

# CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

January, 2005  
Vol. 42, No. 4

## Meeting Calendar

<b>Wed. Jan. 19</b>	Jennifer Holmgren Embassy Suites Blue Ash
<b>Wed. Feb. 16</b>	Chemist of the Year Givaudan Flavors
<b>Wed. Mar. 9</b>	Dr. Burkhard Jansen Genome Research Inst.
<b>Thurs. April 21</b>	High School Awards Northern Kentucky U.
<b>May</b>	Party Night! TBA

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## January Monthly Meeting

*Combinatorial Chemistry: Catalysing Innovation in the Chemical Industry*

**Jennifer S. Holmgren**  
UOP LLC

### Abstract



Combinatorial chemistry increases by several orders of magnitude the ability of the chemist to obtain chemical information. Particularly in the catalyst development area, where testing and evaluation are slow and costly, the successful application of combinatorial methods enables rapid selection of the most-promising candidates for further development. Coupled with a strong commercialization process, combinatorial chemistry has the potential to improve productivity and reduce the cycle time for new product introduction.

The implementation of combinatorial methods for catalyst development must first pass several hurdles. Among these, and per-

*(Continued on page 4)*

### About the speaker

Jennifer Holmgren is Director of Exploratory and Fundamental Research at UOP LLC. The Exploratory and Fundamentals Center sponsors programs which provide the tools, methods, and skills necessary to support UOP's project portfolio as well as programs which take UOP in new directions. In addition she is directly accountable for three of UOP's core groups: New Materials Synthesis, Advanced Characterization and Combinatorial Chemistry.

Jennifer received a B.Sc. in Chemistry from Harvey Mudd

*(Continued on page 5)*

**THE CINTACS NEWSLETTER****Vol. 42, No. 4 January, 2005**

Editor.....Bruce S. Ault  
 Advertising.....Ed Hunter

CINTACS is published nine times a year (September through May) by the Cincinnati Section of the American Chemical Society. The submission deadline will be approximately January 21 for the March, 2005 issue. Electronic submission is strongly preferred, except for original photos. All materials should be sent to:

Dr. Bruce Ault  
 Department of Chemistry  
 University of Cincinnati  
 Cincinnati, OH 45221-0172  
 Telephone:(513) 556-9238  
 FAX: (513) 556-9239  
 E-mail: bruce.ault@uc.edu

**Section Officers**Chair:

Phil Christenson  
 513-948-4942  
 phil.christenson@givaudan.com

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 513-745-5686  
 emel.yakali@uc.edu

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 513-627-5664  
 simmons.es@pg.com

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 513-761-0816  
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 parker.r@fuse.net

Bill Oliver (12/31/05)  
 859-572-5409  
 oliver@nku.edu

Bruce Ault (12/31/07)  
 513-556-9238  
 bruce.ault@uc.edu

Kathy Gibboney (12/31/07)  
 513-622-2289  
 Gibboney.k@pg.com

**From the Chair**

Happy New Year!! By the looks of the January meeting, we're off to a great start in 2005!!

The meeting on Wednesday, January 19<sup>th</sup>, will feature two distinguished scientists. Our after dinner speaker will be Dr. Jennifer Holmgren, Director of Exploratory and Fundamentals Research at UOP. Dr. Holmgren received the Malcolm E. Pruitt award from the Council for Chemical Research in 2003 for her work in industrial catalysis. Dr. Holmgren will share her perspective on innovation in an industrial research environment. The Analytical Discussion group will hear Prof. Mark E. Meyerhoff from the University of Michigan discuss his recent work in the rapidly advancing field of chemical sensors. In addition, the meeting provides you with an excellent opportunity to socialize with your peers in other organizations. So, ignore the weather and come on out!!

The January meeting is sponsored by Ted Logan. We are very grateful to Ted for his support of this meeting and for his tireless efforts to get sponsors for our meetings. Ted's success in obtaining sponsorship of nearly all of our meetings in recent years has allowed the section to help cover meeting expenses such as guest meals, speakers' travel expenses, pre-dinner social hours and reduced registration fees for students, emeritus, unemployed and new members. Thanks again to Ted and all our meeting sponsors for their continued support.

Please note our upcoming meetings on your calendars. On Wednesday, February 16<sup>th</sup>, Givaudan will host the Chemist of the Year award meeting. Dr. Burkhard Jansen will be the featured speaker at the meeting on Wednesday, March 9<sup>th</sup>, to be held at the Genome Research Institute.

It's a New Year and so now is a good time for you to consider how you can become more involved in our local section. In the coming months, the various committees and officers will begin preparing for next year's activities. Participation by our members is essential in keeping programs, such as NCW, YCC, Project Seed, and our student award programs, functioning at the high level that we have come to expect. Please take time to learn about the various programs and activities in the Cincinnati Section and assess how you might contribute. You may contact Emel Yakali, chair-elect, or myself.

In the coming weeks, Joel Shulman, Chair of the Section's Nominating Committee will be looking for members of our local section who are interested in running for office in our spring elections. If you would like to serve our local section and make a difference, please contact Joel at joel.shulman@uc.edu.

Looking forward to seeing you at the meeting!!

Phil Christenson

**January Meeting**  
**Wednesday, Jan. 19, 2005**  
**Embassy Suites Hotel - Cincinnati Northeast**  
**4554 Lake Forest Dr., Blue Ash**

*Sponsored by Ted J. Logan*

**Speaker: Jennifer S. Holmgren, Ph.D.**

<b>Time</b>	<b>Function and Location</b>
5:30-6:30 pm	Analytical Discussion Group, Oak Room. Prof. Mark E. Meyerhoff <i>Enhancing the Biocompatibility and Analytical Performance of in vivo Chemical Sensors Using Nitric Oxide Releasing/Generating Polymers</i>
6:00-7:00 p.m.	Registration
6:00-7:00 pm	Social Hour, Promenade Area
7:00-8:00 pm	Dinner Blue Ash Ballroom  Menu: Lightly breaded boneless chicken breast finished with fresh mushrooms in a Marsala wine sauce or linguini primavera. Mixed green salad, rolls and butter, fresh vegetables, rice pilaf. Chocolate cake, coffee, or tea.  Cost: \$25.00 (retirees, students, K-12 teachers \$12.00)
8:00 p.m.	Meeting and Featured Speaker Jennifer S. Holmgren, Ph.D. <i>Combinatorial Chemistry: Catalysing Innovation in the Chemical Industry</i>

**Dinner Reservations:** The meeting reservation form is online at <http://www.che.uc.edu/acs/cinacs.html>. This is the best and easiest way to register. As a lesser alternative, you may send your reservations by email to [kim.carey@uc.edu](mailto:kim.carey@uc.edu). If it is absolutely impossible for you to make reservations via the internet, call 513-556-0293 (please leave name, affiliation, a contact phone number, dinner entrée choice, and state if you are in one of the ½ -price categories). Deadline for reservations is 12:00 noon on Friday, Jan. 9, 2004. **If you must miss the meeting after you have made reservations, please call to cancel.**

**Directions:**

**From I-71**, take Exit 15 (Pfeiffer Road), head west on Pfeiffer Road two blocks to Reed Hartman Highway. Turn right (north) on Reed Hartman, turn left on to Lake Forest Dr.

**From I-275**, take the Reed Hartman Exit, head south on Reed Hartman about two miles, take a right onto Lake Forest Dr.

## Analytical Discussion Group

Mark E. Meyerhoff  
University of Michigan



*Enhancing the Biocompatibility and Analytical Performance of in vivo Chemical Sensors Using Nitric Oxide Releasing/Generating Polymers*

### Abstract

The analytical performance of intravascular chemical sensors capable of real-time monitoring blood gases and electrolytes in critically ill patients has been limited by problems associated with cell adhesion (platelets) and subsequent thrombus formation on the sensors' surfaces. A novel approach aimed at ultimately solving this fundamental biological response problem is based on fabricating intravascular chemical sensors with outer polymeric films that release/generate low levels of nitric oxide (NO). Such in situ release of NO prevents platelet adhesion/activation on the surface of the devices. Polymer formulations have been developed that provide appropriate rates of NO release required to prevent thrombus formation, without interfering with the sensors' electrochemical response. *In vivo* evaluation of intravascular oxygen sensors prepared with the NO release polymers confirm the enhanced thromboresistivity and concomitant improvement in analytical accuracy. For long term implanted sensors, catalytic polymer coatings capable of continuously generating locally elevated NO from components already in blood (e.g., nitrosothiols) may be useful. Further, the prospects of employing NO release/generation to improve the performance of subcutaneous *in vivo* glucose sensors will be also be discussed.

### About the Discussion Group Leader

**Mark E. Meyerhoff** is Professor of Chemistry in the Department of Chemistry at the University of Michigan. He received his Ph.D. from the State University of New York at Buffalo in 1979. Following post-doctoral work at the University of Delaware, he joined the faculty at Michigan as an Assistant Professor in 1979. His current research interests are fo-

cused on: 1) the design and study of novel electrochemical and optical chemical sensors based on thin polymeric films doped with selective host compounds (especially metal-ligand complexes); 2) the synthesis, characterization and biomedical applications of polymeric materials that release/generate nitric oxide (NO); and 3) development of novel non-separation immunoassay methods. He also is developing methods to improve the biocompatibility of implantable electrochemical/optical gas/ion sensors via use of novel nitric oxide (NO) release polymers. He and his collaborators have authored more than 225 original research papers on these topics. Professor Meyerhoff serves on several editorial/advisory boards of major journals.

*(Continued from page 1)*

haps most critical, is making the link between nano-scale quantities of materials and performance on a lab scale. This means that both the preparation and testing of catalyst libraries needs to be done under pertinent reaction conditions in order to provide predictive performance information.

We have developed an integrated combinatorial heterogeneous catalyst system which includes all the relevant catalyst preparation unit operations including hydrothermal synthesis, metal oxide precipitation, ion exchange, metals addition, oxidation, steaming, reduction and, of course, catalyst testing. Using commercially relevant materials, we have demonstrated the experimental reproducibility of this combinatorial discovery system and scalability of catalysts from the combinatorial scale to the laboratory scale. Our results demonstrate that this system can be used to accelerate discovery and scale-up of heterogeneous catalysts.

*I can lead, and I can follow. An important aspect of leadership is knowing when to do which.*

-Al Garsis, U.S. Marine Colonel

*Just because it's what you do best doesn't mean you have to do it*

-Hugh Prather

*True leadership is the art of changing a group from what it is into what it ought to be.*

-Virginia Allan

(Continued from page 1)

College (1981) in Claremont California and a Ph. D. in Inorganic Materials Synthesis from the University of Illinois at Urbana-Champaign (1986). After completing a Post Doctoral appointment in the area of NMR Characterization of Sol-gel Derived Ceramics, she began working at UOP LLC (1987). Previous assignments at UOP include the preparation and characterization of novel zeolites, molecular sieves and layered materials (clays, pillared clays and layered double hydroxides). In addition she was responsible for the development of microactivity tests for the characterization of novel materials and setting up the infrastructure necessary to develop fundamental mechanistic understanding in UOP's core areas. She also participated on a number of Technology Delivery projects in the BTX (Benzene, Toluene, Xylenes) and Olefins areas.

Jennifer was a member of the R&D Reengineering Design Team, which redefined UOP's technology commercialization methodology. She was the first Chair of R&D's Technical Community Organization. She currently serves on two external advisory boards. She is the author or co-author of

50 US patents, 20 scientific publications and is the 2003 recipient of the Council for Chemical Research's (CCR) Malcolm E. Pruitt Award.

## Membership Survey

The Cincinnati Local Section has more than 1700 members. We want to and we need to get more of the membership to participate in the activities of the section and be involved in how it is run. Yes, we need help planning our program for 2005-2006 and we need volunteers to serve on committees. That is why we will be mailing out member surveys at the same time with the January CINTACS. Please fill out the survey and return it by January 31, 2005.

A more efficient way to evaluate the surveys is to get them filled out and e-mailed to emel.yakali@uc.edu by January 31, 2005. For that purpose, the survey will be available on our section web site, <http://www.che.uc.edu/cinacs.html> as a Word document.

Thanks indeed.



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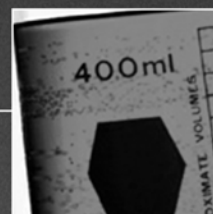
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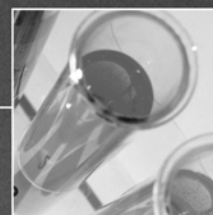
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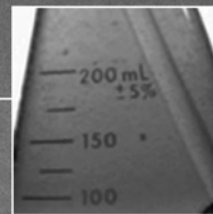
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## Project SEED for High School Students

The Cincinnati Section will participate in the 2005 Project SEED Program, an ACS sponsored program that places economically disadvantaged high school students in academic, industrial, and governmental research laboratories for eight-to-ten weeks during the summer.

The program will build on its success from the past two summers, during which students from Hamilton, Jacobs, Purcell Marian, and Withrow International high schools worked with University of Cincinnati chemistry faculty. This coming summer will involve as many as five students who each will receive \$1,750 while working for 8-10 weeks in local research laboratories under the direct supervision of a mentor.

The Cincinnati Section encourages high school chemistry teachers to identify eligible students who might be interested in participation. Applicant evaluation will begin in February. Student eligibility and application information are available at <http://www.che.uc.edu/kim/SEED/description.htm>. Participating research sites are expected to contribute \$750 of the stipend for each hosted student. Prospective mentors are encouraged to consult the web site and contact Bill Connick at the University of Cincinnati, [bill.connick@uc.edu](mailto:bill.connick@uc.edu), 513-556-0148.

## Educators to Meet at St. Xavier

On Wednesday, February 2<sup>nd</sup>, the chemical educators' discussion group will assemble in Nancy Klas's classroom at St. Xavier High School to share creative classroom projects with one another. Plan to bring the directions for your favorite project or activity as well as samples of the student work. The finished project can include posters, models, Power-Point presentations, research papers, skits, songs, poems, et al. Invite a colleague to join us. Directions to St. X (located at 600 W. North Bend Road) from any direction can be found at the school's website

We specialize in recruiting and placing professionals, for contract, contract-to-hire and direct placement employment across the complete scientific, clinical and research spectrum. This includes: Lab Technicians, Chemists, Research Associates, Quality Assurance, Quality Control, Chemical Engineers, & more.

For more information, contact Michelle Davin at 513-229-2078 or Adam Akin at 513-229-2085.

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([www.stxavier.org](http://www.stxavier.org)). Click on “About Us”. Once you arrive at the school, enter through the main entrance and go up to the third floor. Take two immediate rights and follow the hallway to room 3568. We will begin at 6:30 PM with refreshments, social time, and announcements. The program will run from 7 PM to 8:30 PM.

In late May, the teachers will tour Rozzi Famous Fireworks and then share a pizza supper out in the Mason area. The date for the tour has not been established. Please contact Linda Ford ([Linda.ford@7hills.org](mailto:Linda.ford@7hills.org)) concerning your interest in participating in the tour and to give her your end of school schedule. We hope to set a date that will accommodate the larger number of interested teachers.

ChemEd2005 will be held in Vancouver, British Columbia next summer. A call for papers can be found at the website: <http://nobel.scas.bcit.ca/chemed2005>. Learn more about the conference and the presentation options; proposals are due by February 1, 2005.

## National Chemistry Week (NCW) 2004

Over 45 venues (public libraries, museums, schools and colleges) in the Greater Cincinnati area opened their doors to about 120 volunteers from local universities, colleges, high schools, government laboratories and industry for fun and educational chemistry demonstrations. News of NCW 2004 was disseminated throughout the area by the Hamilton County libraries', the Cincinnati Museum Center's and the local ACS section's websites. It was also publicized through the ChemLuminary award-winning *Newspaper in Education (NIE)* program with the Cincinnati Enquirer/Post reaching about a million readers with four days of quarter-page ads on this year's "Health and Wellness" theme. As a result, our 2004 NCW demonstrations were attended by over 2000 people! We also broke our last's year single library attendance record of 97 with 3 different libraries with over 100 visitors this year, WOW!!



Getting ready to silver a Christmas ornament  
Anderson Public Library  
Saturday October 23th, 2004  
Photographer: Ed Escudero

At the Children's Learning Center & Anderson library, children, and adults alike, were taken aback when they learned how much sugar is

contained in soft drinks and the potential health risks associated with it. Meanwhile, at Blue Ash and Groesbeck libraries volunteers demonstrated the use of Bayer's self-test Clinistix glucose strips and discussed their use and importance for people with diabetes; a great example of how chemistry improves our lives. Likewise, at Miami Township/Cleves library children saw first hand how "iron/magnesium powder" is used as a heating agent to prepare meals on the spot that are distributed to people in need when a natural disaster occurs or to our soldiers fighting abroad. Audiences at the Mariemont and Sharonville libraries learned how toothpaste protects their teeth through the "eggperiment" demonstration and understood the importance of brushing their teeth. And at the Springboro library, the audience understood very well the benefits of washing hands after "allergens" (green glitter in clear gel slime) had been spread through human contact, a very good reminder as the flu season is getting under way. These are only a few examples of the kinds of things that took place in many libraries during NCW held on October 17-23 2004.



Ed Vonbargen and assistants do the silvered bottle demonstration  
Cincinnati Museum Center  
Saturday October 23th, 2004  
Photographer: Carrie Furnish

Several hundreds of people experienced NCW at the Cincinnati Museum Center (CMC) on October 22<sup>nd</sup> and 23<sup>rd</sup>. Millie Mole (Susan Hershberger) greeted field "trippers" and visitors outside and spread "glo germs" after shaking children's hands. Every

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child was then given a passport, and led to three different NCW stations (free of charge) where they received a sticker upon visiting each one. In the CMC rotunda, Gloria Story (P&G) welcomed people with a thermal camera in station 1. Children and adults had a lot of fun seeing themselves as “heat generating” beings when they came up-and-close to the camera. They also learned about exothermic and endothermic reactions and how the former can be used to create products such as ThermaCare® heat wraps and how they differ from other commercial muscular relieving products. In Station 2, just outside of the Children’s Museum, Kathy and Mike made slime with the kids, froze and shattered flowers and bananas with liquid nitrogen, and did the “silvered bottle”. In station 3, located just outside of the

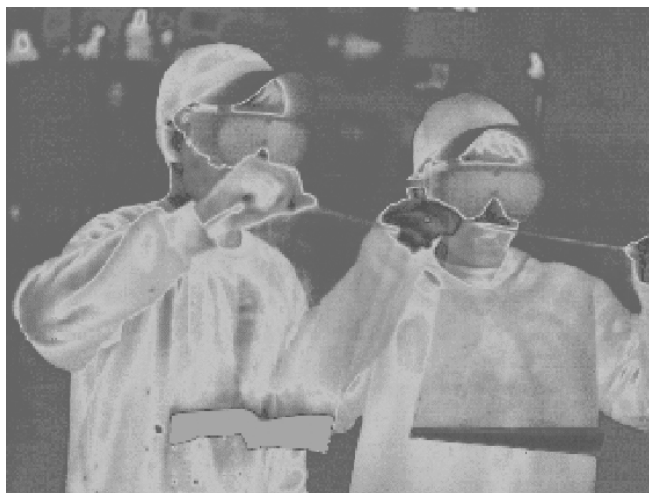
IMAX theater; Ed, Carrie and Rachel used a black light to reveal the germs initially spread my Millie Mole. They also did among many things, “ghost crystals”, “ghost writing”, “instant snow” and “waterlok” demonstrations. Children with a fully stamped passport received a “Hooray for Chemistry” goodie bag with a “Celebrating Chemistry” ACS newspaper, an “Explore and Experiment” pencil, Avogadro’s temporary tattoos and NCW balloons.

Chemistry, the *central science*, was made alive, relevant, and interesting to many young minds thanks to our volunteers who gave their time and talents. We also want to thank Wright Brothers for the liquid nitrogen donated; and Procter & Gamble, Givaudan, Cognis, and the ACS for their generous financial contributions.



Thermal image of young researcher analyzing baking soda with water in a Ziploc bag  
College Hill Public Library  
Tuesday October 19th, 2004  
Photographer: Gloria Story

Thermal image of young researchers comparing a driveway salt and water reaction to a baking soda and water reaction in a Ziploc bags  
Cincinnati Museum Center  
Friday October 22th, 2004



## Outstanding Teaching Awards Nominations Sought

Do you know a teacher who inspires his/her students? Fills them with a curiosity about the world of science and chemistry? The Cincinnati Section of the American Chemical Society is looking for these people – and honors three each year.

- The High School Chemistry Teacher of the year is awarded annually, to recognize accomplishments of those of us who teach chemistry at the secondary school level.
- The Middle School/Junior High School Science Teacher of the Year is awarded annually to honor science teaching at this level.
- The Elementary School Science Teacher of the Year is awarded for excellence in elementary teaching.

All three awards recognize teaching ability, enthusiasm, mentoring skills, and other leadership activities. Nominees need not be members of the American Chemical Society. Generally speaking, anyone teaching in these capacities within 35 mile radius of downtown Cincinnati is eligible. These awards will be given at the April Meeting. Deadline for nominations is January 19, 2004 (at the meeting).

### For a nomination form contact:

Jim Hershberger Ph 513-529-2441  
Department of Chemistry Fax 513-529-1675  
Miami University Hershbjw@muohio.edu  
Oxford, OH 45056

*Instead of forcing employees to think outside the box, supply a bigger, better box.*

*Travelers, there is no path,  
Paths are made by walking.*  
-Antonio Machado

## Meeting Sponsors, 2004-5 Program Year, Cincinnati Section, ACS

Here are six of the seven sponsors for our monthly Section meetings in the new program year. We do not yet have a sponsor for the April meeting. This group of schools, industries, and individuals have each contributed a minimum of \$1000 (in kind or cash) to sponsor our meetings by covering most meeting expenses such as speaker travel, lodging, and food; guest meals, A/V expenses, and the pre-dinner Social Hour.

The Section is very appreciative of these sponsors and their contributions because they ultimately lead to better talks, higher attendance, and more value to meeting attendees. Please thank them for their generosity and let them know you appreciate their contributions to the Section. A good time to do this would be when the donor is recognized at the sponsored meeting.

September Meeting	No Sponsor Solicited
October Meeting	UC Chemistry Department
November Meeting	No Meeting
December Meeting	Procter & Gamble Company
January Meeting	T.J. Logan
February Meeting	Givaudan
March Meeting	Genome Research Institute/ Girindus America
April Meeting	**
May Meeting	Advanced Testing Laboratory

\*\* IOTA SIGMA PI, Honor Society for Women in Chemistry, has made a financial contribution to help support this meeting, hosted by NKU.

Ted J. Logan, Chair  
Sponsor Solicitation Committee

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## Call for Nominations: The Patterson-Crane Award

The Dayton and Columbus Sections of the American Chemical Society sponsor the Patterson-Crane Award for contributions to chemical information. It is international in scope and given in honor of two outstanding members of the Sections: Austin M. Patterson (1876-1956) and E.J. Crane (1889-1966). The biennial award consists of a \$2,000 honorarium and a personalized commendation. The award is funded by a bequest of the Patterson family to the Dayton Section, by the Helen G. Crane Fund of the Columbus Foundation, and by the Patterson-Crane Award Fund of the Columbus Section.

The Austin M. Patterson Award was established in 1949 by the Dayton Section to acknowledge meritorious contributions in the field of chemical literature and especially documentation of chemistry. Dr. Patterson, the first recipient of the biennial award, was recognized for his leadership in organic chemical nomenclature and his work as editor of Chemical Abstracts. There were 13 additional recipients of this award, including E.J. Crane, who was editor of Chemical Abstracts from 1915-1958. Subsequently, there was a desire to honor and establish an award in his memory. In February 1975 the ACS Board of Directors accepted a proposal by the Dayton and Columbus Sections for a jointly sponsored Patterson-Crane Award.

### Award Criteria

Nominees, who need not hold ACS membership, should demonstrate outstanding achievement in the field of chemical information science. Contributions of international significance may relate to:

- \* Design, development, production, or management of chemical information systems or services.
- \* Electronic access to and retrieval of chemical information; critically evaluated data compilations.
- \* Information technology applications in chemistry or other significant chemical documentation, including production of original works, editorial work, or chemical library work.

Nominations for the award must be in writ-

ing and should discuss the nominee's contributions to the field as well as an evaluation of accomplishments. Materials supporting the nomination should include a biography and bibliography of publications and presentations. Seconding letters are required.

Send one copy of the nomination materials to Dr. Melinda Greer, Chair of the Patterson-Crane Award Committee, (Raymond Walters College, 9555 Plainfield Road, Cincinnati, OH 45236) for receipt by January 31, 2005. To receive an informative brochure about the award, contact Dr. Greer (513-936-7165).

Nominations will be judged by a seven-member selection committee consisting of Dayton and Columbus Section members as well as the Chair of the American Chemical Society's Division of Chemical Information.

The 2005 Patterson-Crane Award will be presented in the Spring of 2005 at an awards dinner to be held in Dayton, Ohio.

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## On-line Resume Preparation Workshop

The ACS Department of Career Services staff has developed a new, online workshop on resume preparation. This workshop - the first in DCS' catalogue of workshops to be placed online -- explains the basic principles of writing resumes. It also includes a sample resume that a user can view to see how the various sections fit together. Access this workshop from the left-hand navigation of our homepage at [www.chemistry.org/careers](http://www.chemistry.org/careers)

## ACS ProSpectives Announces the 2005 Conference Schedule

- \* Process Chemistry in the Pharmaceutical Industry  
February 6 - 9, Miami
- \* Interplay of Chemistry and Biology in Integrative Drug Discovery  
March 6 - 9, Miami
- \* Advanced Forensic Science to Combat Counterfeit Drugs, Crime & Terrorism  
May 1 - 5, San Diego
- \* Advances in Structure-Based Drug Discovery  
June 5 - 8, Philadelphia
- \* Discovery and Selection of Successful Drug Candidates  
May 15 - 18, Boston
- \* Organic Microelectronics (joint with IEEE and MRS)  
July 10 - 13, Newport, RI
- \* Mechanisms of Chemical Toxicity As Applied to Drug Safety Prediction  
September, Philadelphia
- \* Exploring Opportunities Along the Nano-Bio Interface  
(joint with MRS, ACS POLY and ACS PMSE)  
To be determined

Please to go [www.acsprospectives.org](http://www.acsprospectives.org) for speakers, topics and program details.

The American Chemical Society created ACS ProSpectives to provide chemical professionals -- and others who rely on chemistry-based information -- with conferences that explore chemistry's role in advancing molecular science across disciplines.

ACS ProSpectives conferences series combines all the best elements of scientific conferences:

- Narrowly focused treatments of topical subjects
- Presentations by top authorities on the subject -- every speaker, from the keynote to the last presenter, is hand picked from among the field's top experts
- Limited attendance, so you will have the chance to meet and talk to the presenters and fellow attendees
- Shorter programs that let you put in a day or two at the office the same week of the conference
- Venues that are comfortable, in easy-to-reach cities

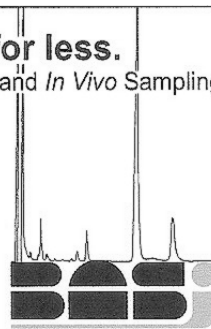
Go to [www.acsprospectives.org](http://www.acsprospectives.org) and sign up for new conference alerts to stay up to date on current and new conferences.

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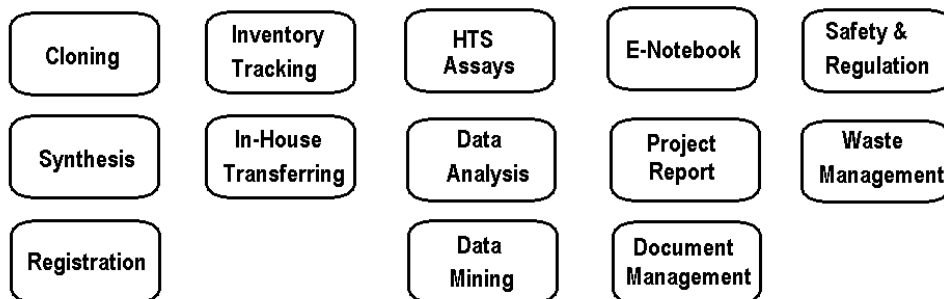
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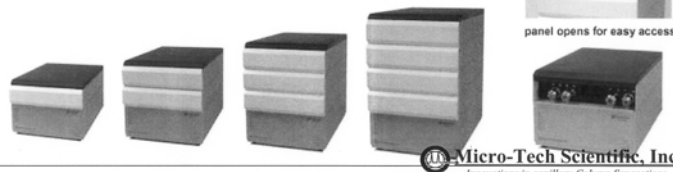
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