AOAC Official Methods Board
March 2, 2017
Teleconference

AOAC INTERNATIONAL
2275 Research Blvd, Suite 300
Rockville, MD 20850
1.301.924.7077

TELECONFERENCE INFORMATION
Conference Call Dial In:
1-877-647-3411 (US/Canada)

For additional international locations,
please see the Outlook Appointment

PASSCODE: 373 523 5702 #

OFFICIAL METHODS BOARD MEETING

Thursday, March 2, 2017

1:00pm – 2:30pm ET

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Expert Review Panel Recommendations location: https://cld.bz/B4i4aMr

AOAC INTERNATIONAL
OFFICIAL METHODS BOARD
2016 –2017
APPOINTED

Chair	**Erin Sutphin Crowley** Q Laboratories, Inc. ecrowley@qlaboratories.com Term 2+: September 22, 2016 - September 11, 2019	*Member*	**Don Gilliland** Abbott Nutrition don.gilliland@abbott.com Term 1: October 1, 2015 - September 29, 2018
Member	**Doug Abbott** Independent Consultant douglas.abbott@gmail.com Term 2: September 11, 2014 - September 27, 2017	*Member*	**Katerina Mastovska** Covance Laboratories Katerina.Mastovska@covance.com Term 1: October 1, 2015 - September 29, 2018
Member	**Joe Boison** Canadian Food Inspection Agency Joe.Boison@inspection.gc.ca Term 2: September 22, 2016 – September 11, 2019	*Member*	**Wendy McMahon** Mérieux NutriSciences wendy.mcmahon@mxns.com Term 1: September 22, 2016 – September 11, 2019
Member	**Amy Brown** Florida Department of Agriculture and Consumer Services Amy.Brown@freshfromflorida.com Term 1: September 22, 2016 – September 11, 2019	*Member*	**Melissa Phillips** US National Institute of Standards and Technology melissa.phillips@nist.gov Term 1: September 22, 2016 – September 11, 2019
Member	**Esther Campos Gimenez** Nestle Research Centre esther.campos-gimenez@rdls.nestle.com Term 1: September 22, 2016 – September 11, 2019	*Member*	**Yvonne Salfinger,** Independent Consultant *AOAC Committee on Safety, Chair* Yhale@aol.com Term 2: September 22, 2016 – September 11, 2019
Member	**Sidney Sudberg,** Alkemist Labs *AOAC Committee on Statistics, Chair* Sidney@alkemist.com Term 1: September 22, 2016 – September 11, 2019	*Member*	**Bradley Stawick** Microbac Laboratories, Inc. brad.stawick@microbac.com Term 2: October 1, 2015 - September 29, 2018
Past Chair (Ex-officio Member)	**Shauna Roman** Reckitt Benckiser, Inc. Shauna.Roman@reckittbenckiser.com Term 4: September 22, 2016 – September 11, 2019		

AOAC Staff Liaisons

Deborah McKenzie Sr. Director, AOAC Standards Development Sr. Director, AOAC Research Institute dmckenzie@aoac.org	Delia Boyd Program Manager, AOAC Standards Development dboyd@aoac.org

AOAC INTERNATIONAL
BYLAWS

As Amended September 26, 2010

ARTICLE I
Name

The name by which this Association shall be known is "AOAC INTERNATIONAL" (hereinafter referred to as the "Association").[1]

ARTICLE II
Purpose

The primary purpose of the Association is to promote methods validation and quality measurements in the analytical sciences.

ARTICLE III
Membership

Section 1. Types of Membership

There shall be three (3) types of membership in the Association: Individual Members, Sustaining Member Organizations, and Organizational Affiliates.

A. Individual Members

There shall be four (4) categories of Individual Members in the Association: Members, Retired Members, Student Members, and Honorary Members.

B. Sustaining Member Organizations

There shall be one (1) category of Sustaining Member Organizations.

C. Organizational Affiliate

There shall be one (1) category of Organizational Affiliate.

Section 2. Qualifications for Membership

A. Individual Members

[1] Members

Qualifications for Members shall be a degree in science, or equivalent as approved by the Board of Directors, and interest in supporting and furthering the purpose and goals of the Association. Such scientists shall be eligible for membership provided they are engaged, or have been engaged, directly or indirectly, in a field relevant to the purpose of the Association.

[2] Retired Members

[1] AOAC INTERNATIONAL was incorporated in the District of Columbia on January 20, 1932, as the Association of Official Agricultural Chemists. On November 10, 1965, the name of the corporation was changed to the Association of Official Analytical Chemists, and on September 12, 1991, the current name was adopted.

A current Member who is no longer actively engaged, directly or indirectly, in a field relevant to the purpose of the Association but who has served the Association as a Member for at least ten (10) years shall be eligible for Retired Member status upon written request and payment of the annual Retired Member dues. Any special benefits accorded Retired Members shall be determined by the Executive Director.

[3] Student Members

Any full-time student working toward an undergraduate or graduate degree in the areas of chemistry, microbiology, food science or other related science shall be eligible for Student Membership in AOAC INTERNATIONAL.

[4] Honorary Members

Honorary Members shall be persons recognized for their substantial contribution toward the achievement of the objectives of the Association. They shall be nominated by the Board of Directors and may be elected by a two-thirds vote of the Individual Members voting.

B. Sustaining Member Organizations

A Sustaining Member Organization shall be any agency of a local, state, provincial, national, or international government; a university, college, or academic department; or any firm, business, or organization with an interest in supporting and furthering the purpose of the Association. Every Sustaining Member Organization must have a designated representative(s). All such Sustaining Member Organization representatives must meet the qualifications for Members and become Individual Members with all the rights and privileges thereof.

C. Organizational Affiliate

An Organizational Affiliate Organization shall be any agency of a local, state, provincial, national, or international government; a university, college, or academic department; or any firm, business, or organization with an interest in supporting and furthering the purpose of the Association. Every Organizational Affiliate must have a designated representative(s). All such Organizational Affiliate representatives must meet the qualifications for Members and become Individual Members with all the rights and privileges thereof.

Section 3. Application for Membership

Applications or requests for membership shall be submitted to the Association's headquarters office. Membership shall become effective upon approval of the application or request, payment of any required membership dues, entry on the membership rolls, and assignment of a member number.

Section 4. Expulsion

The Board of Directors, at any duly called meeting of the Board, by a two-thirds vote of those holding office, may terminate the membership of any member who in its judgment has violated the Bylaws or has been guilty of conduct detrimental to the best interests of the Association. Any member convicted of a felony is subject to immediate expulsion from the Association. Expulsion of a member by the Board of Directors shall be final and shall cancel all rights, interest, or privileges of such member in the services or resources of the Association. Any member, for whom expulsion is proposed, for reasons other than conviction of a felony, shall be entitled to not less than 60 days advance notice of the charges, the date upon which a hearing will be scheduled, and the right to present evidence in defense. The date and place of any such hearing, if held other than at the headquarters or annual meeting site of the Association, must be reasonable with respect to the location of any individual so charged.

Section 5. Dues, Membership Year, and Waivers

A. Annual dues for membership in the Association shall be fixed by the Board of Directors, subject to approval by the majority of the Individual Members voting by ballot by any of the following means (whichever is deemed appropriate by the Board at the time): mail, telephone call, telegram, cablegram, electronic mail or other means of electronic or telephonic transmission.

B. Honorary Members of the Association shall be exempt from payment of dues and annual meeting registration fees.

C. The membership year and the delinquency date shall be determined by the Board of Directors.

D. The authority to grant waivers of membership dues rests with Executive Director.

E. Student Member dues shall be one-third of regular Member dues, rounded up to the nearest $5.00 increment.

Section 6. Members in Good Standing; Rights and Privileges

All Individual Members who maintain their membership by payment of dues as required under these Bylaws and who otherwise qualify shall be considered in good standing and entitled to full privileges of membership.

ARTICLE IV
Officers

Section 1. Elected Officers

The elected officers of the Association shall be Individual Members and shall consist of a President, President-Elect, Secretary, Treasurer, and Immediate Past President.

A. President

The President shall be the principal elected officer of the Association, shall preside at meetings of the Association and of the Board of Directors and of the Executive Committee, and shall be a member ex-officio, with right to vote, of all committees except the Nominating Committee. He or she shall also, at the annual meeting of the Association and at such other times as he or she shall deem proper, communicate to the Association or the Board of Directors such matters and make such suggestions as may in his or her opinion tend to promote the welfare and further the purpose of the Association and shall perform such other

duties as are necessarily incident to the office of President or as may be prescribed by the Board of Directors.

B. President-Elect

In the absence of the President, or in the event of the President's inability or refusal to act, the President-Elect shall perform the duties of the President, and, when so acting, shall have all the powers of and be subject to all the restrictions upon the President. The President-Elect shall perform such other duties as from time to time may be assigned to him or her by the President or by the Board of Directors.

C. Secretary

The Secretary shall give notice of all meetings of the Association, keep a record of all proceedings, attest documents, and, in general, perform such other duties as are usual of the office of Secretary and such other duties as may be assigned by the President or by the Board of Directors.

D. Treasurer

The Treasurer shall be responsible for the funds and securities of the Association; serve as financial officer of the organization and as Chairperson of the Finance Committee; manage the Board of Director's review of and action related to the Board of Director's financial responsibilities; serve as the chief Board liaison in overseeing and reviewing the annual audit, and in general, perform such other duties as are usual of the office of Treasurer and such other duties as may be assigned by the President or by the Board of Directors.

E. Immediate Past President

The Immediate Past President shall serve as advisor to the President and Directors and perform such other duties as may be assigned from time to time by the President or by the Board of Directors.

Section 2. Appointed Officers

The appointed officers shall include the Executive Director and such other appointed officers as may be designated by the Board of Directors from time to time.

A. Executive Director

The day-to-day administration and management of the Association's offices shall be vested in a salaried manager employed or appointed by, and directly responsible to, the Board of Directors. This manager shall have the title of Executive Director with responsibility for the management and direction of all operations, programs, activities, and affairs of the Association, as approved or delegated by the Board of Directors. The Executive Director shall have direct responsibility for employment and termination of employment and the determination of compensation for staff members within the budgetary framework determined by the Board of Directors. The Executive Director functions as the chief operating officer of the Association within the guidelines established by the policies and procedures of the Board of Directors and, as necessary, with the concurrence of the President. The Executive Director shall have such other duties as may be prescribed by the Board.

B. Other Appointed Officers

Other appointed officers shall have such duties as may be prescribed by the Board.

ARTICLE V
Nominations, Elections, Terms, and Appointments to the Board of Directors

Section 1. Nominating Committee

The Nominating Committee shall annually recommend to the Board of Directors a slate of Individual Members as potential nominees for the elected positions where vacancies will occur. The Nominating Committee shall consist of five (5) members who shall be three (3) immediate Past Presidents, as available, and two (2) Individual Members-at-Large of the Association. If three Past Presidents are not available to serve, other Individual Members-at-Large shall be appointed by the President to the extent necessary to form the five (5)-member committee.

Section 2. Elections and Terms of Office

The President-Elect, the Secretary, Treasurer, and the Directors of the Board of Directors shall be elected by a majority of Individual Members voting, from a slate of nominees recommended annually by the Board of Directors.

Terms of office for all Officers and Directors shall begin with the adjournment of the annual meeting following their election and shall end with the adjournment of the annual meeting occurring nearest the expiration of their term. The six (6) Directors shall be elected to staggered three-year terms with two Directors elected to full three-year terms each year, but not to more than two (2), consecutive, three-year terms. Appointment or election to fill an unexpired term shall not affect the eligibility of a person to subsequently be elected to two (2) full terms. The Secretary shall be elected to a one-year term and may be re-elected to successive one-year terms. The Treasurer shall be elected for a one-year term and may be re-elected to successive one-year terms. The President-Elect shall be elected to a one-year term; whereupon the current President-Elect shall become President and the current President shall become the Immediate Past President, each serving a one-year term.

Section 3. Appointments

Directors-at-Large are appointed by the Board in accordance with Article VI, Section 2. Directors-at-Large are appointed for one (1) year terms, renewable at the discretion of the elected Board.

ARTICLE VI
Board of Directors

Section 1. Composition

The Board of Directors shall consist of eleven (11) elected members to include the President, President-Elect, Secretary, Treasurer, Immediate Past President, six (6) Directors, and up to three (3) appointed Directors-at-Large, all of whom shall be Individual Members of the Association. The elected Board shall reflect the makeup of the Association membership and shall not be dominated by any single interest.

Section 2. Powers and Duties

The Board of Directors shall provide supervision, control, and direction of the affairs of the Association, shall determine the Association's policies or changes therein within the limits of the Bylaws, shall actively prosecute

its purpose, and shall have discretion in the disbursement of its funds. It may adopt such rules and procedures for the conduct of its business as shall be deemed advisable, and may, in the execution of the powers granted, appoint such agents as it may consider necessary. The Board of Directors may appoint up to three (3) Directors-at-Large, if, in their opinion, such appointments advance the purpose of the Association. Directors-at-Large shall be accorded the same voting privileges as elected Directors.

Section 3. Meetings

Except that the Board shall have a regular meeting at the time and place of the annual meeting, the Board shall meet, in person or via telephone conference call, upon call of the President at such times and places as he or she may designate within the policies adopted by the Board, and shall be called to meet upon demand of a majority of its members. Notice of all meetings of the Board of Directors shall be sent by any of the following means (whichever is deemed appropriate by the President at the time): mail, telephone call, telegram, cablegram, electronic mail or other means of electronic or telephonic transmission to each member of the Board at his or her last recorded address or number at least fourteen (14) days in advance of in-person meetings or forty-eight (48) hours in advance of conference call meetings.

Section 4. Quorum

A quorum for any meeting of the Board is six (6) Board members elected in accordance with Article V (1). Any less number may: (1) set a time to adjourn, (2) adjourn, (3) recess, or (4) take measures to obtain a quorum.

Section 5. Absence

Any member of the Board of Directors unable to attend a meeting of the Board shall notify the President and state the reason for his or her absence. If a member of the Board is absent from two (2) consecutive meetings, he or she may be removed by a two-thirds vote of the Board Members then in office.

Section 6. Compensation

Members of the Board of Directors, as such, shall not receive any compensation for their services as Board members, but the Board may, by resolution under policies it may adopt, authorize reimbursement of expenses incurred in the performance of members' duties. Such authorization may prescribe conditions and procedures for approval and payment of such expenses. Nothing herein shall preclude a Board member from serving the Association in any other capacity and receiving compensation for such services, if compensation is customarily paid for such services.

Section 7. Resignation or Removal

Any member of the Board may resign at any time by giving written notice to the President, Secretary, Treasurer, or to the Board of Directors. Such resignation shall take effect at the time specified therein, or, if no time is specified, at the time of acceptance thereof as determined by the President or the Board.

Any member of the Board may be removed by a three-fourths vote of the Board members then in office and present at any regular or special meeting of the Board.

Section 8. Vacancies: Members of the Board

If a vacancy should occur in the membership of the elected Board of Directors, any Past President may be appointed by action of the remaining members of the Board to temporarily fill such vacancy until the next

regularly scheduled election. At the next regularly scheduled election nominations will be presented to fill the vacancy for the unexpired portion of the term remaining.

Section 9. Vacancies: President and Other Officers

If the office of the President shall become vacant, the President-Elect shall thereupon become President of the Association for the unexpired term, followed by his or her duly elected term. In the event the office of President becomes vacant at a time when the office of President-Elect is also vacant, the Presidency shall be filled for the remainder of the term by the action of the Board of Directors. If any other officer position shall become vacant, the office may be filled for the remainder of the term by action of the Board.

ARTICLE VII
Committees

Section 1. Committee Formation

The Board of Directors shall form and adopt terms of reference for such standing or special boards, committees, subcommittees, task forces, or task groups as may be required by these Bylaws or as the Board may determine necessary to carry out the affairs of the Association.

Section 2. Committee Appointments

Subject to the requirements of these Bylaws and the specific terms of reference adopted by the Board, the President shall make the appointments to fill the vacancies occurring in the Association's standing or special boards, committees, subcommittees, task forces, or task groups.

ARTICLE VIII
Official Methods of Analysis

The Board of Directors (BoD) is empowered to develop written policies and procedures for the study, adoption, and change in status of the Official Methods of Analysis of AOAC INTERNATIONAL. Implementation of the policies and procedures shall be delegated to an Official Methods Board (OMB).

Section 1. Composition of the Official Methods Board

The Official Methods Board shall consist of a chair and a vice chair, and members who are recommended by the chair. The chair, vice chair and members are appointed by the President of AOAC INTERNATIONAL. The OMB shall be composed of members representing a balance of government, industry, and academia as appropriate to the scope of the group and shall not be dominated by any single interest.

Section 2. Purpose of the Official Methods Board

The OMB shall serve the Association in a scientific and advisory capacity on methods and the process of their adoption. The OMB shall be responsible for implementation of procedures adopted by the BoD, according to the principles in section 3 below.

Section 3. Principles of the Official Methods Program

A. Adequate records of technical data, discussions, and decisions on the study, adoption, and change of status of Official Methods of Analysis shall be maintained for a reasonable time.

B. Timely notice of proposed method studies, adoption, or change in status shall be published in an Association publication that is circulated to the members.

C. Opportunity shall be provided for materially interested parties to submit input during method study and adoption procedures and to submit comments on the adoption, use of, or change in status of specific methods.

D. Methods submitted to the OMB for inclusion in the OMA shall be thoroughly studied, scientifically reviewed, and available in published form prior to adoption as Final Action by the OMB.

E. The OMB shall adopt methods as Final Action.

ARTICLE IX
Meetings

Section 1. Annual Meeting

The annual business meeting of the Association shall be held at the time and place decided by the Board of Directors. A special meeting of the entire Association may be called by the Board of Directors; announcement thereof shall be made at least thirty (30) days prior to the time of said meeting.

Section 2. Quorum

One hundred Individual Members who are present in person or by proxy and entitled to vote shall constitute a quorum at any meeting of the Association which is duly called pursuant to the provisions of these Bylaws.

ARTICLE X
Voting

Section 1. Voting by Ballot

By direction of the Board of Directors, unless otherwise required by these Bylaws or conducted under alternative procedures established under these Bylaws, voting on any matter, including the election of officers and directors, the election of Honorary Members, amendment of the Bylaws, and the approval of dues, may be conducted by ballot of the voting membership by any of the following means (whichever is deemed appropriate at the time): mail, telephone call, telegram, cablegram, electronic mail or other means of electronic or telephonic transmission, and the question(s) thus presented shall be determined according to the votes received, provided in each case votes of at least five (5) percent of the voting membership shall be received. Any and all action taken in pursuance of a vote by any of the means indicated above (whichever the Board deemed appropriate at the time)

in each case shall be binding upon the Association in the same manner as would be action taken at a duly called meeting and shall become effective, unless otherwise provided for in these Bylaws or otherwise stated in the ballot, on the day following certification of the vote.

Section 2. Voting by Proxy

At any duly called meeting of Individual Members, a member-of-record, as determined thirty (30) days prior to any meeting and who is entitled to vote, may vote by proxy executed in writing by the Individual Member or his or her duly authorized attorney-in-fact. No proxy shall be valid for more than eleven (11) months after the date of its execution unless otherwise provided in the proxy.

ARTICLE XI
Earnings and Assets

Section 1. Non-Profit Status

A. Regardless of any provision of the Bylaws which may be construed otherwise:

[1] No part of the net earnings of the Association shall under any circumstances inure to the benefit of any member or individual.

[2] The Association shall not be operated for a private profit.

B. On lawful dissolution of the Association and after settlement of all just obligations of the Association, the Board of Directors shall distribute all remaining assets of the Association to one (1) or more organizations selected by the Board of Directors which have been held exempt from Federal Income Tax as organizations described in section 501(c)(3) of the Internal Revenue Code of 1954.

Section 2. Political Activities

A. No substantial part of the Association's activities shall consist of carrying on propaganda or otherwise attempting to influence local, state, or national legislation. All activities of the Association shall be determined by the Board of Directors.

B. The Association shall not participate or intervene in any manner in any campaign on behalf of any candidate for a political office.

ARTICLE XII
Sections

Section 1. Sections

The Board of Directors shall set geographic limits and grant authority to groups of Individual Members of the Association residing or working in the same geographical areas for the establishment of Sections.

Section 2. Purpose of Sections

The purpose of Sections shall be to promote and further the purpose of the Association.

Section 3. Membership in Sections

Individuals interested in the purpose of the Section shall be eligible for Section membership. Only Individual Members of the Association shall be eligible for election to the Executive Committee of the Section.

Section 4. Bylaws of Sections

Subject to approval of the Board of Directors, each Section shall adopt, for its own governance, bylaws not inconsistent with these Bylaws.

Section 5. Dissolution of Sections

When any Section shall cease to function as a Section for a period of more than one year, or if its membership shall be less than ten (10) Individual Members of the Association for a period of one (1) year, the Board of Directors may terminate the existence of such Section.

Section 6. Actions of Sections

No act of a Section or its members shall be considered an act of the Association unless expressly authorized, ratified, or affirmed by the Board of Directors.

ARTICLE XIII
Technical Divisions

Section 1. Purpose

Technical Divisions shall represent communities of interest within the Association which have the purpose of furthering the purpose of the Association through the development of the analytical sciences either in a commodity-based or scientific discipline-based field. Their activities shall not duplicate the organizational structure nor conflict with the policies or procedures for the adoption of official methods of analysis by the Association.

Section 2. Creation, Combination, Discontinuance, or Change

Technical Divisions may be created, existing Technical Divisions may be combined or discontinued, or the name of a Technical Division may be changed under policies and procedures adopted by the Board of Directors. Each Technical Division shall adopt bylaws not inconsistent with these Bylaws. The jurisdiction of each Technical Division shall be described in its bylaws. No act of any Technical Division or its members shall be considered an act of the Association unless expressly authorized, ratified, or affirmed by the Board of Directors.

ARTICLE XIV
Indemnification

The Association shall have the power to pay, by indemnity, reimbursement, or otherwise, to or for the use of any person designated by resolution of the Board of Directors who was or is a party or is threatened to be made a party to any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or on behalf of the Association), by reason of the fact he or she is or was a director, officer, committee member, employee or agent of the Association, or was serving as such for another at the request of the Association, against expenses (including legal, accounting, witness and other), judgments, fines, and amounts paid in settlement so long as such person was not found by a court of competent jurisdiction to have been willfully negligent of the interests of the Association or such person had reasonable cause to believe that his or her conduct was lawful.

ARTICLE XV
Parliamentary Authority

The rules contained in the current edition of *Robert's Rules of Order Newly Revised* shall govern the Association in all cases in which they are applicable and in which they are not inconsistent with these Bylaws or any special rules of order the Association may adopt.

ARTICLE XVI
Amendments to the Bylaws

These Bylaws may be amended, repealed, or altered, in whole or in part, by a three-fourths vote: (a) of the Individual Members at any annual business or duly called special meeting of the Association, provided notice of any amendment proposed for consideration shall be sent by any of the following means (whichever may be deemed appropriate at the time): mail, telephone call, telegram, cablegram, electronic mail or other means of electronic or telephonic transmission to the last recorded address or number of each Individual Member at least thirty (30) days prior to the date of the meeting; or (b) by approval of the Individual Members through ballot sent by any means indicated above in accordance with the provisions of Article X, Voting.

All proposed amendments of these Bylaws shall be presented in writing to the Board of Directors. The Board shall present the proposals to the Association membership, with recommendations. All amendments to the Bylaws, unless otherwise stated, will become effective at the adjournment of the meeting where action is taken or on the day following the certification of a vote by mail ballot.

AOAC INTERNATIONAL
POLICY ON THE USE OF THE
ASSOCIATION NAME, INITIALS,
IDENTIFYING INSIGNIA, LETTERHEAD, AND BUSINESS CARDS

Introduction

The following policy and guidelines for the use of the name, initials, and other identifying insignia of AOAC INTERNATIONAL have been developed in order to protect the reputation, image, legal integrity and property of the Association.

The name of the Association, as stated in its bylaws, is "AOAC INTERNATIONAL". The Association is also known by its initials, AOAC, and by its logo, illustrated below, which incorporates the Association name and a representation of a microscope, book, and flask. The AOAC logo is owned by the Association and is registered with the U.S. Patent and Trademark Office.

AOAC INTERNATIONAL

The full Association insignia, illustrated below, is comprised of the logo and the tagline, "The Scientific Association Dedicated to Analytical Excellence," shown below. The typeface used is Largo. The AOAC tagline is owned by the Association and is registered with the U.S. Patent and Trademark office.

AOAC INTERNATIONAL

The Scientific Association Dedicated to Analytical Excellence®

Policy

Policy on the use of the Association's name and logo is established by the AOAC Board of Directors as follows:

> "The Board approves and encourages reference to the Association by name, either as AOAC INTERNATIONAL or as AOAC; or reference to our registered trademark, AOAC®, in appropriate settings to describe our programs, products, etc., in scientific literature and other instances so long as the reference is fair, accurate, complete and truthful and does not indicate or imply unauthorized endorsement of any kind.
>
> The insignia (logo) of AOAC INTERNATIONAL is a registered trade and service mark and shall not be reproduced or used by any person or organization other than the Association, its elected and appointed officers, sections, or committees, without the prior written permission of the Association. Those authorized to use the AOAC INTERNATIONAL insignia shall use it only for the purposes for which permission has been specifically granted.
>
> The name and insignia of the Association shall not be used by any person or organization in any way which indicates, tends to indicate, or implies AOAC official endorsement of any product, service, program, company, organization, event or person, endorsement of which, has not been authorized by the Association, or which suggests that membership in the Association is available to any organization."

The Executive Director, in accordance with the above stated policy, is authorized to process, approve, fix rules, and make available materials containing the Association name and insignia.

It should be noted that neither the Association's name nor its insignia nor part of its insignia may be incorporated into any personal, company, organization, or any other stationery other than that of the Association; nor may any statement be included in the printed portion of such stationery which states or implies that an individual, company, or other organization is a Member of the Association.

Instructions

1. Reproduction or use of the Association name or insignia requires prior approval by the Executive Director or his designate.

2. Association insignia should not be altered in any manner without approval of the Executive Director or his designate, except to be enlarged or reduced in their entirety.

3. Artwork for reproducing the Association name or insignia, including those incorporating approved alterations, will be provided on request to those authorized to use them (make such requests to the AOAC Marketing Department). Examples of the types of alterations that would be approved are inclusion of a section name in or the addition of an officer's name and address to the letterhead insignia.

4. When the Association name is used without other text as a heading, it should, when possible, be set in the Largo typeface.

5. Although other colors may be used, AOAC blue, PMS 287, is the preferred color when printing the AOAC insignia, especially in formal and official documents. It is, of course, often necessary and acceptable to reproduce the insignia in black.

6. Do not print one part of the logo or insignia in one color and other parts in another color.

7. The letterhead of AOAC INTERNATIONAL shall not be used by any person or organization other than the Association, its elected and appointed officers, staff, sections, or committees; except by special permission.

   Correspondence of AOAC official business should be conducted using AOAC letterhead. However, those authorized to use AOAC letterhead shall use it for official AOAC business only.

   Copies of all correspondence using AOAC letterhead or conducting AOAC official business, whether on AOAC letterhead or not, must be sent to the appropriate office at AOAC headquarters.

8. AOAC INTERNATIONAL business cards shall not be used by any person or organization other than the Association, its staff, and elected officials, except by special permission.

   Those authorized to use AOAC business cards shall use them for official AOAC business only and shall not represent themselves as having authority to bind the Association beyond that authorized.

Sanctions

1. Upon learning of any violation of the above policy, the Executive Director or a designate will notify the individual or organization that they are in violation of AOAC policy and will ask them to refrain from further misuse of the AOAC name or insignia.

2. If the misuse is by an Individual Member or Sustaining Member of the Association, and the misuse continues after notification, the Board of Directors will take appropriate action.

3. If continued misuse is by a nonmember of the Association or if a member continues misuse in spite of notification and Board action, ultimately, the Association will take legal action to protect its property, legal integrity, reputation, and image.

* * * * * *

Adopted by the AOAC Board of Directors: September 24, 1989
Revised: June 13, 1991; February 26, 1992; March 21, 1995; October 1996

AOAC INTERNATIONAL
ANTITRUST POLICY
STATEMENT AND GUIDELINES

Introduction

It is the policy of AOAC INTERNATIONAL (AOAC) and its members to comply strictly with all laws applicable to AOAC activities. Because AOAC activities frequently involve cooperative undertakings and meetings where competitors may be present, it is important to emphasize the on_going commitment of our members and the Association to full compliance with national and other antitrust laws. This statement is a reminder of that commitment and should be used as a general guide for AOAC and related individual activities and meetings.

Responsibility for Antitrust Compliance

The Association's structure is fashioned and its programs are carried out in conformance with antitrust standards. However, an equal responsibility for antitrust compliance __ which includes avoidance of even an appearance of improper activity __ belongs to the individual. Even the appearance of improper activity must be avoided because the courts have taken the position that actual proof of misconduct is not required under the law. All that is required is whether misconduct can be inferred from the individual's activities.

Employers and AOAC depend on individual good judgment to avoid all discussions and activities which may involve improper subject matter and improper procedures. AOAC staff members work conscientiously to avoid subject matter or discussion which may have unintended implications, and counsel for the Association can provide guidance with regard to these matters. It is important for the individual to realize, however, that the competitive significance of a particular conduct or communication probably is evident only to the individual who is directly involved in such matters.

Antitrust Guidelines

In general, the U.S. antitrust laws seek to preserve a free, competitive economy and trade in the United States and in commerce with foreign countries. Laws in other countries have similar objectives. Competitors (including individuals) may not restrain competition among themselves with reference to the price, quality, or distribution of their products, and they may not act in concert to restrict the competitive capabilities or opportunities of competitors, suppliers, or customers.

Although the Justice Department and Federal Trade Commission generally enforce the U.S. antitrust laws, private parties can bring their own lawsuits.

Penalties for violating the U.S. and other antitrust laws are severe: corporations are subject to heavy fines and injunctive decrees, and may have to pay substantial damage judgments to injured competitors, suppliers, or customers. Individuals are subject to criminal prosecution, and will be punished by fines and imprisonment.
Under current U.S. federal sentencing guidelines, individuals found guilty of bid rigging, price fixing, or market allocation must be sent to jail for at least 4 to 10 months and must pay substantial minimum fines.

Since the individual has an important responsibility in ensuring antitrust compliance in AOAC activities, everyone should read and heed the following guidelines.

1. Don't make any effort to bring about or prevent the standardization of any method or product for the purpose or intent of preventing the manufacture or sale of any method or product not conforming to a specified standard.

2. Don't discuss with competitors your own or the competitors' prices, or anything that might affect prices such as costs, discounts, terms of sale, distribution, volume of production, profit margins, territories, or customers.

3. Don't make announcements or statements at AOAC functions, outside leased exhibit space, about your own prices or those of competitors.

4. Don't disclose to others at meetings or otherwise any competitively sensitive information.

5. Don't attempt to use the Association to restrict the economic activities of any firm or any individual.

6. Don't stay at a meeting where any such price or anti_competitive talk occurs.

7. Do conduct all AOAC business meetings in accordance with AOAC rules. These rules require that an AOAC staff member be present or available, the meeting be conducted by a knowledgeable chair, the agenda be followed, and minutes be kept.

8. Do confer with counsel before raising any topic or making any statement with competitive ramifications.

9. Do send copies of meeting minutes and all AOAC_related correspondence to the staff member involved in the activity.

10. Do alert the AOAC staff to any inaccuracies in proposed or existing methods and statements issued, or to be issued, by AOAC and to any conduct not in conformance with these guidelines.

Conclusion

Compliance with these guidelines involves not only avoidance of antitrust violations, but avoidance of any behavior which might be so construed. Bear in mind, however, that the above antitrust laws are stated in general terms, and that this statement is not a summary of applicable laws. It is intended only to highlight and emphasize the principal antitrust standards which are relevant to AOAC programs. You must, therefore, seek the guidance of either AOAC counsel or your own counsel if antitrust questions arise.

* * * * *

Adopted by the AOAC Board of Directors: September 24, 1989
Revised: March 11, 1991
Revised October 1996

AOAC INTERNATIONAL

POLICY AND PROCEDURES ON

VOLUNTEER CONFLICT OF INTEREST

Statement of Policy

While it is not the intention of AOAC INTERNATIONAL (AOAC) to restrict the personal, professional, or proprietary activities of AOAC members nor to preclude or restrict participation in Association affairs solely by reason of such activities, it is the sense of AOAC that conflicts of interest or even the appearance of conflicts of interest on the part of AOAC volunteers should be avoided. Where this is not possible or practical under the circumstances, there shall be written disclosure by the volunteers of actual or potential conflicts of interest in order to ensure the credibility and integrity of AOAC. Such written disclosure shall be made to any individual or group within the Association which is reviewing a recommendation which the volunteer had a part in formulating and in which the volunteer has a material interest causing an actual or potential conflict of interest.

AOAC requires disclosure of actual or potential conflicts of interest as a condition of active participation in the business of the Association. The burden of disclosure of conflicts of interest or the appearance of conflicts of interest falls upon the volunteer.

A disclosed conflict of interest will not in itself bar an AOAC member from participation in Association activities, but a three-fourths majority of the AOAC group reviewing the issue presenting the conflict must concur by secret ballot that the volunteer's continued participation is necessary and will not unreasonably jeopardize the integrity of the decision-making process.

Employees of AOAC are governed by the provision of the AOAC policy on conflict of interest by staff. If that policy is in disagreement with or mute on matters covered by this policy, the provisions of this policy shall prevail and apply to staff as well.

Illustrations of Conflicts of Interest

1. A volunteer who is serving as a committee member or referee engaged in the evaluation of a method or device; who is also an employee of or receiving a fee from the firm which is manufacturing or distributing the method or device or is an employee of or receiving a fee from a competing firm.

2. A volunteer who is requested to evaluate a proposed method or a related collaborative study in which data are presented that appear detrimental (or favorable) to a product distributed or a position supported by the volunteer's employer.

3. A referee who is conducting a study and evaluating the results of an instrument, a kit, or a piece of equipment which will be provided gratis by the manufacturer or distributor to one or more of the participating laboratories, including his or her own laboratory, at the conclusion of the study.

4. Sponsorship of a collaborative study by an interest (which may include the referee) which stands to profit from the results; such sponsorship usually involving the privilege granted by the investigator to permit the sponsor to review and comment upon the results prior to AOAC evaluation.

5. A volunteer asked to review a manuscript submitted for publication when the manuscript contains information which is critical of a proprietary or other interest of the reviewer.

The foregoing are intended as illustrative and should not be interpreted to be all-inclusive examples of conflicts of interest AOAC volunteers may find themselves involved in.

Do's and Don'ts

Do avoid the appearance as well as the fact of a conflict of interest.

Do make written disclosure of any material interest which may constitute a conflict of interest or the appearance of a conflict of interest.

Do not accept payment or gifts for services rendered as a volunteer of the Association without disclosing such payment or gifts.

Do not vote on any issue before an AOAC decision-making body where you have the appearance of or an actual conflict of interest regarding the recommendation or decision before that body.

Do not participate in an AOAC decision-making body without written disclosure of actual or potential conflicts of interest in the issues before that body.

Do not accept a position of responsibility as an AOAC volunteer, without disclosure, where the discharge of the accepted responsibility will be or may appear to be influenced by proprietary or other conflicting interests.

Procedures

Each volunteer elected or appointed to an AOAC position of responsibility shall be sent, at the time of election or appointment, a copy of this policy and shall be advised of the requirement to adhere to the provisions herein as a condition for active participation in the business of the Association. Each volunteer, at the time of his or her election or appointment, shall indicate, in writing, on a form provided for this purpose by AOAC, that he or she has read and accepts this policy.

Each year, at the spring meeting of the AOAC Board of Directors, the Executive Director shall submit a report certifying the requirements of this policy have been met; including the names and positions of any elected or appointed volunteers who have not at that time indicated in writing that they have accepted the policy.

Anyone with knowledge of specific instances in which the provisions of this policy have not been complied with shall report these instances to the Board of Directors, via the Office of the Executive Director, as soon as discovered.

* * * * * *

Adopted: March 2, 1989
Revised: March 28, 1990
Revised: October 1996

AOAC INTERNATIONAL

TERMS OF REFERENCE

I. NAME:

OFFICIAL METHODS BOARD (OMB)

II. MISSION:

To serve the Association in a scientific and advisory capacity on standards and methods with ethical, timely, open and independent scientific oversight for the implementation of standards development and conformity assessment policies and procedures of AOAC INTERNATIONAL.

III. RESPONSIBILITIES:

To provide ethical, timely, open and independent scientific oversight for the policies and procedures of AOAC INTERNATIONAL.

To approve "Final Action" status for First Action Methods (new and revised) following a proactive review;

To repeal methods, if necessary, in accordance with established policies and procedures;

To participate in addressing appeals and requests for action or guidance, and in resolving disputes;

To endorse and monitor all voluntary consensus panels for appropriate representation and balance of stakeholders' perspectives;

To endorse and monitor all volunteer subject matter experts for volunteer conformity assessment activities;

To adopt and monitor scientific and technical guidance and references;

To acknowledge outstanding scientific and technical volunteer activity and achievement within AOAC;

To actively participate in AOAC standards development activities and maintain and communicate explicit knowledge of AOAC standards development and conformity assessment;

IV. COMPOSITION AND ORGANIZATION:

The Official Methods Board shall consist of up to 13 voting members including a Chair, a Vice-chair, the Chair of the Committee on Safety and the Chair of the Committee on Statistics. The Committee on Safety and the Committee on Statistics may contain co-chairs. The co-chairs for these committees represent one vote on the OMB. Members of the OMB may serve in multiple volunteer roles for the benefit of the Association. The Chair of the Official Methods Board shall have previously served as a member of the Official Methods Board. The Chair, Vice-chair, and members of the Official Methods Board including the chairs of standing committees shall be appointed for a term of three years. A member of the OMB may be reappointed upon the recommendation of the Chair of the Official Methods Board with a maximum term of service of six (6) years. Exceptions may be made at the discretion of the President. The Chair of the Official Methods Board is eligible to serve an additional post chair term of up to three (3) years as an *ex-officio* member. Members of the Official Methods Board must be members of AOAC.

All members of the Official Methods Board are recommended by the Chair and appointed by the President. All Official Methods Board members serve at the pleasure of the President.

The Official Methods Board represents the membership of AOAC INTERNATIONAL. It shall be composed of members representing a balance of scientific expertise, government, industry, and academia as appropriate to the scope of the Board. Every effort should be made to include international representation on the Board.

Additional working groups, task forces, and other appropriate subgroups shall be appointed as needs arise by the Chair of the Official Methods Board.

V. STAFF LIAISON:

The Executive Director shall assign a member of the staff to serve as staff liaison.

VI. REVIEW SCHEDULE:

Every three years.

VII. DATE ESTABLISHED:

Renamed in 1981

VIII. DATES REVIEWED

01/2008, 7/2016

IX. DATES REVISED:

9/89; 5/90; 1/91; 8/06;
02/07; 07/07; 2/08; 4/13; 8/13

OFFICIAL METHODS BOARD TELECONFERENCE

Thursday, March 2, 2017

1:00pm – 2:30pm ET

DRAFT MEETING AGENDA

I. PRELIMINARY ITEMS

a. Welcome and Introductions *(Crowley)*
b. Call to Order /Announcements (*Crowley)*
c. Review of Policy Documents/Terms of Reference *(Crowley)*
d. Review of Draft Agenda* *(Crowley)*
e. Review of February 7-8, 2017 OMB Meeting Draft Minutes* *(Crowley)*

II. AOAC STANDARDS DEVELOPMENT & CONFORMITY ASSESSMENT ACTIVITIES

a. Review of Proposals for Representative Stakeholder Panel Voting Members (*McKenzie)*
   i. SPSFAM Voting Members Proposal*
   ii. ISPAM Voting Members Proposal*
   iii. SPIFAN Voting Members Proposal*
   iv. SPADA Voting Members Proposal*
   v. SPDS Voting Members Proposal*

b. Expert Review Panel Members *(Coates/McKenzie)*
   i. Revision to ERP for SPSFAM Select Food Allergens*
   ii. Revision to ERP for Fertilizer Methods – Metals*
   iii. ERP for Solids in Syrups*

c. Expert Review Panel Recommendations *(McKenzie/OMB Liaisons)*
   i. ERP for SPIFAN Nutrient Methods (AOAC 2014.02* and AOAC 2015.06*)
   ii. ERP for Gluten Assays (AOAC 2012.01*)

d. Mid-Year Meeting Updates *(McKenzie)*

e. Limit of Detection *(Coates)*

III. ADJOURNMENT

Upcoming Meetings

AOAC INTERNATIONAL
Mid-Year Meeting
March 13-17, 2017
Gaithersburg Marriott
Washingtonian Center
Gaithersburg, MD

**** Items that require or may require a vote***

AOAC OFFICIAL METHODS BOARD MEETING IN ROCKVILLE, MARYLAND

February 7-8, 2017

DAY 1 - 9:00am – 5:00pm ET and DAY 2 – 8:30am – 3:00pm ET

DRAFT MEETING MINUTES

OMB MEMBERS *(present during all or part of the meeting)*

Erin Crowley	Q Laboratories	Chair
Douglas Abbott	Independent Consultant	Member
Joe Boison *(proxy)*	Canadian Food Inspection Agency	Member
Amy Brown	Florida Dept. of Agriculture and Consumer Services	Member
Esther Campos Giménez	Nestlé Research Centre	Member
Don Gilliland	Abbott Nutrition	Member
Wendy McMahon	Mérieux NutriSciences	Member
Melissa Phillips	US NIST	Member
Yvonne Salfinger	Independent Consultant	Member
Brad Stawick *(proxy)*	Microbac	Member
Sidney Sudberg	Alkemist Labs	Member

OMB MEMBERS ABSENT *(without proxy)*

Katerina Mastovska	Covance	Member

GUESTS, OBSERVERS, AND BOARD OF DIRECTORS *(present during all or part of the meeting)*

Darryl Sullivan	Covance	Board Secretary

AOAC STAFF *(present during all or part of the meeting)*

Delia Boyd	Deborah McKenzie
Scott Coates	Alicia Meiklejohn
Jonathan Goodwin	Robert Rathbone

I. INTRODUCTORY ITEMS

a. Call to Order/Introductions/Announcements
Crowley called the meeting to order at 9:06am ET on Day 1 and the meeting resumed at 8:40am on Day 2.

b. Crowley called OMB's attention to the AOAC policy documents and reminded all attendees to review the documents and that the meeting will be held according to these policies.

c. Review and Approval of Draft Meeting Agenda
MOTION: For OMB to approve the agenda as presented.
Salfinger moved and Gilliland seconded. Consensus: Unanimous.

d. Review and Approval of January 12, 2017 OMB teleconference minutes.
MOTION: For OMB to approve the minutes as presented.
Abbott moved and Sudberg seconded. Consensus: Unanimous.

e. Update from Executive Office and AOAC INTERNATIONAL Board of Directors.

Sullivan provided an update to the OMB on staff changes in the Executive Office and announced that Jonathan Goodwin would be serving as interim Executive Director. OMB was informed that they could share the information.

II. AOAC STANDARDS DEVELOPMENT ACTIVITIES

a. AOAC Stakeholder Panels Current Activities

McKenzie shared with OMB the work and engagement currently through AOAC stakeholder panels. McKenzie also shared with OMB the new working groups being launched during the AOAC Mid-Year meeting.

b. AOAC Standards Development – Best Practices

McKenzie shared with OMB plans for preparing a "Best Practices" document with lessons learned and guidance for use with a goal of having a draft by the Mid-Year meeting.

c. OMB Meeting to Vet Mid-Year Meeting Stakeholder Voting Panels

McKenzie proposed that OMB has its March teleconference on March 2, 2017 to vet the representative voting members for the Mid-Year Meeting Stakeholder Panels in lieu of meeting on March 9, 2017.

ACTION ITEM: Staff to reschedule March 9, 2017 meeting to March 2, 2017.

III. AOAC CONFORMITY ASSESSMENT ACTIVITIES

a. ERP for Microbiology Methods for Foods & Environmental Surfaces *(McMahon/Salfinger)*

McMahon and Salfinger participated in the January 19, 2017 meeting of the ERP and provided an update on the ERP meeting.

b. Proposal for ERP for Solids in Syrups – AOAC 932.14 Method Modification

Coates proposed the formation of the ERP for Solids in Syrups and its membership to the OMB.

ACTION ITEM:

- Staff to invite Jo Marie Cook and Tom Philips to participate on the ERP.
- Staff to revise package with CVs and send out to OMB with ballot.

c. Terms of Appointed AOAC Volunteers – Engaging New Members

ACTION ITEMS:

- Staff to invite prospective volunteers to process orientations (e.g., ERP Orientation) and consider different approaches to volunteering and perhaps networking for new members
- Staff to include this topic on the agenda of next OMB in-person meeting

d. ERP First Action Method Review Status

ACTION ITEMS:

- Segment method with active method authors and share with OMB
- Share methods' list with ERPs, if a relevant ERP exists

e. ERP Final Action Recommendations

OMB discussed Final Action Recommendations from the ERP for Microbiology Methods for Foods and Environmental Surfaces.

MOTION: To make AOAC 2014.01 a Final Action *Official Methods of Analysis*.
Abbott moved and Phillips seconded. Consensus: 10 in favor; and 1 abstention

ACTION ITEM: Staff to change the ERP checklist on the Reference Materials section from "NO" to "YES".

MOTION: To make AOAC 2014.05 a Final Action *Official Methods of Analysis*.
Abbott moved and Sudberg seconded. Consensus: 10 in favor; and 1 abstention

ACTION ITEM:

- Staff to change the ERP checklist on the Reference Materials section from "NO" to "YES".

- Add the ERP recommendations from the ERP for SPIFAN Nutrient Methods and the ERP for Gluten Assays to the next OMB meeting agenda.

f. AOAC Research Institute – Programs Update
McKenzie provided an update on the conformity assessment programs and activities administered by the Research Institute.

IV. OFFICIAL METHODS BOARD ACTIVITIES

a. Update on and Engagement with AOAC Committee on Statistics
Sudberg provided an update on the Committee on Statistics. Crowley facilitated a discussion on active engagement with the Committee on Statistics
ACTION ITEMS: Staff to send document from agenda item IV.b. discussion to Sudberg and discuss with the Committee on Statistics as a high priority.

b. Update on OMB Working Group on Method Format & Performance Characteristics
Coates and McKenzie provided an update and next steps for this working group. OMB discussed related ideas that required discussion. Staff discussed a proposal for prioritization and grouping the ideas.
ACTION ITEMS:

- Move all of the statistics based items to the Committee on Statistics to work on and bring back to the working group with the highest priority being intermediate precision
- Table other topics for discussion until further discussion has happened.
- Staff to contact working group chair (Paula Brown, BCIT) regarding changes in the working group scope

c. Revisions to Select OMA Appendices & SMPRs
The discussion in this agenda item was combined with the previous agenda item (IV.b.).

d. Update on the AOAC Committee on Safety
Salfinger provided an update on the Committee on Safety. Crowley facilitated a discussion on active engagement with the Committee on Safety, including ideas on how to engage additional members of the committee.
ACTION ITEMS:
Staff to do issue a call for experts.
Staff to arrange a webinar with the committee to update them on AOAC changes and processes

e. AOAC Mid-Year Meeting Activities
ACTION ITEM: Ask Tom Phillips if he could serve as an OMB liaison for SPADA.

Date	Time	Event	OMB Liaison
Monday, 3/13	**8:00am – 12:00pm**	**ERP SPSFAM Select Food Allergens**	Phillips/Brown
Monday, 3/13	**9:00am – 12:00pm**	**AOAC Board of Directors Meeting**	Crowley
Monday, 3/13	**1:00pm – 6:30pm**	**SPSFAM Meeting**	Phillips/Brown
Monday, 3/13	**1:30pm – 5:00pm**	**ISPAM WG Food Allergen Assays, Drafting**	Crowley
Tuesday, 3/14	**8:30am – 4:30pm**	**ISPAM Meeting and WG meetings**	Crowley
Wednesday, 3/15	**8:30am – 5:00pm**	**SPIFAN Meeting**	Phillips/ Campos Giménez/Gilliland
Wednesday, 3/15	**9:00am – 4:00pm**	**SPADA Meeting**	

Wednesday, 3/15	**1:00pm – 4:00pm**	**ERP for Fertilizer Methods, Urea & Metals**	Brown
Wednesday, 3/15	**4:30pm – 6:30pm**	**ERP for Gluten Assays**	Boison
Thursday, 3/16	**8:30am – 5:00pm**	**ERP for SPIFAN Nutrient Methods**	Gilliland/ Campos Giménez/Phillips
Thursday, 3/16	**8:30am – 10:00am**	**ERP for PAH Methods**	Mastovska/Brown
Thursday, 3/16	**10:30am – 12:00pm**	**ERP for Pesticide Residue Methods**	Boison/Brown
Thursday, 3/16	**1:00pm – 5:00pm**	**ERP for Solids and Syrups**	Brown
~~Thursday, 3/16~~	~~**1:00pm – 5:00pm**~~	~~**SPDS Working Group Meeting(s)**~~	
Friday, 3/17	**8:30am – 5:00pm**	**SPDS Meeting**	Phillips/Sudberg

f. AOAC OMB Awards

McKenzie provided an overview of the process, some lessons learned, and present the candidates or nominations for consideration.

ACTION ITEM: Staff to put together a form for the submission of OMB Awards for OMB members to submit nominations for Award in Recognition of Technical and Scientific Excellence.

g. AOAC Working Group on OMB New Member Selection

ACTION ITEM:

- Send Roman a MS Word copy of the approved working group document for proposed revision
- Staff to send a form to work for solicitation of nominations.
- Salfinger and Phillips volunteered to be on the working group.

h. OMB Member Updates

OMB shared the latest in their individual analytical areas of interest.

V. ADJOURNMENT

a. On Day 1, the meeting was recessed for the day at 3:45pm.

MOTION: To adjourn the meeting on Day 2

Gilliland moved and Brown seconded; Consensus: Unanimous.

Meeting adjourned on Wednesday, February 8, 2017 at 2:15pm ET.

AOAC INTERNATIONAL: Expert Review Panel for SPSFAM Food Allergen Methods:

APPLICABLE SMPR(s):

- AOAC SMPR 2016.002, *Standard Method Performance Requirements (SMPRs®) for Detection and Quantitation of Selected Food Allergens*

LIST OF METHODS SUBMITTED FOR REVIEW

- **ALL-01: Detection and Quantitation of Selected Food Allergens using LC-MS/MS (Revised)**
  - Author(s): Lee Sun New, Hua-Fen Liu, Andre Schreiber (SCIEX)
  - Submitted by: Lee Sun New and Hua-Fen Liu (SCIEX)

Qualification of Expert Reviewers:

To qualify as an Expert Reviewer, the candidate must meet one of the following requirements:

- Demonstrated knowledge in the appropriate scientific disciplines.
- Demonstrated knowledge regarding data relevant to adequate method performance.
- Demonstrated knowledge of practical application of analytical methods to bona fide diagnostic requirements.

These qualifications must be clearly described in a CV submitted to the CSO and kept on file at AOAC headquarters.

CSO RECOMMENDED EXPERT REVIEW PANELISTS

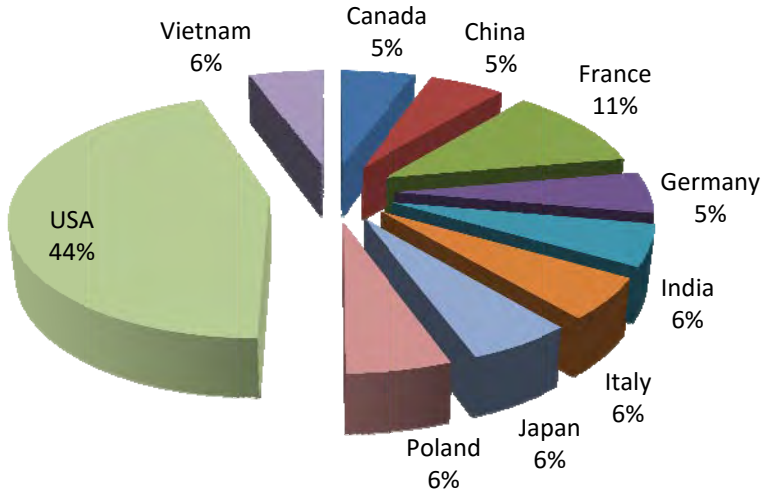
	Name	Affiliation	Country
1.	Almy, David	Neogen Corporation	USA
2.	Bhandari, Sneh	Mérieux NutriSciences	USA
3.	Boudichon, Francois	Danone	France
4.	Cho, France	Maxxam Analytics	Canada
5.	Davenport, Ken	3M Food Safety	USA
6.	Downs, Melanie	FARRP, University of Nebraska	USA
7.	Ehling, Stefan	Abbott Nutrition	USA
8.	Farrow, Michael	Abbott Nutrition	USA
9.	Lawry, John	Covance	USA
10.	Monaci, Linda	National Research Council of Italy	Italy
11.	Nguyen, Minh Hai	Thanglong Instruments	Vietnam
12.	Nishiyama, Yasutaka	NH Foods	Japan
13.	Popping, Bert	Mérieux NutriSciences	France
14.	Siebeneicher, Susanne	R-Biopharm AG	Germany
15.	Tuzimski, Tomasz	Medical University in Lublin	Poland
16.	Yadlapalli, Sudhakar	First Source Laboratory Solutions	India
17.	Zweigenbaum, Jerry*	Agilent Technologies	USA
18.	Szpylka, John (Chair)	Mérieux NutriSciences	USA
	Zhu, Wei	Danone	China

**Method author of methods submitted in response to issued Call for Methods*

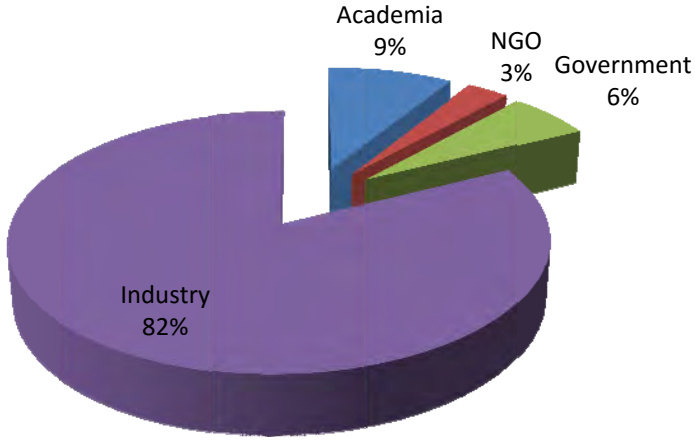
ERP is approved in August 2016.

Replacing Francois Boudichon from Danone with Wei Zhu from Danone.

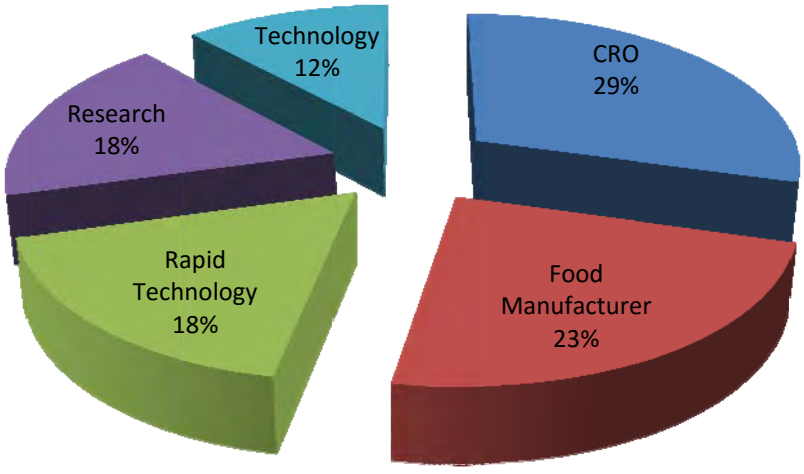
Recommended Candidates by Region



Recommended Candidates by Broad Perspectives



Candidates by Specific Perspectives



WEI ZHU, Ph.D.
wei.zhu@Danone.com
86-15902123208

HIGHLIGHTS OF QUALIFICATIONS

- Professional and scientific leadership on analytical governance as well as analytical support to food safety and quality to fulfill mission and service to business.
- Professional and scientific leadership on public standard setting for food ingredients in Food Chemical Codex (FCC) and dietary supplements in U.S. Pharmacopeia National Formulary (USP-NF)
- Exceptional knowledge and experience in developing and implementing food quality and safety programs to maintain high quality product and to mitigate safety risks
- Strong expertise in food quality and food safety, food fraud/adulteration prevention, dietary supplement verification, pharmaceutical science and analytical chemistry
- Experience of working in standard-developing organization, global food companies as well as pharmaceutical organization; Experience in strategic initiative development
- First-hand experience of establishing new food safety/quality standardization lab in compliance with ISO17025 and new cGMP analytical lab in compliance with cGMP, FDA regulation and ICH guidance with state of art technology
- Lead, guide and deliver numerous projects covering wide range of areas including analytical development of food ingredients and product, complex food matrix as well as drug substance and drug product
- Research experience in drug discovery and drug development; Experience in drug design and structural optimization, characterization, and preformulation as well as analytical service and documentation for IND filing to FDA
- Experienced project management and science-based decision making with broad portfolio in a dynamic and intercultural environment with productivity. Act positively to challenges and provide solutions
- Representing organizations at international conferences, professional associations and public media event
- Demonstrate competency of leading, empowering team and also a good team player; strategic thinking to development new business opportunities
- Experienced in handling media (print, interview), communication and bridging/collaboration with stakeholders, authorities, regulators, scientific associations and industries

PROFESSIONAL EXPERIENCE

October 2016 - Present, Director, Great China Food Safety Lab
Danone Asia-Pacific Management Co. Ltd.

- Implement and drive the Danone Global Analytical Governance; Develop, upgrade and implement the analytical governance at Danone Greater China
- Create the necessary network and organization to ensure that Analytical governance is implemented, applied and enforced (audits, KPIs)
- Organize, manage and develop the necessary capability of Danone Greater China laboratory structure to fulfill mission and service to business.
- Identify, evaluate and rank all relevant existing and emerging food safety risks
- Identify food safety risks management and risks mitigation options
- Recommend and validate reference analytical tools as well as methods and interpret results and recommend corrective actions

- Be the spoke's person for Danone Greater China on Analytical methods and specifications in international organizations, authorities and business groups

June 2015 - October 2016 Director, Global Center of Excellence for Food (GCOE Food)
United States Pharmacopeial Convention (USP), Shanghai, China

- Provide scientific and professional leadership to food devison to ensure development and maintenance of high quality, scientifically sound standards for food ingredients in the Food Chemical Codex (FCC), a compendium of internationally recognized standards for purity and identity
- Provide scientific leadership on the standard setting for dietary supplement; leads the verification testing of dietary ingredient and dietary supplement
- Organize and develop scientific capability of GCOE Food to fulfill the mission of USP and meet the challenge of analytical excellence to ensure food quality, safety and food fraud prevention
- Manage high level coordination and alignments among local authorities, scientific association and industries in terms of science, technology, standards for food quality, food safety and food fraud mitigation
- Perform strategy development to enhance the public health impact of USP food program as well as to strengthen the collaboration with multiple stakeholders
- Monitor threats to the public health arising from unmet standard needs, and develops action plans in concert with stakeholders; Provide training on vulnerability assessment and mitigation of food fraud
- Organize group, identifies personnel needs and empower scientific staff
- Establish goals and metrics for the team, ensure alignment with the program unit goals and organizational goals, and evaluate performance against established goals

Oct 2013 – June 2015 Director, Food Chemicals
United States Pharmacopeial Convention (USP), Shanghai, China

- Provided professional and scientific leadership to the food ingredient program through the development and maintenance of high quality, scientifically sound standards for food ingredients in the Food Chemicals Codex (FCC), a compendium of internationally recognized standards for purity and identity of food ingredients
- Provided professional and scientific leadership to the standard setting of dietary supplements in U.S. Pharmacopeia National Formulary (USP–NF)
- Establishment of new food safety/quality standardization lab in compliance with ISO17025
- Directed the science-based and risk-based approaches for standardization of food ingredients and dietary supplements
- Guided food division's activities, deliverables and outputs in compliance with quality and safety
- Managed high level coordination and alignments among local authorities, scientific association and industries in terms of science, technology, standards for food quality and safety
- Represented USP in international/inter-governmental conferences, workshop, panel discussion on food quality and food safety, successfully delivered speeches
- Represented USP at professional associations, working groups for NGOs and media event; Experienced in handling media (print, interview), communication and bridging/collaboration with stakeholders, authorities, regulators, scientific associations and industries
- Reinvigoration of the scientific underpinning and technical outreach of the FCC standards and standardization, food quality, authenticity and food safety
- Hosted workshops and training for regulators on food safety and risk assessment
- Performed strategy development to enhance the public health impact of USP food program as well strengthen the collaboration with multiple stakeholders

Aug.2011 - Oct. 2013 Manager, Product Safety

Asia Pacific Technical Center, The Coca-Cola Company, Shanghai, China

- Managed and led team to deliver accurate & prompt results on various tasks, emergency cases and projects
- Guided team on method development, validation and transfer of safety related residual testing as well as quality control for various complex food matrix
- Represented the company as technical expert at public media event
- Led food safety related risk evaluation projects as well as ingredient risk screening projects to predict and mitigate future risk with advanced technology
- Led and performed identification and structure elucidation for unknowns from complex matrix.
- Tracked updates of global standards as well as domestic standards to ensure the promptness and integrity of analytical service; Responding to alerts from society and various agencies
- Initiated projects and activities on new technology and concepts to achieve business development target of company as well as keeping the laboratory state-of-art capability
- Identified resources, recruit manpower, budget to accommodate with desired analytical service work with high quality on time
- Maintained expertise in the field of food quality and safety and analytical technologies; Developed team and coached talents; Assisted clients in result interpretation and offered technical advice
- Built up documentation traceability system and data auto-backup system to ensure the integrity of quality system

Sep.2008 - Aug.2011 Senior manager

Pharmaceutical Development Service Center (PDSC), Shanghai Chempartner Co. Ltd. Shanghai

- Set up a new GMP analytical lab with quality control and continuously improve quality system in compliance with cGMP, FDA compliance regulations. Leading professional team to pass numerous audits from various clients from US, Europe and Asia
- Organized and supervise a cGMP team to provide cutting-edge analytical service and technical support in compliance with cGMP, FDA guideline and ICH guideline
- Building up a complete set of SOPs to direct daily activities and common practice in the analytical center conforming cGMP, FDA guideline and ICH guideline
- Planned, managed and supervised all scientific and technical activities of analytical service group.
- Led and guided analytical method development, method validation, method transfer of LC method for impurity, assay and dissolution; GC method for impurity, assay and residual solvents , GC/MS, LC/MS, IC for counter ion and residual impurity, GFAA for metal analysis for both API and finished drug product
- Drafted, reviewed and approved protocols of method development, method validation protocols and method transfer protocols under cGMP, ICH and FDA guidelines
- Drafted, reviewed and approved method development reports, method validation reports and method transfer reports; Reviewing and approving Certificate of Analysis (CoA) and Result of Analysis (RoA)
- Lead and guided structural characterization/elucidation of impurities and degradation, impurity profiling and stability testing
- Lead analytical development and documentation for IND filing to FDA and CFDA; Delivered two projects for IND filing to CFDA
- Trained scientists on technical skills and cGMP operation; and initiate personal development plan for team members; Setting up workshop to train scientists and technicians to adapt new leading technologies and regulation
- Lead dedicated scientists to actively undertake challenging projects and produce quality deliverables within good timing and budget
- Actively participated technical clarification and business communication with customers

Jan. 2005 - August 2008 Research Fellow

Department of Pharmacology, Robert Wood Johnson Medical School-UMDNJ, Piscataway, New Jersey, USA

- Performed research in drug discovery and development of anti-AIDS and anti-cancer; Contributed in drug design and structural optimization, drug synthesis and characterization, purification and preformulation
- Conducted analytical and bioanalytical method development and validation of drug substance
- Performed separation, elucidation and identification of active pharmaceutical ingredient using HPLC, LC-MS/MS, MALDI-TOF MS and NMR
- Conducted pharmaceutical analysis of biological samples to evaluate the pharmacokinetics and elucidate the metabolite of organic drug compounds
- Conducted pegylation of active pharmaceutical ingredient to increase bioavailability and optimize pharmacokinetics
- Performed design and optimization of drug structure to increase inhibition efficacy to fight AIDS
- Performed preparative separation to obtain the most active species against AIDS using semi-prep and prep HPLC

Mar. 2005 - July 2007 Collaboration scientist
Novaflux Biosciences Inc., Princeton, New Jersey, USA

- Developed microbicides from homopolymer and copolymer of guanides and their derivatives (PBGs) to prevent HIV-AIDS transmission
- Performed preformulation of topical microbicides as the fusion inhibitor of HIV type-1 virus
- Investigated the feasible applications of PBGs on other infectious diseases
- Conducted the characterization and identification of active pharmaceutical ingredient and drug substance by NMR, HPLC, LC-MS/MS and MALDI-TOF MS

Sep.1999 - Dec. 2004 Research and Teaching Assistant
Department of Chemistry and Biochemistry, Auburn University, Auburn, AL

- Conducted qualitative and quantitative analytical method development and validation with HPLC, HPAEC, IEC, LC-MS, GC-IR, GC-MS, ESI-MS and MALDI-TOF MS
- Developed electroactive polymers and completed characterization of their chemical and physical properties by various techniques
- Performed isolation and identification of biological samples including proteins, peptides and saccharides
- Developed a group of gas sensors with high selectivity and sensitivity for volatile organic compounds (VOCs)
- Discovered the polymerization and redox switching mechanism using electrochemistry combined with Electrochemical Quartz Crystal Microgravity
- Instructed Instrumental Analysis Lab, Chemical Analysis Lab and General Chemistry Lab; Supervised and trained graduate and undergraduate students

July 1993 - Aug. 1999 Process Engineer
SINOPEC * Shanghai Engineering Company Limited (SSEC),** Shanghai, P.R.China

- Conducted process evaluation and improvement, transferred manufacturing process from R&D to operations
- Developed and designed process flow, plant layout, equipment and piping system
- Committed ANSI, API, cGMP and FDA requirement for chemical and pharmaceutical industries
- Conducted and evaluated on-site installation, troubleshooting, validation, start-up and commission run test

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* China Petrolum & Chemical Corporation
** Former Shanghai Pharmaceutical Industry Design Institute (SPIDI)

- Performed project scheduling and management, directed and coordinated various disciplines

Selected projects

- **Hoechst-Nanning Food Ingredient Co.Ltd**., Sorbic Acid project
  Project leader, process leader,
  Responsible for project management, process development, layout and detail design
- **NEGPF-BASF Shenyang Vitamin Co.Ltd**., Vitamin A, B and E project
  Project leader, process leader,
  Responsible for process development, layout & detail design, on-site installation, start-up and commission run test
- **Roche-Sunve (Shanghai) Vitamin Co.Ltd**., Vitamin E project
  Process engineer,
  Responsible for process development and coordination between various disciplines
- **Liaoyang Petrochemical Fiber Company/SINOPEC**, Purified Terephthalic Acid project
  Process engineer,
  Responsible for process development, detail design, and on-site installation

Dec.1992 – July 1993 Research Assistant
National Key Laboratory of Bio-organic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, P. R. China

- Conducted research on carbohydrate chemistry
- Accomplished design and multi-step organic synthesis of carbohydrate, and isolation & identification

TECHNICAL SKILLS

Over ten years practice in the development and validation of qualitative & quantitative analytical methods with HPLC, GC, GC/MS, LC/MS, LC/MS/MS for food ingredient and food product as well as API and drug products.

Analytical skills including HPLC, HPAEC, IEC, GPC; LC-MS/MS, ESI-MS, MALDI-TOF MS; GC-MS, GC-IR; UV-VIS, FTIR, NIR, Raman, Fluorescence; FAA, GFAA; PSD; DSC and NMR
Organic synthesis, characterization, separation and fraction collection
Chemical / electro polymerization, isolation and identification
Computer skills, CAD design

PATENTS

- Welsh, W, **Zhu, W**., Kholodovych, V.
  Methods and Compositions for the preparation of linear polymeric and oligomeric biguanides
  Serial Number 60/899,527
- Welsh, W., **Zhu, W.**, Kholodovych, V., Arora, S., Rando, R..
  Methods and compositions for the preparation of linear polymeric and oligomeric biguanides useful for prevention and therapy of disease and infection
  Serial Number 60/899,519

EDUCATION

Ph.D. Analytical and Material Chemistry
Department of Chemistry and Biochemistry, Auburn University, Auburn, Alabama, USA *December 2004*

B.S. Organic Chemistry
Department of Chemistry, Shanghai University of Science and Technology, Shanghai, P.R.China *July 1993*

Mini MBA Fu Dan University MBA program *July 2011*

AWARD

- Presidential assistantship, Auburn University, 2000-2004
- Outstanding student scholarship, SUST, 1st and 2nd class, 1990-1993

PROFESSIONAL SOCIETY

- Food Industry Asia (FIA) Organization representative
- Association of Official Analytical Chemists
- American Chemical Society
- American Association of Pharmaceutical Scientist

REFERENCES

Furnish upon request

MEMORANDUM

DATE: March 2, 2017

TO: Members of the Official Methods Board

FROM: Deborah McKenzie, Sr. Director, AOAC Research Institute

SUBJECT: **AOAC Research Institute**
AOAC *Official Methods of Analysis*℠ (OMA) Expert Review Panel for Fertilizers-Urea

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BACKGROUND

The AOAC Expert Review Panel for Fertilizers - Urea will convene on Wednesday, March 15, 2017 from 1:00pm to 4:00pm during the AOAC INTERNATIONAL Mid-Year Meeting.

The purpose of the meeting will be to review the following:

1) **OMAMOD-05**: Modification to AOAC Official Methods 959.03, Urea in Fertilizers (Urease Method)
2) **Discuss First to Final Action requirements and Feedback mechanisms.**

RECOMMENDATION

Currently, there are 10 members on the ERP for Fertilizers – Urea that were vetted by the Official Methods Board to evaluate candidate methods for Fertilizers – Urea as per the Expert Review Panel (ERP) Policies and Procedures and revised last August. The current roster is as follows:

Last Name	First Name	Mar-17
1. Guertal	Elizabeth	cannot attend
2. Hall (Chair)	William	Okay to attend
3. Hartshorn	Jon	Okay to attend
4. Hojjatie	Michael	Okay to attend – (method author)
5. Joseph	George	Okay to attend
6. Ma	Qiang	cannot attend
7. Nacharaju	Krishnamurthy	Okay to attend
8. Pereira	David	Okay to attend
9. Phillips	Heidi	Okay to attend
10. Tan	Rechel	cannot attend

We are also proposing the addition of the three (3) new members to the ERP as follows:

New Candidates for ERP Membership:
Patricia Lucas – Florida Department of Agriculture and Consumer Services
Jack Schmansky – The Scotts Miracle-Gro Company
Frank Sikora – University of Kentucky

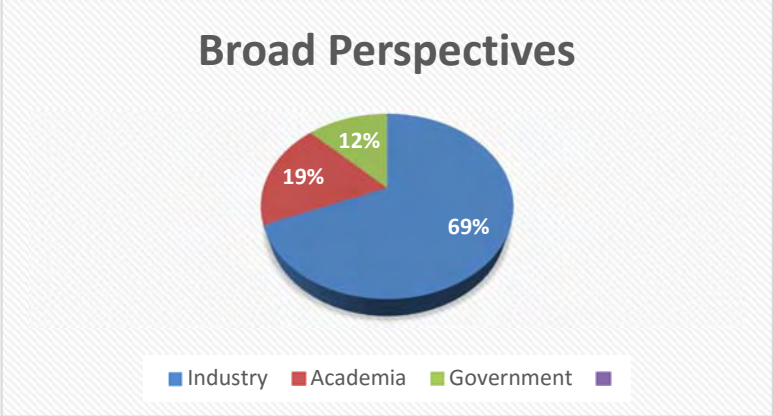
They are recommended by the ERP Chair, Bill Hall and their CV's are attached for your quick reference.

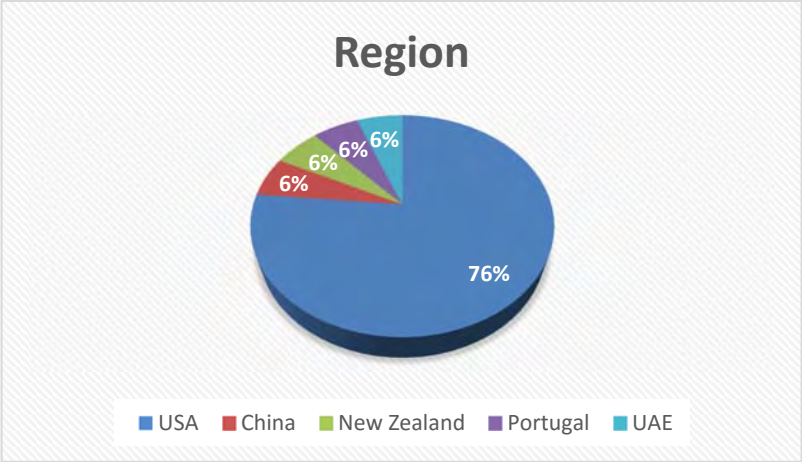
The revised ERP roster would still maintain a diverse balance of major and specific perspectives.

PROPOSED ROSTER FOR ERP - UREA

Name	Organization	Perspectives	Region	Status
1. Hall, William (Chair)	Mosaic	Industry – Product Manufact.	USA	Current
2. Guertal, Elizabeth	Auburn University	Academia – Research	USA	Current
3. Hartshorn, Jon	Morral Companies	Industry – Product Manufact.	USA	Current
4. Hojjatie, Michael	Tessenderlo Kerely	Industry – Processing	USA	Current
5. Joseph, George	AsureQuality	Industry – CRO	New Zealand	Current
6. Lucas, Patricia	FL Dept. of Ag.	Government – State	USA	NEW
7. Ma, Qiang	CAIQ	Government - Regulatory	China	Current
8. Nacharaju, Murthy	ICL-SF	Industry – Product Manufact.	USA	Current
9. Pereira, David	3B's Research Group	Academia - Research	Portugal	Current
10. Phillips, Heidi	Self Employed	Industry - Independent	USA	Current
11. Schmansky, Jack	The Scotts Miracle-Gro Co.	Industry – Product Manufact.	USA	NEW
12. Sikora, Frank	University of Kentucky	Academia – Research	USA	NEW
13. Tan, Rechel	Abu Dhabi Fertilizer	Industry – Product Manufact.	UAE	Current

REVISED EXPERT REVIEW PANEL PERSPECTIVES





PATRICIA LUCAS

Bureau of Agricultural Environmental Laboratories
Florida Department of Agriculture and Consumer Services
3125 Conner Blvd, Bldg 7
Tallahassee, FL 32599
850-617-7830
Patricia.Lucas@FreshFromFlorida.com

Patricia Lucas is a Laboratory Supervisor for the State of Florida regulatory laboratories serving asthe Bureau Chief for the Bureau of Agricultural Environmental Laboratories of the Florida Department of Agriculture and Consumer Services. She has been supervisor for more than five years and has expertise or can draw on expertise of her staff. The Bureau conducts analysis of commercial feed, seed, fertilizer, agricultural liming materials, and pesticide formulations in Florida to ensure compliance with labeling. Analysis of fertilizers includes testing for urea and trace metals. Lucas is one of Florida's Control Officials for AAFCO, AAPCO, and is active in AAPFCO. She is also a member of the Florida Fertilizer & Agrichemical Association.

JACK SCHMANSKY

The Scotts Miracle-Gro Company
14111 Scottslawn Road
Marysville, OH 43040
937-644-0011
jack.schmansky@scotts.com

Summary: Jack Schmansky holds a Bachelor of Science degree in Molecular Genetics and has 14 years of experience at The Scotts Company. His current position is the Elementals Lead Senior Scientist for Analytical Research Laboratory at The Scotts Miracle-Gro Company. Has a great knowledge and experience in testing urea fertilizers and HPLC analysis.

Skills: Analytical Chemistry, Biochemistry, Microbiology, Molecular Biology, Ion Chromatography, GC, HPLC, GLP

PROFESSIONAL EXPERIENCE

- 2008 - present. Senior Scientist, The Scotts Miracle-Gro Company
- 2005 - 2008. Scientist, The Scotts Miracle-Gro Company
- 2001 - 2005. Senior Specialist, The Scotts Miracle-Gro Company
- 1997 - 2001. Quality Control Specialist, The Scotts Miracle-Gro Company

EDUCATION

- B.S. The Ohio State University, 1980

ORGANIZATIONS

- American Chemical Society
- Association of American Plant and Food Control Officials (AAPFCO)

FRANK SIKORA

Soil Test Coordinator, Regulatory Services
Associate Adjunct Professor

University of Kentucky
Soil Testing Lab
103 Regulatory Services Bldg.
Lexington, KY 40546-0275
Phone: 859-257-2785
fsikora@uky.edu

AREAS OF INTEREST: Soil-Plant relationships, Analytical chemistry in soil analysis, Chemical Equilibria

PROFESSIONAL EXPERIENCE

- 1998-present. Soil Testing Coordinator and Adjunct Associate Professor, University of Kentucky
- 1996-1998. Team Leader for Constructed Wetlands Research Team, Biotechnology, TVA Environmental Research Center, Muscle Shoals, AL.
- 1987-1995. Research Chemist, Biotechnology, TVA Environmental Research Center, Muscle Shoals, AL
- 1991-1998. Associate Adjunct Professor, Department of Agronomy and Soils, Auburn University, Auburn, AL.
- 1986-1987. Postdoctoral Associate, Dept. of Agronomy, Cornell

EDUCATION

- B.S. West Virginia University, 1980
- M.S. University of Tennessee, 1982
- Ph.D. University of Illinois, 1986

As Coordinator of the Soil Testing Laboratories, the goal is to help the citizens of Kentucky maintain productive and economical plant growth operations by offering tests on soils, water, greenhouse media, and animal waste with subsequent fertilizer and lime recommendations.

Chemical tests are offered on media utilized for plant growth operations such as soil, greenhouse media, and animal waste. Nutrient needs and fertilizer responses are determined by research conducted within the UK College of Agriculture on crops and soils in Kentucky.

Routine soil testing includes pH, buffer pH, P, K, Ca, Mg, Zn and non-routine tests which include boron, organic matter, and triazine residue in soil, pH and nutrients in greenhouse media used for various horticultural crops, pH and nutrients in water used for irrigation and nutrient solution purposes, nutrients in animal waste used for land application, and potential acidity in mine spoil.

MEMORANDUM

DATE: March 2, 2017

TO: Members of the Official Methods Board

FROM: Deborah McKenzie, Sr. Director, AOAC Research Institute

SUBJECT: **AOAC Research Institute**
AOAC *Official Methods of Analysis*℠ (OMA) Expert Review Panel for Fertilizers-Metals

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BACKGROUND

The AOAC Expert Review Panel for Fertilizers - Metals will convene on Wednesday, March 15, 2017 from 1:00pm to 4:00pm during the AOAC INTERNATIONAL Mid-Year Meeting.

The purpose of the meeting will be to review the following:

1) **OMAMAN-28**: Simultaneous Determination of Arsenic, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Selenium, and Zinc in Fertilizers by Microwave Acid Digestion and Inductively Coupled Plasma-Optical Emission Spectrometry Detection: Single Laboratory Validation
2) **Discuss First to Final Action requirements and Feedback mechanisms.**

RECOMMENDATION

Currently, there are 15 members on the ERP for Fertilizers – Metals that were vetted by the Official Methods Board to evaluate candidate methods for Fertilizers – Metals as per the Expert Review Panel (ERP) Policies and Procedures. The current roster is as follows:

Last Name	First Name	Mar-17
1) **Bartos**	James	Okay to attend
2) **Clifford**	Robert	No Response
3) **Gopala**	Anil	No Response
4) **Hall (Chair)**	William	Okay to attend
5) **Kariuki**	Solomon	No Response
6) **Liu**	Kai	No Response
7) **Oppermann**	Uwe	No Response
8) **Parisi**	Salvatore	Cannot attend
9) **Phillips**	Heidi	Okay to attend
10) **Provance-Bowley**	Mary	Resigned
11) **Reba**	Rick	Okay to attend
12) **Shelite**	Kristopher	Resigned
13) **Tan**	Rechel	Cannot attend
14) **Tsourides**	Dion	Okay to attend
15) **Wegner**	Keith	Cannot attend

We are currently proposing the termination of membership for seven (7) ERP members as follows:

Termination of Membership:
Robert Clifford - Shimadzu
Anil Gopala - PerkinElmer
Solomon Kariuki – University of Kentucky
Kai Liu – Eurofins Scientific
Uwe Oppermann - Shimadzu
Mary Provance-Bowley - Harsco Metals & Minerals
Kristopher Shelite – Compass Minerals

We are also proposing the addition of the five (5) new members to the ERP as follows:

New Candidates for ERP Membership:
Timothy Fau – PotashCorp Aurora
Timothy Jestness – PotashCorp Aurora
William Martin – Compass Minerals
Scott Roalofs – Colorado Department of Agriculture
Frank Sikora – University of Kentucky

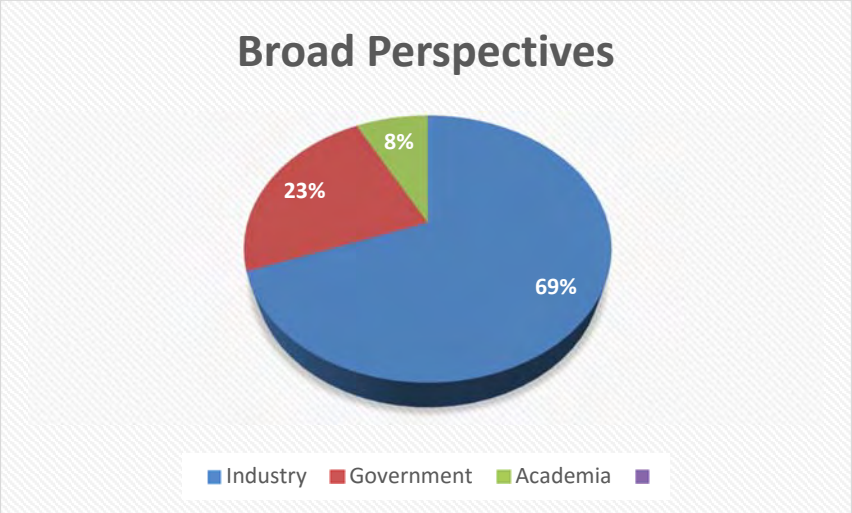
They are recommended by the ERP Chair, Bill Hall and their CV's are attached for your quick reference.

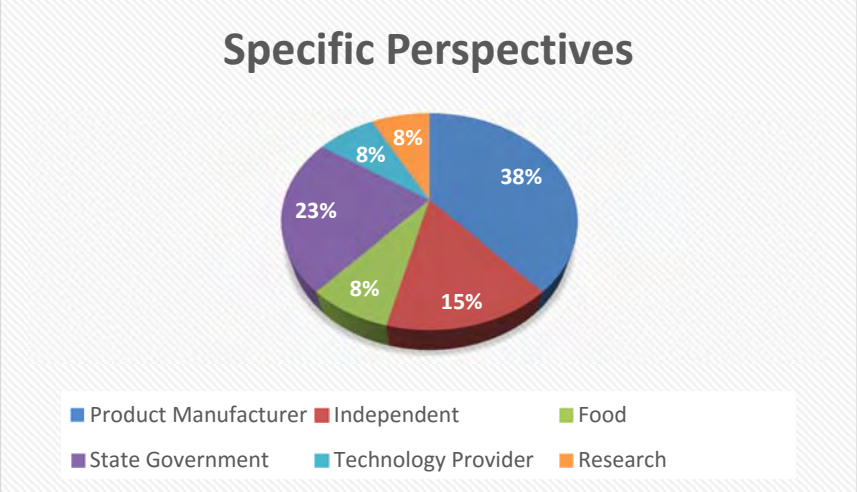
The revised ERP roster would still maintain a diverse balance of major and specific perspectives.

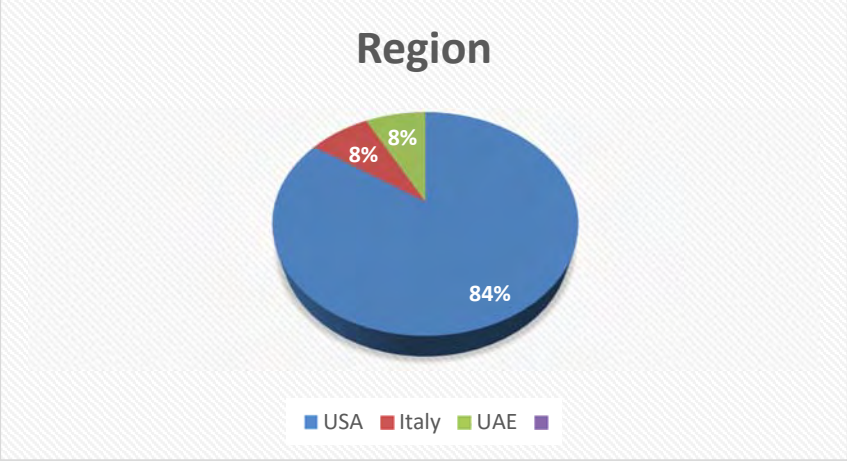
PROPOSED ROSTER FOR ERP - METALS

Name	Organization	Perspectives	Region	Status
1. Hall, William (Chair)	Mosaic	Industry – Product Manufact.	USA	Current
2. Bartos, James	Office-Indiana State Chemist	Government - State	USA	Current
3. Fau, Timothy	PotashCorp Aurora	Industry - Product Manufact.	USA	NEW
4. Jestness, Timothy	PotashCorp Aurora	Industry – Product Manufact.	USA	NEW
5. William Martin	Compass Minerals	Industry – Product Manufact.	USA	NEW
6. Parisi, Salvatore	Industry Consultant	Industry – Independent	Italy	Current
7. Phillips, Heidi	Self Employed	Industry – Independent	USA	Current
8. Reba, Rick	Nestle	Industry – Food	USA	Current
9. Roalofs, Scott	Colorado Dept. of Agriculture	Government – State	USA	NEW
10. Sikora, Frank	University of Kentucky	Academia – Research	USA	NEW
11. Tan, Rechel	Abu Dhabi Fertilizer	Industry – Product Manufact.	UAE	Current
12. Tsourides, Dion	Spectro A. I.	Industry – Technology Provider	USA	Current
13. Wegner, Keith	Colorado Dept. of Agriculture	Government – State	USA	Current

REVISED EXPERT REVIEW PANEL PERSPECTIVES







TIMOTHY ALAN FAU

PotashCorp Aurora
1530 NC Hwy 306 S
Aurora, NC 27806
Phone: 252-322-8159
E-Mail: tafau@potashcorp.com

SKILLS

Analytical Chemistry, GMP, Research & Development, HAACP, ISO/FSSC 22000
Gas Chromatography, GC-MS, HPLC, LC-MS, ICP, ICP-MS, NMR, UV/Vis, X-ray Fluorescence

PROFESSIONAL EXPERIENCE

- Laboratory Supervisor, PotashCorp Aurora, Aurora, NC (2009 – Present)
- Senior Chemist, ConAgra Foods, Charlotte, NC (1989 – 2009)

EDUCATION

- MBA, William Woods University, 2003
- BS, Missouri State University, 1990 (Environmental Chemistry)

TIMOTHY A. JESTNESS

PotashCorp Aurora
1530 NC Hwy 306 S
Aurora, NC 27806
252-322-8291
tajestness@potashcorp.com

SKILLS

Process Control, Process Engineering, Process Optimization, Engineering, Factory, Root Cause Analysis, Lean Manufacturing, Chemical Engineering, Manufacturing, Capital Projects, Predictive Maintenance, Continuous Improvement, Cement, Process Safety, Aspen Plus, Quality Management, Kaizen, Maintenance Management, Plant Maintenance, Reliability, SPC, TPM, Commissioning, Process Improvement, Mineral Processing, Metallurgy, Raw Materials, Manufacturing Operations, 5S, Plant Management, Preventive Maintenance, Process Simulation, Project Engineering, Manufacturing..., ISO, HAZOP, Mining, Materials

RECENT PROFESSIONAL EXPERIENCE

- Phosphate Technical Services Manager, PotashCorp Aurora, Aurora, NC (2013 – Present)
- Superintendent – Phosphoric Acid/STF, PotashCorp Aurora, Aurora, NC (2011 – 2013)
- Superintendent – Product Distribution, PotashCorp Aurora, Aurora, NC (2011 – 2011)
- Product Superintendent - STF, PotashCorp Aurora, Aurora, NC (2010 – 2011)
- Senior Engineer, PotashCorp Aurora, Aurora, NC (2008 – 2010)
- Production Manager, Lafarge Cement, Seattle, WA (2005 – 2008)
- Mill Manager, Lafarge Gypsum, Palatka, FL (2001 – 2005)

EDUCATION

- BS Chemical Engineering - Iowa State University, 1990
  Chemistry and Biology

PROFESSIONAL ORGANIZATIONS

Association of American Plant Food Control Officials, Inc. (AAPFCO)

STATEMENT OF EXPERTISE

William Martin

I am writing for your consideration regarding an appointment to the AOAC Expert Review Panel. I am confident that my extensive background in analytical chemistry and method development will provide a diverse expertise that would be well suited for the review panel. My specialties range between spectroscopic analysis, nanotechnology, biological sample preparation, and single molecule detection. This broad range of skills will provide a unique point of view to the review panel.

I recently received my Ph.D. in analytical chemistry from the University of Kentucky in the Richards Lab, where I worked to develop cutting edge analytical methods. This includes spectroscopic studies between various pharmaceuticals and the active sites on live cells. The methods developed allowed the study of the flow of nutrients (including potassium, calcium, and other metals) across plasma membrane (PM) of mammalian cells, vesicle fusion for the purposes of drug delivery, and nicotinic receptor stoichiometric.

During my tenure as a graduate student I participated in a four month fellowship in the Vosch Lab at the University of Copenhagen. We worked to develop new single molecule confirmation methods via the simultaneous acquisition of six separate spectroscopic signals on an individual fluorophore. This work, when used in conjunction with various nanofabrication methods, allowed me to perform accurate and reproducible characterizations for spectroscopically enhanced biomarkers.

During my graduate research fellowship I worked at the Center for Nanophase Materials Sciences at Oak Ridge National Laboratory to develop nanofabrication methods for single particle analysis. These new procedures were simplified and allowed reproducible fabrication of nanostructures that were cost effective. These structures were then used to analyze calcium flux across the PM of cancer cells, biomarker enhancement, and measurement of single ligand turnover in live cells.

My current position as Sr. Researcher at Compass Minerals is heavily involved with the method development for macro and micro nutrients in fertilizers. This type of work is closely correlated to very important safety interests outlined by the AOAC. While my industry experience is somewhat limited, I believe my expertise in such a diverse array of analytical methods would make me a great addition to the AOAC Expert Review Panel. I appreciate your consideration and look forward to making a contribution.

W. ELLIOTT MARTIN

8271 N Tullis Ave APT 2211 Kansas City, MO 64158
Phone: (620) 562-8706 Email: martinw@compassminerals.com

EDUCATION

Doctor of Philosophy, Chemistry University of Kentucky, Lexington, KY December 2016
Advisor: Christopher I. Richards, Ph.D.
Dissertation topic: Characterization and Application of Hybrid Nanostructures for Enhanced Biological Imaging using Fluorescence Microscopy Techniques

Bachelor of Science, Chemistry Lindenwood University, St. Charles, MO May 2012
Advisor: Ricardo Delgado, Ph.D.
Undergraduate research: Blind Studies of Organic Fuels for Application in Forensic Arson Using GC/MS

PROFESSIONAL EXPERIENCE

Sr. Researcher Compass Minerals, Overland Park, KS 2017-Present

- Develop and implement methods for macro and micronutrients in fertilizers using instruments such ICP-MS, FTIR, UV-VIS, IC, and CHNOS Elemental Analysis
- Develop new macro and micro nutrient blends in fertilizers
- Developing additives for salts to reduce caking, and spalling
- Regular maintenance, training, and repairs for laboratory instrumentation
- Provide technical support

Research Assistantship University of Kentucky, Lexington, KY 2014-2016

- Fabricated plasmonic devices and performed single molecule photophysical studies to determine the effect of metal structures on single molecule fluorescence
- Worked regularly in the Center for Nanophase Materials Sciences (CNMS) at Oak Ridge National Laboratory (3+ years) to fabricate novel nanostructures for fluorescence imaging such as zero-mode waveguides, gold nanobowties, and nanoporous silicon nitride membranes
- Wrote several successful user proposals for group access to CNMS facilities and supplies
- Summer research fellowship in the Vosch lab at the University of Copenhagen, Denmark. Performed simultaneous single molecule fluorescence intensities, lifetimes, spectra, blinking dynamics, and photon antibunching statistics
- Developed an integrated microfluidic and nanopore imaging device to monitor single ligand-receptor interactions on the plasma membrane of live cells
- Built several custom microscopy setups for applications including confocal, TIRF, FLIM, FCS, smFRET and alternating laser excitation (ALEX) - Used these techniques to study DNA and protein systems inside of hybrid zero-mode waveguides
- Built a custom microscope with the capability to perform high throughput TIRF (prism-based) and FCS measurements
- Coordinated and designed application specific confocal/widefield microscopy set ups based collaborator needs, and led training/certification sessions for new users

- Facilitated certification and training of students, faculty, and external customers at the University of Kentucky Confocal Microscopy Center for imaging biological species

Teaching Assistantship University of Kentucky, Lexington, KY 2012-2014
Lindenwood University, St. Charles, MO 2011-2012

- Stockroom Employee: Prepped supplies for general, analytical, and organic chemistry laboratory sections. Organization and material upkeep for all supplies.
- General Chemistry Teaching Assistant (3 sections/semester): Pre-lab lectures followed by laboratory activities (~24 students). Regular office hours were held for Q/A's regarding homework assignments, lab reports, exam preparation, and future lab work.

SKILLS

- Expert in the assembly, alignment, and use of custom wide-field and confocal microscopy setups including free-space beam alignment, fiber coupling, total internal reflection fluorescence (TIRF), fluorescence correlation spectroscopy (FCS), ALEX, resonant scanning based systems, and super-resolution techniques
- Expert user of nanofabrication techniques including: E-beam lithography (EBL), focused ion beam (FIB), photolithography, dual chamber E-beam evaporation, sputter deposition, reactive ion etcher (RIE), atomic layer deposition (ALD), optical profilometry, and scanning electron microscopes (SEM)
- Thorough knowledge of substrate construction and sample preparation methods including polydimethylsiloxane (PDMS) based microfluidic systems, various linker chemistries for fluorescent labeling of substrates, as well as, molecular adsorption onto surfaces using polyvinyl alcohol films
- Strong technical background with acquisition/analysis softwares including: Micro-Manager (NIH), ImageJ (NIH) , OriginPro, Symphotime64 (Picoquant), Metamorph (Olympus), IQ (Andor), Solis (Andor), and the Microsoft Office Suite

PUBLICATIONS

1. **W. Elliott Martin;** Ning Ge; Bernadeta R. Srijanto; Emily Furnish; C. Patrick Collier; Christine Trinkle; Christopher I. Richards. "Real Time Sensing of Single Receptor-Ligand Interactions with Nanoaperture Integrated Microfluidic Devices" ACS Nano. Submitted for Review
2. **W. Elliott Martin;** Bernadeta R. Srijanto; C. Patrick Collier; Tom Vosch; Christopher I. Richards, A Comparison of Single-Molecule Emission in Aluminum and Gold Zero-Mode Waveguides. The Journal of Physical Chemistry A 2016, ASAP
3. Das, S. K.; Luk, C. M.; **Martin, W. E.**; Tang, L.; Kim, D. Y.; Lau, S. P.; Richards, C. I., Size and Dopant Dependent Single Particle Fluorescence Properties of Graphene Quantum Dots. The Journal of Physical Chemistry C 2015, 119, 17988-17994.
4. Moonschi, F. H.; Effinger, A. K.; Zhang, X.; **Martin, W. E.**; Fox, A. M.; Heidary, D. K.; DeRouchey, J. E.; Richards, C. I., Cell-derived vesicles for single-molecule imaging of membrane proteins. Angew Chem Int Ed Engl 2015, 54 (2), 481-4.

PRESENTATIONS

1. (Oral Presentation) Fluorescence Characterization Studies for Single Molecules Isolated in Hybrid Zero-mode Waveguides. **W. Elliott Martin**; Christopher I. Richards, 16th Annual Tech Connect World Innovation Conference and Expo, Washington, DC, May

22-25, 2016, Section- Real Space Imaging and Mapping (Microscopy-Optical, Electron, Scanning Probe).

2. Characterization/Application Based Fluorescence Studies in Hybrid Zero-Mode Waveguides for Improved Biological Imaging. **W. Elliott Martin**; Christopher I. Richards, 42nd Annual NAFF Symposium, Lexington, KY, April 29, 2016, Section- Protein Signaling and Design.
3. Selective Labeling of Photo-cleavable Molecules using Plasmonic Structures. **W. Elliott Martin**; Christopher I. Richards, 1st Annual Oak Ridge National Laboratory Nanobio Workshop, Oak Ridge, TN, May 22-25, 2013.

REFERENCES

Christopher I. Richards, Ph.D.; University of Kentucky, Department of Chemistry; 209 Chemistry/Physics Building; Lexington, KY 40506; 859-218-0971; chris.richards@uky.edu; Ph.D. Professor/Advisor

C. Patrick Collier, Ph.D; Oak Ridge National Laboratory, Center for Nanophase Materials Sciences; 1 Bethel Valley Road, Bldg. 8610; Oak Ridge, TN 37831; 865-576-3638; colliercp@ornl.gov; Staff Researcher/Collaborator

Tom Vosch, Ph.D.; University of Copenhagen; Nano-Science Center/Department of Chemistry; Universitetsparken 5, 2100 Copenhagen, Denmark; +45 35 32 03 13; tom@chem.ku.dk; Professor/Collaborator

SCOTT ROALOFS

Biochemistry Laboratory
Colorado Dept. of Agriculture
2331 W. 31st. Ave
Denver, CO 80211
Phone: 303 867-9250
E-Mail: scott.roalofs@ag.state.co.us

PROFESSIONAL EXPERIENCE

- **Fertilizer Program Chemist, Colorado Department of Agriculture, Denver, CO (Dec. 2011-present)**
  - Perform trace metals analyses including, but not limited to trace metals in animal feeds, trace metals and metallic content in fertilizer, and analysis of toxic metals such as arsenic in foods.
  - Proficient in operating within the ISO/IEC 17025 Quality Control System.
  - Develop new testing methods and procedures for new equipment or technologies through method development, testing and validation. Position devises improvements, updates, or modifications to existing methods and procedures through method validation, verification studies, report generation, creates Standard Operating Procedures (SOP's) for such methods.
  - Specialties: Analysis techniques include using wet chemical methodologies and analytical instrumentation.
    - Instrumental techniques include:
    - Perkin-Elmer Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)
    - Perkin-Elmer Atomic Absorption, Emission (AA) and Mercury Hydride System (MHS) spectroscopy
    - LECO Combustion Spectrometry (Nitrogen, Sulfur, Carbon) analysis
    - CEM Microwave Digestion techniques
  - Performs routine and emergency maintenance, repair and calibration of instruments.

- **Senior Chemist, Colorado Department of Transportation, Muscle Shoals, AL. (Dec. 2006-Mar 2012)**
  - Served as lead scientist for CDOT chemical testing, performs chemical and physical assays using wet chemical techniques, a Perkin Elmer Flame Atomic Absorption Spectrometer (FASS) and a Bruker S4 Pioneer Wavelength Dispersive X-ray Fluorescence Spectrometer (WDXRF).
  - Responsible for supervising technicians, managing a budget, ensuring laboratory testing is performed in compliance with AASHTO/ASTM regulations, approving test results, validating methods and reagents, developing procedures and protocols, and evaluating, selecting, acquiring, installing and maintaining laboratory equipment.
  - Followed chain-of-custody protocols, receives, maintains and serves as principal custodian of samples that may be relevant to criminal investigation.
  - Devised scientific investigations and studies to validate new highway technologies, equipment and procedures; writes reports, grant applications and related documents.
  - Kept up to date on contemporary research as they relate transportation issues; makes presentations regarding laboratory investigations, research and validation studies.
  - Wrote manuscripts for publication and participates in multidisciplinary teams and task forces.

- **Summer Research Assistant, Southern California Bioinformatics Summer Institute, UC Santa Cruz, Santa Cruz, CA. (Jun. 2006-Aug 2006)**
  - Research performed under Dr. Steven Smith, City of Hope Medical Center.
  - Molecular modeling of experimental DNA molecules designed for cancer detection. Models were built using PC Spartan, and Insight II.

- **Adjunct Faculty Instructor of Microbiology, Pueblo Community College, Pueblo CO. (Jan.2006-May 2006)**
  - Lecture class topics that included Microbiology, Immunology and Genetics.
  - Microbiology laboratory instruction included the use of aseptic technique, microbial identification and the observation and classification of bacteria and their vectors.

EDUCATION

- M.S. Colorado State University - Pueblo, 2006
  Applied Natural Science, Molecular Genetics

- B.S. Colorado State University - Pueblo, 2004
  Chemistry and Biology

PROFESSIONAL ORGANIZATIONS

Association of American Plant Food Control Officials, Inc. (AAPFCO)

FRANK SIKORA

Soil Test Coordinator, Regulatory Services
Associate Adjunct Professor

University of Kentucky
Soil Testing Lab
103 Regulatory Services Bldg.
Lexington, KY 40546-0275
Phone: 859-257-2785
fsikora@uky.edu

AREAS OF INTEREST: Soil-Plant relationships, Analytical chemistry in soil analysis, Chemical Equilibria

PROFESSIONAL EXPERIENCE

- 1998-present. Soil Testing Coordinator and Adjunct Associate Professor, University of Kentucky
- 1996-1998. Team Leader for Constructed Wetlands Research Team, Biotechnology, TVA Environmental Research Center, Muscle Shoals, AL.
- 1987-1995. Research Chemist, Biotechnology, TVA Environmental Research Center, Muscle Shoals, AL
- 1991-1998. Associate Adjunct Professor, Department of Agronomy and Soils, Auburn University, Auburn, AL.
- 1986-1987. Postdoctoral Associate, Dept. of Agronomy, Cornell

EDUCATION

- B.S. West Virginia University, 1980
- M.S. University of Tennessee, 1982
- Ph.D. University of Illinois, 1986

As Coordinator of the Soil Testing Laboratories, the goal is to help the citizens of Kentucky maintain productive and economical plant growth operations by offering tests on soils, water, greenhouse media, and animal waste with subsequent fertilizer and lime recommendations.

Chemical tests are offered on media utilized for plant growth operations such as soil, greenhouse media, and animal waste. Nutrient needs and fertilizer responses are determined by research conducted within the UK College of Agriculture on crops and soils in Kentucky.

Routine soil testing includes pH, buffer pH, P, K, Ca, Mg, Zn and non-routine tests which include boron, organic matter, and triazine residue in soil, pH and nutrients in greenhouse media used for various horticultural crops, pH and nutrients in water used for irrigation and nutrient solution purposes, nutrients in animal waste used for land application, and potential acidity in mine spoil.

AOAC *Official Methods of Analysis*[SM] (OMA)
AOAC Expert Review Panel for Solids in Syrups

TABLE OF CONTENTS

MEMORANDUM

DATE: February 28, 2017

TO: Members of the Official Methods Board

FROM: La'Kia Phillips, Conformity Assessment Coordinator

SUBJECT: **AOAC Research Institute**
AOAC *Official Methods of Analysis*℠ (OMA) Expert Review Panel for Solids in Syrups

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BACKGROUND

The AOAC Expert Review Panel for Solids in Syrup is slated to meet on Thursday, March 16, 2017 from 1:00pm to 5:00pm during the 2017 AOAC INTERNATIONAL Mid-Year Meeting being held at the Gaithersburg Marriott Washingtonian Center, located at 9751 Washingtonian Boulevard, Gaithersburg, MD 20878.

The AOAC Expert Review Panel for Solids in Syrups will meet to discuss the proposed modification to AOAC Official Method 932.14: Solids in Syrups. The AOAC Research Institute announces a notification of a proposed change in status of an AOAC First Action Official Method 932.14: Solids in Syrups [Final Action] as submitted by Cott Beverages. The open public comment period for the proposed modification of AOAC Official Method 932.14 will be posted for a minimum of 30 days. The comment period closed on December 30, 2016. Comments will be compiled, reviewed, and intended to obtain input on the proposed modification. The documents may be revised if necessary, based on comments received. Any interested party may submit comments. As of today, February 6, 2017, we have not to date received any comments regarding this method for modification.

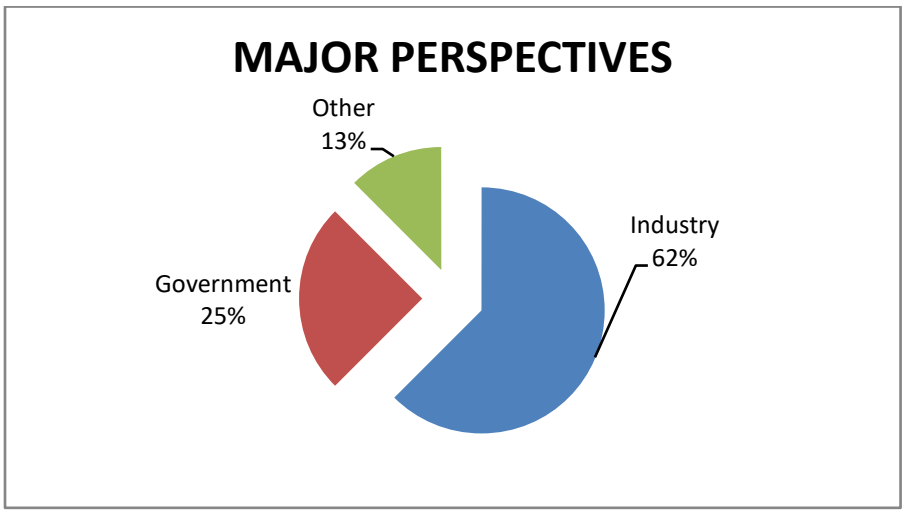
RECOMMENDATION

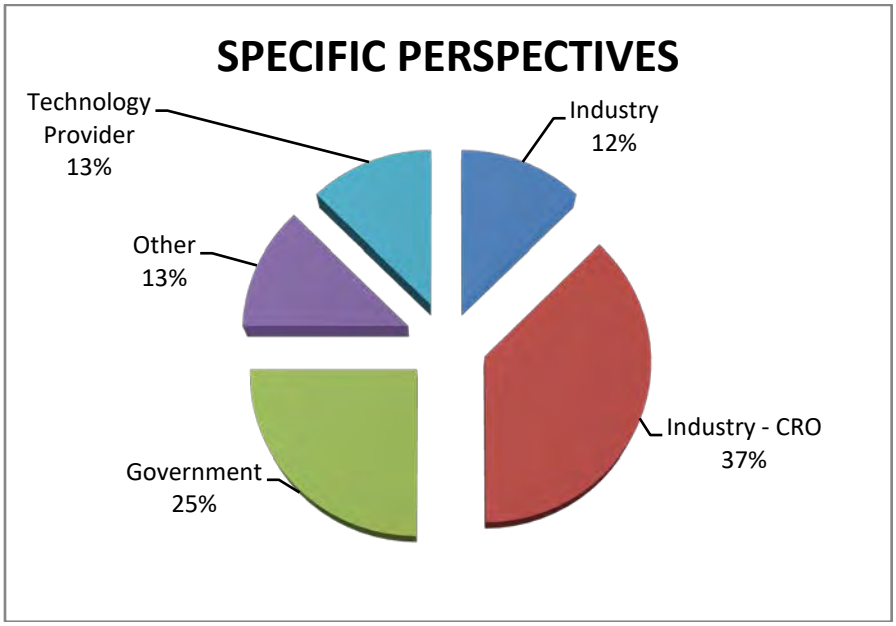
The following candidates are highly recommended and/or have demonstrated expertise via their submission to the AOAC Call for Experts. All proposed candidates will be required to attend the mandatory AOAC Expert Review Panel Orientation webinar that will be held during the month of February, 2017. Incoming Expert Review Panel Chairs will also be trained on the AOAC Expert Review Panel process.

The following eight (8) candidates are being submitted for consideration by the Official Methods Board to evaluate candidate methods for Solids in Syrups as per the Expert Review Panel (ERP) Policies and Procedures. Sneh Bhandari, Jo Marie Cook, Mohamed Hamad, George Joseph, Dana Krueger, Eleftheria Katechaki, Tom Phillips, and Prem Virmani.

CURRENT EXPERT REVIEW PANEL ROSTER & PERSPECTIVES

Name	Organization	Perspectives	Status
SNEH BHANDARI	Silliker Laboratories	CRO	New
Jo Marie Cook	Florida Department of Agriculture	Domestic State government	New
MOHAMED HAMAD	MICROBAC	CRO	New
GEORGE JOSEPH	AsureQuality	Technology Provider	New
DANA KRUEGER	Krueger Food Laboratories	CRO	New
Eleftheria Katechaki	Agricultural Cooperatives' of Union	Other	New
Tom Phillips	MD Dept of Agriculture	Domestic State government	New
PREM VIRMANI	Cott Beverages (Retired)	Industry	New





Summaries of Expertise
AOAC Expert Review Panel for Solids in Syrups

SNEH BHANDARI
I am involved in nutritional analysis in food over last 25 years from various perspective. Reviewed solids in syrup method 932.14, 988.06 and extensively and reviewed the study slv of of 932.14 using digital density meter.

JO MARIE COOK
Expertise to be discussed by the AOAC Official Methods Board.

MOHAMED HAMAD
PHD in chemistry and director of food chemistry and Nutrition

GEORGE JOSEPH
Over 25 years of experience in analytical chemistry laboratory.

DANA KRUEGER
I have been involved with analysis of sugar based food products (juices, sweeteners and syrups) for over 30 years. I am familiar with most of the widely used test methods in this field. I gave an oral presentation last year on the subject of methods of solids analysis (focused on fruit juices) at the TCJJP meeting in association with last year's AOAC annual meeting.

ELEFTHERIA KATECHAKI
PhD in Chemistry
Thesis title: "Effect of thermally dried starter cultures on ripening of hard-type cheeses"
Expertise in the fields of food microbiology, immobilized cells technology, fermentation, exploitation of whey for the production of starter cultures, sensory evaluation

Researcher in the programmes: "Exploitation of whey for the production of novel foods and products of added-value employing biotechnological methods" , "Integrated management of entomological and microbiological risks during processing, storage and transport of currants by using non-chemical, environmentally compatible methods: sustainability in practice" , "Obesity and metabolic syndrome: Nutritional intervention with currants in Non-alcoholic fatty liver disease / Non-alcoholic steatohepatitis (NAFLD / NASH). Investigation of molecular mechanisms of action" , Expertise in the fields of food chemistry and technology, food biotechnology, nutrition, food microbiology, immobilized cells technology, fermentation, exploitation agro industrial wastes, sensory evaluation, chromatography analysis, moisture analysis, acidity analysis, protein analysis.

TOM PHILLIPS
Expertise to be discussed by the AOAC Official Methods Board.

PREM VIRMANI
Spent 47 years working for major soft drink companies in various capacities. Created and helped created countless soft drinks, did or guided analysis including brix measurements using hydrometers, pycnometers, refractometers and DMA (densitometers).

Sneh Bhandari

Current Position

Chemistry Research & Development Director,
Silliker Laboratories, 3600 Eagle Nest Drive, Crete, IL 60417.

Experience

Since May, 1997 Silliker Laboratories Crete, IL

Chemistry Research Director

- Direct & Manage the chemistry research and serves as a resource to the Silliker clients to resolve their analytical issues.
- Working with corporate to plan budget, growth and development of the department.
- Write proposals to justify research studies. Create research reports to summarize the findings and discuss those in relation to the objective and existing knowledge.
- Design research studies, experiments and protocols. Work with in guidelines of ISO 17025.
- Work with National & International Agencies to lead efforts in improving method of food, dietary supplement analysis
- Fellow of AOAC. Expert review panel and strategic committee member for AOAC SPIFAN program.
- Chair AOCS Analytical Division.
- Member Chromatography Division, AOCS
- Help clients about regulatory guide lines (FDA, USDA) including nutritional labeling.
- Wrote a chapter on food hazards resulting from environmental, industrial and agricultural contaminants.
- Made various presentations at professional and scientific meetings including AOAC, IFT, AOCS etc.
- Managed special projects like stability testing, method validation including studies to fill in the gaps cited in FDA form 483 and other audits.
- Helped clients to study oil authenticity and also oil adulteration.
- Served on various AOAC Expert Review Panels and Stakeholder Panels.
- AOAC Technical Committee member for Additives (2004-2007).
- Was involved in EPR for vitamin E analysis in dietary supplements (AOAC task force; FDA/NIH).
- Develop and write SOPs, Policies and the method protocols to be used in routine functions of the lab.
- Validated HPLC/GC methods to analyze various nutritionally important food analytes, i.e.,tocopherols, tocotrienols, vit K, nutraceuticals, capsaicin, cholesterol & phytosterols. sugars, sugar alcohols etc.

1995–1997 Silliker Laboratories Chicago Heights, IL

Research Manager

- Managed Research Department.
- Developed and validated various new HPLC methods for analysis including B-lactam antibiotics in milk, vitamin K analysis using post-column, derivatization, iodine by by ion-chromatography with PAD, amino acids analysis, hydroxy-citric acid, benzocaine, resorcinol, carotenoids, ginginosides, aspartamae and its degradatory products.
- Participated in AOAC collaborative study on ethoxyquin.

1990–1995 Silliker Laboratories Chicago Heights, IL

Method Development Specialist

- Managed and supervised instrumental and vitamin dept.

- Developed/validated various new HPLC methods for vitamins, preservatives, organic acids etc.
- Participated in AOAC collaborative study on vitamin D analysis by HPLC.

1987–1990 Dept of Food Science & HN, Gainesville, FL

Postdoctoral Research Associate

- Studied metabolism and bioavailabilty of folate vitamers in humans using stable isotopes analyzed using mass-spec.
- Synthesized various stable isotopes of folates and purified using HPLC & characterized by photo diode array.
- Studied Polyglutamyl conjugase from human intestinal brush border vesicles and from porcine pancreatic juice using a HPLC assay.
- Devised various methods of folate extraction from biological tissues assessed using HPLC methods.

1986–1987 Dept of Pharmacology, LSUMC, Shreveport, LA

Postdoctoral Research Fellow

- Studied mechanism of folate transport in rat kidney. Characterized folate receptor in renal brush border vesicles.
- Studied effect of ethanol on folate metabolism and bioavailabilty of folate vitamers in rat using radioactive isotopes.

1976–1986 Biochemistry Dept., MS University, Baroda, India

Reader and Lecturer

- Taught Biochemistry, Human Physiology and Clinical Chemistry, Human Nutrition and Food Chemistry to post-graduate students.
- Studied effects of nutritional factors on intestinal enzymes and lipids.

1982–1983 Dept. of Pediatrics, AHSC, Tucson, AZ

UNESCO Postdoctoral Research Fellow

- In vitro studies on sugar transport using everted gut sac technique and its correlation with activities of digestive enzymes.
- Studies on thyroid hormone receptors in isolated intestinal epithelial crypt and villi cells.

1977–1980 Biochemistry Dept., MS University, Baroda, India

Principal Investigator

- Studies on intestinal phosphoinositide metabolism.

1972–1976 Biochemistry Dept., MS University, Baroda, India

Research Fellow

- Studies on intestinal enzymes and biochemistry in relation to nutrition.

1972–1972 Biochemistry Dept., MS University, Baroda, India

Research Fellow

Studies on soybean hemagglutinins and trypsin inhibitors and effect of food processing on the same.

Education 1972–1977 Biochemistry Dept., MS University, Baroda, India

- Ph.D. in Nutritional Biochemistry

1970–1972 Biochemistry Dept., MS University, Baroda, India

- M.S. in Biochemistry. Specialization: Human Nutrition.

1967–1970 Jodhpur University, India

- Bachelor of Science.
  Major subjects: Chemistry, Botany, Zoology and Physics.

C.N.S.

1994 Certification Board for Nutr. Sp., American College of Nutrition

- Certified Nutrition Specialist (C.N.S.)

Honors

♦ Chair AOCS Analytical Division, 2012

♦ Vice Chair AOCS Analytical Division, 2012

♦ Fellow of AOAC International, 2011

♦ Member of the AOAC Official Methods Board since 2010

♦ AOAC Additives Technical Committee Member

♦ Involved in AOCS in Chromatography Technical Committee (member fatty acid analysis group)

♦ AOAC Horwitz Advisor

♦ AOAC/FDA/NIH Expert Review Panel member – Coenzyme Q (2005)

♦ Serving as a Single Lab Validation Expert for Vitamin E Analysis in Dietary Supplements for AOAC/FDA/NIH Task force.

♦ Sweetener Technical Committee member ISBT.

♦ Past - AOAC Associate Referee for Vitamin E .

♦ Listed in Strathmore's Who's Who Directory (1995-96).

♦ UNESCO Postdoctoral Fellowship (1982).

AOAC

Collaborative Studies Participated

♦ Vitamin D in infant formula by a HPLC method AOAC 995.05 (1995).

♦ Ehoxyquin in feeds by a HPLC method (996.13).

♦ Participated in USDA led folate analysis in foods using triple enzyme method.

Theses

♦ Ph.D. Nutritional Studies on rat intestinal Phytase

♦ M.Sc. Effects of diet on Cholesterol Metabolism.

Publication

- Original Research Papers Published : 20
- Book Chapter : 1 (In: Handbook of Food Safety, 2003, Wiley)
- Presentations at Scientific meetings : 60

JOANNE MARIE COOK (Jo Marie)

WORK ADDRESS

3125 Conner Blvd, Bldg. 3
Tallahassee, FL 32399-1650
(850) 617-7505

EDUCATION

Bachelor of Science in Chemistry 'With Honor' 1970, Michigan State University, Lansing MI

Information Science (34 qrt.hrs.) 1987 - 90, University of North Florida and St. Johns River Community College

Certified Public Manager, 1997, Florida State University

WORK EXPERIENCE

2005 - present *Bureau Chief*
Florida Department of Agriculture & Consumer Services (FDACS)
Chemical Residue Laboratories

Oversees the operations of the FDACS Bureau of Chemical Residue Laboratories including 27 residue chemists, 5 technicians, 7 field inspectors and 2 office staff. The laboratories conduct chemical residue testing of foods for pesticides, antibiotics and other targeted and non-target screens for toxins in foods including major federal grant programs:
Provides oversight and direction for the Department's Florida Pesticide Residue Regulatory Program as well as three major grant programs: sample collections and analysis of pesticides residues for the Pesticide Data Program; aseptic sample collections for the Food Inspection of retail grocery stores and screening for toxic and poisonous compounds for the Food Emergency Response Program. Managed Florida's BP Oil Spill laboratory program including analysis for polycyclic aromatic hydrocarbons (PAHs) and dioctyl sulfosuccinate dispersant in seafood.

The Chemical Residue Laboratories are accredited by American Association for Laboratory Accreditation (A2LA) to the ISO/IEC 17025 standard, General Requirements for the Competence of Testing and Calibration Laboratories, for the specific tests listed in certificate 2534.03:

- CR PDP Screen: Multiresidue screening of Pesticide Data Program (PDP) samples
- CR Screen 100: Multiresidue pesticides in State Program fruits and vegetables
- CR Method 403: Preparation and LC/MS/MS analysis of chloramphenicol and florphenicol in honey
- Flexible scope*: Analysis of pesticide residues in foods using gas chromatography with MS/MS or MS^n acquisition modes
- Flexible scope*: Analysis of pesticide residues in foods using liquid chromatography with MS/MS or MS^n acquisition modes or LC high resolution mass spectrometry with MS/MS or MS^n acquisition modes

*There are circumstances in which this laboratory must perform testing activities not covered on their fixed scope of accreditation, such as for additional matrices (flexibility concerning sample type) or additional parameters (flexibility concerning analytes)

2000 - 2005 *Environmental Manager*
Florida Department of Agriculture & Consumer Services
Chemical Residue Laboratories

Manage the Tallahassee Chemical Residue Laboratory. Oversee day to

day technical activities to support complex trace level chemical analyses including collection and receipt of food samples; detailed organic extractions; sophisticated chromatographic instrumental analysis and computerized data reporting. Supervise and support a staff of highly trained chemists. Serve as Florida Technical Program Manager for the Pesticide Data Program (PDP) which is a national risk evaluation program conducted through Cooperative Agreements between the United States Department of Agriculture (USDA) and several selected states. Develop capabilities and provide analytical support for the Food Emergency Response Network (FERN) including analysis of highly toxic chemicals which may be used as terrorist agents. Promote new analytical capabilities in support of food safety including the analysis of antibiotics. Prepare the laboratory for ISO 17025 accreditation.

1994 – 2000

Chemist Administrator, Supervisor of the Gas Chromatography Section.
Florida Department of Agriculture and Consumer Services,
Chemical Residue Laboratory, Tallahassee, FL

Certified Public Manager. Supervise gas chromatographic (GC) analyses of trace level pesticides for the State of Florida Pesticide Residue Monitoring Program and the USDA Pesticide Data Program. Continuously improve the effectiveness of a regulatory laboratory using multiple GC selective detectors including implementation of retention time locking and validation of the new halogen specific detector (XSD). Develop methods to identify unknowns using atomic emission detection and database searching in cooperation with outside vendor. Generate data of internationally recognized quality, designed to be used by the EPA for dietary exposure determinations. Provide 24 hour analysis for the regulatory enforcement of federal pesticide residue tolerances. Develop Access and Excel applications for data handling and reporting.

1990 - 1994

Chemist III, Supervisor of the Gas Chromatography Section
Florida Department of Health, Bureau of Laboratories
Jacksonville, FL

Supervise gas chromatographic analyses of EPA priority pollutants in water including volatile organics by purge-and-trap FID, pesticides, herbicides, fumigants and other toxins by ECD and NPD. Purchase and maintain equipment. Validate new methods. Institute MS WORD, Lotus123 and DBASE documentation for procedures, inventory, results and QC.

As Chemical Safety Officer implement OSHA, DOT and EPA regulations for the handling, transportation and disposal of hazardous chemicals including the safety inspection and training of 5 state branch laboratories.

1973 - 1985

Research Chemist, Corporate R&D,
The Coca-Cola Company, Atlanta, GA

Represented Analytical Services on an interdisciplinary technical team assigned to develop or improve a variety of products and packages. Analytical techniques including GC, LC, HPLC, IR, NMR, NIR, AA, Gas Permeation, Color Analysis, SAS programming and wet chemistry techniques were used to study flavors, gums, emulsifiers, weighting agents, unknown contaminants, impurities, product residues, plastic, metal, and glass packaging. Projects were planned, implemented, and reported inside and outside the company.

PROFESSIONAL MEMBERSHIPS AND COMMITTEES

AOAC International
Member, AOAC Official Methods Board, 2010 - 2016
Co-Chair of the Chemical Contaminants and Residues in Food Community, 2007 - 2012
2007 Method Committee Member of the Year
Secretary, Methods for Residues and Related Topics Committee, 2004 – 2007
Methods for Residues and Related Topics Committee member, 2001 – 2007

Southeast USA Regional Section of AOAC International
2008 Doug Hite Honorarium
President, 2003-2004
President elect, 2002-2003
Secretary, 2001-2002
Executive Committee Member, 1999 - present

Association of Public Health Laboratories, 2008 – present
Association of Food and Drug Officials, 2005 - 2009
Florida Association of Certified Public Managers, 1997 - present
American Chemical Society, 1972 - present

North American Chemical Residue Workshop, formally the Florida Pesticide Residue Workshop
Program Chair, Organizing Committee, Web Master, Moderator, Presenter – 1994 - present

Association of Public Health Laboratories
Committee member, FDA Cooperative Agreement to Implement an Integrated Food Safety System. – Sampling and Data Handling groups. 2012 - present

American Chemical Society, Member since 1977

U. S Food and Drug Administration Partnership for Food Protection Laboratory Task Group – 2008 – present

USDA Pesticide Data Program, Florida Cooperative Agreement Laboratory
Section Supervisor, Laboratory Manager, Bureau Chief – 1994 – present.

U.S. Food and Drug Administration Food Emergency Response Network Cooperative Agreement, Principle Investigator – 2005 - present

INTERLABORATORY STUDY PARTICIPATION

Mastovska, K., Sorenson W. R., Hajslova J., Determination of Polycyclic Aromatic Hydrocarbons (PAHs) in Seafood using Gas Chromatography-Mass Spectrometry: A Collaborative Study, Journal of AOAC International, Volume 98, Number 2, March 1, 2015, pp. 477-505(29)

Schneider, Marilyn J.; Andersen, Wendy C. Determination of Triphenylmethane Dyes and Their Metabolites in Salmon, Catfish, and Shrimp by LC-MS/MS Using AOAC First Action Method 2012.25: Collaborative Study, Journal of AOAC International, Volume 98, Number 3, May-June 2015, pp. 658-670(13)

Lehotay, S. J., et. al., Determination of Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate: Collaborative Study, Journal of AOAC International, Volume 90, Number 2, March 2007, pp. 485-520(36)

PUBLICATIONS:

Aldeek, F., Canzani, D., Standland, M., Crosswhite,M., Hammack,W., Gerard, G. and Cook,J.M., 2016

Identification of Penicillin G Metabolites under Various Environmental Conditions Using UHPLC-MS-MS, J. Ag and Food Chem, DOI: 10.1021/acs.jafc.5b06150, 2/24/2016

GOODSamples. 2015. GOODSamples: Guidance On Obtaining Defensible Samples. Sampling and Sample Handling Working Group, F., AAFCO, AFDO, APHL and Industry. http://www.aafco.org/Portals/0/SiteContent/Publications/GOODSamples.pdf

Aldeek, F., Canzani, D., Standland, M., Crosswhite,M., Hammack,W., Gerard, G. and Cook,J.M., 2016
Identification of Penicillin G Metabolites under Various Environmental Conditions Using UHPLC-MS-MS, J. Ag and Food Chem, DOI: 10.1021/acs.jafc.5b06150, 2/24/2016

Aldeek, F., Rosana,M., Hamilton,Z., Crosswhite,M., Burrows,C., Singh,S., Gerard,G., Hammack,W. and Cook,J.M., 2015, LC-MS/MS Method for Determination and Quantitation of Penicillin G and its Metabolites in Citrus Fruits Affected by Huanglongbing, J Agric. Food Chem, DOI: 10.1021/acs.jafc.5b02030 • Publication Date (Web): 14 Jun 2015

Lehotay, S.J., Cook, J.M., 2015
Sampling and Sample Processing in Pesticide Residue Analysis, . *Agric. Food Chem.*, **2015**, *63* (18), pp 4393–4394, **DOI:** 10.1021/jf5059599

Rogers,K., Cook,J.M., Krueger, D.,Beckmann, K., 2013
Modification of AOAC Official Method 998.12 to Add filtration and/or Centrifugation: Inerlaboratory Comparison Exercise, J. of AOAC Int, V96, #3,

Brown, A.N., Cook, J.M., Hammack, W.T., Stepp, J.S., Pelt, J.V., Gerard, G, 2011
Analysis of Pesticides Residues in Fresh Produce using Buffered Acetonitrile Extraction and Aminopropyl Clean-up with GC QqQ/MS,LC QqQ/MS, GC ITD/MS and GC/XSD, J of AOAC Int,, V94, #3,

Cook, Becket, Reliford, Hammack, Engel, 1999
Multiresidue Analysis of Pesticides in Fresh Fruits and Vegetables Using Procedures Developed by the Florida Department of Agriculture and Consumer Services
J. AOAC, Vol 82, #6, 1999, pp 1419-1435

Cook, Engel, Wylie, Quimby, 1999
Multiresidue Screening of Pesticides in Foods Using Retention Time Locking, GC-AED, Database Search, and GC/MS Identification
J. AOAC Int, Vol 82, #2, 1999, pp 313-326

Cook, J.M., Karilitz, R.L. and Dalsis, D.E., 1985
Measurement of Oxygen, Nitrogen and Carbon Dioxide in Beverage Headspace. J. of Chromatographic Science, (23), Feb. '85, pp.57-63

Radford, T., Cook, J.M. and Dalsis, D.E. 1985
Characterization of Aminosaccharins in Commercial Sodium Saccharin Produced by the Maumee Process.
Fd. Chem. Toxic. Vol. 23, No. 4/5, pp. 419-428

Chang, S.S. and Cook, J.M. 1983.
Studies of Stevioside and Reboudioside A in Carbonated Beverages. J. of Agr. and Fd. Chem., (31), 409-412

PRESENTATIONS (selected examples):

European Pesticide Residue Workshop
- 2016: "Theory and Practical Aspects of Laboratory Sampling"

American Chemical Society joint meeting with IUPAC
- 2014: "Guidance to Improve Sampling Quality and Accuracy"

Florida Department of Agriculture – internal presentations
- 2013: Ag Café, "Ensuring the Safety of Florida's Gulf Seafood"
- 2011: "Ethics in Our Laboratory"

North American Chemical Residue Workshop
- 2015: "Theory of Sampling Guide to Quality Sample Processing"
- 2014: "Science without Borders"
- 2012: "Third Party Standards, Challenges and Possibilities"
- 2012: "Florida's State Report"
- 2012: "Florida's Response to the Oil Spill"
- 2011: "Florida's Annual Report"
- 2011: "Sampling & Accreditation"

AOAC International:
- 2012: "Path to Final Action – What to Expect from an OMB Review"
- 2012: "Update on the Chemical Contaminants and Residues Community"
- 2009: "Our Residues in Food Community"
- 2008: "Reaching Out to the Chemical Contaminants and Residues in Food Community"

Association of Public Health Officials:
- 2014: The Pesticide Data Program, An Overview

Mohamed Hamad, Ph.D.

900 Calypso Breeze Dr, Lexington, KY 40515, Phone: (859) 420 5924
E-mail: m_o_hamad@hotmail.com

Objective:

To work in a highly challenging environment where I can apply my experience, knowledge, and technical skills towards the advance and excellence of the organization

Consultant Activity:

Clinical Data, RTP, NC.
Law pharma, Lexington, KY
Nahlan, Lexington KY
Mobley LLC, Lexington, KY
SABIC, Jubail, Saudi Arabia
ARAMCO, Dhahran, Saudi Arabia

Professional Experience:

Nov 2014 – present Director, Food Chemistry, Microbac Laboratories Inc. Pittsburgh Division, 100 Marshal Drive, Warrendale PA 15086

• Method development on drugs and supplements using LC-MS-MS, LC-QTOF-MS, GC-MS-MS, ICP-MS
• Supervise chemists and lab manger
• Prepare manuscript, patents and reports
• Developing and performing analytical process assays and studies including analysing samples and interpreting results. Work with clients to understand project needs and work with internal groups to help manage all aspects of the project.
• Prepare manuscript, patents and reports
• analyse, interpret and prepare results for internal and external presentations.
• Supervise all the work and review all reports for ensure scientific integrity and to comply with **17025 A2LA accreditation**
• Supervise team members in obtaining team goals, and mentoring them to broaden their professional outlook.

Dec. 2010 – Nov 2014 Chief Analytical Chemist / Associate Director, USEF Lab. University of Kentucky-Cold Stream, Lexington, KY

• Method development on drugs and supplements using LC-MS-MS, LC-QTOF-MS, GC-MS-MS, ICP-MS
• Supervise chemists and lab manger
• Prepare manuscript, patents and reports

• Developing and performing analytical process assays and studies including analysing samples and interpreting results. Work with clients to understand project needs and work with internal groups to help manage all aspects of the project.
• Prepare manuscript, patents and reports
• analyse, interpret and prepare results for internal and external presentations.
• Supervise all the work and review all reports for ensure scientific integrity and to comply with **17025 A2LA accreditation**
• Supervise team members in obtaining team goals, and mentoring them to broaden their professional outlook.

March 2008 – Aug. 2010 Food Science, University of Kentucky, Lexington/ Chief Chemist, Nahlan Pharma, Lexington, KY

Professor (V. Scholar-Process Analytical chemist / Chief Scientific

• Perform high throughput chemical identities analyses on complex matrices using high resolution LC-MS methodologies, electro-spray ionization, time of flight mass spectrometry (ESI-TOF-MS), and MALDI-MS
• Developing and performing analytical process assays and studies including analysing samples and interpreting results. Work with clients to understand project needs and work with internal groups to help manage all aspects of the project.

• Develop sample preparation and LC-MS analytical methods
• Process development and optimization
• Prepare manuscript, patents and reports
• analyse, interpret and prepare results for internal and external presentations.
• Perform business development trips to various external customers
• Supervise team members in obtaining team goals, and mentoring them to broaden their professional outlook.

May 2007 – Dec. 2007 Cogenics, RTP, Morrisville, NC
Senior Research Scientist- Mass Spectroscopy Expert

• Method development, operation, trouble shooting and maintenance on LC-MS, TOF-LC-MS, TOF-MALDI-MS, GC-MS. LC-MS-MS
• Providing leadership, focus and coordination of activities, goals and resources for Analytical projects. Sole responsibility for the design, execution, analysis, and reporting of LC-MS studies. Work effectively with others to achieve business goals and objectives. Lead internal Mass spectroscopy team and contributes to external teams.
• Develop and validate quantitative LC-MS/MS methods in a variety of matrices using state of the art separation and sample preparation techniques.
• Present research findings and project information within and outside the company.
•Developing protocol for Identifications of hundreds of chemical identities present in one sample by TOF-MS techniques, and then confirmed by MS-MS techniques.
• Manage departmental resources and actively set high goals to go beyond what is required.
• Perform QA and QC protocols for the MS instruments.
• Perform chemical analysis to support on-going studies

- Produce high quality analytical results and reports.
- Identify and resolve analytical problems using innovative solutions..
- Maintain appropriate, accurate records according to departmental SOPs using GLPs.

Aug 2001–June 2006 University of Kentucky, Chemistry/College of Pharmacy, Lexington, KY

Research Associate/ Postdoctoral Research Scholar

- chemical identities analyses in complex matrices using high resolution LC-MS methodologies, electro-spray ionization, time of flight mass spectrometry (ESI-TOF-MS), and MALDI-MS, and NMR
- Preparation, isolation, an identification of organic compounds and organo-metallic compounds using GC-MS, IR, UV, HPLC, LC-MS, and NMR spectroscopy.
- Process development and optimization
- Prepare manuscript, patents and reports
- analyse, interpret and prepare results for internal and external presentations.

Nov. 2000 – Aug. 2001 ARAMCO, Dhahran, Saudi Arabia

Consultant- chemistry

Environmental committee

Dec1998 – Aug. 2000 KFUPM, Centre of Refining & Petrochemicals, Dhahran, Saudi Arabia

Research Scientist/ Assistant Professor-Analytical chemist

- Fluid Catalytic Cracking of Heavy Crude Oil: Spectroscopy group leader
- Analytical: Small molecule identification. GC-MS, LC-MS & NMR
- Process development and optimization
- Crude Oil Desulphurization
- Prepare manuscript, and reports
- Mass spectroscopy Supervisor: Operation, maintenance, trouble shooting, and training
- Hydrocarbon processes were developed, characterized and optimized through different reactors and reaction parameters using experimental design. The consultant for this project was Dr. T. Inui of Japan. Thus, full analysis of catalysts, reactants, products was carried using LC-MS, HPLC, GC-MS, GC, XRF, Thermal Methods, NMR, EPR, MS, and online GCs and HPLCs connected to different reactors. Extensive Kinetic and Mechanistic studies were carried to understand and optimized these processes.

March 1993-Feb 1994 KFUPM, LASER LAB, Dhahran, Saudi Arabia

Scientist-II

Spectroscopic investigation of probes in polymers and other constrained media using fluorescence, and LC-MS

Feb 1989-Feb 1992 KFUPM, Research Institute, Dhahran, Saudi Arabia. Chemist

Extraction and Analysis of organic pollutants from oil spill using HPLC and LC-MS. IR, UV and GC-MS.

Academic Qualification:

2001-2003	**Post-Doctoral Fellowship**, Pharmaceutical Sciences/ Chemistry, University of Kentucky, Lexington, KY
1998	**Ph.D. in Chemistry**, Chemistry Department, KFUPM, Dhahran, S.A. (Dissertation Advisor: Dr. Jimmy Hwang)
1992	**M.S. in Chemistry**, Chemistry Department, KFUPM, Dhahran, SA
1986	**B.S. in Chemistry & Zoology**, University of Khartoum, Sudan

Instructional Activity

Spectroscopy
Analytical Chemistry
Pharmaceutics
Medicinal Chemistry

Honours and Awards

2006	AAPS Exceptional Graduate Student Research Award: Drug, Design & Discovery Award.
2001-2002	National Science Foundation, Postdoctoral Fellowship
2002-2003	National Institutes of Health, Postdoctoral Fellowship

Professional Organizations

Member – American Chemical Society
Member - American Association of Pharmaceutical Scientists (AAPS)
Member - Society for Neuroscience Local Chapter

PATENTS:

1. Peter A. Crooks, Peter; **Hamad, Mohamed**; Stinchcomb, Peter. Novel oral bioavailable prodrugs. PCT Int. Appl. (2005), 27 pp. WO 2005009377

2. Peter A. Crooks, Peter; **Hamad, Mohamed**; Stinchcomb, Audra. Opiate agonist and antagonist duplex prodrugs for transdermal delivery. UK Disclosure No. 1183,

Docket No. 50229-337, filed as a US Provisional Patent Application, No. 60, XXX, XXX, July 23rd, 2003.

3. Stinchcomb, Audra; Crook, Peter**; Hamad, Mohamed**. Enhancing transdermal delivery of opiate antagonsts and agonists using codrugs linked to bupropion and hydroxybupropion. UK Disclosure No. 1426, July 253th, 2006.

PUBLICATIONS:

4. Kiptoo, Paul K.; Paudel, Kalpana S.; Hammell, Dana C.; **Hamad, Mohamed O** .; ; Crooks, Peter A. Stinchcomb, Audra L. In vivo evaluation of transdermal codrug of 6-β-naltrexol linked to hydroxybupropion in hairless guinea pigs. Eur. J. Pharm. Sc. 2008 April, 33(4-5), 371379

5. **Hamad, Mohamed O**.; Kiptoo, Paul K.; Stinchcomb, Audra L.; Crooks, Peter A. Synthesis and hydrolytic behavior of two novel tripartate codrugs of naltrexone and 6-β-naltrexol with hydroxybupropion as potential alcohol abuse and smoking cessation agents. Bioorganic & Medicinal Chemistry, 2006, 14(20), 7051-7061.

6. Kiptoo, Paul K.; **Hamad, Mohamed O**.; Crooks, Peter A.; Stinchcomb, Audra L. Enhancement of transdermal delivery of 6-β-naltrexol via a codrug linked to hydroxybupropion. Journal of Controlled Release, 2006, 13(2), 137-145.

7. Valiveti, Satyanarayana; Paudel, Kalpana S.; Hammell, Dana C**.; Hamad, Mohamed O**.; Chen, Jianhong; Crooks, Peter A.; Stinchcomb, Audra L. In vitro/in vivo correlation of transdermal naltrexone prodrugs in hairless guinea pigs. Pharmaceutical Research, 2005, 22(6), 981-989.

8. Paudel Kalpana S; Nalluri Buchi N; Hammell Dana C; Valiveti Satyanarayana; Kiptoo Paul; **Hamad Mohamed O**; Crooks Peter A; Stinchcomb Audra L Transdermal delivery of naltrexone and its active metabolite 6-β-naltrexol in human skin in vitro and guinea pigs in vivo. Journal of Pharmaceutical Sciences, 2005, 94(9), 1965-1975.

9. Vaddi, Haranath K.; **Hamad, Mohamed O**.; Chen, Jianhong; Banks, Stan L.; Crooks, Peter A.; Stinchcomb, Audra L. Human skin permeation of branched chain 3-O-alkyl-ester and carbonate prodrugs of naltrexone. Pharmaceutical Research, 2005, 22(5), 758-765.

10. Hammell, D.C.; Stolarczyk, E.I.; Klausner, M.; **Hamad, M.O**.; Crooks, P.A.; Stinchcomb, A.L. Bioconversion of naltrexone and its 3-O-alkyl-ester prodrugs in a human skin equivalent. Journal of pharmaceutical sciences, 2005, 94(4), 828-836.

11. Satyanarayana Valiveti , Audra L. Stinchcomb, Dana C. Hammell, Kalpana S. Paudel, , **Mohamed Hamad**, Peter A. Crooks, , Audra L. Stinchcomb. In vivo evaluation of 3-O-alkyl-ester transdermal prodrugs of naltrexone in hairless guinea pigs. Journal of Controlled Release, 2005, 102(2):509-520.

12. Pillai, Omathanu; **Hamad, Mohamed**; Crooks, peter; Stinchcomb, Audra. Physicochemical evaluation, in vitro human skin diffusion and concurrent

biotransformation of 3-O-alkyl carbonate prodrugs of naltrexone. Pharmaceutical Research, 2004, 21(7):1146-1152.

13. Hammell, Dana; **Hamad, Mohamed**; Vaddi, Haranath; Crooks, Peter; Stinchcomb, Audra. A duplex "Gemini" prodrug of naltrexone for transdermal delivery. Journal of Controlled Release, 2004, 97(2):283-290.

14. **Hamad, Mohamed** and Hwang, Jimmy. EPR line shape and translational diffusion studies of vanadium complex with acetone Schiff base in toluene. EMARDIS and the fifth International Seminar on Applied EPR, in Sofia, Bulgaria, June 9-14, 2001.

15. Kimura, T; **Hamad, M**.; Biswas, M; Al-Nawad, K; Al-Suaibi, H; Al-Gharami, M; Inui, T. Highly active Co supported high porous saponite as a hydrotreating catalyst. proceedings; The 4th Iinternational Conference on Chemistry in Industry, 2000, Bahrain, Oct. 30-Nov.1, 2000, CAT-15 page 1-7.

16. **Hamad, M. O**. and . Hwang, J. EPR line shape and translational diffusion studies of Bis (S-methyl-3-cyclohexylidenehydrazine-carbothioato)-oxovanadium(IV) in toluene, 23rd International EPR Symposium, Broomfield, Colorado, July 30-Aug. 3, 2000.

17. Hwang, J.; **Hamad, M**.; El-Sayed, L., Algwidi, H. EPR and spectroscopic studies of S-methyl-N-salicylidene-hydrazinecarbo-dithioato-phenenthroline-oxovanadium(IV) as a model compound for vanadium bound to nitrogen and sulphur heteroatoms Energy & Fuels, 2000,14, 179.

18. Sultan, S.; **Hamad, M**.; Hwang, J. Electron spin resonance for quantitative assay of chlorpromazine in Drug formulations by oxidation with cerium (IV) in sulfuric acid media. Talanta, 2000, 51, 237.

19. Hwang, J.; **Hamad, M**.; El-Sayed, L. EPR and Spectroscopic Studies of Bis-(S-methyl-3-isopropylidenehydrazine-carbodithioato)oxovanadium (IV) as a model compound for vanadium bound to nitrogen and sulfur heteroatoms. Energy & Fuels, 1994, 8, 793.

20. **Hamad M**. and Hwang, J. EPR study of $VO[(CH_3)_2C{=}NNCSSCH_3]_2$: A model compound for vanadium bound to nitrogen and sulfur heteroatoms. The 1st International Conference on Chemistry in Industry, Nov. 14 -16, 1992, Manama, Bahrain.

21. Banks, Stan; **Hamad, Mohamed**; Crooks, Peter; Stinchcomb, Audra. Transdermal permeation of 6-β-naltrexol HCl versus base after microneedle treatment of hairless guinea pigs. The 2005 AAPS Annual Meeting, Nashville, TN, Nov. 06-11, 2005.

22. Paul K. Kiptoo, Paul; **Hamad, Mohamed**; Crooks, Peter; Stinchcomb, Audra. Enhancement of transdermal delivery of 6-b-naltrexol via a codrug linked to hydroxybupropion. The 2005 AAPS Annual Meeting, Nashville, TN, Nov. 06-11, 2005.

23. **Hamad, Mohamed**; Crooks, Peter; Stinchcomb, Audra. Synthetic strategies for the preparation of "Gemini' codrugs of naltrexone, and heterocodrugs of 6-β-naltrexol hydroxybupropion for transdermal delivery. The 2005 AAPS Annual Meeting, Nashville, TN, Nov. 06-11, 2005

24. Paul Kiptoo, Paul; Buchi Nalluri, Nalluri, **Hamad, Mohamed**; Crooks, Peter; Stinchcomb, Audra. Transdermal permeation of bupropion and hydroxybupropion across human skin in vitro. The 2004 AAPS Annual Meeting, Baltimore, Maryland, Nov. 05-11, 2004.

25. Vaddi, Haranath; **Hamad, Mohamed**; Chen, Jiahong; Crooks, Peter; Stinchcomb, Audra. In vitro human skin permeation of branched chain 3-O-alkyl ester prodrugs of naltrexone. The 2004 AAPS Annual Meeting, Baltimore, Maryland, Nov. 05-11, 2004.

26. Nalluri, Buchi; Paudel, Kaplana; Hammell, Dana; valiverti, Satya; Kiptoo, Paul; **Hamad, Mohamed**; Crooks, Peter; Stinchcomb, Audra. Transdermal delivery of naltrexone and its active metabolite 6-β-naltrexol in human skin in vitro and guinea pigs in vivo. The 2004 AAPS Annual Meeting, Baltimore, Maryland, Nov. 05-11, 2004.

27. Valiverti, Satya; Hammell, Dana; Paudel, Kaplana; **Hamad, Mohamed**; Crooks, Peter; Stinchcomb, Audra. Transdermal delivery of 3-O-hexyl ester prodrugs of naltrexone in hairless guinea pigs in vivo. The 2004 AAPS Annual Meeting, Baltimore, Maryland, Nov. 05-11, 2004.

28. **Hamad, Mohamed**; J Chen, Jiahong; Vaddi, Haranath; Hammell, Dana; Stinchcomb, Audra; Crooks, Peter. Carbamate prodrugs of naltrexone for transdermal delivery. The 2004 AAPS Annual Meeting, Baltimore, Maryland, Nov. 05-11, 2004

29. **Hamad, Mohamed**; Pillai, O.; Stinchcomb, Audra; Crooks, Peter. Carbonate ester prodrugs of naltrexone for transdermal delivery. The 2003 AAPS Annual Meeting, Salt Lake City, Utah, Oct. 26-30, 2003.

30. **Hamad, Mohamed**; Hammell, Dana; Stinchcomb, Audra; Crooks, Peter. A novel "gemini" prodrugs of naltrexone for transdermal delivery. The 2003 AAPS Annual Meeting, Salt Lake City, Utah, Oct. 26-30, 2003.

31. Hammell, Dana; **Hamad, Mohamed**; Stinchcomb, Audra; Crooks, Peter. A duplex prodrug of naltrexone for transdermal delivery. Gordon Research Confrence on Barrier Function of Human Skin, Rode Island, August 2003.

32. Stinchcomb, Audra; Hammell, Dana; Stolarczyk, Elzbieta; Klausner, Mith; **Hamad, Mohamed**; Crooks, Peter. Naltrexone and naltrexone-3-O-valerate diffusion and bioconversion in a human epidermis equivalent. The 2003 AAPS Annual Meeting, Salt Lake City, Utah, Oct. 26-30, 2003.

33. Hwang, J. and **Hamad, M**. EPR studies of vanadyl model ompounds of $VO(N_3S)$ & $VO(N_2S_2)$ systems. ACS National Meeting Mar.21-25, 1999.

34. **Hamad, M**. and Hwang, J. EPR line shape and translational diffusion studies of Bis (S-methyl-3-cyclohexylidenehydrazine-carbothioato) oxovanadium (IV) in toluene. 23rd International EPR Symposium, Broomfield, Colorado, July 30-Aug. 3, 2000.

RESUME

Profile

AsureQuality is a New Zealand government owned enterprise provides world class food safety and biosecurity services to the food and primary production sectors worldwide. As the Chemistry Technical Manager at AsureQuality Auckland laboratory, I am responsible for overall technical matters. The Auckland laboratory is the prime laboratory of AsureQuality and is currently offering wide range of analytical services to its customers including but not limited to vitamin analyses.

Personal details

Name	:	George Joseph
Address (residence)	:	37 Claremont Way, Auckland 2016
Telephone DDI	:	+64 9 626 8237
Mobile	:	+64 21 364412
Email	:	george.joseph@asurequality.com

Career objective

To obtain a challenging management, administrative or technical role as deemed suitable to my skills, experience and background, to help a successful organization to expand further and to help myself grow further professionally.

Academic qualifications

- M Sc: Cochin University of Science and Technology, India (1989)
- PhD: Cochin University of Science and Technology, India (1995)

Personal attributes

- Excellent communication, interpersonal and problem solving skills
- Strong customer focus with orientation capability to convert queries into sales
- Well developed time management skills with the ability to perform multi-tasks
- Flexible, innovative, quick learner and committed to continuous self-improvement

Awards / Affiliations / Training

- Excellence Award, AsureQuality 2016
- Excellence Award, AsureQuality 2011
- Excellence Award, AsureQuality 2005
- Member AOAC International
- Advisor, Proficiency Testing Australia
- Signatory Chemistry IANZ, LAS, Medsafe, TGA, Instrumentation
- Research Fellow, Department of Atomic Energy, Govt. India, 1989 to 1994
- Training, Solid Phase Extraction (Varian)
- Leadership training by Andre Vaan Heerden (AsureQuality)
- Presentation Skills Training by Kevin Simms (AsureQuality)
- Management Training on People Skills (Grafton Consulting Group, NZ)
- Health and Safety in Employment Training (BWA Group, NZ)
- HPLC Training Course (Waikato Polytechnic, Hamilton)

Professional Experience

- February 2012 to current: Technical Manager, AsureQuality
- June 2009 to February 2012: Scientist / Senior Scientist, AsureQuality
- June 2006 to June 2009: Team Leader, GMP Chemistry, AsureQuality
- November 2005 to June 2006 : Scientific Analyst, Chemistry, AsureQuality
- September 2004 to October 2005: Analyst, Chemistry, AsureQuality
- February 2001 to September 2004: Team Leader, SGS New Zealand Ltd
- September 2000 to February 2001: Analyst, SGS New Zealand Ltd
- October 1994 to June 1999: Lecturer, University of Calicut, Kerala, India
- February 1989 to August 1994: Department of Atomic Energy (DAE) Research Fellow, Cochin University of Science and Technology, Cochin, Kerala, India

Analytical Skills and experience

- Analysis of wide range of raw materials and finished products by Pharmacopoeia Methods
- Developed and validated Folic Acid, Biotin and Vitamin B12 methods by Biacore system for AsureQuality
- Developed and validated methods for many finished products as per various protocols following ICH guidelines.
- Analysis of food samples for nutritional panel information as per NZFSA regulations (Energy, Moisture, Ash, Protein, Fat, Saturated fat, Carbohydrate, Sugar - total, reducing, invert, sucrose and Sodium)
- Free fatty acids, Acid value, Peroxide value, Iodine value, TBA value etc
- Mercury, Calcium, Copper, Iron, Potassium, Magnesium, Manganese, Sodium, Nickel, Lead, Tin, Zinc, Arsenic etc. by AAS
- Acidity, Brix, Salt, Sulphurdioxide, Phosphorus, Water activity, Viscosity, Colour, Turbidity, Conductivity, pH etc.
- Total Dietary fibre, Insoluble dietary fibre, Soluble dietary fibre, Inulin, Resistant Maltodextrins (RMD) etc.
- Benzoic acid, Sorbic acid, Methyl & Propyl paraben, Caffeine, Theophylline, EGCG etc. by HPLCOrganic acids – Lactic acid, Citric acid, Formic acid, Propionic acid, Malic acid etc. by HPLC
- Wine testing – Alcohol content, Sulphurdioxide, Sugar, Acidity, Heat stability
- Ethanol, Methanol, Propanol, Glycerol, Ethylene glycol, Acetone, Toluene sulphonamides etc. by GC
- Fatty acid profile by GC - Omega 3 (EPA, DHA, ALA) Omega 6, Saturated, Monounsaturated and Polyunsaturated etc.
- Antioxidants – GC
- Vitamins – Vitamin B group, C, A, D, E, K etc by HPLC or GC
- Amino acid separation by ion-exchange chromatography / GC / HPLC

- Protein – separation by electrophoresis, electrofocussing etc
- Enzyme - purification and kinetic studies
- Vanillin assay by GC or HPLC
- Wax esters by GC
- Sugar profile by GC
- Pesticide residue screening of fruits, vegetables, environmental samples and health foods by HPLC and GCMS
- Assay of veterinary preparations for Cypermethrin, Amitraz, Deltamethrin, Permethrin, Diflubenzuron, Ivermectin, Abamectin etc. by HPLC
- Phenols and Acetic Herbicides by GC – ECD
- Volatile organic compounds by Purge & Trap GCMS
- Semi-volatile organic compounds by GCMS
- Organic volatile impurities of pharmaceutical preparations by BP / USP methods by GC / HPLC
- Solid Phase Extraction (SPE), Liquid phase extraction and Gel Permeation Chromatography techniques for the sample preparation in pesticide residue analysis.
- Analysis of wool samples for permethrin and other pesticide residues by HPLC / GC
- HPLC / GC method development, validation and trouble shooting.

Instrumentation

- High Performance Liquid Chromatography (HPLC)
- Liquid Chromatography and Mass Spectrometry (LCMS)
- Gas Chromatography (GC)
- Gas Chromatography Mass Spectrometry (GC-MS)
- Surface Plasmon Response, Biosensor systems (Biacore)
- UV-Visible, IR Spectrophotometry

DANA ALAN KRUEGER
President
Krueger Food Laboratories, Inc.
President
Krueger Enterprises, Inc. (dba Geochron Laboratories)
21 Alpha Road, Suite D
Chelmsford, MA 01824

Education:

1979-80	University of Pittsburgh Pittsburgh, PA Graduate program in Chemistry: organic synthesis
1975-9	Massachusetts Institute of Technology Cambridge, MA Bachelor of Science, Chemistry

Continuing Education:

Quality Assurance for Analytical Laboratories
AOAC Short Course, Washington, DC (1984)

Accreditation vs. Registration
AOAC Int./AALA Short Course, Washington, DC (1993)

Work Experience:

1984 to Present	Krueger Food Laboratories, Inc. Chelmsford, MA President and Founder: Direction of an analytical laboratory specializing in food analysis.
1982-4 and 1999 to Present	Krueger Enterprises, Inc. Chelmsford, MA President (1999 to Present): Direction of an analytical laboratory specializing in isotope analysis. Research Director (1982-4): Development of new analytical procedures and commercial services in the area of isotope analysis, particularly in the detection of adulterated foodstuffs.
1980-2	KOR Incorporated Cambridge, MA Chemist: Synthesis of isotopically labelled compounds and specialty chemicals

Memberships:

American Chemical Society
AOAC International
(Fellow 1997, Peer Verified Methods Advisory Committee 1994-2000, Horwitz Advisor, 2004-present, Commodity Foods Committee 1997-2006, General Referee for Flavors 1988-2000, 2006-present, Associate Referee for Vinegar 1986-1992, Associate Referee for 14C in Flavors 1988-93, Associate Referee for 13C/12C in Fruit Juices 1995-2000, Northeast Regional Section Executive Committee 1996-8, Northeast Regional Section President 1998-99, Sam-E Expert Review Panel)
Association of the Industry of Juices and Nectars of Fruits and vegetables (AIJN)
(Code of Practice Expert Group)
Institute of Food Technologists
(Professional Member, Certified Food Technologist)
Technical Committee for Juice and Juice Products (TCJJP)
(Executive Board, term 1992 to 1995, ByLaws Committee Chairman, 1993-5, Executive Board Chairman, 2005-7)
International Federation of Fruit Juice Producers (IFU)
(Commission Methods of Analysis and Statistical Working Group)
American Oil Chemists Society
American Society of Brewing Chemists
Grocery Manufacturer's Association
(Food Industry Analytical Chemists Committee)
United States Pharmacopeia (USP)
(Expert Committee on Food Ingredient, 2015-2020 term)

Publications:

Krueger, D. A., and Krueger, H. W., Carbon Isotopes in Vanillin and the Detection of Falsified "Natural" Vanillin, *J. Agr. Food Chem.*, **1983** *31*, 1265-1268

Krueger, D. A., and Krueger, H. W., Comparison of Two Methods for Determining Intramolecular 13C/12C Ratios of Acetic Acid, *Biomedical Mass Spectrometry*, **1984,** *11*, 472-474

Krueger, D. A., and Krueger, H. W., Detection of Fraudulent Vanillin Labelled with 13C in the Carbonyl Carbon, *J. Agr. Food Chem.*, **1985**, *33*, 323-325

Krueger, D. A., and Krueger, H. W., Isotopic Composition of Carbon in Vinegars, *J. Assoc. Off. Anal. Chem.*, **1985**, *68*, 449-452

Krueger, D. A., Krueger, R.-G., and Krueger, H. W., Carbon Isotope Ratios of Various Fruits, *J. Assoc. Off. Anal. Chem.*, **1986**, *69*, 1035-1036

Byrne, B., Wengenroth, K. J., and Krueger, D. A., Determination of Adulterated Natural Ethyl Butyrate by Carbon Isotopes, *J. Agr. Food Chem.*, **1986**, *34*, 736-738

Krueger, D. A., Determination of Adulterated Bitter Almond Oil by Carbon Isotopes, *J. Assoc. Off. Anal. Chem.*, **1987**, *70*, 175-176

Krueger, D. A., Improved Method for 14C Determination in Oils of Bitter Almond and Cassia, abstract 101st International Meeting of the Association of Official Analytical Chemists (1987)

Krueger, R.-G., and Krueger, D. A., Detection and Estimation of Corn Syrup in Barley Malt Syrup Using Carbon SIRA, abstract 101st International Meeting of the Association of Official Analytical Chemists (1987)

Krueger, D. A., Detection of Adulterated Orange Juice, in Ready to Serve Citrus Juices and Juice Added Beverages: 1988 Food Industry Short Course Procedings, R. F. Matthews, ed., (1988) IFAS and IFT Florida Section

Krueger, D. A., Applications of Stable Isotope Ratio Analysis to Problems of Fruit Juice Adulteration, in Adulteration of Fruit Juice Beverages, S. Nagy, J. Attaway and M. Rhodes, eds., (1988) Marcel Dekker

Krueger, D. A., Detection of Synthetic Flavoring Materials Using Hydrogen Stable Isotope Ratios, abstract 102nd International Meeting of the Association of Official Analytical Chemists (1988)

Morselli, M., Currier, W. S., Baggett, W. L., Whelan, M. L., and Krueger, D. A., HPLC Analysis of Phenolics in Maple Syrup Darkened in Bulk Containers, abstract 102nd International Meeting of the Association of Official Analytical Chemists (1988)

Soileau, S. D., Hunter, K. W., Brimfield, A. A., Krueger, D. A., and Maciel, J., Detection of Raffinose in Foodstuffs by Enzyme Immunoassay, abstract 102nd International Meeting of the Association of Official Analytical Chemists (1988)

Krueger, D. A., Detection of Added Sugar in Fruit Juice Using Stable Isotope Ratio Analysis, in 2nd Fruit Juice Authenticity Workshop, A. Brause, ed., (1989) General Physics Corp.

Krueger, D. A., General Referee Report: Flavors, *J. Assoc. Off. Anal. Chem.*, **1989**, *72*, 86

Krueger, D. A., General Referee Report: Flavors, *J. Assoc. Off. Anal. Chem.*, **1990**, *73*, 120-121

Krueger, D., Detection of Beet Sugar in Orange and Grapefruit Juices by Deuterium/Hydrogen Isotope Ratios, abstract 200th National Meeting of the American Chemical Society (1990)

Krueger, R.-G., and D. Krueger, Adulteration of Fruit Products with Sugars or Other Fruits, abstract 104th International Meeting of the Association of Official Analytical Chemists (1990)

Krueger, D., A Critique of AOAC Method 22.B06 for Detection of Orange Pulpwash Solids in Orange Juice, abstract 104th International Meeting of the Association of Official Analytical Chemists (1990)

Krueger, D., J. Maciel and R.-G. Krueger, Composition of Commercial Apple Juice, abstract 104th International Meeting of the Association of Official Analytical Chemists (1990)

Krueger, D., Detection of Beet Sugar in Orange Juice, abstract 104th International Meeting of the Association of Official Analytical Chemists (1990)

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Krueger, D. and R.-G. Krueger, Sample Preparation Bias in Carbon Stable Isotope Ratio Analysis of Fruit Juices and Sweeteners, abstract 105th International Meeting of the Association of Official Analytical Chemists (1991)

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Krueger, D. A., Maciel, J., and Krueger, R.-G., Composition of Pineapple Juice, *J. Assoc. Off. Anal. Chem.*, **1992**, *75*, 280-282

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Krueger, D. A., Krueger, R.-G., and Maciel, J., Reaction to Letter to Editor on Composition of Pineapple Juice, *J. Assoc. Off. Anal. Chem.*, **1992**, *75*, 133A-134A

Krueger, D. A., New Analytical Techniques for the Detection of Added Sugars in Citrus Juices, abstract 1992 IFT Annual Meeting (1992)

Krueger, D. A., Maciel, J., and Lin, S., Composition of Vanilla Extract, abstract 106th International Meeting of the Association of Official Analytical Chemists (1992)

Krueger, D. A., Maciel, J., Lin, S. and Shifrin, E., Composition of Strawberry Juice, abstract 106th International Meeting of the Association of Official Analytical Chemists (1992)

Krueger, D. A., General Referee Report: Flavors, *J. Assoc. Off. Anal. Chem.*, **1993**, *76*, 107-8

Krueger, D. A., Sample Preparation Bias in Carbon Stable Isotope Ratio Analysis of Fruit Juices and Sweeteners, *J. Assoc. Off. Anal. Chem.*, **1993**, *76*, 418-420

Krueger, D. A., Detection of Adulterated Fruit Flavors, abstract 206th National Meeting of the American Chemical Society (1993)

Wrolstad, R. E., Durst, R. W., and Krueger, D. A., Red Raspberry Juice Composition, abstract 107th International Meeting of the Association of Official Analytical Chemists (1993)

Krueger, D. A., Authentication of Commercial Apple Juice, in Juice Technology Workshop October 18-19, 1993, D. L. Downing, Ed., **1993**, Special Report number 67 of the New York Agricultural Experiment Station, Geneva, NY

Krueger, D. A., General Referee Report: Flavors, *J. Assoc. Off. Anal. Chem.*, **1994**, *77*, 130-1

Krueger, D. A., Eisele, T. and Iuliano, T., Determination of D-Malic Acid in Apple Juice by Enzyme Assay: an Interlaboratory Study, abstract 108th International Meeting of the Association of Official Analytical Chemists (1994)

Krueger, D. A., Stable Isotope Ratio Analysis in Fruit Juice Evaluation, in Workshop on Juice Analysis: Analytical Techniques for Determining Composition and Authenticity of Fruit Juices, (1994) AOAC International/Technical Committee for Juice and Juice Products

Krueger, D. A., Detection of Added Sugar to Fruit Juices Using Carbon and Hydrogen Stable Isotope Ratio Analysis, in Methods to Detect Adulteration of Fruit Juice Beverages, Volume 1, S. Nagy, R. Wade, eds., (1995) AgScience

Krueger, D. A., Detection of Adulterated Fruit Flavors, in Fruit Flavors: Biogenesis, Characterization, and Authentication, ACS Symposium Series 596, R. L. Rouseff and M. M. Leahy eds., (1995) American Chemical Society

Krueger, D. A.and Maciel, J., Authentication of Aloe Vera Products, abstract 109th International Meeting of the Association of Official Analytical Chemists (1995)

Krueger, D. A., Analysis of Calcium in Fruit Juices by Flame AAS: a Ruggedness Study, abstract 109th International Meeting of the Association of Official Analytical Chemists (1995)

Durst, R. W., Wrolstad, R. E., and Krueger, D. A., Sugar, Nonvolatile Acid, $^{13}C/^{12}C$ Ratio, and Mineral Analysis for Determination of the Authenticity and Quality of Red Raspberry Juice Composition, *J. Assoc. Off. Anal. Chem.*, **1995**, *78*, 1195-1204

Krueger, D. A., Fruit Juice Analysis: Detection of Fraudulent and Mislabeled Fruit Juices, in Juice Technology Workshop August 12-13, 1996, J. Anderson, Ed., **1996**, Special Report number 70 of the New York Agricultural Experiment Station, Geneva, NY

Krueger, D. A., and Maciel, J., Detection of Corn Syrup in Invert Sugar Syrups by Trace Oligosaccharide Analysis, abstract 110th International Meeting of the Association of Official Analytical Chemists (1996)

Krueger, D. A., and Maciel, J., Detection of Roselle Colorant in Strawberry and Red Raspberry Juices, abstract 110th International Meeting of the Association of Official Analytical Chemists (1996)

Krueger, D. A., General Referee Report: Flavors, *J. AOAC International*, **1997**, *80*, 115-6

Kahan, S. and Krueger, D. A., Liquid Chromatographic Method for Determination of Vanillin and Ethyl Vanillin in Imitation Vanilla Extract (Modification of AOAC Official Method 990.25): Collaborative Study, *J. AOAC International*, **1997**, *80*, 564-570

Krueger, D. A., Detection of Guaiacol, an Off-Odorant, in Apple Juice, abstract 111th International Meeting of the Association of Official Analytical Chemists (1997)

Krueger, D. A., Formation of Reversion Disaccharides in Fruit Juice Concentrates During Processing, abstract 111th International Meeting of the Association of Official Analytical Chemists (1997)

Krueger, D. A., Stable Isotope Analysis by Mass Spectrometry, in Analytical Methods of Food Authentication, P. Ashurst, Ed., Chapman and Hall (1998)

Krueger, D. A., Detection of Beet Sugar in Maple Syrup by Hydrogen Stable Isotope Ratio Mass Spectrometry, abstract 112th International Meeting of the Association of Official Analytical Chemists (1998)

Krueger, D. A., Identification of the Marker Disaccharides Indicating Hydrolyzed Inulin Syrup Addition to Fruit Juices, abstract 112th International Meeting of the Association of Official Analytical Chemists (1998)

Krueger, D. A., New Developments in Stable Isotope Ratio Analysis of Fruit Products and Syrups, in Food Authenticity Workshop, Nicolas Sennequier, Ed. (1998) ENI Laboratories, Montreal, September 13, 1998

Krueger, D. A., Composition of Commercial Pomegranate Juice, abstract 122nd International Meeting of the Association of Official Analytical Chemists (2008)

Zhang, Y., D. A. Krueger, R. Durst, R. Lee, D. Wang, N. Seeram and D. Heber, International Multidimensional Authenticity Specification (IMAS) Algorithm for Detection of Commercial Pomegranate Juice Adulteration, *J. Agric. Food Chem.* **2009** *57(9*) 3961

Krueger, D. A., Composition of Acai Juice, abstract 123rd International Meeting of the Association of Official Analytical Chemists (2009)

Krueger, D. A., Detection of Adulterated Pomegranate Juice, abstract 123rd International Meeting of the Association of Official Analytical Chemists (2009)

Durst, R., B. Frei, Y. Zhang, D. Heber and Krueger, D. A., Pomegranate: Composition of a Superfruit, abstract 123rd International Meeting of the Association of Official Analytical Chemists (2009)

Krueger, D. A., Detection of Added Citric Acid to Pomegranate Juice, abstract 124th International Meeting of the Association of Official Analytical Chemists (2010)

Krueger, D. A., Detection of Adulterated Agave Syrup, abstract 124th International Meeting of the Association of Official Analytical Chemists (2010)

Twohig, M., Burgess, J., Gledhill, A., Rosnack, K., Young, P. B. and Krueger, D. A., Pomegranate sample profiling using multivariate data analysis, high resolution chromatography, UV and Time of Flight MS detection, abstract American Society of Mass Spectrometry (2011)

Hobbs, L. J., and Krueger, D. A., Response to "Response to the Letter Regarding 'Sugar Content of Popular Sweetened Beverages'", *Obesity*, **2011** 19(4) 688

Gledhill, A., Krueger, D. A., Twohig, M., Burgess, J., "Super fruit juice authenticity using multivariate data analysis high resolution chromatography UV and Time of Flight MS detection", *AgroFOOD Industry High-tech, Supplement "Focus on Food Analysis"*, **2011**, 22(5) 23-26, Poster Abstract: PittConn (2011)

Krueger, D. A., Composition of Pomegranate Juice, *J. AOAC International*, **2012**, 95(1) 163-168

Rogers, K.M., Cook, J.-M., Krueger, D. A., Beckmann, K., AOAC Method 998.12, C-4 Plant Sugars in Honey: A Collaborative Study of Two Modifications of the Protein Preparation Procedure, abstract 126th International Meeting of the Association of Official Analytical Chemists (2012)

Rogers, K.M., Cook, J.-M., Krueger, D. A., Beckmann, K., Modification of AOAC Official MethodSM 998.12 to Add Filtration and/or Centrifugation: Interlaboratory Comparison Exercise, *J. AOAC International*, **2013**, 96(3) 607-614

Krueger, D. A., Composition of Mango Juice, abstract 127th International Meeting of the Association of Official Analytical Chemists (2013)

Krueger, D. A., Composition of Sweet Cherry Juice, abstract 128th International Meeting of the Association of Official Analytical Chemists (2014)

Krueger, D. A., Authentication of Pure Coconut Water, abstract PittCon 2015 (2015)

Krueger, D. A., Recent Problems of Economic Adulteration of Fruit Juices in the American Market, abstract 129th International Meeting of the Association of Official Analytical Chemists (2015)

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Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Eleftheria Katechaki**
Address(es)	94 Kanakari Str., 26221, Patras, Greece
Telephone(s)	00302610990171 Mobile: 00306947321427
E-mail	elkatehaki@hotmail.com
Nationality	Hellenic
Date of birth	08/12/1980
Gender	Female

Work experience

Dates	30/03/2016 - present
Occupation or position held	Technical Expert
Main activities and responsibilities	Assessment of Eurostars applications
Name and address of employer	EUREKA Secretariat AISBL, Rue Neerveld 107, 1200 Brussels, Belgium
Dates	11/09/2015 - present
Occupation or position held	Technical Expert
Main activities and responsibilities	Assessment of Phase 2 applications to Innovation Fund Denmark's Large Scale Projects
Name and address of employer	Innovation Fund Denmark, Østergade 26 A, 4. Sal, DK – 1100 København K, http://innovationsfonden.dk
Dates	21/10/2014 - present
Occupation or position held	Chemist researcher
Main activities and responsibilities	Quality Assurance Manager, R&D, Quality Control Manager in accredited laboratory Participation in national research programmes co-funded by European Union (postdoctoral fellow): • PAVET 2013 "Integrated management of entomological and microbiological risks during processing, storage and transport of currants by using non-chemical, environmentally compatible methods: sustainability in practice" (1442-BET-2013) • SYNERGASIA 2009 "Obesity and metabolic syndrome: Nutritional intervention with currants in Non-alcoholic fatty liver disease / Non-alcoholic steatohepatitis (NAFLD / NASH). Investigation of molecular mechanisms of action" (ΣΥΝ2009-890)
Name and address of employer	Agricultural Cooperatives' Union Aeghion SA, 201 Korinthou Str., 25100, Aeghion, www.pesunion.gr
Dates	05/2014 - present
Occupation or position held	Technical expert
Main activities and responsibilities	Research programme physical object monitoring and certification ("Bio-functional rice production with absorption of micro ingredients from herbal extracts")
Name and address of employer	Greek General Secretariat for Research & Technology,14-18 Mesogeion Av., 11510, Athens, www.gsrt.gr
Dates	22/03/2004 - 30/04/2016
Occupation or position held	Freelance chemist
Main activities and responsibilities	Work experience in industry, research, process development, product validation, quality control, chemical analysis, evaluations, development of educational material, adult education

Dates	01/07/2015 - 31/08/2015
Occupation or position held	Implementation and support of the necessary development processes of mixed university courses a) Chemistry II for the Department of Geology and b) General Chemistry for the Department of Biology in Open eClass platform
Main activities and responsibilities	Adjustment of theoretical and laboratory course material in accordance with a specific standard, educational material collection and organization, digitization, documentation in Open eClass platform, control and confirmation of accessibility
Name and address of employer	University of Patras
Dates	04/08/2014 - 31/07/2015
Occupation or position held	Researcher
Main activities and responsibilities	Study on the professional development of Hellenic Open University' graduates and the degree of convergence of the skills they have acquired to real labor market needs.
Name and address of employer	Hellenic Open University,18 Parodos Aristotelous Str., 26335, Patras, www.eap.gr
Dates	01/04/2014 - 31/05/2015
Occupation or position held	External partner of Computer Technology Institute and Press "Diophantus"
Main activities and responsibilities	Coordination and support of volunteer teachers that are members of the Network, for the implementation of individual activities and encouraging their participation and cooperation. Support and organization of local actions (seminars, workshops, etc)
Name and address of employer	Computer Technology Institute and Press "Diophantus", Panepistimioupoli Patron, 26500, Rion, Patras, www.cti.gr
Dates	04/10/2004 - 07/02/2014
Occupation or position held	Professor
Main activities and responsibilities	Teaching of chemistry, food chemistry, microbiology, quality control, technology, environment, hygiene and safety at work, food hygiene, physics, cosmetology, aromatherapy, pharmaceutical technology, laboratory of pharmaceutical physics
Name and address of employer	IEK Patras (289 Akrotiriou Str., 26332, Patras), 2nd IEK Patras (5 Gianitson Str., 26223, Patras), IEK Aigiou (Xirolithion, 25100, Aigio), IEK OAED Patras (21 Panepistimiou Str., 26504, Rio), IEK AKMI (61 St. Andreou Str., 26221, Patras)
Type of business or sector	Public and private Institutes of Vocational Training
Dates	01/01/2005 - present
Occupation or position held	Seminar instructor
Main activities and responsibilities	Teaching of food hygiene and safety, pollution control, anti-pollution systems, hospital waste management, laboratory accreditation ISO17025/2005, official inspection in the field of food additives, official inspection in the field of wine and beer
Name and address of employer	Computer Practica (51 Ermou Str., 26221, Patras), KEK Achaias-NELE (16 Aftokratoros Theodosiou Str., 26333, Patras), KEK GSEVEE (170 Panepistimiou Str., 26443, Patras), Social Multicenter of ADEDY (4 Dioskouron & Polignotou Str., 10555, Athens), National Centre for Public Administration and Government (211 Pireos Str., 17778, Tayros, Athens), KAELE (42 Mitropoleos Str., 10563, Athens), EFET (Hellenic Food Authority, 124 Kifisias Str., 11526, Athens)
Type of business or sector	Vocational Training Centres
Dates	01/12/2010 - present
Occupation or position held	External partner of Hellenic Organization for Standardization (ELOT)
Main activities and responsibilities	Development of Standard ELOT 1439 "Organization friendly to citizens with disabilities - Requirements and Recommendations"
Name and address of employer	ELOT SA, 50 Kifisou Av., 12133, Athens, www.elot.gr
Type of business or sector	Legal entity governed by private law
Dates	01/01/2010 - present
Occupation or position held	Evaluator
Main activities and responsibilities	Evaluator for sustainability reporting enterprises in the competition «BRAVO» (open consultation on reporting and sustainable development)
Name and address of employer	QualityNet Foundation, Pentelis Avenue 138, ZIP:152 34 Chalandri, www.qualitynetfoundation.gr
Type of business or sector	Non Profit Private Legal Entity
Dates	04/04/2012 - present

Occupation or position held	Evaluator
Main activities and responsibilities	Evaluation of investment proposals in the programmes: • "Aid for SMEs active in the sectors of Manufacturing, Tourism, Commerce - Services" • "National Contingency Reserve Programme"
Name and address of employer	Authority for operational programme “Competitiveness and Entrepreneurship” (EFEPAE), 119 Sevastoupoleos Str., 11526, Athens, www.efepae.gr
Type of business or sector	Non Profit Private Legal Entity
Dates	23/04/2012 - 31/10/2013
Occupation or position held	External partner of Computer Technology Institute and Press "Diophantus"
Main activities and responsibilities	Developing and deploying conventional and digital media in education and lifelong learning, publishing printed and electronic educational materials, administrating and managing the Greek School Network, supporting the organization and operation of the electronic infrastructure of the Greek Ministry of Education, Lifelong Learning and Religious Affairs and all educational units.
Name and address of employer	Computer Technology Institute and Press "Diophantus", Panepistimioupoli Patron, 26500, Rion, Patras, www.cti.gr
Type of business or sector	Legal entity governed by private law
Dates	15/5/2013 - 15/6/2013
Occupation or position held	Inspector
Main activities and responsibilities	Inspector of Food Health and Safety in CARREFOUR
Name and address of employer	Quality Cycle Company
Type of business or sector	Private company
Dates	02/11/2010 - 30/06/2012
Occupation or position held	Hourly paid professor in Secondary Education
Main activities and responsibilities	Teaching of chemistry and physical sciences
Name and address of employer	SDE (School of Second Chance) Patras, EPAL Kato Achaias, Lykeio Halandritsas, 4nd EPAL Patron
Type of business or sector	Secondary Education
Dates	14/07/2009 - 31/12/2010
Occupation or position held	Inspector and assesor
Main activities and responsibilities	Inspector and assessor of private Institutes of Vocational Training as a specialist in the field of Chemical Industry Professional
Name and address of employer	Organization of Vocational Education and Training (OEEK), 49-45 Konstantinoupoleos Str., 11855, Athens
Type of business or sector	Public Entity
Dates	13/10/2006 - 31/12/2009
Occupation or position held	Universitary assistant
Main activities and responsibilities	Supervision of undergraduate and postgraduate students
Name and address of employer	University of Patras, Department of Chemistry, 26504, Rio, www.upatras.gr
Type of business or sector	Academic Organisation
Dates	14/05/2007 - 29/06/2008
Occupation or position held	Examiner and examination marker in National Accreditation Examinations of Institutes of Vocational Training (IEK)
Main activities and responsibilities	Oral examination and examination marking of trainees from public Institutes of Vocational Training (IEK)
Name and address of employer	PEEP of Western Greece, 289 Akrotiriou Str., 26332, Patras
Type of business or sector	Public Certification Commission
Dates	19/04/2006 - 31/03/2008
Occupation or position held	Researcher, funded by Greek General Secretariat for Research & Technology (GSRT)
Main activities and responsibilities	Exploitation of whey for the production of novel foods and products of added-value employing biotechnological methods
Name and address of employer	University of Patras, Department of Chemistry, 26504, Rio, www.upatras.gr
Type of business or sector	Academic Organisation

Education and training

Dates	2006 - 2010
Title of qualification awarded	PhD in Chemistry
Principal subjects/occupational skills covered	Thesis title: "*Effect of thermally dried starter cultures on ripening of hard-type cheeses*", research in the fields of food microbiology, immobilized cells technology, fermentation, exploitation of whey for the production of starter cultures, ripening acceleration, sensory evaluation
Name and type of organisation providing education and training	University of Patras, Rio, Greece
Dates	2002 - 2004
Title of qualification awarded	Master of Science in Food Biotechnology
Principal subjects/occupational skills covered	Enterprise in Biotechnology, Recombinant DNA Technology, Process Biotechnology, Research Design and Statistics, Food Microbiology and Preservation, Food Biotechnology, Food Chemistry, Advanced exercises in Food Chemistry and Biotechnology Final year project in the production of yogurt with probiotic starter culture (*Lactobacillus casei*)
Name and type of organisation providing education and training	University of Patras, Rio, Greece University of Ulster, Coleraine, UK University of Ioannina, Ioannina, Greece
Dates	1998 - 2002
Title of qualification awarded	Bachelor of Science in Chemistry
Principal subjects/occupational skills covered	General, Organic, Inorganic, Analytical, Physical Chemistry and Biochemistry Final year project in Biochemistry (isolation of envelope membranes and photosystem II from spinach, determination of chlorophyll, impact of UV-A radiation on photosystem II activity, isolation of alliinase from garlic, application of affinity chromatography)
Name and type of organisation providing education and training	University of Crete, Heraklion, Greece

Personal skills and competences

Mother tongue(s): **Greek**

Other language(s)

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English (Certificate of Proficiency in English, University of Michigan)	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
French (Certificat de Langue Française, Insitut Française d' Athènes)	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
Spanish (DELE C1, Instituto Cervantes)	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

(*) Common European Framework of Reference for Languages

Computer skills and competences: Windows, Word, Excel, Internet Explorer, Access, PowerPoint, Outlook (Certificate of ECDL Core), Origin, CS ChemDraw Pro, ISIS/Draw, MathType, ABBYY FineReader, blind typing

Other skills and competences

SCHOLARSHIPS

- Scholarship awarded from Alexander S. Onassis Public Benefit Foundation for post-graduate studies (2003-2004)
- Scholarship awarded from Greek State Scholarship Foundation for post-graduate studies (2002-2003)
- Scholarship awarded from University of Patras for post-graduate research (2002-2003)

AWARDS

Torchbearer in Vancouver 2010 Torch Relay as representative of sciences and arts

MEMBERSHIPS

- Association of Greek Chemists
- EFET (Hellenic Food Authority) Register of Instructors
- EKEPIS (National Accreditation Centre of Vocational Training Structures and Accompanying Support Services) Register of Instructors
- EKDDA (National Centre for Public Administration and Local Government) Register of Instructors
- EYSEKT (Special Service for Coordination and Monitoring of European Social Fund Actions) Central Register of Evaluators
- IKY (Greek State Scholarship Foundation) Register of Evaluators
- EFEPAE (Authority for operational programme "Competitiveness and Entrepreneurship") Register of Evaluators
- GSRT (General Secretariat for Research and Technology) Register of Evaluators
- EOPPEP (National Organisation for the Certification of Qualifications & Vocational Guidance) Register of Evaluators and Inspectors
- Scholars' Association of the Alexander S. Onassis Public Benefit Foundation
- EUREKA high-level Technical Experts database
- Central European Initiative List of Experts in European and international affairs March 2015
- National Center for Educational Quality Enhancement (NCEQE) database of International Experts
- Interreg CENTRAL EUROPE MA database of Experts

JOURNAL PEER REVIEWER

- International Journal of Food Engineering and Technology
- Science Journal of Chemistry
- Journal of Food: Microbiology, Safety & Hygiene
- Journal of Agriculture, Food Systems, and Community Development
- Journal of Higher Education Outreach and Engagement

Driving licence

CAT. B

Additional information

PUBLICATIONS

In international journals:

Katechaki E., Panas P., Rapti K., Kandilogiannakis L. and Koutinas A.A. (2008). Production of hard-type cheese using free or immobilized freeze-dried kefir cells as a starter culture. *Journal of Agricultural and Food Chemistry*, 56, pp. 5316-5323.

Koutinas A.A., Papapostolou H., Dimitrellou D., Kopsahelis N., Katechaki E., Bekatorou A. and Bosnea L. (2009). Whey valorisation: A complete and novel technology development for dairy industry starter culture production. *Bioresource Technology*, 100, pp. 3734-3739.

Katechaki E., Panas P., Kourkoutas, Y., Koliopoulos, D., and Koutinas A.A. (2009). Thermally-dried free and immobilized kefir cells as starter culture in hard-type cheese production. *Bioresource Technology*, 100, pp. 3618-3624.

Koutinas, A. A., Bekatorou, A., Papapostolou, H., Kopsahelis, N., Katechaki, E., Dimitrellou, D., Panas, P., Sideris, K., Kallis, M., Bosnea, L. A., Koliopoulos, D., Sotiropoulos, P., Panteli, A., Kourkoutas, Y., Kanellaki, M., and Soupioni, M. Scale-up of thermally dried kefir production as starter culture for hard-type cheese making: An economic evaluation. *Applied Biochemistry & Biotechnology*, Published online: 17 May 2009.

Katechaki, E., Solomonidis, T., Bekatorou, A. and Koutinas, A.A. (2010). Thermal drying of *Lactobacillus delbrueckii* subsp. *bulgaricus* and its efficient use as starter for whey fermentation and unsalted cheese making. *Applied Biochemistry & Biotechnology*, Published online: 03 February 2010.

Katechaki, E. (2015). Integrating women into new European labour market / Developing the policies of Agricultural Cooperatives' Union – Aeghion S.A. according to Sedex Members Ethical Trade Audit (WEP). *InGRID TNA Activity Report*, Centre d'études de l'emploi (CEE) https://inclusivegrowth.be/downloads/tna-activity-reports/c13-03-report-eleftheria-katechaki.pdf

In international conferences:

Katechaki E., Bakoyianis V., Psarianos C. and Koutinas A.A. Dairy products with low cholesterol content: A review. *2nd International Congress on Bioprocesses in Food Industries*. 18-21 of June 2006, Patras, Congress Proceedings, pp. 107-108.

Katechaki E., Koutinas A.A. and Bekatorou A. Evaluation of dried starter cultures for unsalted hard type cheese production. *4th International Greek Biotechnology Forum*. 2-3 of February 2008, Athens.

Katechaki E. and Koutinas A.A. Use of whey as raw material for the production of starter cultures in hard type cheeses ripening. *2nd International Conference For Waste Valorisation*. 2-5 of June 2008, Patras, Congress Proceedings, pp. 325-326.

Koutinas A.A., Papapostolou D., Bekatorou A., Kopsahelis N., Katechaki E. and Bosnea L. Whey valorization: A complete and novel technology development for starter cultures production employed in dairy industry. *2nd International Conference For Waste Valorisation*. 2-5 of June 2008, Patras, Congress Proceedings, pp. 145.

Katechaki E. Have working conditions really improved for researchers? EURAXESS – *Voice of the Researchers Conference*. 21-22 of November 2013, Area 2, Brussels.

Panagopoulou E.A., Chiou A., Christea M., Katechaki E., Katharakis D., Alexandridou C. and Karathanos V.T. Simultaneous determination of water-soluble vitamins in Corinthian currants (*Vitis Vinifera* L., var. *Apyrena*) by reversed phase high pressure liquid chromatography (RP-HPLC). *29th EFFoST International Conference*. 10-12 of November 2015, Athens, Congress Proceedings.

PARTICIPATIONS IN CONFERENCES/TRAINING COURSES

- 05/10/2015 – 09/10/2015, "Integrating women into new European labour market / Developing the policies of Agricultural Cooperatives' Union – Aeghion S.A. according to Sedex Members Ethical Trade Audit (WEP)" study visit carried out in Centre d'études de l'emploi (CEE), Paris, France.
- 06/05/2014 – 18/07/2014, "Recent bioanalysis techniques in health, agriculture, environment and nutrition sector" (150 hours).
- 06/04/2015, "Sensory evaluation of foods".
- 21/11/2013 - 22/11/2013, EURAXESS – Voice of the Researchers Conference.
- 12/06/2010 - 15/10/2013, "Adult Education" training courses (358 hours).
- 02/09/2013 - 06/09/2013, "Metodología del Corpus para la Reduccíon del Fracaso Escolar" training course carried out in Porto, Portugal, within the framework of Grundtvig programme.
- 10/04/2013 - 15/04/2013, "Introduction to Homeopathy" training course carried out in Istanbul, Turkey, within the framework of Grundtvig programme.
- 26/03/2013 - 27/03/2013, "Mentoring for Entrepreneurship".
- 24/01/2011 - 29/01/2011, "Creating and developing a European network for inclusion: tools, instruments and methodologies" training course carried out in Potenza, Italy, within the framework of Grundtvig programme.
- 10/10/2009 - 08/06/2010, Special Education seminar (410 hours) carried out by the University of Thessaly.
- 01/10/2008 - 31/06/2009, Greek Sign Language training course (480 hours).
- 23/05/2009, Sign Language seminar.
- 08/03/2009 - 14/03/2009, "Training instructors on teaching tools" training course carried out in Madrid, Spain, at UPM Universidad Politecnica de Madrid, within the framework of LLP-LdV/VETRO/2007/EL/114 project.
- 17/12/2005 - 18/12/2005, "Fundamentals of HACCP".
- 02/06/2008 - 05/06/2008, 2nd International Conference For Waste Valorisation.
- 02/03/2008 - 03/03/2008, 4th International Greek Biotechnology Forum.
- 18/06/2006 - 21/06/2006, 2nd International Congress on Bioprocesses in Food Industries.

- 17/12/2005 - 18/12/2005, Fundamentals of HACCP seminar carried out by the Royal Society for the Promotion of Health.
- 27/02/2004 - 28/02/2004, 1st Conference on Green Chemistry and Sustainable Development.

Tommy D. "Tom" Phillips

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arathang01@hotmail.com

Education: **Eastern Kentucky University**
Program: M.S. (incomplete)
Major: Analytical Chemistry 1993-1997

Pikeville College, Pikeville Kentucky
Degree Awarded: B.S. 1979-1982
Major: Biology
Major: Chemistry
Major: Mathematics

Academic Activities and Awards
Presidential Scholar 1978-1982
Kentucky Academy of Sciences 1979-1982
Pikeville College Judicial Board 1980-1982

Professional Memberships and Associations
American Chemical Society
Association of Mass Spectrometry
Association of Official Analytical Chemists
Committee on Mine Water Quality
Reviewer for Journal of Agricultural and Food Chemistry

Professional Experience

State of Maryland, Department of Agriculture, Annapolis, MD
Chemist III, State Chemist Division **2002 -present**

Administrative Responsibilites: Supervision and training of scientists and technicians on appropriate instrument use, chemical analyses, and evaluation. As a founding member of the QA/QC committee, responsibilities include preparation, implementation, and approval of Standard Operating Procedures (SOPs); implementation of standards relative to GMP, GLP, and ISO accreditations.

Analytical Responsibilities: Analyses include sample preparation, method determination, validation, and implementation. Lead investigator for routine pesticide analyses in foods, large animal feeds, soils, water. Other investigations include complex and non-routine formulation analyses of chlorinators, quaternary ammonium compounds, mixed formulation pesticides, aerosols, mycotoxins, and biological analyses of large animal feeds and feed ingredients. All investigations require data analyses and technical reports; proficient with SAS, SPSS, and Excel packages and experiment-specific VBA codes.

Instrument Responsibilities: Principal scientist responsible for the provision of technical evaluation, calibration, repair and all other phases of analytical instrument maintenance in all laboratories. Division instruments include GC, GC-MS, HPLC, ASE, CE, RT-PCR, Gel Electrophoresis, UV-Vis, and assorted detectors (e.g., photodiode array, fluorescence, Triple Quadrapole MS, FID, NPD, ECD, halogen specific).

Analytical Chemical Services of Columbia, Inc., Columbia, MD
Assistant Chief Chemist **1997-2002**

Administrative Responsibilities: Training and supervision of all scientific staff (i.e., chemists, technicians); oversight of $300k annual laboratory budget. Other responsibilities included establishment of QA/QC protocols and laboratory safety methods.

Analytical Responsibilities: Responsible for agricultural and environmental analyses which included product deformulation and product matching and non-routine analyses of food ingredients. Scientific evaluations included statistical evaluation of data, technical report writing, and method evaluation.

Instrument Responsibilities: Primary scientist responsible for all analytical instruments, including GC, GC-MS, HPLC, CE, RT-PCR, Gel Electrophoresis, UV-Vis, and assorted detectors (e.g., photodiode array, fluorescence, FID, NPD, ECD, halogen specific).

Department of Public Health, Frankfort KY
Chemist III, Division of Laboratory Services **1989 –1997**

Administrative Responsibilities: Training and supervision of analytical science team as well as inspectors in the Food Safety and Cosmetic Divisions. Developed training protocols for inspectors relative to efficient and GLP/GMP sampling methods, entomological ecology, environmental contaminants and contaminant sources, which required staff cross-training. As QA Officer for Instrumentation, responsibilities included adherence to AIHA, OSHA, and EPA standards of operation and accreditation. As liaison between scientists and administrators, provided evaluation and recommendations regarding employee relations, departmental policies, and interagency relations.

Analytical Responsibilities: Principal scientist for routine analyses of environmental contaminants in food, water, soil, and air, as well as evaluation of fluoride in drinking water. Experimental methods included method determination, method validation, data analysis, and technical report writing.

Instrumental Responsibilities:
Primary scientist responsible for all analytical instruments, including GC, GC-MS, HPLC, UV-Vis, and assorted detectors (e.g., photodiode array, fluorescence, FID, NPD, ECD, halogen specific).

Pharmacology and Toxicology Research Laboratories, Inc., Clays Ferry, KY
Analytical Chemist II **1986 –1989**

Provided chemical and biological analyses of drugs and their metabolites in serum; developed and implemented chemical analyses of pesticides and their metabolites in air, water, soil, plant, and animal tissues. Other responsibilities included experimental method development and in-house validation certifications. Administrative Responsibilities included enforcement of in-house regulations for radiological safety and decontamination of biohazards and/or radioactive materials.

Instrumental Responsibilities:
Primary scientist responsible for all analytical instruments, including GC, GC-MS, HPLC, UV-Vis, and assorted detectors (e.g., photodiode array, fluorescence, FID, NPD, ECD, halogen specific).

University of Kentucky, College of Agriculture, Lexington, KY
Principal Laboratory Technician, Agronomy Department **1985 –1986**
Analytical responsibilities for routine analyses of soils for classification (e.g., particle size, CEC, mineralogy); and fulfillment of experiments required by doctoral candidates. Undergraduate teaching requirements included laboratory preparation, preparation of handout materials, grading, and academic tutoring.

References: Available upon request.

Prem Virmani
601 Winterhavenway
Columbus, GA 31094
pvirmani@softdrinksolutions.com
706.587.1012

April 2016 to Current: President, Soft Drink Solutions, LLC

Consultation services for ideation and product formulation of soft drinks, water chemistry, and sweetener science (Nutritive and High Intensity Sweeteners)

Available for seminars on the subject matters listed above and all technical matters related to Soft drinks.

August 1991 to April 2016
Cott Beverages, Inc
Sr.VP, Science & Research

Senior Vice President of Global Science and ResearchforCott Beverages, Inc, world's largest Customer Brand Soft Drink Company with revenue exceeding $3 B from $50 MM in 1991.

Over 25 years, built a state of the art Science & Research center in Columbus, GA.

Created a number of proprietary formulations to become the most successful soft drinks in the history ofCott Beverages.

Advised and aided in several company acquisitions including Royal Crown Cola International division and Cliff Star LLC

Since fall of 2015
Board of Trustee and Adjunct professor at Columbus State University, Columbus, GA

Attend quarterly board meetings and teach undergraduate students on the subject of Food Science (related to Soft Drinks) in the Department of Chemistry

1977 to 1991
Royal Crown Cola Co
Director of R& D

Executed product development and directedregulatory affairs, quality control and packaging labs while leading a group of 17 scientists

Trained and taught water chemistry.

Extensive research on sweeteners (granulated sugar and High fructose corn syrup and High Intensity sweeteners)

1969 to 1976
Chemist
Coca-Cola Export Corporation
Area Office of the Coca-Cola Company
New Delhi, India

Major Affiliations

- Member of (ISBT), International Society Of Beverage Technologists from 1978 to 2012
- Chaired sweetener committee of International Society of Beverage Technologists (ISBT) (1986 to 1988). Received award for the best Committee.
- Served on the board of ISBT (1989 to 1991)
- Member of Institute of Food Technologists
- Member of American Water works Association from 1990 to 2012
- Associated with Scientific and Regulatory Affairs of American Beverage Association (formerly National Soft Drink Association) from 1985 to 2012
- Member of ABA's Health and Wellness Committee till 2012.
- Played a role in finalizing Nutritional Labeling Education Act (NLEA) as a member of the ABA's technicalcommittee during 1991-92.
- Member of International Technical Caramel Association (ITCA)

Education

- Master of Science in Chemistry, Agra University, India (1965)
- Bachelor of Science in Physics, Chemistry and Mathematics, Agra University, India (1967)
- Master of Business Administration, Columbus State University, GA (1982)

Honors

Awarded Thomas Y. Whitley Distinguished Alumnus Award, 2015 by the Alumni Association of Columbus State University, Columbus, Georgia

AOAC INTERNATIONAL
2017 MID-YEAR MEETING SCHEDULE

Date	Time	Event	OMB Liaison
Monday, 3/13	**8:00am – 12:00pm**	**ERP SPSFAM Select Food Allergens**	Phillips/Brown
Monday, 3/13	**9:00am – 12:00pm**	**AOAC Board of Directors Meeting**	Crowley
Monday, 3/13	**1:00pm – 6:30pm**	**SPSFAM Meeting**	Phillips/Brown
Monday, 3/13	**1:30pm – 5:00pm**	**ISPAM WG Food Allergen Assays, Drafting**	Crowley
Tuesday, 3/14	**8:30am – 4:30pm**	**ISPAM Meeting and WG meetings**	Crowley
Wednesday, 3/15	**8:30am – 5:00pm**	**SPIFAN Meeting**	Phillips/ Campos Giménez/Gilliland
Wednesday, 3/15	**9:00am – 4:00pm**	**SPADA Meeting**	
Wednesday, 3/15	**1:00pm – 4:00pm**	**ERP for Fertilizer Methods, Urea & Metals**	Brown
Wednesday, 3/15	**4:30pm – 6:30pm**	**ERP for Gluten Assays**	Boison
Thursday, 3/16	**8:30am – 5:00pm**	**ERP for SPIFAN Nutrient Methods**	Gilliland/ Campos Giménez/Phillips
Thursday, 3/16	**8:30am – 10:00am**	**ERP for PAH Methods**	Mastovska/Brown
Thursday, 3/16	**10:30am – 12:00pm**	**ERP for Pesticide Residue Methods**	Boison/Brown
Thursday, 3/16	**1:00pm – 5:00pm**	**ERP for Solids and Syrups**	Brown
~~Thursday, 3/16~~	~~**1:00pm – 5:00pm**~~	~~**SPDS Working Group Meeting(s)**~~	
Friday, 3/17	**8:30am – 5:00pm**	**SPDS Meeting**	Phillips/Sudberg