

AICHE



The Catalyst

PITTSBURGH CHAPTER
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS



Volume 16 Issue 5



February 2002

FEBRUARY MEETING NOTICE

Event: *Engineers of Today and Tomorrow*

Where: The William Pitt Union
University of Pittsburgh
For directions, see page 7.

When: Thursday, February 21, 2002

Time: 6:00 Reception and Poster Session
6:45 Dinner
7:30 Presentation
8:15 Student Awards
8:45 Adjourn

Cost: \$25.00 for professionals
\$15.00 for student members

Menu:

Chicken Francaise

Tender Chicken Breast coated with fresh Bread Crumbs and grated Romano Cheese then sautéed to perfection.

Grilled Tuna

Flaky grilled Tuna Fillet topped with a zesty Citrus Glaze

Fusilli Pizzaiolio

Fusilli Pasta blended with a Vilange of Peppers, Mushrooms and Onions, blended with Fresh Herbs, OliveOil and Garlic

Dinner entrees will be served with Soup, Salad, Vegetable and Dessert, and includes Dinner Rolls, Butter, Coffee, Tea, Decaffeinated Coffee and Iced Tea.



Evening Presentation:

"Time and the Chemical Engineer: What are our obligations?"

All engineers need to be aware of the impact of their work. Dr. Indira Nair will outline the ideas behind the concept of Industrial Ecology (IE). She will then give examples of how the concept of IE applies to Chemical Industries.

About the Speaker:

Dr. Indira Nair has been at Carnegie Mellon for 23 years. She is the Vice Provost for Education and Professor in the Department of Engineering and Public Policy at Carnegie Mellon University. She holds a Ph.D. in Physics from Northwestern University. Dr. Nair is a member of the National Science Foundation's Committee on Equal Opportunities in Science and Engineering (CEOSE). She is co-author of a book, *Journeys of Women in Science and Engineering: No Universal Constants*, (Temple University Press, 1997). She was voted a *Women of Distinction* in 1999 by the National Association of Women in Higher Education (NAWE). Dr. Nair received the Doherty Prize for excellence in education in 1993 and the Undergraduate Advising and Mentoring Award in 1994. She founded the Carnegie Mellon chapter of Student Pugwash to encourage students to think about the social responsibility of science and technology.

RSVP NO LATER THAN
THURSDAY, THURSDAY FEBRUARY 14, 2002

TO:

Ms. JoAnn Truchan, Vice Chair

Tel 724-695-1945

Email: cricket.jt@att.net

PLEASE PAY AT DOOR

Name _____

Menu Selection _____

Email _____

Phone _____

CANCELLATIONS: If you must cancel your meeting reservation, please do so no later than 24 hours prior to the meeting. If you do not provide a cancellation notice, you will be invoiced for the cost of your meal.

LETTER FROM THE EDITOR

Dear Members:

We had two great meetings in January!

Thank you to **Equity Advisor Group, Inc.** for the intriguing Financial Planning Seminar. We appreciated the time they spent with us.

Our joint meeting with A&WMA was also a success. It was great to learn more about the Riverlife Task Force and the plans they have for improving our City.

It is fantastic to see so many new faces at our monthly meetings. I look for to seeing you again on February 21st, 2002!

Best regards,

Peggy Panagopoulos

AICHe Newsletter Editor

LETTER FROM THE VICE-CHAIR

Dear Members

This month's meeting is our annual joint Student/Professional meeting and I wanted to take a moment to encourage everyone to attend.

Traditionally, many professionals decide to skip this event, believing that it is exclusively a "Student Night". However, the importance of having a joint Student/Professional meeting lies in giving students an opportunity to meet and interact with working chemical engineers. I have heard many people say things to the effect of, "But my work isn't in chemical engineering – I'm in sales/business/etc." It's important that people in non-traditional chemical engineering roles also attend this event. Students need to see a wide variety of chemical engineers in a wide variety of disciplines. The possibilities with a chemical engineering degree are limitless, and the students need to realize that. The only way they can is by meeting people like you and me.

Please join us on the 21st and help in encouraging these students and teaching them that as chemical engineers, the sky is the limit.

JoAnn Truchan, AICHe Vice-Chair

MEMBERSHIP CORNER

Dear Members,

WANTED.....VOLUNTEERS FOR NATIONAL ENGINEER'S WEEK

Our local section will again sponsor a table at the Carnegie Science Center in celebration of National Engineer's Week. Volunteers are needed to help staff the table on Friday, February 22 and Saturday, February 23, 2002 from 9 am to 5 pmeach day. We will again be making superballs and gumdrop chemical models. If anyone is interested in interacting with the public - especially children – call me at 412-826-3636 or send an e-mail to: nhirko@air-comp.com I sure could use the help!!

Regards

Nancy Hirko

Please sign me up for the local Pittsburgh Section of AICHe

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Business _____

Residence _____

Email _____

Annual Dues are \$16.00. Make check payable to "AICHe Pittsburgh Section" and send to our Treasurer: **Leigh Anne M. Wacker, CFX Software & Services, Omega Corporate Center, 1260 Omega Drive, Pittsburgh, Pennsylvania 15205**



PUMP UP YOUR CAREER

If you feel that you are running in place at work, or simply want to strengthen your career options, don't miss AIChE's Career Fitness Conference 2002, April 7-8. This unique conference is free for national AIChE members, and features career seminars, skills workshops, and job fair. AIChE's Career Fitness Conference 2002 will be held in the Chicago area at Donald E. Stephens Convention Center, Rosemont, IL. For more information or to register, visit <http://www.aiche.org/careerservices>.

SPEAKING OF THE FUTURE...

New Orleans is home to dynamite food, rich history, and, in March, chemical engineering conversation and debate. Members of industry, academia, government, the media, and the general public will attend the inauguration of AIChE's first Critical Issues Series, "Energy and a Sustainable Planet." Free to all Spring Meeting participants, the Series will feature panels of experts on controversial topics of global climate change, alternative energy, and nuclear energy. Don't miss this innovative program in an incredible city.

Register today, at <http://www.aiche.org/spring> or call 1-800-242-4363

INTERESTED IN HOSTING AN AIChE MEETING AT YOUR COMPANY?

We are in search of hosts for our future AIChE monthly meetings. The Chapter is looking for companies that can provide AIChE members with an interesting, informative, and beneficial agenda. If your company would be interested in hosting a meeting please contact me.

Also, if you have a topic or an idea that you would like to see presented at a monthly meeting, please feel free to contact me and we can discuss your idea.

*Mr. Michael Flaherty, Chair
WSP Chemicals & Technology Inc.
Tel 724-266-7688 ~ Fax 724-266-7683
Email Michaelp871@hotmail.com*

HUMOR

Daily Aphorisms:

- Always remember you're unique, just like everyone else.
- Never test the depth of the water with both feet.
- It is far more impressive when others discover your good qualities without your help.
- If you think nobody cares if you're alive, try missing a couple of car payments.
- If you tell the truth, you don't have to remember anything.
- If you lend someone \$20 and never see that person again, it was probably worth it.
- Give a man a fish and he will eat for a day. Teach him how to fish, and he will sit in a boat and drink beer all day.
- If at first you don't succeed, skydiving is not for you.
- Duct tape is like the force, it has a light side and a dark side and it holds the universe together
- Don't squat with your spurs on.
- Good judgment comes from bad experience and a lot of that comes from bad judgment.
- The quickest way to double your money is to fold it in half and put it back in your pocket.

HOT NEWS

Government News

IRS Taking A Closer Look At Consultants

A faltering US economy has increased Internal Revenue Service (IRS) scrutiny of business consultants and companies that outsource to them, according to NetCompliance, Inc. (www.netcompliance.com), a provider of Internet-based global compliance solutions and regulatory information.

The IRS acknowledged that corporate downsizing has lead to an explosion of displaced workers becoming business consultants or contractors, NetCompliance, Inc. said. But the agency is concerned that companies are hiring back these very same workers -- some with a minimal break in company service -- in order to lower their costs in payroll and employee benefits. The IRS is also concerned that individuals in general are too loosely calling themselves "consultants." According to NetCompliance, the IRS has told its auditors "many people call themselves a consultant, when in reality they may be a broker, a salesperson, a retailer" or engaged in a hybrid business which doesn't meet the government's tax laws on consulting practices.

"The IRS has quite a challenge on its hands, for the consulting industry is very broad and billions of dollars are spent each year by companies outsourcing work to consultants and contractors," said Krish Krishnan, CEO of NetCompliance, Inc. "This IRS decision could have a chilling impact on businesses which outsource," Krishnan said, "because they run the risk of not knowing whether or not their practices are in compliance with IRS auditors."

To help companies and their consultants determine if they are in compliance with the IRS, NetCompliance has posted the agency's auditor technique guidelines, plus a list of potential auditor questions, on NetCompliance, (www.netcompliance.com). "We feel that offering a glimpse of the IRS' methods and suggestions on audits via our Web sites will provide timely and accurate compliance information to our customers and their consultants," Krishnan said. "By using the Internet and technologies offered by NetCompliance, companies are finding a better, faster, and more affordable way to determine their compliance needs and meet and manage the regulatory-related requirements set by government agencies," he added.

The Bureau of Labor Statistics estimates 8.5 million people work as independent contractors, consultants, or free-lance workers, accounting for 6.7 percent of all US workers. Meanwhile, the government also estimates there are 5 million home-based workers who consider themselves consultants.

The agency has also directed its auditors to be alert to consultants who take companions or family on domestic and foreign business; "to pay particular attention to the limitation of meals and entertainment while in travel status"; to sample invoices or contracts and cross check the income and reimbursed expenses; and to determine the employer/employee status of consulting firms that subcontract out work to others.

<http://www.aiche.org/newsroom/articledtl.asp?CatID=1&ArtID=382>

HOT LINKS

Pump Net

<http://pump.net/>

Find many physical properties that are common to pumping systems on this web site. Additional material is being added periodically.

FACTrio Online Physical Properties

<http://factrio.jst.go.jp/>

Get access to thermophysical, thermochemical, mass

spectral, and crystal structure databases on this site. The search mechanism is a little clumsy, but once you get the hang of it, you'll realize how much great data in at this site!

Online Property Calculations Through Microsoft

<http://www.waveone.com/>

Waveone.com has introduced the release of a MS Excel spreadsheet that can be used to access their online database right from a spreadsheet. Sign up for access and try the spreadsheet a try. There are many models to choose from and the interface has thoughtfully planned.

Sugar Engineer's Library -- Material Properties

<http://www.sugartech.co.za/matlprop.php3>

Contains properties such as boiling point elevations (for evaporation design), density data for materials such as cane, bagasse, juice, syrup, etc., enthalpy of factory sugar solutions, viscosity of cane factory products, supersaturation coefficients, and steam tables.

Physical Properties Spreadsheet

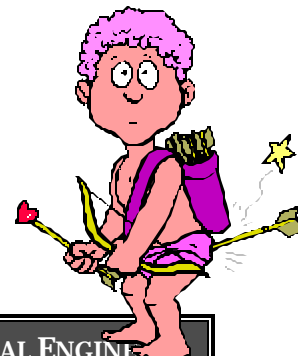
<http://www.cheresources.com/data.xls>

Available right here at the Resource Page. This handy little spreadsheet contains some of the more common properties for many compounds.

NEWSLETTER DEADLINE

**THE DEADLINE FOR THE MARCH NEWSLETTER IS
FEBRUARY 15, 2002**

Please submit information to
Peggy Panagopoulos at
ChemTech Consultants
1370 Washington Pike, 4th Floor
Bridgeville, PA 15017
pegpana@chemtech88.com or Fax: 412-221-5685



NEW WEB TOOLS FOR CHEMICAL ENGINEERS

Responding to the professional engineer's need for instant information and data, AIChE has enhanced its Web site with quality content, adding online publications, career resources, and Web portal options.

These enhanced Web tools are in thanks to the generous support of American Home Products Corporation, ICI Americas Inc., Pfizer, Inc. and Sunoco, Inc., which each contributed \$25,000 to the AIChE Foundation's 21st Century Campaign.

The AIChE Web site now features an online edition of CEP – the premier publication for chemical engineering practitioners. ChAPER One, AIChE's magazine for students, joins CEP online and serves as an important resource for chemical engineering students.

A special careers area on the Web helps busy professionals manage their career and even helps them find mentors, and continuing education opportunities. In the coming months, AIChE members will be able to fashion their own Web portal. They will have access to breaking industry news and the latest technological innovations.

Members around the globe have discovered the AIChE Web site and traffic has grown dramatically. In March, AIChE's Web site averaged 3,400 user sessions per day. More importantly, users visit for more than 20 minutes at a time, substantially higher than the industry average of eight minutes per visit.

"AIChE has always been a resource to our chemical engineering professionals," explains Bruce G. Fischer, vice president, Sunoco Chemicals. "We are pleased to help AIChE improve their data deliver through new technologies."

In accepting these donations, Executive Director John Sofranko said, "American Home, ICI, Pfizer and Sunoco have demonstrated their commitment to the chemical engineering profession. We look forward to providing their engineering staff with instant access to the latest engineering information and data."

<http://www.aiche.org/foundation/>



AIChE's 2002 Spring National Meeting, to be held in New Orleans, Louisiana, March 10–14, will break the

mold. Beyond superior technical content and excellent networking events, AIChE will offer a parallel symposium on sustainability, attracting a diverse assembly of experts and attendees; a Webcast short course, connecting learners around the world; and a first-rate conference location.

The Institute will present the AIChE Critical Issues Series, forums that explore issues that are important to chemical engineers but are also significant to society as a whole. The inaugural Critical Issues Series, "Energy and a Sustainable Planet," on March 10–12, will focus on sustainability, with forums on global climate change, alternative energy, and nuclear energy.

The Series will run concurrent with the Spring National Meeting, and will feature a diverse contingency of leaders and policy experts in business and government who will debate and discuss these controversial subjects. The Series will attract business leaders, secondary educators, the media, policy makers, and the general public.

"We are especially pleased about the introduction of a new form of programming, the Critical Issues Series, which we hope will attract an audience that traditionally has not attended AIChE meetings," meeting program chair, Sandra Dudley, told AIChExtra. "The Series will focus on topics which are pertinent to chemical engineering and have broad societal implications."

The Critical Issues Series is a bonus for all Spring National Meeting participants. Those who register for the full meeting will be able to attend the Series free. The Series will dovetail with distinct topical conferences on global climate change and sustainability.

The Spring National Meeting will further involve and connect participants with the launch of its first Webcast, "Improving a Manufacturing Process: A Practical Guide for Plant Personnel." This is a short course in the Process Improvement in Manufacturing topical conference. The Webcast will connect engineers onsite and all over the world in an interactive educational experience. Remote participants will connect through a PC from any location. The Webcast will feature a live audio/video hook-up, PowerPoint slides, and instant interaction with the instructors through email.

The 2002 Spring National Meeting is packed with technical programming, featuring topical conferences ranging from traditional favorites like loss prevention and ethylene production to timely subjects like fuel cell technology and process improvement in manufacturing. For the first time, AIChE will offer a topical conference on professional development, "Career Planning in the

New Millennium,” which will look at job opportunities in emerging industries.

“With fourteen topical conferences, technical programming promises to be some of the best ever for the practicing chemical engineer,” stated Dudley.

The 2002 topical conferences include: Promoting Sustainability Through Innovative Product & Process Development; the 14th Annual Ethylene Producers’ Conference; Fuel Cell Technology: Opportunities and Challenges; the Topical Conference on Natural Gas Utilization; the 5th International Conference on Polymer Processing; the First International Aromatics Producers Conference; IMRET 6: the 6th International Conference on Microreaction Technology; the 3rd International Conference on Petroleum Phase Behavior and Fouling; the 36th Annual Loss Prevention Symposium; the 5th International Conference on Refinery Processing; Distillation Tools for the Practicing Engineer; Process Improvement in Manufacturing; Technologies for Tomorrow’s Chemical Industry; and Global Climate Change and the Chemical Industry.

Many of the topical conferences will offer related short courses or tutorials on Sunday, March 10, inviting participants to learn more about their field from leading experts. Receptions and dinners provide an opportunity for participants to connect with colleagues.

New Orleans is the ideal location for the AIChE conference, literally offering something for everyone. Its unique French and Spanish lineage unfolds in its architecture, cuisine, and entertainment. The conference hotel, the Hilton New Orleans Riverside, is located on the bank of the Mississippi, one block from the historic French Quarter. The hotel is next door to Harrah’s New Orleans Jazz Casino, the Aquarium of the Americas, and an Imax theatre.

Guest programs and plant tours encourage participants to explore the unique character of New Orleans. Featured tours include a day at the New Orleans School of Cooking, a city tour, a cruise in the nearby swamps and bayou, and an evening steamboat cruise on the Mississippi. Featured plant tours include OxyChem, Monsanto and Abita Brewing Company.

Attendees of the 2002 Spring National Meeting can plan on reconnecting with peers and meeting experts from around the world — in addition to hearing from the best and brightest in their fields. Discussion will focus on issues that promise to change the future as attendees learn in new ways and relax in a city known “to let the good times roll.”

Because the meeting will offer so much for AIChE members—and there’s plenty to see and do in New Orleans—members are encouraged to consider bringing along spouses or friends to share the experience.

For meeting information and to register online visit <http://www.aiche.org/spring> or call 1-800-242-4363.

<http://www.aiche.org/spring/>

AIChE'S 55TH CAREER FAIR

Held in conjunction with the Career Fitness Conference, <http://www.aiche.org/careerservices/jobs/careerfit.htm>

Sunday & Monday, April 7 & 8, 2002

Donald E. Stephens Convention Center, Rosemont, Illinois

- **Apply for available job openings** and have the opportunity to interview with company representatives or chat with them informally. Bring plenty of resumes.
- **Network** with fellow engineers and company representatives.

Whether or not you plan to attend the Career Fair, introduce yourself to employers "virtually." Let participating employers preview your credentials prior to the Fair.

Can't Make it?? Submit Your Resume (no fee) Electronically - Opens Feb . 4

Please note: once entered in the system, your resume cannot be edited

We cannot guarantee that you will find a job, or even receive an interview, by participating in the Career Fair. However, our Fairs have proven to be excellent opportunities to make the contacts that may lead to employment.

Historically, organizations that participate in an AIChE Career Fair seek practicing engineers. There are generally very few entry-level opportunities available.

AIChE PITTSBURGH EXECUTIVE COMMITTEE

Chair

Michael Flaherty (michaelp871@hotmail.com)

WSP Chemicals & Technology Inc.
724-266-7688



Vice-Chair & Program

JoAnn Truchan (cricket.jt@att.net)
724-695-1945

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Engineers' and Chemistry Week

Nancy Hirko (nhirko@air-comp.com)
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Committee Chairs

Safety & Environmental: Shiaw Tseng
Scholarship Sam Vance

Web Master

Richard Dupree (rrd@telerama.com)
724-775-5122

the Soldiers and Sailors Memorial Hall, which is located on Fifth Avenue across from the William Pitt Union.

From the East: Cars traveling from the east via the PA turnpike (I-70) should take Exit 6 to Route 370 West. From Route 376 take Exit 7A, Oakland onto Bates Street. Stay on Bates Street until it ends at Bouquet Street, turn left onto Bouquet Street, and then right at the first light onto Forbes Avenue. Turn left at the first light onto Bigelow Boulevard towards Fifth Avenue.

From the West: Cars traveling from the West via the PA turnpike (I-76) should take Exit 3 to I-79 South. Exit from I-79 South to I-279 South. Exit I-279 South at Exit 14 to I-579 South. After crossing the Veterans Bridge on I-579, take the Forbes Avenue/Oakland Exit to the Boulevard of Allies. Follow Boulevard of the Allies to the second traffic light at Halket Street (Howard Johnson). Turn left onto Halket Street and follow to Forbes Avenue. Turn right onto Forbes Avenue and follow to Bigelow Boulevard. Turn left onto Bigelow Boulevard towards Fifth Avenue.

From the North: Take I-79 South to I-279 South. Exit I-279 South at Exit 14 to I-79 South. After crossing the Veterans Bridge an I-579, take the Forbes Avenue/Oakland Exit to the Boulevard of Allies. Follow Boulevard of the Allies to the second traffic light at Halket Street (Howard Johnson). Turn left onto Halket Street and follow to Forbes Avenue. Turn right onto Forbes Avenue and follow to Bigelow Boulevard. Turn left onto Bigelow Boulevard towards Fifth Avenue

From the South: Take I-79 North to I-279 North and follow I-279 through Fort Pitt Tunnels. Exit to I-376 East (first exit off the bridge) and follow that towards Monroeville. Take the Forbes Ave/Oakland Exit. Follow Forbes Avenue to Bigelow Boulevard. Turn left onto Bigelow Boulevard towards Fifth Avenue. The William Pitt Union will be on your left.



DIRECTIONS TO THE WILLIAM PITT UNION

Please note that there is no parking in the driveway of the William Pitt Union. It is recommended that you park at

An industrial sized problem needs an industrial sized solution



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Contact Peggy Panagopoulos
pegpana@chemtech88.com
412-220-4612



Catalyst

American Institute of Chemical Engineers
337 Fourth Avenue
Pittsburgh, PA 15222-2097

Tentative Meeting Schedule for 2001-2002

Date	Event	Location
March 19	TBA	TBA
April 17	TBA	TBA
May 15	Spring Event	TBA



PROUD TO BE AN AMERICAN!