

# Chesapeake Chemist

Maryland Section  
American Chemical  
Society



NASA satellite photo Hurricane Katrina  
near peak strength on August 28, 2005

February Speaker:

*~Dr. Naomi Surgi~*

HWRP Project Leader

NOAA/National Weather Service - NCEP/Environmental Modeling Center

**“Advanced Hurricane Prediction in the Environmental Model Center at  
National Centers for Environmental Prediction (NCEP) at NOAA: The  
Hurricane Weather Research Forecast (HWRP)”**

Wednesday, February 21, 2007 - Dinner Meeting - Goucher College, Baltimore, MD

## Message from the Chair

By: Stephanie S Watson

I want to introduce myself as the new chair for the section. I began my involvement with the ACS Maryland Section shortly after my arrival to the Baltimore area for employment nearly nine years ago. Being new to the area and on my own, I used the ACS Maryland Section, in addition to other local scientific groups, to get to know people, to start networking for job opportunities in the area, and to learn the scientific interests and issues of the area. It sounds corny, but true. I volunteered to chair the exhibition program for the 2001 MARM meeting that was held at Towson University. From there, I became secretary on the Executive Committee of the section and worked my way up to chair.

I have found the Maryland Section to be a strong and longstanding section. However, like most scientific society groups, the core set of volunteers is getting older and approaching retirement. Because of this, it is very important that our section begin to attract new energetic chemists willing to serve as volunteers. Now is the time to learn from the older members so that we can continue the traditions of the Maryland Section. Accordingly, the more volunteers the section has, the lesser the amount of work one person will have to do as I have seen in our ever increasingly busy lives. I have also observed that the attendance of monthly dinner meetings and other events slowly decline over the years. I would like to spend some this year into finding ways to boost attendance in meetings and events. Finally, I have seen that the Maryland Section has a very strong Outreach Program. This is an important function for our community. There needs to be continued support of these programs and recognition of the hard work from volunteers by the section to maintain these programs.

I look forward to increased contact with all members!

### February Dinner Meeting

Wednesday, February 21, 2007 - Dinner Meeting - Goucher College, Baltimore, MD

6:00-6:45 pm	Social/Appetizers & Beverages
6:45-7:45 pm	Dinner
7:45-8:45 pm	Presentation: Dr. Naomi Surgi HWRF Project Leader NOAA/National Weather Service - NCEP/Environmental Modeling Center <b>"Advanced Hurricane Prediction in the Environmental Model Center at National Centers for Environmental Prediction (NCEP) at NOAA: The Hurricane Weather Research Forecast (HWRF)"</b> ~Question and Answer (10 minutes)~

Cost for the dinner is \$25.00 for members; \$20.00 for spouses, retired chemists and guests, and \$10.00 for students. For reservations please contact Shirish Shah at 410-323-0803 (H) or by email at [dr.shah@juno.com](mailto:dr.shah@juno.com).

### Directions to Goucher College:

1021 Dulaney Valley Road  
Baltimore, Maryland 21204

- From the Baltimore Beltway (I-695), take exit 27A-Towson (Dulaney Valley Road south).
- The college entrance is on the left, one-half block from exit 27A.
- Meeting will be held at the Alumni House.

- Meeting Information Continued on Page 4 -

## ACS Maryland Section - Officers and Committee Chairs

### **Section Officers:**

*Chair* - Stephanie J. Watson - (301) 975-6448; [stephanie.watson@nist.gov](mailto:stephanie.watson@nist.gov)

*Vice-chair* - Lev Ryzhkov - (410) 704-3831; [lryzhkov@towson.edu](mailto:lryzhkov@towson.edu)

*Chair-elect* - Walter Roy - (410) 771-7886; [walter\\_roy@mccormick.com](mailto:walter_roy@mccormick.com)

*Secretary* - Sara Narayan - (443) 334-2326; [f-naraya@mail.vjc.edu](mailto:f-naraya@mail.vjc.edu)

*Treasurer* - Angela Sherman - (410) 532-5713; CND of MD, 4701 North Charles Street, Baltimore, MD 21210  
[asherman@ndm.edu](mailto:asherman@ndm.edu)

### **Councilors:**

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Charles Rowell  
410-647-9452

[cfrowell35@verizon.net](mailto:cfrowell35@verizon.net)

### **Alternate Councilors:**

Shekar Munavalli, Shirish Shah, Paul Smith,  
Joseph Topping

### **Members at Large:**

Karen Hatwell, Maurice Iwunze, Liina Ladon,  
Angela Wells Winstead, Takashi Tsukamoto

### **Committee Chairs:**

*Student Awards (April)* - George Farrant - (410) 455-4120; [gfarrant@ccbcmd.edu](mailto:gfarrant@ccbcmd.edu)

*MD ACS Student Grants (April)* - Susan Mercer - [sgill002@umaryland.edu](mailto:sgill002@umaryland.edu) or Paul Smith, [pjsmith@umbc.com](mailto:pjsmith@umbc.com)

*Remsen Award (May/June)* - Lev Ryzhkov

*Braude Award (October)* - Charles Rowell

*Maryland Chemist Award (December)* - Angela Sherman - (410) 532-5713; [asherman@ndm.edu](mailto:asherman@ndm.edu)

*Maryland Service Award* - Shree Iyengar - (410) 777-2266; [ssiyengar@aacc.edu](mailto:ssiyengar@aacc.edu)

### **Programs:**

*Archives* - Ernie Silversmith - (443) 885-3214

*Career Planning* - Linh Cheong - (410) 762-1159

*Earth Day* - Paul Smith

*Environmental Issues* - Shirish Shah - (410) 704-2720  
[sshah@towson.edu](mailto:sshah@towson.edu) & Sandy Young

*Finance Committee* - Jan Kolakowski - (410) 436-2755  
[jan.kolakowski@us.army.mil](mailto:jan.kolakowski@us.army.mil)

*Government Relations* -

Shirish Shah & Robert von Tersch -  
[robert.l.vontersch@us.army.mil](mailto:robert.l.vontersch@us.army.mil)

*Long Range Planning* - Shekar Munavalli

*MARM* - Shirish Shah & Alan Samuels -  
[alan.samuels@us.army.mil](mailto:alan.samuels@us.army.mil)

*Membership* - Merle Eiss

*Minority Affairs* - Alfred Amah - (410) 602-7164;  
[aamah@coppin.edu](mailto:aamah@coppin.edu)

*Public Relations* - Shirish Shah & Walter Roy,  
[Walter\\_Roy@mccormick.com](mailto:Walter_Roy@mccormick.com)

*Retired Chemists* - Alvin Bober, 410-581-5321

*Women Chemists/Younger Chemists* -  
Sara Narayan - (410) 602-7326  
Amanda (Miller) Idstein -  
[aredmiller@cs.com](mailto:aredmiller@cs.com)

### **Educational Programs:**

*Chemistry Olympiad/Chem-a-Thon* -  
Shirish Shah & Mike Zapf,  
[Mike\\_Zapf@mccormick.com](mailto:Mike_Zapf@mccormick.com)

*Continuing Education/High School Education* -  
Shirish Shah/Ellen Pisciotta

*Kids & Chemistry/Chemistry-in-the-Library* -  
Sue Procell, 410-436-4604,  
[suzanne.procell@us.army.mil](mailto:suzanne.procell@us.army.mil) /Sandy Young

*National Chemistry Week (NCW)* -  
Shirish Shah & Sandy Young

**Maryland Section on the Web:** <http://mdchem.org>  
*Webmaster* - Sandy Young ([chemists4fun@yahoo.com](mailto:chemists4fun@yahoo.com))

### **Chesapeake Chemist Editor:**

Kevin Staigerwald ([illustrator12@hotmail.com](mailto:illustrator12@hotmail.com))  
and  
Sandy Young ([chemists4fun@yahoo.com](mailto:chemists4fun@yahoo.com))

## About the speaker

Dr. Naomi Surgi

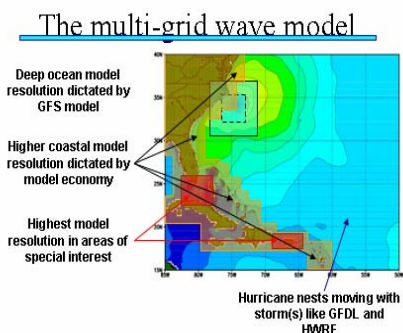
Dr. Surgi received a Ph.D. in Meteorology from Florida State University in 1987. She was an assistant professor at the Rosenstiel School of Marine and Atmospheric Science/University of Miami from 1988-1993 where her research focused on modeling the tropical atmosphere and numerical weather prediction. She left the University of Miami in 1993 and joined the National Hurricane Center in Miami at the National Oceanic and Atmospheric Association (NOAA)-U.S. Department of Commerce after Hurricane Andrew and became interested in improving operational numerical hurricane forecast systems. She is now at NOAA's Environmental Modeling Center of the National Weather Service where she is leading the effort in NOAA to develop the next generation hurricane modeling system which will address the intensity/structure problem in addition to further advancing skill for track.

Dr. Surgi has published numerous scientific papers. She has taught meteorology for over 15 years and has graduated several Ph.D. and MS students. She currently serves on the editorial board of the international journal of Meteorology and Atmospheric Physics.

## February Abstract

### **“Advanced Hurricane Prediction in the Environmental Model Center at National Centers for Environmental Prediction (NCEP) at NOAA: The Hurricane Weather Research Forecast (HWRF)”**

The Weather and Research Forecast system for hurricane prediction (HWRF) is scheduled for operational implementation at NCEP in 2007. This advanced hurricane prediction system is being developed at the Environmental Modeling Center (EMC) at the National Weather Service (NWS)/NCEP to address the Nation's next generation hurricane forecast problems and will replace the current Geophysical Fluid Dynamics Laboratory (GFDL) model. The HWRF will have the capability to fully address the intensity, structure and rainfall forecast problem in addition to advancing wave and storm surge forecasts. Also continued advancements in track prediction will remain an important focus of this prediction system.



The HWRF will be a high-resolution coupled air-sea-land prediction model with a movable nested grid and advanced physics for high resolution. To address the totality of the hurricane forecast problems noted above, the HWRF will also include coupling to a nested wave model that will eventually be coupled to a dynamic storm surge model. Additionally, the land surface component will also serve as input to hydrology and inundation models to address to hurricane related inland flooding problem. For initialization of the hurricane core circulation, an advanced data assimilation is under development at EMC that will make use of real time airborne Doppler radar data from NOAA's high altitude jet to initialize the three dimensional storm scale structure.

Details on aspects of EMC's hurricane modeling plans will be presented.

## Student Affiliate News

By: Susan Mercer

The MD ACS is sponsoring a "Student Affiliate – MD ACS Green Chemistry Initiative Award". This Award will be given to Student Affiliate groups who host or participate in a Green Chemistry Event of their own choosing. Ideas include: 1) hosting a Boy/Girl Scout group on campus and help them reach their Science Badge in a "Green" manner, 2) host an informational session with demonstrations to a high school or college community to increase awareness of Green Chemistry, and 3) change a laboratory experiment to a Green experiment. Novel ideas for the Green Chemistry Initiative and collaborations with other local Student Affiliate chapters and/or the MD-ACS are highly encouraged!

- The Green Chemistry Initiative Awards will be given out to a maximum of 5 chapters at the April Student Awards Dinner Meeting. Recipients of the award will receive \$100 for their chapter activities.
- Documentation requirements: A statement (no longer than 2 pages) must be submitted for consideration which includes:
  - Description of event/participation
  - Names of group members (more than 2 people must be involved in order to be considered)
  - Community impact
  - 2-3 digital pictures of the event
  - Plans for award money (if received)
  - Any other pertinent information
- Student affiliate groups can only be considered for one Green Chemistry Award per calendar year.
- Questions about the award or documentation for the award should be e-mailed to Ms. Susan Mercer at [sgill002@umaryland.edu](mailto:sgill002@umaryland.edu)
- Green Chemistry Award documentation is **due annually on March 1<sup>st</sup>**

## Applications Are Being Accepted for the Undergraduate Student Travel Awards

Students can apply to receive up to \$500 for travel and expenses to attend a National ACS Meeting or up to \$300 to attend a Regional ACS Meeting. Open to undergraduate student affiliates of the ACS who are enrolled full time in a college or university in the Maryland Section.

The application should include:

- The meeting you plan to attend along with location, dates
- An estimated budget (cost for travel, registration, lodging, and meals)
- A 250 word essay describing your motivation for attending the meeting (if you plan to present, include a brief description of the work to be presented)
- A letter of support from a faculty member in your department

Review of applications will begin January 15<sup>th</sup> but will continue through the year until all funds are utilized. Applications should be mailed to: Dr. Paul Smith, UMBC, Department of Chemistry and Biochemistry, 1000 Hilltop Circle, Baltimore, MD, 21250 or sent via e-mail: [pjsmith@umbc.com](mailto:pjsmith@umbc.com).

## Nominations for the 2007 Maryland Chemist Award

The Maryland Chemist Award Committee is accepting nominations for the 2007 Maryland Chemist Award. Supportive documentation should include copies of the resume of the nominee and his/her list of publications. A short statement describing the outstanding contributions of the nominee to scientific research, education, industry, technology, etc., will be helpful and appreciated. Please send nominations to S. Munavalli, 700 Paige Circle, Bel Air, MD, 21014. The deadline for submission of nominations is April 15, 2007.



## February Historical Events In Chemistry

By: Leopold May

- February 13, 1672 Etienne-Francois Geoffroy, who was born on this date, published the first table of chemical affinities and was an early supporter of phlogiston theory.
- February 18, 1745 Alessandro G. A. A. Volta invented the voltaic pile, *vota pila*, and observed the bubbling of methane in swamps. He developed a gas lantern that was electrically ignited. The unit of electric potential, the volt, is named in his honor. He was born on this date.
- February 21, 1791 John Mercer who invented the process of treating cotton with caustic soda producing mercerized cotton, was born on this date. He was also the discoverer of certain calico dyes.
- February 8, 1795 Friedlieb F. Runge, who was born on this date, discovered carbolic acid (phenol) and aniline in 1834, in coal tar. He also investigated dry distillation and the composition of matter.
- February 28, 1814 Edmond Frémy, who was born on this day, prepared anhydrous hydrogen fluoride. He was a researcher on plumbates, stannates, ferrates, coring of flowers and saponification of fats.
- February 11, 1847 Thomas A. Edison was an inventor who invented the incandescent lamp and the mimeograph. He was born on this date.
- February 7, 1850 This the birth date of John B. F. Herreshoff who developed the method for manufacturing sulfuric acid.
- February 26, 1866 Herbert H. Dow, the founder of Dow Chemical Company, was born on this date.
- February 25, 1869 Phoebus A. T. Levene, who was born on this date, was a researcher on the biochemistry of proteins.
- February 3, 1893 Lenora Neuffer Bilger, a researcher in asymmetric nitrogen compounds, was born on this date. She also received the Garvan Medal from ACS in 1953.
- February 4, 1896 Friedrich Hermann Hund was born on this date. He devised the Hund's rules for electron configurations, the first of which predicts maximum multiplicity of spin. He also did research in molecular-orbital theory (Hund-Mulliken approach).
- February 24, 1913 William S. Johnson, who devised new and efficient methods to synthesize complex molecules including corticoid steroids, was born on this date.
- February 23, 1941 Glenn T. Seaborg, and co-workers chemically identified plutonium at the University of California, Berkeley, California.
- February 9, 1950 Californium was discovered by ion exchange chromatography on this date at the University of California, Berkeley.

More historical events may be found at Dr. May's website: <http://chemistry.cua.edu/may.cfm>

An informal association, Society for the Propagation of the Music of the Chemist-Composers, has been formed to publicize the music of chemist-composers. For information, see <http://faculty.cua.edu/may/SPMCC.htm>



## Spring 2007 - Important Dates



- February 1, 2007 Student Affiliate Documentation for the MD ACS Travel Award due
- February 21, 2007 February Dinner Meeting - Goucher College, Baltimore, MD - directions at:  
(<http://mdchem.org/meetings/goucher.html>)
- March 1, 2007 Student Affiliate Documentation for the MD ACS Awards: Green Chemistry, Interaction, and Outreach due
- March 25-29, 2007 Spring 2007 ACS National Meeting & Exposition, Chicago, IL  
(<http://chemistry.org/meetings>)
- April 14, 2007 Earth Day Clean Up - Project Clean Stream  
(<http://www.alliancechesbay.org/project.cfm?vid=220>)  
- MD ACS will sponsor a site again
- April 15, 2007 April Student Awards Meeting - Burkshire Marriott, Towson, MD - directions at:  
(<http://mdchem.org/meetings/burkshire.html>)
- April 28, 2007 Chemistry Olympics (College of Notre Dame, Baltimore, MD - directions at:  
(<http://mdchem.org/meetings/notredame.html>)
- May 16-18, 2007 Mid-Atlantic Regional Meeting (MARM), Ursinus College, Collegeville, PA  
(<http://www.marmacs.org/>) - Theme: Forging New Connections in Chemistry



## Summer 2007 - Important Dates



- June 15, 2007 Student Affiliate National Meeting Travel Grant application deadline
- July 15, 2007 MD ACS Annual Picnic, McKeldin Area, Patapsco State Park

### Receiving the Chesapeake Chemist

Hopefully, if you are receiving the Chesapeake Chemist this month, you received our mailing regarding going to electronic only updates for the Chesapeake Chemist. Please remember that we are dependant on the National ACS records for your correct, current e-mail.

E-mail changes can be updated either by:

- E-mailing us at [chemists4fun@yahoo.com](mailto:chemists4fun@yahoo.com) - give us your member #, full name, and e-mail changes and we can ensure that your records are updated with National ACS.
- Contacting the National ACS membership division: 800-333-9511 (US only) or [service@acs.org](mailto:service@acs.org)

Johns Hopkins University Chemistry Department  
The Ephraim and Wilma Shaw Roseman Colloquium Series

**Spring 2007**

**Remsen Hall 233 – Tuesdays, 4:15 pm**

For more information contact Rosalie Elder, 410-516-7432

<http://chemistry.jhu.edu/colloquia.html>

*The schedule can be downloaded in pdf or html format.*

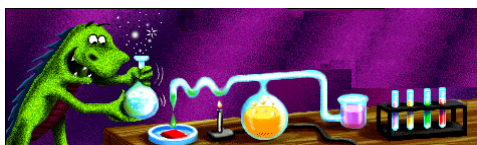
February 20 <i>Townsend</i>	Professor Michael Burkart University of California, San Diego	“Coenzyme A and Modular Synthases”
February 27 <i>Toscano</i>	Professor Katrina Miranda University of Arizona	“Design of New Nitroxyl (HNO) Donors for Treatment of Heart Failure”
March 6 <i>Draper</i>	Professor Jamie Williamson Scripps	“A Post-proteomic Approach to Study Ribosome Assembly”
March 13 <i>Dagdigian</i>	Professor Arthur Suits Wayne State University	“Lost in Configuration Space: Probing Novel Reaction Mechanisms with High Resolution Imaging”
March 20 <i>Goldberg</i>	Professor Julie Kovacs University of Washington, Seattle	“Understanding How the Thiolate Sulfur Contributes to the Function of the Non-Heme Iron Enzyme Superoxide Reductase (SOR)”
March 27 <i>Fairbrother</i>	Professor Steven J. Sibener University of Chicago	“Interfacial Dynamics of Polymers, Metals, and SAMs: Nanoscale Assembly, Glassy Dynamics, and the Quest for Perfection”
April 3 <i>Tolman</i>	Professor Hashim Al-Hashimi University of Michigan	“An NMR View of RNA Dynamics and Its Role in Adaptive Recognition”
April 10 <i>Tovar</i>	Professor Adam Matzger University of Michigan	“Controlling Crystal Polymorphism: Pharmaceuticals to Proteins”
April 17 <i>Bowen</i>	Dr. Mark Pederson Naval Research Laboratory	“Density-Functional-Based Simulation of Molecular Magnets and Light Harvesting Molecules”
April 24 <i>Roth</i>	Dr. Ronald Mason NIH/NIEHS [E]	“Do It Yourself Detection of Protein and DNA Free Radicals in Organelles, Cells, and Tissues: A 30 Year Odyssey”
May 1 <i>Yarkony</i>	Dr. M. Riad Manaa Lawrence Livermore National Laboratory	“Initiation and Reactivity of Energetic Materials at Extreme Conditions”



## December Dinner Meeting Recap



Dr. Alexander D. MacKerell, Jr. accepting the Maryland Chemist of the Year Award from Dr. Shekhar Munavalli and Dr. Sandra Young at the December Maryland ACS meeting on December 13th. Dr. MacKerell was accompanied by his wife, father, and mother at the dinner meeting. His talk, 'Adventures in Computational Chemistry: Obtaining Detailed Topographical Pictures of Bio-molecules', gave a fantastic picture of how computational chemistry is impacting chemical development. The dinner and presentation were enjoyed by all who attended.



## Outreach

### Chemistry-in-the-Library

Reminder: MARK YOUR CALENDARS: our spring program dates are as follows. Other dates may be added.

- Monday, March 26<sup>th</sup> - 4:30 - 5:30pm - Magnetism: Chemistry of Attraction - Waverly Branch Library, Baltimore, MD (Baltimore City)
- Friday, March 30<sup>th</sup> - 2-3pm - Magnetism: Chemistry of Attraction - Savage Branch Library, Savage, MD (Howard County)
- Saturday, April 21<sup>st</sup> - 2-3pm - Chemists Celebrate Earth Day - Walkersville Library, Walkersville, MD (Frederick County)
- Monday, April 23<sup>rd</sup> - 4:30 - 5:30pm - Chemists Celebrate Earth Day - Waverly Branch Library, Baltimore, MD (Baltimore City)
- Saturday, April 28<sup>th</sup> - 2-3pm - Chemists Celebrate Earth Day - Glenwood Library, Cooksville, MD (Howard County)
- Friday, May 18<sup>th</sup> - 2-3pm - Chemists Celebrate Earth Day - Savage Library, Savage, MD (Howard County)
- Saturday, May 19<sup>th</sup> - 2-3pm - Chemists Celebrate Earth Day - Elkridge Library, Elkridge, MD (Howard County)
- Saturday, May 19<sup>th</sup> - 2-3pm - Chemists Celebrate Earth Day - Port Deposit Library, Port Deposit, MD (Cecil County)
- Saturday, June 2<sup>nd</sup> - 2-3pm - 'Who Dun It? The Chemistry of Crime' - Elkton, MD (Cecil County)

## **Chemists Celebrate Earth Day - Theme 2007: Recycling - Chemistry Can!**

National ACS plans to publish an Earth Day handout again this year. When it is available we will have it available for download on our website.

Stop in and join us if you have time!! If you have any questions or want to assist with an event, please feel free to contact us at [chemists4fun@yahoo.com](mailto:chemists4fun@yahoo.com).

### **Volunteer Here!**

Like working with students? Have a talent for encouraging students in science? Have ideas for outreach events? Sign up for our volunteer news. Contact Sandy Young at [chemists4fun@yahoo.com](mailto:chemists4fun@yahoo.com).

### **Interested in holding your own Chemistry-in-the-Library Program?**

We are looking at putting some supply kits together and having a short training event with luncheon for folks who plan to hold their own Maryland ACS sponsored science events at local libraries in the spring. Please contact Sandy Young at [chemists4fun@yahoo.com](mailto:chemists4fun@yahoo.com) for more information.

### **Maryland ACS**

Interested in how your dues get used and want to work on interesting member programs/projects? If you want to get involved with the Maryland Section Executive Committee and/or with section activities, we want to hear from YOU! The Maryland ACS Executive Committee meets 4 times during the year to discuss and plan activities. Please feel free to contact the chair, vice-chair, or chair-elect via e-mail to get more information on various areas/activities that you are interested in or that we would like to start or expand in the future. The amount of time to commit would be up to you but might be around 2 hours per month, depending on the activity. We are always looking for individuals with budget/financial, editing, and planning skills.

The Chesapeake Chemist is e-published monthly September through June by the Maryland Section of the American Chemical Society. Send submissions to the editor in electronic format. The Maryland Section is not responsible for opinions expressed herein. Editorials express the opinions only of the authors. The editor is not responsible for all unsigned material.

## Career Opportunities:



MindPharm is an executive search firm for scientific professionals. USP and MindPharm are partnering for the purpose of recruiting top Food Science Professionals interested in ensuring the regulatory standards for food and food additives. All inquiries should be directed to MindPharm, LLC.

### **Scientific Liaison, Food Chemicals Codex**

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**Reports to:** Director of Excipients

**Department:** Department of Standards Development

U.S. Pharmacopeia (USP) has acquired the Food Chemicals Codex (FCC) from the Food and Nutrition Board of the IOM in August, 2006.

The FCC is a food additives compendium begun under the auspices of the Institute of Medicine (IOM) after passage of the 1958 Food Additive Amendments to the Food, Drug and Cosmetic Act. The FCC is cited in U.S. law and widely used for industry self-regulation and regulatory oversight by the Food and Drug Administration (FDA).

#### **Job Summary:**

Responsible for providing general scientific and other support within the Department of Standards Development (DSD). Such activities include, but are not limited to, assisting in the development and revision of monographs, general tests and assays, and responding to internal and external queries related to the FCC. These activities will require the critical evaluation of relevant documents and other information, the performance of literature searches on related topics and the development and drafting of pertinent documents for other DSD scientific staff and/or Expert Committee review. Recognizes when additional expertise is needed and has the ability to put together and manage advisory panels. Follows closely the work of the other Excipient Committees, so that collaboration and exchange of information is seamlessly accomplished and made available when needed. Establishes and maintains relevant contacts outside of USP. Stays abreast of new findings and informs other DSD scientific staff of new developments in food quality methodologies.

#### **Major Duties & Responsibilities:**

- Provide general scientific and related support to other DSD scientific and managerial staff.
- Critical evaluation and analysis of specifications and supporting data, translating specifications into FCC style and format.
- Responds to telephone and written inquiries pertaining to FCC monographs, general chapters, and test methods included in the FCC.
- Writes general and specific subject correspondence pertaining to monographs and general tests and assays.
- Keeps abreast of current trends and developments in related scientific fields.
- Communicates with other USP departments regarding projects related to validation studies, method development, and reference standards.
- Assists in the formation of USP FCC Expert Committees and in planning and organizing their work assignments: provides assistance and guidance to Expert Committees for preparation of portions of FCC.
- Assists in the activities of USP FCC Advisory Panels and subcommittees, as needed.

- Substitutes for other scientific liaisons during extended absences.
- Serves as representative of USP at professional meetings.
- Gives public presentations on USP matters.
- Establishes and maintains good working relations with scientific and trade organizations in the fields of food additives and ingredients and their use.
- Establishes and maintains productive relations with the Expert Committees, Project Teams, and Advisory Panels.
- Performs other related duties as assigned.

**Education:**

Ph.D. or equivalent in Food Chemistry, Food Microbiology, related fields. MS will be considered with sufficient experience.

**Experience:**

A minimum of 3 years relevant experience working with FCC,CCFAC or JECFA analytical methods and standards. (An equivalent combination of experience and education may be substituted).

A minimum of five years experience with analytical techniques such as chromatography, wet chemistry, spectroscopy, titrations, etc

Familiarity with the food additives and ingredients industry and the associated regulatory or pharmacopeial framework is a must.

**Specific Skills:**

Knowledge of internet and electronic database searches is a plus. The candidate should possess excellent written and verbal communication skills and strong interpersonal skills.

**Please Contact:**

**MindPharm, LLC**

**Stephanie Miller**

**410-448-4522**

**[stephanie.miller@mindpharm.net](mailto:stephanie.miller@mindpharm.net)**



**micron inc.**

ANALYTICAL SERVICES

**MATERIALS CHARACTERIZATION**

MORPHOLOGY   CHEMISTRY   STRUCTURE

OM / SEM / EDXA / TEM / SAED, EPA / WDXA,  
XRF / ESCA / AUGER / XRD  
DSC / TGA / MFTIR

3815 LANCASTER PIKE, WILMINGTON DE 19805  
Voice 302-998-1184, Fax 302-998-1836

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