Course X News For October, 1998

In This Issue...

- Joint Distinctions
- Department News
- Department Events
- Study/Travel Opportunities
- On-Campus Recruitment
- Opportunities:
  - Post-Doctoral
  - Industrial
  - Academic

Joint Distinctions

Congratulations to **David Weaver**, who has won a Research Presentation Award from the Division of Colloid and Surface Chemistry at the American Chemical Society National Meeting in Boston, August 23-27, 1998 for his poster on "Palladium-Grafted Mesoporous Materials for Heck Catalysis" with **Christian P. Mehnert** and **Prof. Jackie Y. Ying**. David is currently a Course X senior, and is completing an undergraduate thesis in Prof. Ying's laboratory.
Department News

A belated welcome to Carolyn Baker, who joined Prof. Griffith's lab on September 15th. Carolyn will be working as a Technical Assistant on the "Tissue-Based Biosensors" project. Carolyn received her Bachelor's Degree in Biological Engineering from Cornell and her Master's Degree in Bioengineering from Oregon State. Please drop by 16-436, and welcome Carolyn to the Department!

Chemical Engineering welcomes three new Support Staff members who have recently joined the department: Anna DiMaria, who started as Profs. Jack Howard and Jack Longwell's new AA last week; Janet Campbell, who began working as AA for Profs. Danny Wang and Alex Klibanov; and Belinda Moise, who is working with Connie Beal, for Prof. Langer's lab. Please join me in extending a warm welcome to Anna (Room 66-460/258-0471) Janet (Room 56-579/258-7498) and Belinda (Room E25-342/253-3123).

Safety Alert

There have been a few incidents recently of students playing around with laser pointers who produced a reaction they did not anticipate from a Campus Police officer.

It turns out that law enforcement officers -- our CP's are trained with municipal and state police -- immediately connect a red laser beam with the sight on a sophisticated gun. Seeing a red dot on his body, a police officer thinks someone is aiming a gun at him. You can understand then, why they react forcefully. They typically immediately identify the person holding the laser-emitting device, insist on ID, search him/her if the device is not visible then, and sometimes confiscate the pointer.

The students in question understandably react with surprise or even outrage. There was, after all no weapon, only a pointer. But at that moment they are dealing with an officer whose adrenalin is flowing at maximum levels, creating a charged encounter. It would be better to prevent such misunderstandings from the beginning.

Please tell students to be very careful with laser pointers.

Carol Orme-Johnson
Assistant Dean, Residence Life & Student Life Programs
Director, mediation@mit
(617) 258-8423
Department Events

The Chemical Engineering Department's Fall Seminar Series would like to announce the upcoming seminar by Professor Christopher K. Ober of the Department of Material Science and Engineering, Cornell University on Friday, November 6, 1998. The title of his seminar is listed below in the announcement.

"Creating Ordered Materials by the Interplay of Liquid Crystallinity and Microphase Separation"

Date: Friday, November 6, 1998
Time: 3:00 PM
Place: Room 66-110

A reception will be held before the seminar at 2:45 PM

For an appointment with Prof. Ober, or for more information, please contact:
Arlene Benford
Room 66-460
Phone: 258-7031
E-Mail arline@mit.edu

1998 Hoyt C. Hottel Lecture

Friday, November 13, 1998
Room 66-110 at 3:00 PM
"Energy, Efficency Increases and Emissions Reductions in Light-Duty Vehicles in the U.S.; Past, Present and Future"
Presented by Dr. James R. Katzer

Reception will follow the lecture in Room 66-201.

Meetings with Dr. Katzer will be arranged for Thursday and Friday with a dinner planned for Thursday evening. If you would like to visit with him or attend the dinner please contact:
Arlene Benford
Room 66-460
Phone: 258-7031
E-Mail arline@mit.edu
Study/Travel Opportunities

Live and Work in Germany!

3-12 month paid internship opportunities for Chemical Engineering undergrads, seniors, and graduate students in German/international companies such as:

- BASF
- Bayer
- DIAS
- Hoechst Marion Russel (HMR)
- RWE

The MIT-Germany Program:

Modeled on the highly successful MIT-Japan Program, the new MIT-Germany Program gives students the opportunity to combine their knowledge of German language and culture with their expertise in the fields of engineering and science by working in German companies, German subsidiaries of American companies, or German research institutions.

Eligibility

The program is open to undergraduate, graduate students, and alumni. The MIT-Germany Program will offer participating students internships both during the summer and after their graduation. The MIT-Germany Program is not conceived as another traditional "study abroad" program. Rather the program sees itself as a praxis-oriented first step in the career of the participant. The special qualifications of the candidate will be closely matched with the expectations and demands of the company or research institution.

Requirements

Participating students will be expected to have fulfilled the following minimum requirements (or have equivalent proficiency):

- Two years of university-level German language (German I - IV) with a grade of B or better. At least one course in German beyond German IV, preferably 21F 499 (IAP), 21F 410 or 21F415 that introduces students to important cultural, social, and political aspects of German-speaking countries
- A grade point average of 4.0 or better at MIT
Company Contributions

Participating companies and research institutions will offer:

- The travel costs of the participant
- Compensation which will be based upon the participant's qualification and experience and on the length of stay (summer or year)
- If possible, provision of health insurance for the duration of the stay in Germany and help with housing arrangements.

All further arrangements such as work conditions, work time, form and scope of a detailed job description will be negotiated between the employer and the participant.

Questions about MIT-Germany? Please contact:

Dr. Sigrid Berka
Program Coordinator, MIT-Germany Program
Massachusetts Institute of Technology
292 Main Street
Room E38-274
Cambridge, MA 02139

Phone: (617)253-6982
Fax: (617)258-8048
E-Mail: sberka@mit.edu

Or visit MIT-Germany's Web site at http://web.mit.edu/mit-germany

MIT India Project

Teach · Work · Live · Earn · Learn in India

- Teach teenagers in India: Internet, Web, HTML, Java
- Work for a cutting-edge Indian firm
- Live with an Indian family or in a company guest house
- Earn a modest living allowance for the summer
- Learn about the world's largest democracy and "emerging superpower"

Contact: mitip-contact@mit.edu

Or visit the MIT-India Web site at http://web.mit.edu/itep/www/
MISTI China Program

Internships in China

The MISTI China Program sponsors paid work internships in mainland China, Taiwan, Hong Kong for MIT undergraduate and graduate students in all fields. Interns are placed in multinational companies such as:

- Intel
- Microsoft
- Lucent Technologies
- IBM
- 3M
- Roche Pharmaceuticals
- Ingersoll-Rand

You could also do research at Chinese research institutes such as Chinese Academy of Sciences, Tsinghua University and Fudan University.

For more information, please contact:

Deborah Ullrich, Administrative Director
MIT International Science and Technology Initiative (MISTI)
MIT E38-600
292 Main Street
Cambridge, MA 02139

Phone: (617) 258-7331
Fax: (617) 258-8049
E-Mail: dau@mit.edu

Or visit the MITSI-China Web site at http://web.mit.edu/misti/www/china.htm

On-Campus Recruitment

Seagate Technology
Seagate Technology provides information - the way you want it, when you need it. We are the world's largest manufacturer of disc drives, magnetic discs and recording heads, and a leading supplier of software for enterprise information management. We will be actively recruiting on campus on November 16-17. We invite engineers in Courses 2, 3, 5, 6-I, 6-III, 8, 10, and 18 to sign up for interviews, and to come to our information session to learn more about what we do!

My name is Diane Rucker (III-B '92), and I'd like to invite you to interview with Seagate Technology. We will be on campus recruiting during the following days:

November 16 (7:00 - 9:00) - Information Session in 4-163
November 17 - Interviews 8:30-4:30

Seagate Technology, Inc. (NYSE: SEG) is a leading provider of technology and products enabling people to store, access, and manage information. The Company is recognized as the world's largest manufacturer of disc drives, magnetic discs and read-write heads, an innovator in tape drives, and a leading developer of software for enterprise information management. Founded in 1979, with over $7 billion in revenue for the twelve months ended April 3, 1998, Seagate employs over 86,000 people worldwide and can be found around the globe and on the world

For more information on opportunities about Seagate's on-campus recruiting, contact Diane Rucker at:
Phone: (612)-844-5747 E-Mail: Diane_F_Rucker@notes.seagate.com

For more about Seagate Technology, visit http://www.seagate.com

Return to the top.

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**Post-Doctoral Opportunities**

**Hydrogel Based Molecular Separation Processes**

Qualifications include a Ph.D. in chemistry or chemical engineering with a strong experimental background in hydrogels, organic/polymer synthesis, and related analytical skills. Submit resume, one-page future research plan/interest, and names of three references to:

Dr. Ram B. Gupta
Department of Chemical Engineering
Auburn University, AL 36849-5127

Phone: (334) 844-4827
Fax: (334) 844-2063
Resume review will begin on October 28, 1998 and continue until a candidate is selected and recommended for appointment.

For more about Chemical Engineering at Auburn University, visit http://www.eng.auburn.edu/department/che/

Nanoscale Materials: A postdoctoral fellowship position is immediately available in the area of nanoscale materials. The candidate should have an advanced degree related to materials science and engineering, and should have a very strong background in the physics or chemistry of semiconducting materials, electronic/(or optical) materials and in the processing of microelectronic materials and composites. The candidate must have strong materials synthesis and characterization skills.

Experience in one or more of the following areas will be helpful: sol-gel chemistry, colloidal and surface chemistry, polymer chemistry, organic synthesis, vacuum deposition. The candidate should have good communication skills, be able to perform independent research, and should have the potential to lead new research projects.

Please contact:
Dr. Jun Liu, Staff Scientist
Pacific Northwest National Laboratory
Battelle Boulevard
Box 999
Richland, WA 99353

Phone: (509) 375-2616
Fax: (509) 375-2186
E-Mail: Jun.Liu@pnl.gov

For more about Pacific Northwest National Laboratory, visit http://www.pnl.gov

Industrial Opportunities

Polymer Engineer
Responsibilities: Develop innovative polymer processing technology and optimize existing processes with a primary focus in twin screw extrusion, single screw extrusion, and injection molding. Analyze the effect of compounding and molding operations on product quality, consistency, throughput, and performance using fundamental chemical engineering tools. Transition laboratory processes through pilot operations into manufacturing, and develop methodologies to analyze full scale production processes in the laboratory. Efforts will be focused in the processing of polymer blends, filled polymers and sheet products and will be predominantly experimental. Requires close collaboration as part of a cross-functional team with other CRD scientists and GE's Plastics and Silicones global technology, manufacturing and commercial operations.

Requirements: Ph.D. in Chemical Engineering, Materials Science, Polymer Engineering, or related discipline with a background in polymer rheology, transport phenomena, and 0 to 10 yrs. experience in polymer processing. Strong experimental and analytical skills. Capable of integrating short- and long-term technical priorities in process technology, product technology, manufacturing and applications with GE component business needs. Ability to work as a global technology leader implementing statistical quality tools. Excellent team leadership and communication skills, high energy level and vision.

Desired: Experimental and modeling capabilities in polymer compounding, extrusion and molding of thermoplastics, thermoplastic blends and filled polymers.

Ph.D. Chemical Engineer
Location: Schenectady, NY 12345, USA

Description: The GE Research and Development Center is one of the world's largest and most diversified industrial laboratories. Our CRD facility, a 600-acre site, is located on a wooded bluff overlooking the Mohawk River on the outskirts of Schenectady, NY. The cornerstone of GE's commitment to technical leadership, the advanced innovations and technical expertise produced here have benefited a broad and diverse range of areas - from the information revolution to the environment, from financial services to advanced materials. The results are a myriad of progressive inventions and discoveries that continue to help businesses develop future-generation products and processes.

Responsibilities: Working as a team member of a process development group, discover and develop process options directed toward polycarbonate polymerization technologies. Work with chemists to develop & implement process schemes. Develop polymer isolation & purification schemes. Provide conceptual process designs and preliminary engineering analysis. Develop both statistics-based and fundamental physical models to describe polycarbonate polymerization. Support process innovation scale-up and transition to manufacturing.

Requirements: Seeking Ph.D./M.S. in Chemical Engineering with strong experimental and modeling background in polymer reaction engineering and transport phenomena. Job will require approximately a 75/25 mixture of experimental and modeling work. Strong process development background with demonstrated problem solving ability a must. Knowledge of statistical tools applied to research and...
development is desirable. The successful candidate will work in a results driven, fast-paced environment. This position requires hands-on R&D in the lab and in a pilot facility, if flexibility essential.

Desired: Experience in development and implementation of new monomer and polymer technology. Experience working with GE Plastics on technical projects.

To apply for either of the above two positions please contact:

Irene Dris, Ph.D
Chemical Engineer
GE Corporate R & D Center
Optical Media Technology Program
Dial Comm: 8*833-7112
Phone: (518) 387-7112
Fax: (518) 387-6662
E-Mail: dris@crd.ge.com

For more about GE Corporate R&D, visit [http://www.crd.ge.com/](http://www.crd.ge.com/) or [http://www.crd.ge.com/rd18.html](http://www.crd.ge.com/rd18.html)

Reliability Research Scientist: The Global Reliability Engineering Division of the Procter & Gamble Company located in Cincinnati, OH, has an immediate Ph.D. staff opening. The Global Reliability Engineering Division supports the technology of reliability engineering globally and across all business categories and product lines. The individual must be able to effectively interact with Engineering, communication, teaching and team building skills.

We are staffing a Ph.D. position for a Reliability Research Scientist to serve as a global expert resource to support, innovate and teach the use of reliability engineering statistics, modeling and simulation (e.g. acceptance testing, growth modeling, failure distribution analysis, surge and scheduling analysis, etc.) to improve reliability time to market of complex manufacturing systems. The job requires research and innovation in advancing reliability science and quality statistics applied to consumer product manufacturing, combined with the ability to teach others and implement tools on key projects. An engineering Ph.D. with a theoretical background is desirable with experience in chemical or mechanical operations analysis. The ideal applicant will also have a programming background in software for reliability analysis statistics and discrete-event simulation.

The Procter & Gamble company is a world leader in the research development, manufacture and marketing of a wide variety of health care, beauty care, laundry and cleaning, cosmetics and fragrance, food and beverage and paper products. P&G's annual sales exceed $35 billion, and our annual R&D investment is more than $1.2 billion. P&G offers a competitive salary and benefits package placing us in the top 5% of U.S. firms.
If you meet the qualifications, please send a letter of introduction resume, list of publications, and references by E-Mail to:
Dr. Jonathan S. Tan
The Procter & Gamble Company
6250 Center Hill Avenue
WHTC/W2N06/Box 215
Cincinnati, OH 45224
Phone: (513) 983-1100
E-Mail: tanjs@pg.com

For more about this position at Procter & Gamble, visit http://www.pg.com/cgi-bin/cgiCareers/jobfind3.pl?id=126

Loss Prevention Engineer: (Kemper Insurance Lumbermens Mutual Casualty Company
Location: Tokyo, Japan)

Kemper's loss prevention engineers play an important role for our future success in the coming deregulated environment. They must not only support our client to reduce risks of losing its property, but also provide our underwriters with indispensable client information with which the underwriters judge the client's risk and set an adequate price for a policy. Engineers will be sent to the US for one year to build on their University training and teach them to handle the responsibilities.

Kemper Insurance (Lumbermens Mutual Casualty Company) is a major US-based property and casualty insurer, strong in commercial lines business. The company is now trying to achieve profitable growth in the Japanese market, catching a wave of the "Big Bang," deregulation of the financial industries. Kemper is seeking professional candidates for positions in its Loss Prevention Engineering Department in Tokyo, Japan. We are committed to provide our employees with excellent training to certify as HPR engineers. Resume submissions will be treated with strict confidence.

Responsibilities

● Visit client's site for surveys
● Review and approve contractors' engineering plans
● Make reports to recommend how the client should reduce the risks
● Provide underwriters with information necessary for the pricing
● Help clients achieve recommendations
● Visit accident sites to investigate the cause of accidents

Minimum Required Skills

Candidates must be either recent graduates/soon to graduate engineers with the following skills:
- Bilingual Japanese and English (required fluent Japanese)
- Engineering degree
- Self-motivated and career orientated

Please forward resumes to:
Michael French, Engineering Supervisor
Kemper Insurance
Sumitorno Shiba-Dalmon Bldg. 8F
2-5-5 Shiba-Daimon on, Minato-ku, Tokyo 105-0012
JAPAN
Phone: (011) 03-5408-7755
Fax: (011) 03-5408-7733
E-Mail (preferred method): mfrench@kemperjapan.com

Visit our website at http://www.kemperinsurance.com

**Synthetic Polymer Chemistry: Cohesion Technologies of Palo Alto, CA** is seeking a chemist or biomaterials engineer with training in synthetic polymer chemistry and bicompatible polymers, work experience (preferably industrial) in medical product development, knowledge of FDA regulatory and GMP manufacturing practices for biomaterials, good leadership capability, and strong communications skills, to serve as senior program manager. The position features competitive pay, and opportunities for significant equity participation through stock options.

*Qualifications:* Doctoral degree, 3-5 years medical product development experience preferred, with a recognized company in the medical device/biomaterials field.

For information or to apply please contact:

Alan (amicon@aol.com) Phone: (617) 323-9188

**Vaccine Research: Corixa Corporation** is a leading edge biotechnology company dedicated to the discovery of vaccines for the treatment of cancer and infectious diseases. We currently have a great opportunity available in Vaccine Research for an individual with 2-4 years experience. Requires B.S./M. S. in biochemistry, chemistry, or chemical engineering. Familiarity with a wide range of analytical techniques is essential; protein and peptide characterization, formulation, and/or polymer chemistry experience helpful. Corixa offers an attractive compensation and benefits package and a progressive work environment. Please apply by September 28, 1998, to:

Corixa Corporation, ATTN: 50-0101
1124 Columbia Street, Suite 200
Seattle, WA 98104
Assistant/Associate Professor: The Department of Chemical Engineering of the University of Massachusetts/Amherst is seeking an entry-level, tenure-track assistant or associate professor. Ph.D. in Chemical Engineering or equivalent qualifications and commitment to excellence in teaching and research are required. Duties in undergraduate and graduate teaching; establishment of a research program with supervision of graduate students, fund raising and publication of original results at meetings and in refereed journals. Research area is open, rank and salary commensurate with qualifications.

Preferred starting date is September 1, 1999. Please send a resume, statement of teaching interests, research plan, and arrange for three letters of reference directly to:

Chair, Faculty Search Committee
Department of Chemical Engineering
University of Massachusetts
Amherst, MA 01003-3110
Phone: (413) 545-2507
Fax: (413) 545-1647
E-Mail: mmalone@ecs.umass.edu

For more about ChemE at UMass/Amherst, visit http://www.umass.edu/che

Complete applications should be received by December 1, 1998; applications accepted thereafter until the position is filled.

Tenure-Track Faculty: The University of Pennsylvania is soliciting applications for a tenure-track faculty position in Chemical Engineering. The University seeks an individual with exceptional promise for, or proven record of, research achievement who will excel in the teaching of undergraduate and graduate courses. Applicants must have a Ph.D. in Engineering or equivalent. Interested persons should send a curriculum vitae, including names of at least three references to:

Dr. Raymond J. Gorte
Tenure-Track Faculty: The Department of Chemical Engineering at Iowa State University invites applications and nominations for a tenure-track faculty position. Entry level candidates are preferred. All candidates must have an earned doctorate in chemical engineering or a closely related discipline. Senior candidates must show outstanding achievement in teaching and research and entry-level candidates must show exceptional potential for teaching and research.

The Department of Chemical Engineering has 16 full-time faculty members, about 60 graduate students, and about 500 undergraduates. Degrees are offered at all three levels. The department expanded into new research facilities in 1994.

Iowa State University has strong and growing research programs in engineering and the chemical and biological sciences. Major on-campus funding and research facilities are provided by the Institute for Physical Research and Technology, including the Ames Laboratory of the U.S. Department of Energy and by the University Biotechnology Council.

Applications with resumes including names, addresses and telephone numbers of three references or nominations of potential candidates should be submitted to:

Prof. Dean L. Ulrichson
Department of Chemical Engineering
2114 Sweeney Hall
Iowa State University
Ames, IA 50011-2230
Phone: (515) 294-6944
Fax: (515) 294-2689
E-Mail: dlulrich@iastate.edu

For more about ChemE at Iowa State, visit http://www.public.iastate.edu/~cheme/homepage.html

Assistant/Associate Professor-Environmental Engineering Biotechnology: The Department of Chemical Engineering at Yale University invites applications for an Assistant/Associate Professor position in Environmental Engineering Biotechnology starting July 1, 1999. This position is part of the ongoing initiative at Yale University to develop an interdisciplinary Environmental Engineering
Program involving engineering and science departments in the Faculty of Arts and Sciences as well as the School of Forestry and Environmental Studies. Applicants should have a Ph.D. degree in Environmental or Chemical Engineering or related field. Candidates are expected to have research interests and demonstrated expertise in the application of novel biotechnological processes relevant to Environmental Engineering of aqueous systems. A focus on novel techniques for the biodegradation of organic contaminants in engineered and natural systems would be of particular interest. The successful candidate will be expected to teach undergraduate and graduate courses in Environmental engineering and related engineering science, advise students, and develop a creative and vigorous externally-funded research program.

Nominations and applications with a detailed resume, a description of research and teaching interests, and names and addresses of at least four references should be sent to:

Chair, Environmental Search Committee
Department of Chemical Engineering
Yale University
P.O. Box 208286
New Haven, CT 06520
Phone: (203) 432-2222
Fax: (203) 432-7232
E-Mail: gary.haller@yale.edu

For more about Chemical Engineering at Yale, visit http://www.yale.edu/yaleche/ChE.htm#Research

For more about Yale's School of Forestry and Environmental Studies, visit http://www.yale.edu/forestry/about/about.html

Assistant Professor: The Department of Chemical and Petroleum Engineering at the University of Pittsburgh invites applications for a tenure-track position at the assistant professor level. The applicant should have (or expect to receive before taking the position) a PhD in chemical engineering or a related field, a strong commitment to undergraduate and graduate education, and the ability to develop an internationally recognized research program. The research area is open; however, applicants in biomaterials and tissue engineering, catalysis, and environmental issues relating to energy are especially encouraged to apply. The Department has a research expenditure level of approximately $3.4 million/year, placing us in the top 25 federally supported departments in the U.S. Informal interviews will be held at the November AIChE Meeting. A rapid response to this advertisement is encouraged. Please send an application letter, CV, research plans, and the names of 4 references to:

Professor Mohammad M. Ataai, Chairman of the. Search Committee,
Department of Chemical and Petroleum Engineering
Room 1249 Benedum Hall
University of Pittsburgh
Tenure-Track Faculty (2+): The Department of Chemical Engineering at Northeastern University invites applications for several positions that are available for tenure-track faculty appointments at all levels. Applicants for the positions must have a Ph.D. in chemical engineering or a related field and a strong commitment to excellence in teaching and research. Preference will be given to individuals with research interests in the areas of advanced materials, biotechnology, and environmental protection. Responsibilities include teaching at the undergraduate and graduate levels, graduate student supervision, and establishment of a funded research program. At least two positions are available as early as January 1999. Applications will be accepted until positions are filled. Salary and rank are commensurate with experience. Applications from members of under-represented groups are particularly encouraged. Please send a letter of application, statement of teaching and research interests, and current resume including the names of 3 references to:

Professor Gilda Barabino, Search Committee Chair
Department of Chemical Engineering (342 SN)
Northeastern University
360 Huntington Avenue
Boston, MA 02115
Phone: (617) 373-3900
E-Mail: gbarabin@lynx.dac.neu.edu

For more about Chemical Engineering at Northeastern, visit http://www.coe.neu.edu/chemical/chemeng.html

Tenure-Track Faculty: The Department of Chemical Engineering at the Worcester Polytechnic Institute (WPI) invites applications for a tenure-track faculty position at the Assistant Professor level to begin Fall, 1999. WPI is the 3rd oldest, nationally ranked, technological university with 2,600 undergraduate and about 1,000 full- and part-time graduate students, and an innovative project-based education. The department currently comprises 10 faculty and about 215 undergraduate and 25 graduate students. The active research areas are catalysis and reaction engineering, zeolite technology, biochemical engineering, advanced materials, and environmental engineering. We seek an outstanding individual with a Ph.D. in Chemical Engineering or a closely-related field who can supplement or complement our graduate offerings. Demonstrated excellence in research and a strong commitment to teaching are essential. The selected candidate will be expected to develop a vigorous research program of international repute and teach effectively at both the undergraduate and graduate levels.
Applicants should submit a curriculum vitae along with copies of representative publications, research and teaching plans, and a list of references to:

Chair Faculty Search Committee  
Department of Chemical Engineering  
Worcester Polytechnic Institute  
100 Institute Road  
Worcester, MA 01609-2280  
Phone: (508) 831-5250  
Fax: (508) 831-5853  
E-Mail: rdatta@wpi.edu

For full consideration, applications should be received by December 15, 1998.

For more about Chemical Engineering at WPI, visit http://www.wpi.edu/Academics/Depts/ChemEng/

Tenure-Track Faculty: The Department of Chemical Engineering at the University of Delaware invites applications for a tenure-track faculty position. A Ph.D. in Chemical Engineering or a closely related field is required. Successful applicants will be expected to carry out a vigorous research program, teach, and advise students at both the undergraduate and graduate levels. The Chemical Engineering Department is well-equipped and maintains state-of-the-art laboratories and computational facilities for both experimental and theoretical research. The department has strong research programs in bioengineering, kinetics and catalysis, colloid and surface science, polymers and composites, molecular thermodynamics, separations, materials science, and environmental fields.

Please send a curriculum vitae, a description of research and teaching interests, and the names, addresses and telephone numbers of three references to:

Professor Andrew L. Zydney, Search Committee Chairman,  
Department of Chemical Engineering  
University of Delaware  
Newark, DE 19716-3110  
TEL: (302) 831-2399/FAX: (302) 831-1048  
E-Mail: zydney@che.udel.edu

Applications must be postmarked by January 11, 1999.

For more about Chemical Engineering at U. Delaware, visit http://www.che.udel.edu

Assistant/Associate Professor (Microbiological): The Agricultural and Biological Engineering
Department, Pennsylvania State University.

Starting Date: January 1, 1999 or as negotiated.

Responsibilities: This position has approximately 45% teaching and 55% research responsibility in the area of microbiological engineering. The teaching responsibility would include teaching approximately three 3-credit courses per year primarily for agricultural and biological engineering, microbiology, and food science students. The courses could include both graduate and undergraduate instruction with the main responsibility being for microbiology and microbiological engineering related courses. The research responsibility would be to develop an internationally recognized program in microbiological engineering specifically, the application of engineering principles to microbiological safety of food and food systems with emphasis on computational and visualization technologies. It is expected that the successful candidate will attract outside funding to support her/his research program.

Qualifications: Ph.D. in Agricultural and Biological Engineering or closely related discipline. Fundamentals in Engineering or Professional Engineer registration is desirable. Candidates are expected to have demonstrated strong teaching capabilities. They should show commitment to a teaching and research career and dedication to life-long learning and productivity. Candidates must reveal an interest and capacity to pursue competitive research funds and to collaborate with interdisciplinary teams of scientists and engineers.

Salary: Competitive, commensurate with background and experience. An attractive benefits package is provided.

Applications: Applicants should submit a letter of application, resume, academic transcripts, and the names and addresses of three professional references to:

Dr. Paul N. Walker, Search Committee Chair
Penn State University
Department of Agricultural and Biological Engineering
223F Agricultural Engineering Building
University Park, PA 16802
Phone: (814) 865-4582
Fax: (814) 863-1031
E-Mail: pnw@psu.edu

Applications will be accepted until November 30, 1998 or until a qualified candidate is identified.

For about Agricultural/Biological Engineering at Penn State, visit http://server.age.psu.edu/

Assistant Professor: The Department of Chemical Engineering at the University of Tulsa is seeking qualified candidates for a tenure-track position at the Assistant Professor level, with a starting date of
The successful candidate must have a sincere commitment to excellence in teaching as well as research. Minimum qualifications include an earned doctorate or its equivalent in chemical engineering or a closely related field, and the ability to conduct high-quality, externally funded research. The Department of Chemical Engineering has a strong reputation in petroleum and natural gas processing and refining, and related environmental research. The Department, one of nine in the College of Engineering and Natural Sciences, offers degree Programs through the Ph.D. degree, with a current enrollment of approximately 150 students. Applicants should forward a one-page summary of projected research activities, a statement of teaching interests and qualifications, and the names, addresses and phone numbers of three references. Applications should be sent to:

Prof. Keith Wisecarver, Chair  
Department of Chemical Engineering  
University of Tulsa,  
600 S. College Ave.,  
Tulsa OK 74104-3189  
Phone: (918) 631-2226  
Fax: (918) 631-3268  
E-Mail: keith-wisecarver@utulsa.edu

Screening of candidates will begin October 1st and will continue until the appointment is made.

For more about Chemical Engineering at the Univ of Tulsa, visit [http://cer.ce.utulsa.edu/](http://cer.ce.utulsa.edu/)

**Tenure-Track Faculty: Drexel University, Chemical Engineering Dept.** Our department seeks individuals with exceptional promise for establishing, strong, research programs and for developing effective teaching skills. Initial appointment will be at the Assistant Professor level. The candidate must hold a PhD in chemical engineering or a closely-related discipline. His or her research area, although open, should enjoy the potential for significant external support.

Drexel University is a private, nonsectarian university located near the center of Philadelphia and sharing a common border with the University of Pennsylvania. There are approximately 6,000 undergraduates and 2,000 graduate students. The Chemical Engineering Department has approximately 350 undergraduate students, 35 graduate students, and nine faculty. The faculty include two CAREER award winners and one Presidential Faculty Fellow. Current research strengths include biomedical engineering biochemical engineering process control, and semiconductor processing.

Send a CV, along with a summary of research plans and names of two professional references to:

Prof. Elihu D. Grossmann, Faculty Search Committee Chair  
Dept. of Chemical Engineering  
Drexel University  
32nd & Chestnut Streets
Assistant/Associate Professor (2+): The Department of Chemical Engineering at Michigan Technological University (MTU) invites applications for tenure-track positions at the Assistant/Associate Professor level available beginning September, 1999. Positions are available in Chemical Engineering, with the possibility of a joint appointment in the Center for Biomedical Engineering for applicants with interests in this area. Salary will be commensurate with qualifications and experience. The Department seeks individuals who possess an outstanding academic record, have demonstrated commitment to excellence in undergraduate and graduate education, are capable of establishing a strong research program, and compliment MTU's existing strengths.

Applicants with significant industrial experience are encouraged to apply. Applicants must possess a PhD in Chemical Engineering or related discipline. Please send letter of application, curriculum vitae, statement of research plans, teaching interest and the names/addresses of three references, and a set of representative publications to:

Faculty Search Committee
Chemical Engineering Department, Room 203
CSE Building
Michigan Technological University
1400 Townsend Drive,
Houghton, MI 49931-1295
Phone: (906) 487-3132
E-Mail: khschulz@mtu.edu

Consideration to qualified applicants will begin on January 1, 1999.

Assistant Professor: Applications are being accepted for a position as Assistant Professor of Chemical Engineering with an initial appointment for four years. Outstanding individuals with a Ph.D. and a strong commitment to original research and teaching excellence are encouraged to apply. A curriculum vitae including a list of publications, a brief description of proposed research activities, and three letters of recommendation should be sent to:
Tenure-Track Faculty (2): The Department of Chemistry at Washington University in St. Louis invites applications for two tenure-track faculty positions at the Assistant Professor level to begin in September 1999. The search will focus on inorganic chemistry, materials chemistry, and physical chemistry. Participation in the teaching of core chemistry courses at both the undergraduate and graduate levels will be required. Applications should be received by 31 October 1998 and should consist of a curriculum vitae and a research proposal. Candidates should arrange for three letters of reference to be received by the same deadline.

Address all materials to:

Faculty Search Committee
Department of Chemistry
Campus Box 1134
Washington University
One Brookings Drive
St. Louis, MO 63130-4899
Phone: (314)935-6530
Fax: (314)935-4481
E-Mail: ackerman@wuchem.wustl.edu

For more about Chemistry at Wash U, visit http://www.washu.edu

Department Chair: School of Engineering at Manhattan College (NY) seeks an Associate Professor or Professor to serve as department chair. Commitment to excellence in undergraduate and graduate teaching, current record of scholarly publication and demonstrated leadership skills essential. Expertise in separation processes preferred, other specialties considered. Industrial experience desirable.

Qualifications: Doctorate in chemical engineering required.

Manhattan College is a private Lasallian Catholic college located in the Riverdale section of the Bronx, approximately 20 minutes away from Manhattan. The College offers programs in the arts, science,
engineering, business, education and human services. Manhattan was founded in 1853 by the Brothers of Christian Schools, opening its doors to qualified students from all economic, religious and national backgrounds.

Candidates should send resume and names of three references to:

Dr. Helen C. Hollein, Dean of Engineering
School of Engineering
Manhattan College
4513 Manhattan College Parkway
Riverdale, New York 10471
Phone: (718) 862-7186
Fax: (718) 862-7819
E-Mail: hhollein@manhattan.edu

Deadline Date: 10/15/1998, or until the position is filled.

For more about Chemical Engineering at Manhattan, visit http://www.manhattan.edu/engineer/chem/chemeng.html

Faculty (1+): The Department of Chemical Engineering at the University of Illinois of Urbana-Champaign invites applications from qualified candidates for one or more full-time regular faculty positions (rank open). A preferred starting date for these positions is August, 1999. In order to ensure full consideration, applications must be received by January 1, 1999. Applications will be accepted after January 1, 1999 until the position is filled. Interviews may be conducted during the application period, but all applications received by January 1 will receive full consideration: salary and appointment level are open and will depend upon qualifications. A Ph.D. with a distinguished academic record is required. Duties include teaching undergraduate and graduate courses, and direction of M.S. and Ph.D. theses. The candidate is expected to develop a strong imaginative research program and to engage in outstanding scholarly activities leading to national recognition. Past accomplishments should support these expectations. Applications with curriculum vitae and names of three references should be sent to:

Professor Charles F. Zukoski, Head of Chemical Engineering
University of Illinois
114 Roger Adams Lab, Box C-3
600 S. Mathews Avenue
Urbana, Illinois 61801
Phone: (217) 333-3640
E-Mail: czukoski@uiuc.edu

For more about Chemical Engineering at Illinois, visit http://www.scs.uiuc.edu:80/chem_eng/
Assistant Professor (Biological/Biomechanical)

Appointment: Academic tenure-track position, approximately 66% Research in the Louisiana Agricultural Experiment Station and 34% Teaching in the LSU College of Agriculture.

Duties and Responsibilities: The Department of Biological and Agricultural Engineering, Baton Rouge, Louisiana is seeking a faculty member to develop and lead a research and teaching program in Biological and Agricultural engineering. Research projects will be in Biological and Biomechanical Engineering, for example aquaculture, animal, and biological and agricultural systems, including systems for the culture, harvesting, grading, processing, and by-products utilization of Louisiana's economically-important species. The faculty member should be innovative in research approaches and willing to participate in an interdisciplinary research environment to provide expertise in Biomechanical Engineering. Teaching duties will include core undergraduate courses in Biological Engineering, and undergraduate and graduate courses in Biomechanics and/or Aquacultural Engineering. The faculty member will direct graduate students and provide expertise in this area of advanced study.

Qualifications: Applicant must have earned a Ph.D. in biological engineering, agricultural engineering, mechanical engineering, biomechanics engineering, aquacultural engineering or related engineering discipline with emphasis, course work, and/or experience in biomechanics or aquacultural engineering applications.

Salary and Benefits: Salary commensurate with training and experience. Benefits include University holidays, earned annual and sick leave and option group hospitalization and group life insurance.

Date Available: September 1, 1998

Deadline: June 1, 1998 or until a suitable applicant is found.

Application: Submit letter of application, resume, transcript and a list of three references to:

Dr. Lalit R. Verma, Professor and Head
Biological and Agricultural Engineering Department
Louisiana State University
Baton Rouge, Louisiana 70803-4505
Phone: (225) 388-3153
E-Mail: lverma@gumbo.bae.1su.edu

For more about LSU, visit http://www.lsu.edu

Assistant Professor (1-2): The Department of Chemical Engineering at the University of Virginia seeks outstanding candidates for one or two faculty positions at the Assistant Professor level, although
consideration can be given to an appointment at a higher level. Applicants should have a Ph.D. in Chemical Engineering or a related field, a record of excellence in research, and a commitment to teaching at the undergraduate and graduate levels.

The Department of Chemical Engineering currently has ten faculty members, approximately fifty undergraduate students in each year, and fifty graduate students, 75% of whom are doctoral students. The department currently occupies a modern (1992) laboratory and office building as well as space in Thornton Hall, the main engineering building. Research activities in the department currently are concentrated in reaction and electrochemical engineering, catalysis, separations science and technology, biochemical engineering, bioremediation and environmentally benign processing, and molecular simulation. The School of Engineering and Applied Science is composed of nine departments with 1800 undergraduate students and about 650 graduate students. The University of Virginia, founded by Thomas Jefferson, is consistently ranked as one of the finest public universities in the United States.

Interested parties should submit a curriculum vitae, a statement of teaching and research goals, and the names of three references to:

Chair, Faculty Search Committee
Dept. of Chemical Engineering
University of Virginia
Charlottesville, VA 22903-2442
Phone: (804) 924-7778
Fax: (804) 982-2658
E-Mail: chesearch@virginia.edu

For more about Chemical Engineering at the University of Virginia, visit http://www.che.virginia.edu/dept_main.html

The search will remain open until the position is filled.

Tenure-Track Faculty (1): The Department of Chemistry at Virginia Polytechnic Institute and State University solicits applications for a tenure-track faculty position starting August 15, 1999 in any area of experimental polymer physical chemistry. Rank and salary commensurate with credentials. The successful candidate will be involved in pertinent interdisciplinary research activities on campus (NSF Science and Technology Center, Polymeric Materials and Interfaces Laboratory, Center for Adhesive and Sealant Science, Center for Composite and Material Structures, etc.).

Minimum requirements include a Ph.D. in Chemistry, Polymer Science, Materials Science or related field and the potential for excellence in teaching undergraduate and graduate topical courses. A firm commitment to develop an internationally recognized research program, to establish and maintain significant external funding and to publish in high quality peer-reviewed journals is expected. Applicants should submit a curriculum vitae, including a list of publications, teaching and research plans.
with start-up requirements. Application materials, as well as three letters of recommendation, should be sent to:

Prof. Herve Marand, Chair, Polymers
Physical Chemistry Search Committee
Department of Chemistry
Hahn Hall Room 2103
Virginia Tech
Blacksburg, VA 24061-0212
Phone: (540) 231-8227
Fax: (540) 231-8517
E-Mail: hmarand@chemserver.chem.vt.edu

For more about Prof. Herve Marand's work at Virginia Tech, visit [http://www.chem.vt.edu/chem-dept/marand/HM.html](http://www.chem.vt.edu/chem-dept/marand/HM.html)

For more about Virginia Tech, visit [http://www.vt.edu/](http://www.vt.edu/)

Screening of applications will begin on January 10, 1999. Candidate interviews will be scheduled after February 1, 1999 and continue until the position is filled.

**Assistant/Associate Professor (Materials Synthesis): Chemistry Department, University of Missouri-Rolla.** Applications for a new tenure-track, Assistant/Associate Professor position in area of polymers, coatings, and/or materials synthesis to start September 1, 1999. Candidates must have earned a Ph.D. in Chemistry. Postdoctoral experience is desirable. Responsibilities to include teaching both undergraduate and graduate courses in organic organic chemistry, developing a strong, independently-funded research program, directing graduate and undergraduate research, and effectively interacting with faculty, staff and students. Expertise required in polymers, coatings, and/or materials synthesis (first priority to areas related to polymers and coatings). Opportunity to participate in UMR's interdisciplinary Graduate Center for Materials Research. The committee will begin review of applications on November 1, 1998, but applications will be accepted until the position is filled or January 31, 1999, whichever is sooner. Send applications, comprising of a complete vitae, a statement of research and teaching plans, and three letters of reference to:

Human Resource Services,
Reference Number R52797
University of Missouri-Rolla
201 North Bishop,
1870 Miner Circle
Rolla, MO 65409-1050
Phone: (573) 341-4451
Fax: (573) 341-6033
Lecturer: School of Engineering, University of Edinburgh. Applications are sought for a permanent lectureship which is available immediately. Applicants must have a Ph.D. in Chemical Engineering, or in a cognate engineering or science discipline; and be able to demonstrate a good track record in research and a strong commitment to teaching (the post holder will be expected to contribute to the teaching of both BEng and MEng degrees).

The area of research is open. The starting salary is dependent on qualifications and experience, in the range of AT2A (£16,366 - 21,436) or AT2B (£22,332 - 28,545) per annum.

Informal enquiries may be made to:

Professor N.A. Seaton, Head
School of Chemical Engineering
University of Edinburgh
Phone: (011) 44-131-650-4867
Fax: (011) 44-131-650-6551
E-Mail: n.seaton@ed.ac.uk or nigel@chemeng.ed.ac.uk

Further particulars including details of the application procedure should be obtained from:

Personnel Department
University of Edinburgh
1 Roxburgh Street
Edinburgh EH8 9tB
UNITED KINGDOM

For more about the University of Edinburgh and this position, visit http://www.admin.ed.ac.uk/persnnel/recruit.htm

Assistant Professor: A faculty position at the Assistant Professor level at the University of California, Santa Barbara in Chemical Engineering is available, effective July 1, 1999. Candidates must have a Ph.D. in Chemical Engineering or a related field, but are not restricted to particular areas of research. We seek outstanding individuals who will contribute to the academic programs of the department and have the potential to become leaders in their fields of research. Please send resume, reprints of representative publications, a statement of research and teaching plans, and a list of four references to:

E-Mail: fblum@umr.edu

For more about Chemistry at U.Missouri-Rolla, visit http://www.chem.umr.edu/
Tenure-Track Faculty: Cornell University invites applications for a tenure-track position in the School of Chemical Engineering. Appointment at any rank is possible depending on the candidate's experience and achievements. The successful candidate should be capable of developing an outstanding research program.

Although all research areas will be considered, emphasis will be placed on work involving materials, polymers or bioengineering. The individual who is hired can benefit from associations with Cornell's interdisciplinary research centers, national facilities, and national resources such as the Cornell Center for Materials Research, the Cornell Nanofabrication Facility, the Center for Theory and Simulation in Science and Engineering, the Center for Advanced Technology in Biotechnology, an NIH-funded Resource for Macromolecular X-ray Diffraction and Biophysical Imaging and the Cornell High Energy Synchrotron Sources. Cornell University provides an environment that promotes collaboration with other faculty, including those in other departments and colleges.

Applications should include a current CV, a statement of research interest, copies of key publications and the names of at least three references. Applications should be submitted to:

Faculty Search Committee  
School of Chemical Engineering  
120 Olin Hall  
Cornell University  
Ithaca, NY 14853  
Phone: (607) 255-8656  
Fax: (607) 255-9166  
E-Mail: don@cheme.cornell.edu

For more about Chemical Engineering at Cornell, visit http://www.engr.cornell.edu/
Thanks To...

Prof. Armstrong, Elaine Aufiero, Connie Beal, Arline Benford, Dr. Sigrid Berka, Prof. Griffith, Seth Jameson, Prof. Langer, Prof. Lauffenburger, Gareth McKinley, Prof. Rutledge, Emmi Snyder, Dr. Deborah Ullrich and Prof. Ying for their contributions to this edition of the Course X News!

Submissions for the Course X News should be sent to:
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Assistant for Publications, Payroll & Fellowships
MIT Administrative Services, 8-328
77 Massachusetts Ave.
Cambridge, MA 02139
E-Mail: gsands@mit.edu
Phone: (617) 253-0949
Fax: (617) 253-9894