

Mid-Hudson Chemist  
American Chemical Society  
Department of Chemistry  
SUNY New Paltz  
1 Hawk Drive  
New Paltz, NY 12561



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The following website may be used to subscribe,  
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[lists.msmc.edu/mailman/listinfo/acs-mh](http://lists.msmc.edu/mailman/listinfo/acs-mh)

To post a message to all the list members, send  
e-mail to [acs-mh@lists.msmc.edu](mailto:acs-mh@lists.msmc.edu).

**Mid-Hudson ACS Website:**  
[www.midhudsonacs.org](http://www.midhudsonacs.org)

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## Mid-Hudson Chemist Newsletter Announcement

This year, the Mid-Hudson Chemist will be moving to  
all-electronic distribution. If you would prefer to  
receive a paper copy of the newsletter in the mail, we  
would be happy to send one upon request.  
Please make requests by e-mail to  
[jotanski@vassar.edu](mailto:jotanski@vassar.edu), or by mail to:

Joseph M. Tanski  
Department of Chemistry  
Vassar College  
124 Raymond Avenue  
Box 601  
Poughkeepsie, NY 12604

### Instrumentation Manager

Vassar College  
Chemistry Department

Vassar College seeks a full time/full year Instrumentation Manager to support the vibrant undergraduate research environment in the chemical sciences. Vassar's Department of Chemistry ([www.chemistry.vassar.edu](http://www.chemistry.vassar.edu)) is home to an extensive array of state-of-the-art, research-grade chemical instruments for use by students and faculty throughout the curriculum and for student/faculty research collaborations.

#### Responsibilities:

The Instrumentation Manager will have primary responsibility for the oversight and maintenance of instrumentation and guiding instruction of students and faculty from Chemistry and other departments, as well as area institutions, on the use of instrumentation. This position also assists in the acquisition of new instrumentation and negotiates and supervises service contract work. The Instrumentation Manager ensures that our portfolio of instrumentation is properly maintained for advanced classes and undergraduate research, including the Undergraduate Research Summer Institute (URSI) at Vassar College. The Instrument Manager also must be willing to work with students and colleagues to troubleshoot instrumentation and experiments. The Instrumentation Manager is also responsible for the daily supervision of the Science Technology Support staff. In this capacity, the successful candidate will provide work direction, prioritization, guidance, and feedback and will have responsibility for monitoring and managing the overall Science Technology Support department budget. The Science Technology Support staff includes an electronics specialist and a machinist who provide technical expertise and support for all science departments. The Instrumentation Manager reports to the Chair of the Department of Chemistry and to the Dean of Faculty Office as it relates to The Science Technology Support staff. Located in the scenic Hudson valley, 90 miles north of New York City, Vassar College is a highly selective, residential, coeducational liberal arts college. Vassar is strongly committed to fostering a community that reflects the values of a liberal arts education and to promoting an environment of equality, inclusion and respect for difference. Vassar College is an affirmative action, equal opportunity employer, and applications from members of historically underrepresented groups are especially encouraged.

#### Qualifications:

The successful candidate will have an advanced degree in the chemical sciences and relevant work experience or a bachelor's degree in the chemical sciences with significant work experience. In both cases, a detailed knowledge of day-to-day maintenance and operation of common instrumentation in the chemical sciences is required. The ideal candidate will have a strong desire to learn new techniques, be adaptable and exhibit good interpersonal and management skills. Previous supervisory experience is preferred. The ability to interact effectively with students and collaborate with faculty and staff is essential.

#### To Apply:

Please visit us on the web at <https://employment.vassar.edu/>. To complete your on-line application, you will be required to attach your cover letter, CV or resume, and a copy of your transcripts. In addition, three professional references will need to submit a confidential letter of recommendation on your behalf. (Word or PDF format is required.) For full consideration, please apply by March 12, 2010. The position will remain open until filled.

The Mid-Hudson Section of the American Chemical Society and

The Department of Chemistry of Vassar College

Announce

**Synthesis and Adaptive Behavior of Reversibly-Formed, Nanostructured Polymers**

**Frantz Folmer-Andersen, Ph.D.**

Assistant Professor of Chemistry, State University of New York at New Paltz

**Wednesday, March 3, 2010**

**7:00 PM**

**Mudd Chemistry Building, SciVis Classroom**

**Vassar College**

(Refreshments at 6:30 PM)

Contact: Joe Tanski at 845-437-7503 or by e-mail at [jotanski@vassar.edu](mailto:jotanski@vassar.edu)

**Abstract:** A series of amphiphilic dialdehyde and dihydrazide monomers were synthesized, and shown to undergo reversible polymerization by hydrazone condensation in acidic aqueous solution. The polymers were studied by methods including size exclusion chromatography, transmission electron microscopy, and neutron and light scattering. The data support the existence of rod-like nanostructures of variable lengths and constant diameters, which are interpreted as individually folded polymer chains. Because of unusual solubility properties, the polymers are observed to undergo reversible chain growth upon heating. Additionally, the system displays remarkable resistance to molecular weight degradation when one monomer is in excess, which suggests that polymer folding provides an energetic driving force for polymerization. This idea is further supported by the fact that the more hydrophobic of the two dihydrazide monomers is selectively polymerized in direct competition experiments, but this selectivity is lost in less polar aqueous-organic solvent mixtures. The demonstrated ability of non-covalent interactions (in this case hydrophobic forces) to direct the spontaneous formation of certain polymer sequences from a mixture of reversibly interacting components will be discussed in terms of its possible relevance to prebiotic evolution.

**About the speaker:** Frantz Folmer-Andersen received a B.A. in chemistry from Bard College in 2001, after performing research on the photochemical generation of oxetenes. That same year, he entered the graduate program in chemistry at the University of Texas at Austin, where he worked in the laboratory of Professor Eric Anslyn on the development of coordination complexes that function as ribonuclease mimics and enantioselective sensors. Upon receiving a Ph.D. in 2006, he was awarded an International Research Fellowship from the National Science Foundation to pursue postdoctoral studies with Professor Jean-Marie Lehn at the Université Louis Pasteur, in Strasbourg, France. During this period, he developed a series of reversibly formed amphiphilic polymers that assume recurrent nanostructures in solution and exhibit stimulus-responsive behavior. In the fall of 2008, he began as an Assistant Professor at the State University of New York at New Paltz, where he teaches organic chemistry. His current research projects, which have enjoyed ample undergraduate participation, involve the design of macrocycles for chirality recognition, and the study of reversible acylhydrazone condensations.

Directions to Vassar College are available at <http://www.vassar.edu/visitors/index.html>.

The Mid-Hudson Section of the American Chemical Society

Announces

**Networking Tips: The Key to Your Next Successful Career Transition**

**Bill Suits, Ph.D.**

American Chemical Society Career Consultant and  
Director, AIDSfreeAFRICA

**Wednesday, March 31, 2010, 7:00 PM**

**Barnes & Noble Bookstore**

2518 South Road

Poughkeepsie, NY 12601

845-485-2224

An Informal Science Café Talk  
Coffee and Cookies will be served

**Abstract:** Most people will have at least seven career changes in their lifetime. Even for the few that are lucky to remain with the same company, these transitions still happen. A high percentage of these transitions will be facilitated by your network. While hundreds of jobs are easily viewed on the Internet, less than 5% of those who apply will find a position using these leads alone. What can you do to enhance your interactions with others in a manner that will assist you with finding that helpful lead?

**About the speaker:** Bill Suits is an ACS Career Consultant with more than ten years experience in helping hundreds with their career advancement. He retired after spending many years selling and marketing scientific instruments for Packard, Varian, Dionex and Beckman. This year, Bill received the Henry Hill Award from the ACS Professional Relations Division for his lifetime of volunteer service. He served as Chair of the NJ Section, MARM 05 and the MARM Board of Directors and continues to serve ACS in many roles. As a Director for ChemPharma, he helped executives find new positions. As a director for AIDSfreeAFRICA, he is helping Africans solve their health challenges.

Directions to the Poughkeepsie Barnes & Noble Bookstore are available at <http://store-locator.barnesandnoble.com/store/2886>.

## 11<sup>th</sup> Annual ACS Undergraduate Chemistry Research Symposium

Friday, April 23, 2010

Bard College  
The Gabrielle H. Reem and Herbert J. Kayden Center for Science and Computation  
The Lynda and Stewart Resnick Science Laboratories

Poster Session: 3:30 – 5:00 PM  
(Poster set-up starts at 3:00 PM)  
Talk: 5:15– 6:45 PM (open to all)  
Dinner: 7:00 PM (reservations required)

Guest Speaker: Professor Richard Puddephatt  
Distinguished University Professor  
The University of Western Ontario  
“Advances in Carbon-Hydrogen Bond Activation”

The Mid-Hudson Section of the American Chemical Society is pleased to announce the eleventh annual Undergraduate Chemistry Research Symposium to be held at Bard College on Friday, April 23. The symposium provides a chance for area undergraduate students in the chemical sciences to present their research. All areas of chemistry, environmental science, molecular biology, and related fields are welcome. The poster presentations will be followed by a guest speaker and dinner.

**The Symposium:** The symposium will be held from 3:30 PM to 8:30 PM. Set-up must be completed by 3:30 PM. As in previous years, all research will be presented as posters. To present a poster, please submit an abstract of 200 words or less. The format for the abstract should adhere as closely as possible to the following guidelines: 1) 12 point Times-Roman font, 2) One inch margins, 3) MS Word document, 4) The abstract title should be typed in capital letters, followed by the authors' names and institution name, institution address, and telephone number in lower case letters. Advisor's name should be followed by an asterisk (\*). **Please submit the abstract no later than April 1 by e-mail to [BardACS2010@gmail.com](mailto:BardACS2010@gmail.com).** If you are unable to meet this deadline, please contact Craig Anderson by phone or e-mail (see below for contact information).

**Posters:** Bard has permanent fixtures that hold posters which will be available for use. The poster will slip between two pieces of plastic that are supported and balanced by two wires. ***The size of each holder is 42 inches by 42 inches, which is different than the rectangular standard ACS size.*** Please note: there will be a \$25 conference fee per poster up to \$100 maximum per school. Please submit your abstract, via e-mail to:

Dr. Craig Anderson  
Phone: 845-752-2356  
Email: [BardACS2010@gmail.com](mailto:BardACS2010@gmail.com)

**Dinner:** Please make reservations with Dr. Anderson by April 1. Estimated price:\$20 (final dinner menu and cost to be determined)

### Directions:

Bard College is in Annandale-on-Hudson, New York, on the east bank of the Hudson River, about 90 miles north of New York City and 220 miles southwest of Boston.

In New York State, take the Taconic State Parkway to the Red Hook/Route 199 exit, drive west on Route 199 through the village of Red Hook to Route 9G, turn right onto Route 9G, and drive north 1.6 miles. Or take the New York State Thruway (I-87) to Exit 19 (Kingston), take Route 209 (changes to Route 199 at the Hudson River) over the Kingston-Rhinecliff Bridge to Route 9G, turn left onto Route 9G and drive north 3.5 miles. A campus map is available at <http://www.bard.edu/campus/maps/pdfs/campusmap.pdf>.



**Call for  
American Chemical Society  
Mid-Hudson Section  
2010 College Recognition Awards**

The Mid-Hudson Section of the American Chemical Society is once again sponsoring the College Recognition Awards. The purpose of this award is to recognize achievement in the field of chemistry and to encourage further study in chemistry. One student from each college in the Mid-Hudson Section will be presented with a certificate and cash award at the Undergraduate Research Symposium in April.

The chemistry faculty at each college should select one award winner on the basis of general excellence in chemistry. Four-year degree-granting colleges may wish to recognize a junior year student, while a community college may select a second-year student.

Winner selections from the faculty should be submitted by April 1. Please send the student's name, as well as the faculty advisor's name to Joe Tanski, 2010 Chair, Mid-Hudson Section of the American Chemical Society, by e-mail ([jotanski@vassar.edu](mailto:jotanski@vassar.edu)).

**Call for Applications for  
2010 Undergraduate Student Research  
Awards**

The Mid-Hudson Section of the American Chemical Society invites applications for 2010 Undergraduate Research Awards from student researchers who plan to present their work at the 2010 undergraduate poster symposium. Outstanding submissions will be selected to each receive a \$100 award. *Applications for research awards are not a requirement for attending and presenting at the poster symposium.*

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**Rationale**

The Mid-Hudson Section wishes to reward undergraduates who participate in good quality research and plan to present at the poster symposium by providing small grants to allow students to present at a regional or national conference.

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**Criteria**

Research work should be completed by a student currently enrolled (2009-2010 academic year) as an undergraduate at one of colleges in the Mid-Hudson ACS area. Students must also present their work at the 2010 Mid-Hudson ACS Undergraduate Research Poster Symposium.

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**Application Procedure**

Applicants must submit a short (2 page maximum) summary of their research work aimed at an audience with college level chemistry knowledge. Applicants should include a brief background, relevant results, and possible significance of the research to the wider community. The summary should be written in normal scientific format and divided into appropriate sections (Introduction, Experimental, Results and Discussion, Conclusion, Acknowledgements, and References). *Clearly identify the **one** student* currently enrolled (2009-2010 academic year) as an undergraduate at one of colleges in the Mid-Hudson ACS area applying for the URS Award on the submitted paper. Applications should be sent in electronic format (as a WORD document) by e-mail to Dr. Craig Anderson ([BardACS2010@gmail.com](mailto:BardACS2010@gmail.com)) by **April 13, 2010.**

## 2010 Dutchess County Regional Science Fair

The 2010 Dutchess County Regional Science Fair will be held on Saturday, April 10 at Dutchess Community College (Falcon Hall). The Mid-Hudson Section has participated in this Fair for many years. We are now looking for volunteers to help with the judging for the special awards presented by our section. The judging will start at about 9:00 AM and must be completed by 1:00 PM. We will be judging all the projects which are related to chemistry. The number varies every year, but we typically judge about 60 - 70 exhibits. There are judging criteria which we use as a guideline in our review of each project. If you have never taken part, we think you will find it to be a rewarding experience. The students are very receptive to the ideas and comments from professionals and appreciate the time given to their efforts. For more information about the fair, see the fair website: <http://www.dcsciencefair.org/>

Please contact Patti Cusatis by e-mail ([patti.cusatis@basf.com](mailto:patti.cusatis@basf.com)) or by phone at 914-785-2970 (daytime) or 845-505-0825 (evenings).

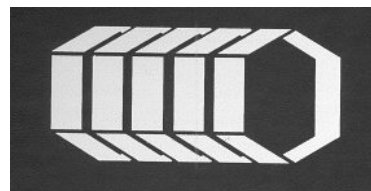
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## The Mid-Hudson ACS Section Celebrates Earth Day - Illustrated Poem Contest

**Theme: "Plants - The Green Machines!"**

The Mid-Hudson Section is once again taking part in the **ACS Chemists Celebrate Earth Day** celebration. As part of this celebration, we will be participating in an **Illustrated Poem Contest**. Students attending a school within the Mid-Hudson Section in grades K - 12 are asked to write and illustrate a poem using the Chemists Celebrate Earth Day 2010 theme, "Plants: The Green Machines!". Detailed rules and guidelines can be found on the ACS website ([www.acs.org/earthday](http://www.acs.org/earthday)). Please submit poems of 40 words or less of any style. The top entry from our section in each age category will be entered in the national ACS contest. There will also be prizes from the Mid-Hudson ACS for the top entries in each category. **To each participating school: Please send your top three entries for each age category to Patti Cusatis ([patti.cusatis@basf.com](mailto:patti.cusatis@basf.com)) by Thursday, April 1, 2010 to the address below.** Please pass this on to any K-12 educators who would be interested.

Patti Cusatis  
BASF  
540 White Plains Road  
Tarrytown, New York 10591  
914-785-2970 (daytime)  
845-505-0825 (evenings)  
[patti.cusatis@basf.com](mailto:patti.cusatis@basf.com)



### Attention: High School Teachers and Students

The Mid-Hudson Section of the American Chemical Society will be participating in the International Chemistry Olympiad for 2010. We are starting the selection process to choose 10 participants from the Mid-Hudson Section. These 10 participants will take the National Chemistry Olympiad qualifying exam on Saturday, April 24 at Mount Saint Mary College. Part of the National exam will consist of a laboratory practical section, as in past years. Twenty students will be chosen nationally from the results of the national exam to participate in a study camp at the U.S. Air Force Academy in Colorado Springs in June. From these students, the national team will be selected to represent the U.S. in **Tokyo, Japan** in July.

To select our 10 students, we will hold Local ACS Section qualifying exams, which will be administered at your school, should you choose to participate. If you feel that your school has students who can compete in the Local Section exams, or are a high school student who would like to participate, please let us know. More information can be found at [www.acs.org/olympiad](http://www.acs.org/olympiad).

We encourage you to take part in this exciting program! Contact Lynn Maelia by phone: 845-569-3131, fax: 845-569-3480, e-mail: [maelia@msmc.edu](mailto:maelia@msmc.edu) or mail at Mount Saint Mary College, 330 Powell Avenue, Newburgh, New York 12550.

Lynn E. Maelia, Ph.D.  
Chair, Division of Natural Science  
Mount Saint Mary College  
330 Powell Avenue  
Newburgh, New York 12550  
845-569-3131  
fax: 845-569-3480  
[maelia@msmc.edu](mailto:maelia@msmc.edu)

## **Attention All Members**

Your Local section is looking to expand its membership to include members that work in various government positions, including state or regional health departments, DEC, EPA, or any other organization that may have individuals interested in what we at the ACS do. So if this sounds like you, we would like to hear from you. Or if you know someone in these positions, feel free to pass this news on to them. The Executive Board members would like to introduce ourselves to you at a local section meeting, or by e-mail if you prefer.

Local Section events can be found on our website, [www.midhudsonacs.org](http://www.midhudsonacs.org). An e-mail list is also posted for the Executive Board. As the Chair-Elect, I look forward to meeting you.

As always, the section events are open to anyone. It is not necessary to be a member to attend an event. We have some great presenters coming up in the next few months that we hope you will come out to see. If you are interested in being more actively involved, let us know. We will find the perfect fit for you.

Thank you,

George Ruger  
[gruger04@yahoo.com](mailto:gruger04@yahoo.com)  
Chair-Elect, Mid-Hudson Section

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## **ACS Night at Gold's Gym**

One opportunity that may come up in April, the weekend before Earth Day, is ACS Day, or Night, at Gold's Gym. We can have access to the gym for a few hours at the Newburgh location. It is not necessary to be a member of the gym to participate, and the event will be free. However, in order to get this event to happen, we need at least 20 people to pre-register. If more than 20 people pre-register, we may be able to add additional benefits to the event. Pre-registration ends on March 15, so plan ahead and we hope to see you there. Feel free to invite a friend, or two. Gold's Gym policy states that all participants must have a valid ID to use the facility. Contact George Ruger at [gruger04@yahoo.com](mailto:gruger04@yahoo.com) for more information.

## **50- and 60-Year Members Save the Date**

This year, the Mid-Hudson Section will honor several members celebrating 50- and 60- year ACS membership. The honorees will be guests of the Mid-Hudson Section at the Research Symposium on April 23. Formal invitations will be mailed. Please save the date!

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### **Hudson Valley Science Café**

A Science Café is a monthly gathering in a café, pub or restaurant, open to the public, with a short presentation of a topic followed by discussion. The essence of a Science Café is informality, with groups seated around tables with food and drink to encourage conversation. Hudson Valley Science Café usually meets on the 4<sup>th</sup> **Wednesday** of the month, except where noted.

Website: [www.cafescientifique.org/hudsonvalley.htm](http://www.cafescientifique.org/hudsonvalley.htm)  
Meeting site: Diana's, 1015 Little Britain Road (Route 207) in New Windsor (just east of Stewart Newburgh Airport, on the opposite side of the road from the airport entrance). Visit [www.dianasny.com](http://www.dianasny.com) for menus and map.

\$3.00 admission fee includes coffee or tea. If you arrive at 6 PM, you can order from the Early Bird menu. No orders are taken during the Presentation (7:00-7:30 PM).

**March 24:** "Diabetes: Don't Be Part of the Epidemic (and if you are already, good self-care is the key)", Emily Evina-Ze, Registered Dietician and Certified Diabetes Educator, Hudson Valley Healthcare System (VA initiative to bring care closer to veterans).

**April 28:** "Risks to New York Water supplies from Natural Gas "Fracking"", Stephen Penningroth, Ph.D. Executive Director, Community Science Institute, Ithaca.

Hudson Valley Science Café has received start-up funds from WGBH-NOVA and the American Chemical Society. To suggest a speaker, please contact Dr. Toby Rossman ([tobyrossman@yahoo.com](mailto:tobyrossman@yahoo.com)).

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### **Women Chemists Committee Girl Scout Science Saturday**

The Girl Scout Science Saturday will be held on April 10 at Mount Saint Mary College. Please contact Margaret Larrousse ([larrouss@msmc.edu](mailto:larrouss@msmc.edu)) if you would like to volunteer to help with this event.



The 2010 American Chemical Society Northeast Regional Meeting, NERM2010, will be held June 2-5, at the SUNY Potsdam campus, New York. The theme of our event is "Chemistry for a Sustainable World". Our keynote speakers, including Dr. Catherine T. Hunt (2007 ACS president) from Dow Chemical, Prof. Paul T. Anastas from Yale University and Prof. Vicki L. Colvin from Rice University, will elaborate on this theme, headlining our technical sessions on green and environmental chemistry. The meeting features 25 special symposia with particularly strong programming in physical chemistry and nanotechnology; biomedical and biochemistry; analytical chemistry; organic/medicinal chemistry; and chemical education. There will be a strong program for K-12 educators on Saturday June 5. ACS regional meetings provide a high level of scientific discourse, excellent networking opportunities, and are great value for money. We invite you to visit our website: [www.nerm2010.org](http://www.nerm2010.org), to learn more about our special symposia, our many distinguished invited speakers, and about the wonderful social and networking events planned for this meeting. We also invite you to present your research: the meeting is open for abstract submission until April 20.

Martin Walker  
Conference Chair  
Dept. of Chemistry, SUNY Potsdam

Maria Hepel  
Program Chair  
Dept. of Chemistry, SUNY Potsdam

## Call for Nominations 2010 Northeast Region Awards

The awards will be presented at the  
2010 Northeast Regional Meeting  
Potsdam, New York  
June 2-5, 2010

Specifics about each award and nomination forms may be found on the webpage for the 2010 Northeast Regional Meeting (NERM):  
[www.nerm2010.org](http://www.nerm2010.org) .

**The deadline for these awards is  
April 15, 2010.**

- The ACS Division of Chemical Education Northeast Region Award for Excellence in High School Teaching
- The E. Ann Nalley Regional Award for Volunteer Service to the American Chemical Society
- The ACS Regional Industrial Innovation Awards
- The Northeast Region, ACS Award for Achievements in the Chemical Sciences