



# TUFTS

Fall 2005

## DEPARTMENT OF CHEMICAL & BIOLOGICAL ENGINEERING ALUMNI NEWSLETTER

### Welcome from the Department Chair



Professor Georgakis

Dear Friends,

Our Spring 2005 Alumni Newsletter has received an overwhelmingly positive response from Alumni interested in re-connecting with the Department. With this step, we are closer to our goal of advancing and strengthening our overall alumni communications efforts. Please help us continue towards this goal by filling out and returning the alumni Survey on page 4.

The past year has been eventful for us. Since our last communication, we have learned of the death of Professor Martin

Sussman. He was a man admired by faculty and students alike, and will be greatly missed. A scholarship has been set up in his name. Details for this can be found on page 2.

The May 7th Symposium in honor of Professor Gregory Botsaris and the subsequent Alumni Dinner was an enormous success. The faculty surprised Prof. Botsaris with the announcement of the establishment of an annual lectureship in his honor. A fundraiser is underway to help endow this lectureship. The alumni dinner will be continued regularly; we hope to see as many of you as possible at these events.

Recently, the Department unveiled an improved website with a dedicated page for alumni rela-

tions (<http://ase.tufts.edu/chemical/alumni.htm>). This page will be updated on a regular basis, so please check in when you have a chance!

The Department is currently undertaking a faculty search for an Associate or Assistant Professor with a research focus in biological or biochemical engineering that will help us to further strengthen our new integrated core in chemical and biological engineering.

All my best to you in the coming months, and please keep in touch!

*Dr. Christos Georgakis,  
Department Chair  
October 2005*

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### Department Mourns the Passing of Prof. Martin V. Sussman

The ChBE Department was deeply saddened to learn of the death of Martin V. Sussman, Professor Emeritus, on April 13, 2005. Professor Sussman was enormously popular with students and widely respected within the Tufts community.

Professor Sussman grew up in New York City, entering high school at age 12. At 19, he received his undergraduate degree in chemical engineering from the City College of New York. He earned his doctorate in chemical engineering from Columbia University. Professor Sussman was a Fellow of both the American Institute of Chemical Engineers and American Institute of Chemists, and was a registered Professional Engineer in the state of

Massachusetts. He was a gentleman, an inventor, and a scholar who planted seeds of technical knowledge in the world.

His research interests focused on fiber technology, biotechnology, and separation processes. Professor Sussman held more than 20 patents that cover, among other inventions, the "Incremental Draw Process"™ that has been used to manufacture millions of pounds of synthetic fibers, and the "Fibra-Cel"™ tissue culture matrix used in the production of interferon and interleukin.

Martin served the Chemical Engineering Department for 37 years before retiring and was chairman for ten years. He was one of the last

members of the faculty to serve our country during World War II.

Students who knew him best as an enthusiastic and entertaining teacher of thermodynamics are invited to share their thoughts and stories about Professor Sussman on the Department's website. Please take a look! <http://ase.tufts.edu/chemical/newsMartinSussman.htm>

An undergraduate research scholarship has been established by the Department in his name. Please see the fundraising article on page 2 for more details.



Professor Martin V. Sussman

## Featured Alumnus: Steven Demetriou, E'80

Steve Demetriou was honored with the Department's *Distinguished Alumnus Award* at the May 7, 2005 Alumni Dinner. Steve graduated from Tufts University with a Bachelor of Science degree in Chemical Engineering in 1980. He was chosen to receive this award because he embodies many of the successful traits that our illustrious graduates have demonstrated over the years.

In December 2004 he became Chair-

man and Chief Executive Office of Aleris International, Inc. following the merger of Commonwealth Industries, Inc. and IMCO Recycling, Inc. Prior to Aleris, Steve was appointed President and Chief Executive Officer of Commonwealth in June 2004 after serving as a member of its board of directors since 2002. He has also served as President and CEO of Noveon, Inc. and Executive Vice-President of IMC Global, Inc.

On October 3, 2005, Steve was named Chairman of the Aluminum Association's Executive Committee.

Recently, we welcomed Steve as a member of the Department Advisory Board, which provides guidance to the Department.



Steve Demetriou receives the Distinguished Alumnus Award from Dr. Christos Georgakis

## Faculty News

Our faculty continues to achieve national recognition for excellence in novel research and has been awarded prestigious grants in the past year.

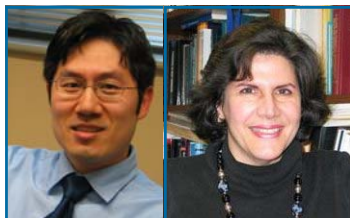
Professor Kyongbum Lee has been awarded an NIH grant for his investigation of nano-ceramic materials for metabolic stem cell engineering. The major goal of this project is to investigate whether nanometer scale features of a novel ceramic scaffold can be used to direct mesenchymal stem cell differentiation into the osteoblast lineage. Professor Lee's approach involves metabolically optimizing culture and differentiation conditions. Findings should contribute to improving efficiency of

autologous adult stem cell use for bone tissue engineering.

Under the umbrella of the DOE's Hydrogen Fuel Initiative Program, Professor Maria Flytzani-Stephanopoulos has been awarded a grant of \$1.2 million over three years. Research work under this grant, entitled "Nanostructured,

metal-ion modified ceria and zirconia oxidation catalysts," will be conducted at Tufts and Columbia University under the direction of Professor Flytzani-Stephanopoulos.

Specifically, the team will examine a recent discovery at Tufts of an atomic-scale interaction between gold and cerium oxide, which can lead to identification of the active sites for the water-gas shift reaction and, most importantly, to rational design of low-cost catalysts for fuel cell applications.



Professors Kyongbum Lee & Maria Flytzani-Stephanopoulos

## Friends of the Department Club

The ChBE Department has launched a new fundraising initiative named "Alumni Friends of the Department Club," which is based on offering alumni an annual "membership" and is intended to complement and strengthen the Department's alumni communications efforts. A second initiative, an Industrial Friends of the Department Club, is currently in development.

We have outlined three membership levels: Sponsor (\$200), Patron (\$500), and Benefactor (\$1,000). Gifts such as these will enable us to increase communications efforts, support novel research and educational activities, and give alumni the opportunity to shape the education of future engineers. Most importantly, Friends of the Department will receive public recognition for their gen-

erosity.

The Friends of the Department Club will function as a general fundraising umbrella for specific efforts, such as the Martin V. Sussman Memorial Scholarship and the Gregory Botsaris Lectureship fund, both of which were announced at the Department's May 2005 Symposium.

A memorial scholarship fund was established upon the passing of Professor Martin V. Sussman in April 2005. Donations to the Department in his name will provide the seed money for an undergraduate research scholarship for deserving seniors.

The Gregory Botsaris Lectureship

fund will provide for a distinguished speaker to visit the Tufts campus each year. The fund was presented as a gift to Professor Gregory Botsaris during the Alumni Dinner in recognition of his outstanding leadership and dedication to the Department.

Several of the Department's faculty, friends and alumni have already stepped forward to contribute to these two fundraising initiatives and demonstrated that they are truly friends to the Department. We are extremely grateful for their kindness and generosity. If you are interested in becoming a Friend of the Department, please fill in the pledge section of the Alumni Survey on page 4.

## Alumni Updates

Thank you to those of you who responded to our previous Alumni Updates survey. We received many positive responses, and are thrilled to share them with you! If you have news that you would like to share with the Department, or updated contact information, please fill out the survey on the following page and return to us for inclusion in future newsletters. In addition, if you know of any ChBE alumni who does not currently receive our communications, please forward their contact information to the Department. We are working hard to replace the alumni data that was lost with a change in database format that occurred several years ago, and would very much appreciate your help in this effort. Thank you very much!

Sadly, Milton Glaser, **E34**, passed away on February 26, 2003. Our thoughts are with his family.

Herbert Kaster, **E42**, retired in 1985 as Director of Material Management, Occidental Petroleum Corp.

Richard Vincent, **E42**, retired September 1, 1984 in Aberdeen, Scotland. Previously, he served as Managing Director of Texaco North Sea United Kingdom Co. Mr. Vincent served Texaco International for 48 years.

Charles Wolpert, **E49**, is still active, instructing bridge on cruise ships, moving around the world and thoroughly enjoying himself!

Dale Walker, **E51**, retired from Shell Oil after 37 years. He has been active in the Society of Plastics Engineers for 45 years and remains an Emeritus member.

After 36 years of service at General Motors, Joseph DiFonzo, **E56**, retired and launched his own company, Consulting Engineering Worldwide, ten years ago. He has been married for 47 years and has 10 children and 18 grand-children. He has set up automotive air-conditioning plants in China, Venezuela, Argentina and Mexico.

In 1997 the passing of Robert E. Simmons, **E56**, was mourned. He will be missed.

Kenneth Jacobsen, **E57**, retired as President of K&L Research in 1987. He holds 5 patents and held the position of Mayor of Madeira Beach, Fla., for 12 years. Kenneth has 2 children and 4 grand-children.

Stephen Jaffe, **E64**, was chosen to receive the Chemical & Reaction En-

gineering Practice Award from AICHE in 2004. Stephen remains active in the Department in his role as a member of the ChBE Advisory Board.

Robert Petersen, **E66**, recently retired but continues to provide management consulting, and is always looking for more clients! He has 3 children, all married: Christine-Sr. VP of Marketing for TripAdvisor; Timothy, Dr. and Clinical Psychologist at Mass. General; and Stephen, a German teacher. Mr. Petersen has three grand-children.

Jeffrey Eagles, **E68**, went on from Tufts to receive an M.S. in Hydro-geochemical Engineering in 1969 and an MBA in 1981, both from Harvard University.

John Murphy, **E68**, retired from Dow Chemical Co. in 1996 after 28 years of service. He was recently elected a Fellow of AICHE. Mr. Murphy retired from the U.S. chemical Safety & Hazard Investigation Board after 5 years as an investigator and recently moved to Florida.

Hamzah Baksh, **E77**, currently resides in Kuwait and has generously extended an open invitation to assist ChBE Alumni in the event they are visiting the area.

Wayne Canner, **E79**, married Kate Lindberg in 1987. They have 2 children, John (b. Aug. 8, 1993) and Emily (b. Oct. 9, 2000). Wayne has been working for General Electric since 1979.

Joe Abruzzo, **E84**, married Dr. Susan McInnes on Dec. 28, 1991. They have 2 children, Mac (b. Aug. 10, 1993) and Lauren (b. March 27, 1995).

Stewart Sonnenfeldt, **E85**, lives with his 2 children in Burlingame, CA, working in finance and tin internet & software industries. Mr. Sonnenfeldt currently works with the San Francisco Bay area in Clean Technology industries.

Charissa Rigano, **E90**, traveled with her husband, Alan Kao, to China in Spring 2005 to adopt their 16-month old daughter, Zeena. She joins older sister Ananda, 5 yrs.

In July 2001, Eugenia (Geanne) Vasilopoulos, **E95/G95**, married Dimitri Metaxas, Professor & Director of the Center for Computational Biomedical Imaging at Rutgers. Their first child, Ada, was born Nov. 18, 2003.

Jennifer Rudolph, **E97**, received her M.D. from Case School of Medicine/Cleveland Clinic Foundation in 2001. She is now a post-doctoral melanoma vaccine clinical research fellow, specializing in internal medicine and dermatology.

Nancy Hsieh, **E00**, married Mark Bonassera in June 2003. They now live in San Diego while Nancy pursues a Ph.D. in Chemical Engineering at UCSD.



ChBE 2000 Alumni Shaina Reese, Nancy Hsieh & Barbara Martinez (formerly Stutzman) in June 2003.

# Alumni Survey

We want your news! We have revived the tradition of featuring alumni news in every issue of our newsletter. This is your chance to re-connect with your classmates and colleagues. Please provide the following information for the purposes of updating our alumni database and informing your classmates of any news you would like to share. Private contact information will not be published. [Please return completed surveys to the Department via e-mail, fax or mail using the contact information below.](#)

Name: \_\_\_\_\_

Tufts Degree/Year: \_\_\_\_\_

Name of Graduate School/Degree/Year: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Phone Number: \_\_\_\_\_

Current Employer: \_\_\_\_\_

Current Title: \_\_\_\_\_

What is your fondest memory of the ChBE Department at Tufts? \_\_\_\_\_

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News you'd like to share (i.e., professional & academic accomplishments, marriages, births, retirements, etc.): \_\_\_\_\_

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**Would you like to pledge to become a member of the Friends of the Department Club? (see page 2)**

- Yes! I would like to be a Benefactor (\$1,000/year)**
- Yes! I would like to be a Patron (\$500/year)**
- Yes! I would like to be a Sponsor (\$200/year)**

## Alumni Updates, *continued.*



Ben Azoff, Severino Martinez, Barbara (Stutzman) Martinez (E00), Nancy Hsieh (E00) and Shaina Reese (E00), in May 2004.

Barbara Stutzman, **E00**, married Severino Martinez (LA, Tufts, 2000) on May 22, 2004 on Cape Cod. The couple met their freshman year at Tufts. Severino graduated from Northeastern University School of Law in 2003 and now practices in Boston. Barbara continues to work in the process control industry.

Shaina Reese, **E00**, is engaged to marry Luis Brito in October 2005 in Bedford, NH. Shaina currently works as a Chemical Engineer in the medical device industry in Boston.

Rachel Brecher, **E01**, is currently completing her MBA and Master's of Engineering Management at the Kellogg School of Management at Northwestern University. She expects to graduate in June 2006.



Adam Sokolnicki (E04, G04) & Alketa Katerina Gjoka (G02)



Guadalupe Molina Garcia (G77), her husband Dr. Pablo Longoria-Trevino (G94), and Prof. Gregory Botsaris

## Symposium in Honor of Professor Gregory Botsaris



Professor Botsaris

On Saturday, May 7, 2005 the Department of Chemical and Biological Engineering hosted a day-long Symposium in honor of the 75th birthday of Professor Gregory Botsaris, followed by a cocktail reception and alumni dinner.

The event presented a unique opportunity for alumni, industry professionals, academics and ChBE faculty and staff to forge lasting professional and social connections based on shared experiences in the Chemical & Biological Engineering Department. This was the first event of its kind since the Department's Centennial celebration in 2001.

Guest speakers included:

- Professor Ronald Rousseau, Georgia Institute of Technology;
- Dr. Kostas Saranteas (G84, G97), Sepracor, Inc.;
- Dr. Edward Denk (E65, G68, G71), Evergreen Solar;
- Dr. Richard Siegel (E64, G66), Keramida Environmental, Inc.;

- Professor Elias Gyftopoulos, M.I.T.;
- Professor Dionysios Dionysou (G95), University of Cincinnati;
- Dr. Val Krukoni, PhaseX Corporation;
- Professor Gregory Botsaris, Tufts ChBE.

In addition to our program of distinguished guest speakers, the Department's graduate students had the opportunity to present their current research posters during the Symposium's cocktail reception.

The celebration continued with an Alumni Dinner in the new Carmi-



L-R: Dr. Richard Siegel (E64, G66) and Dr. Jim Noble

chael Function Hall, during which several awards were presented. Robert Reintjes (E'70) received an award for Distinguished Service to

the Department for his efforts to revive alumni communications. Steven Demetriou (E'80), Chairman and Chief Executive Officer of Aleris International, Inc., was honored with our Distinguished Alumnus award. Former Department Chair Eliana De Bernardez-Clark, now Director of Therapeutics Manufacturing and Development at Genzyme Pharmaceuticals, received a Distinguished Service award for her devotion to the Department during her time at Tufts. Lastly, Professor Gregory Botsaris was honored with a Leadership award for his long service and outstanding dedication to the Chemical and Biological Engineering Department.



Dr. Eliana DeBernardez Clark & Prof. Ronald Rousseau

We hope to make the Alumni Dinner an annual tradition. Thank you to our illustrious alumni whose presence made this event such a success!

*Symposium photos continued on the next page!*

## Symposium, *continued.*



L-R: Prof. Dionysios Dionysiou (G95), Alkis Skalkeas (G98), & Dr. Kostas Saranteas (G84, G97)



Margaret Quinn, Dr. Edward Denk (E65, G68, G71) and Prof. Louis Chin (E66, G68)

### Upcoming Events: Mark your calendars!

- **Alumni Weekend, May 18-21**

*The ChBE Department welcomes you to a reception to celebrate Alumni Weekend. Details will be announced as they become available.*

## About the Department

The Department of Chemical Engineering at Tufts University was established in 1901 and awarded its first Bachelor of Science degree in 1905, becoming one of only five colleges in the United States to develop a chemical engineering curriculum. In 2000, the Department was the first in the nation to recognize the evolving interdisciplinary nature of the field by changing its name to the Department of Chemical and Biological Engineering. In 2001, the Department celebrated its centennial.

Since 1990, the Department and its laboratories have been housed in the Science and Technology Center, a state-of-the-art research and teaching facility. Here, graduate students conduct innovative research encompassing biotechnology (genetic, metabolic, and cellular Engineering), biomaterials engineering, catalysis, membrane processes, polymers, colloids and surface science, and clean energy and environmental pollution prevention.

# TUFTS

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