



NCS NEWS

April 1999

A Publication of the National Capital Section of the American Institute of Chemical Engineers

*Upcoming Meetings of the AIChE National Capital
Section*

**“Cooperative Watershed Management: The
Occoquan Experience”**

Dr. Adil Godrej, Associate Director, Occoquan Watershed
Monitoring Laboratory, Virginia Tech

Date and time: Wednesday, April 28th, 6pm

Location: Steak & Ale Restaurant, Vienna, VA

**“Korean Embassy/Korea-U.S. Science
Cooperation Center (KUSCO)/NCS AIChE
Evening Meeting”**

Dr. Yoon-Soo Park, KUSCO

Professor Inyong Ham, The Pennsylvania State University

Mr. Dan Wiley, U.S. Department of Energy

Professor Kyu Yong Choi, University of Maryland

Date and time: Tuesday, May 18th, 6pm

Location: KUSCO, Vienna, VA

Reservations: For both meetings, call Victoria Guvanasen at
703/736-4544.

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Two evening meetings of the NCS are scheduled during the months of April and May. On **April 28th**, Dr. Adil Godrej will present “Cooperative Watershed Management: The Occoquan Experience.” His talk will focus on the almost 600-square-mile Occoquan Watershed, which drains into the Occoquan Reservoir and supplies a significant

population in Northern Virginia. For over 20 years, the Occoquan Watershed Monitoring Program has successfully provided scientific input to management decision-making to preserve water quality in a water-supply watershed that has seen tremendous growth during that time. The long-term presence of the program was crucial in providing appropriate input for many watershed impact considerations, including the recent siting of Dominion Semiconductor. The talk will discuss the issues that led up to the creation of the monitoring program, the organization of the program with local contributing agencies, and an overview of the results.

Dr. Adil Godrej is Associate Director of Virginia Tech's Occoquan Watershed Monitoring Laboratory in Manassas, Virginia. He has 10 years of research experience in watershed monitoring and modeling, non-point source monitoring and control, and the implementation of best management practices. Dr. Godrej is on the Civil and Environmental Engineering faculty in northern Virginia and is also actively involved in the graduate programs offered by Virginia Tech.

Meeting Time/Location: This dinner meeting will be held on Wednesday, April 28th, at the Steak & Ale Restaurant, 215 Maple Ave West, Vienna, VA (ph: 703-281-6310). From the 495 Beltway, take Rt. 66 west, exit at Nutley St. in the direction of Vienna. Continue to Maple Ave. (Rt. 123), take a right on Maple, and proceed 4 blocks to the restaurant (located on the left). From Tysons Corner, take Rt. 123 directly to the restaurant. The meeting begins at 6pm with a cash bar; dinner begins at 6:30pm, and Dr. Godrej's talk will commence at 7:15pm.

Menu/Reservations: Dinner will cost \$20; menu choices consist of Signature Herb Roasted Prime Rib, Sirloin Steak, Hawaiian Chicken, and Stuffed Flounder. All include a choice of baked potato or rice pilaf, beverage, salad, and bread. Please call NCS Treasurer Victoria Guvanassen (ph: 703/736-4544; fax: 703/471-4180; e-mail: vmg@hgl.com) before noon, April 27th for reservations.

KOREAN EMBASSY MEETING

This year's embassy meeting on May 18th will involve the Korean embassy, the Korea-U.S. Science Cooperation Center, and the AIChE NCS. The

meeting will begin with a social at 6pm, followed by dinner. The program will commence at about at 7:15pm and consists of the four presentations:

- 1) Welcome and Introduction of the speakers by **Dr. Yoon-Soo Park** of KUSCO and **Mr. Dan Wiley** of the AIChE NCS;
- 2) Science and Technology of the Silla Period by **Professor Inyong Ham**, Distinguished Professor Emeritus of The Pennsylvania State University;
- 3) U.S. Industry-Government Partnerships by **Mr. Dan Wiley** of the U.S. Department of Energy, Office of Industrial Programs;
- 4) A final presentation by **Professor Kyu Yong Choi** of the Department of Chemical Engineering, University of Maryland.

Meeting Time/Location: This meeting will be held on May 18th at the Korea-U.S. Science Cooperation Center, located at 1952 Gallows Road, Vienna, VA. The meeting begins at 6pm with a cash bar; the program will begin at 7:15pm. It is anticipated that the embassy event will cost no more than \$25 per person. Please call NCS Treasurer Victoria Guvanassen (ph: 703/736-4544; fax: 703/471-4180; e-mail: vmg@hgl.com before May 17th (or sooner, if at all possible) for reservations.

NCS AND NATIONAL ENGINEERING DESIGN COMPETITION

NCS represented AIChE at the National Engineering Design Competition for secondary school students this February. Representatives from various engineering societies, private engineering companies, and intellectual property specialists met in the District to judge the event. Secondary schools from throughout the United States participated. The NEDC is sponsored by the JETS, the Junior Engineer Technical Society, headquartered in Alexandria, Virginia. NCS is also assisting the JETS in the preparation of examinations used in the career guidance of secondary school students.

-- Thomas Wallen, NCS Past Chair

NCS PUBLIC OUTREACH

In October, 1998, the National Capital Section received a Public Outreach grant from AIChE to establish a formal interactive local program with 4-H (initially the 4-H Center at the University of Maryland) and with the Junior Engineering Technology Society (JETS). Our objective is to increase our Section's opportunities to work with high school youngsters within our local communities and increase their awareness of how chemical engineering affects them now and is likely to impact their lives in the future.

Some of our members are already involved in community programs including science fairs, individual tutoring, and similar volunteer activities at local schools. We believe that collaboration at the Section level with 4-H and JETS will permit long range planning involving all three organizations and provide a resource of experienced chemical engineers to both 4-H and JETS. Exposure to practicing engineers might induce talented youngsters to consider career opportunities in engineering and allied fields.

Several of our members have brought their current volunteer activities to our attention and we would like to learn more from others. One member has been involved for several years at the regional and state level with MathCounts - a math skills development program and competition for 7th and 8th graders sponsored by NSPE (National Society of Professional Engineers); another of our members is involved in Project RE-SEED (Retirees Enhancing Science Education through Experiments and Demonstrations), a Northeastern University program that prepares people with science backgrounds to assist middle school science teachers with the teaching of science. He is currently volunteering at a middle school in Montgomery County.

We want to use the available experience of our members to develop a collaborative effort with programs already established by 4-H and JETS. We hope to reach out to youngsters in the community through volunteer activities with these organizations. Some of our members have been active in such activities already. Tom Wallen, Past Chair of the Section, is the AIChE representative to JETS, and

recently volunteered as a judge in a national competition held at George Washington University. Jan Sengers, Chair of the Chemical Engineering Department at the University of Maryland, and an NCS Director, has played a lead role in establishing the University of Maryland as a host for upcoming JETS competitions that will involve high school teams from our region. This year a regional JETS competition was held at Howard University with sponsorship by the D.C. Society of Professional Engineers. We hope to participate more strongly in all of the regional JETS competitions in future years.

In February, we met with 4-H at the 4-H Center at the University of Maryland and are moving towards establishing "Special Interest Groups" within the 4-H structure. 4-H operates on a state/county structure basis with professional program people and educators located in counties throughout Maryland. The same is true in Virginia and 4-H has recently established an office at the University of the District of Columbia. One of our members is exploring establishing a collaboration with 4-H in Virginia to implement local activities there.

The "Special Interest Group" concept is for a small group of students (5 to 8) to meet with an advisor/mentor (preferably 2 people) to set up and carry out a project of interest to all involved, one with a finite time and a clearly defined deliverable. The time frame for a project may be a month or more, but should be completed within a reasonable period. The role of the volunteer advisor/mentor is to do just that. The students are the leaders and the doers. The volunteers guide the students towards a defined problem and in the activities needed to carry it out, but they are responsible for the product. The time involved for a volunteer is a few hours a week at most, but availability can be important. Initially, we'd like to establish several groups, perhaps 3 in Maryland, 2 or 3 in Northern Virginia, and 1 in DC. 4-H will help us identify students and schools; volunteers are free to identify students and schools as well, and the projects will depend on the interests of the volunteers as well as the students. If you're interested, contact David Richman at 301-320-5509 or dmr0313@aol.com for more information.

As these initial activities get underway, we propose to develop a symposium in collaboration with our partners. It will focus on the 21st century and the biotechnology revolution, career opportunities and societal issues involving chemical engineering,

biotechnology, genetic engineering, agriculture, food science and the environment. We expect to benefit from Vision 2020 activities as well. Members in the biotechnology fields are needed to participate in planning for this symposium. Again, call David Richman at 301-320-5509 or dmr0313@aol.com if you'd like to participate in this effort.

--David Richman, External Affairs

--Maria K. Burka, NCS Chair



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