



PTF *Newsletter*

Particle Technology Forum

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

Vol. 12 No. 1

Fall 2006

The PTF is an international and interdisciplinary forum that promotes information exchange, scholarship, research, and education in the field of particle technology – that branch of science and engineering dealing with the production, handling, modification, and use of a wide variety of particulate materials, both wet or dry, in sizes ranging from nanometers to centimeters. Particle technology spans a range of industries to include chemical, petrochemical, agricultural, food, pharmaceuticals, mineral processing, advanced materials, energy, and the environment. See www.erpt.org/ptf for more information.

In this issue...

News and Announcements.....	2
◆ Letter from the Chair	2
◆ 2006 AIChE Annual Meeting.....	4
◆ 2006 AIChE PTF Meetings in San Francisco.....	6
◆ Program Director Positions at the National Science Foundation.....	7
◆ PTF Awards.....	8
◆ PTF Awards Banquet Dinner	9
◆ A word from our sponsors... ..	10
◆ PTF Election Results.....	11
◆ APS-DFD Conference.....	12
◆ Thanks to WCPT5 Organizations.....	13
Upcoming Conference Calendar.....	14
PTF Organizational Information	15
◆ Officer and Committee Listing	15
◆ Report from the Treasurer	17
◆ From the Editor's Desk	18
◆ Moving? New E-mail?	18
◆ Membership Information	19

LETTER FROM THE CHAIR



I want to thank the Executive Organizing Committee of the Fifth World Congress on Powder Technology (WCPT5) for last spring's excellent conference in Orlando. This includes, but is not limited to, George Klinzing, Ralph Nelson, Shrikant Dhodapkar, Joe Cramer, Jeff Wood, and Mark Bumiller in addition to all of the track chairs. The ability to bring all of this together and to then pull it off in such excellent fashion was remarkable. We had over 700 attendees, including significant non U.S. participation.

I also want to thank Fluor and the Fluor Foundation for their sponsorship of the PTF Lectureship Award in Fluidization for the past eight years. In particular, I want to thank Behzad Jazayeri (BJ) for his having championed the funding of this award. I know from first hand experience how difficult it is each year to continue justifying support for a professional society award within one's industrial organization. BJ is a class act and has been an active member and a strong supporter of PTF for many years. Thanks.

With my tenure as PTF Chair rapidly coming to a close, I want to reflect somewhat on the organization and I want to discuss what I see in my crystal ball as the future and how PTF can best support its members and help influence policy.

First, on the reflection part, I remember an Area 3B AIChE Meeting in San Francisco in the late 1970's, where we had about 500 people attend one of our sessions relating to fluidized bed coal gasification. This magnitude of attendance was not uncommon during the height of the energy era at that time. Later, as interest in energy dwindled, other exciting interest areas emerged. Chief among these was the pharmaceutical processing which brought a number of new members to PTF affiliated with pharmaceutical companies. More recently, we've seen significant interest in nanoparticles. And, in the last three years, PTF has expanded to include Area 3E, Energetic Materials. The point that I want to make is that PTF has always been at the forefront of important and developing technologies and has had a consistent effort to develop strong rapport with various industries. We truly value our industrial members.

Likewise, our fundamental sessions have also had very strong participation. Our members have driven much of the research in areas such as Computational Fluid Dynamics (CFD), Discrete Element Modeling (DEM), and overall population balance modeling including nucleation, aggregation, and growth of particles. Our fundamentals sessions are always overbooked, testament to the significant interest generated by them. This year is no different and I expect a huge crowd on-hand for the two sessions in honor of Prof. Pfeffer, a professional colleague who has significantly impacted the direction of PTF, and our PTF Award Lectures session.

As I peer into my crystal ball, I see the re-emergence of energy as a huge new driver for PTF activities far into the future. However, this time around, the focus is going to be somewhat different. The focus will truly be sustainable energy and it will include significant interest in renewable processes and the sequestration of greenhouse gases. The intersection of energy

News and Announcements

security and global environmental concerns will be paramount. I am anticipating huge interest in the fluid-particle processing of biomass, i.e. biorefining and biofuels. The future for many of our younger members, including those who have not yet connected with us, will be in this area and we need to be ready for them. I strongly encourage the programming committees to be aware of and to plan for this.

So, as I conclude, let it be clear that PTF is active in many areas and will continue to be active in these areas and more. Just as we saw the emergence of the Nanoscale Science and Engineering Forum (NSEF) and the Food, Pharmaceutical, and Bioengineering Division, we will also see the emergence of a new Energy Forum. These Forums and Divisions have provided an opportunity for us to collaborate and share sessions in the areas of nanoparticles, agglomeration, etc.. PTF has not lost its ability to attract and to develop excellent programs in these areas. In fact, PTF members have worked hard to make sure that our programs are part of these expanding areas that represent an expanding interest in particle technology. The re-emergence of significant interest in energy, as renewable and sustainable energy, will be no different. PTF is positioned with its unique industrial/academic membership to take a leading role here.

As I pass the torch, I want the PTF membership to know that this has been a fun service position. The main reason is the great people who are PTF! I want to thank the PTF Executive Committee that has done an excellent job handling all of our many projects. I want to especially thank Christine Hrenya for her commitment regarding the PTF newsletter, Manuk Colakyan for his service as PTF Programming Director, and Shrikant Dhodapkar for his unending ability to take care of all of the loose ends so to speak regarding PTF activities. I assure the membership that it is in great hands with Shrikant over the next two years as he takes the reigns. Expect to see me as an active participant in PTF activities well into the future. I'm having too much fun being involved. Finally, don't miss the PTF Banquet Dinner in San Francisco. This is always a great place to network and to socialize with friends!

Professor Alan Weimer
PTF Chair

2006 AIChE Annual Meeting



November 12-17, 2006

San Francisco Hilton

San Francisco, CA

URL: <http://www.aiche.org/Conferences/AnnualMeeting/index.aspx>

Day of Week	Start Time	Session Title	Location
Monday	8:30 AM	Characterization of Engineered Particles and Nano-Structured Particles	Yerba Buena Ballroom 5 (Marriott San Francisco)
Monday	8:30 AM	Modeling and Scale-up of Particle Processing	Yerba Buena Ballroom 6 (Marriott San Francisco)
Monday	8:30 AM	Synthesis and Applications of Engineered Structured Particulates	Franciscan C (Hilton San Francisco)
Monday	12:30 PM	Agglomeration and Granulation Processes I	Franciscan B (Hilton San Francisco)
Monday	12:30 PM	Dynamics and Modeling of Particles, Crystals and Agglomerate Formation	Yerba Buena Ballroom 5 (Marriott San Francisco)
Monday	12:30 PM	Multiscale Modeling of Nanoparticle Systems	Franciscan C (Hilton San Francisco)
Monday	12:30 PM	Nanoparticle Manipulation and Separation	Yerba Buena Ballroom 6 (Marriott San Francisco)
Monday	12:30 PM	Supercritical Fluids for Food and Pharmaceuticals	Union Square 25 (Hilton San Francisco)
Monday	3:15 PM	Agglomeration and Granulation Processes II	Franciscan B (Hilton San Francisco)
Monday	3:15 PM	Applications of Fluidization	Yerba Buena Ballroom 6 (Marriott San Francisco)
Monday	3:15 PM	Gas Phase Synthesis of Particles	Franciscan C (Hilton San Francisco)
Monday	6:30 PM	Particle Technology Forum Poster Session	Grand Ballroom B (Hilton San Francisco)
Tuesday	8:30 AM	Fundamentals of Fluidization I: In Honor of Professor Bob Pfeffer on the Occasion of His 70th Birthday	Franciscan D (Hilton San Francisco)

News and Announcements

Tuesday	12:30 PM	Fundamentals of Fluidization II: In Honor of Professor Bob Pfeffer on the Occasion of His 70th Birthday	Franciscan D (Hilton San Francisco)
Tuesday	3:15 PM	Computational and Numerical Approaches to Particle Flow	Franciscan D (Hilton San Francisco)
Tuesday	3:15 PM	Particle Technology Forum Award Lectures	Continental 2 (Hilton San Francisco)
Wednesday	8:30 AM	Functional Nanoparticles and Nanocoatings on Particles I	Yerba Buena Ballroom 4 (Marriott San Francisco)
Wednesday	8:30 AM	Population Balance Modeling for Particle Formation Processes I: Nucleation, Aggregation and Breakage Kernels	Union Square 14 (Hilton San Francisco)
Wednesday	12:30 PM	Dynamics and Modeling of Particulate I	Franciscan D (Hilton San Francisco)
Wednesday	12:30 PM	Functional Nanoparticles and Nanocoatings on Particles II	Union Square 14 (Hilton San Francisco)
Wednesday	12:30 PM	Nano-Energetic Materials	Continental 9 (Hilton San Francisco)
Wednesday	3:15 PM	Dynamics and Modeling of Particulate Systems II	Franciscan D (Hilton San Francisco)
Wednesday	3:15 PM	Energetic Materials: Environmental and Life Cycle Issues	Continental 9 (Hilton San Francisco)
Wednesday	3:15 PM	Population Balance Modeling for Particle Formation Processes II: Nucleation, Aggregation and Breakage Kernels	Union Square 14 (Hilton San Francisco)
Thursday	8:30 AM	Circulating Fluidized Beds	Union Square 14 (Hilton San Francisco)
Thursday	8:30 AM	Processing and Safety of Energetic Materials	Franciscan D (Hilton San Francisco)
Thursday	12:30 PM	Solids Handling and Processing	Franciscan D (Hilton San Francisco)
Thursday	12:30 PM	Transport in Fluidized Systems	Union Square 14 (Hilton San Francisco)
Thursday	3:15 PM	Health and Environmental Effects of Nanoparticles	Union Square 14 (Hilton San Francisco)
Thursday	3:15 PM	Mixing and Segregation	Franciscan D (Hilton San Francisco)

2006 AIChE PTF Meetings in San Francisco



PTF Executive Committee: Sunday, November 12, 5:00-6:00 pm, Marina Room in the Executive Conference Center

General PTF Meeting: Monday, November 13, 5:45-6:45 pm, California Room

Area 3A Meeting: Monday, November 13, 12 noon-12:30 noon, Franciscan C (Ballroom Level)

Area 3B Meeting: Tuesday, November 14, 11:30am to 12 noon, Franciscan D (Ballroom Level)

Area 3C Meeting: Tuesday, November 14, 12 noon to 12:30 pm, Franciscan C (Ballroom Level)

Area 3D Meeting: Monday, November 13, 11:30 am – 12 noon, Franciscan C (Ballroom Level)

Area 3E Meeting: Wednesday, November 15, 11:00am-12:30pm, Continental Parlor 9 (Ballroom Level)

Program Director Positions at the National Science Foundation



The Chemical, Biochemical, Environmental, and Transport Division (CBET) within the Engineering Directorate (ENG) at the National Science Foundation (NSF) announce a nationwide search for engineering professionals to fill the following positions:

Program Director: – Energy for Sustainability Program (ESP) [Closing date October 17]

Program Director: – Particulate and Multiphase Processes (PMP) [Closing date November 21]

The Energy for Sustainability Program supports fundamental research and education in novel energy production, conversion, and storage and is focused on energy sources that are energy friendly and renewable. Sources for sustainable energy could include sunlight, wind, and biomass. Hydrogen and alcohols are potential carriers that can be derived from renewable sources. Exploratory research to produce and store hydrogen for use in direct combustion or in fuel cells, the role of biomass and bio-fuels, and enhanced energy efficiency and novel photovoltaics research are examples of areas under consideration.

The Particulate and Multiphase Processes Program supports fundamental and applied research on mechanisms and phenomena governing multiphase processes, granular and granular-fluid flows, particle/bubble/droplet interactions, aerosol science and technology, suspensions, micro/nanostructured fluids, self and directed assembly of nanostructures, and related instrumentation and diagnostics. While disciplinary expertise is expected, the focus of the search is for a scholarly, open-minded, diverse and intellectually capable individual to join the present team in sharing ENG's responsibilities within NSF's overall mission to support merit-reviewed education and research activities.

Both of these positions offer the exciting opportunity to engage in the continuing dialogue and influence the future of research in our discipline. For additional information on NSF's rotational programs, please see "Programs for Scientists, Engineers, and Educators" on the NSF website at http://www.nsf.gov/about/career_opps.

PTF Awards

Particle Technology Forum Award

(Sponsored by DuPont)

Doug Fuerstenau

Contact Details:

Douglas W. Fuerstenau, Sc.D., Tekn.Dr.(h.c.)
Professor in the Graduate School
Dept. of Materials Science and Engineering
210 Hearst Memorial Mining Building
University of California
Berkeley, CA 94720-1760
Tel: 510-642-3826
Fax: 510-643-5792



Award Description:

Recognizes outstanding contributions in the field of particle technology, teaching of particle technology (as evidenced by the aggregate contributions of the nominee's PhD students to the field) and the advocacy of particle technology within industry, academia, and government.

Thomas Baron Award in Fluid-Particle Systems

(Sponsored by Shell Global Solutions)

Dimitri Gidaspow

Contact Details:

Dimitri Gidaspow

Distinguished University Professor
Room 142 Perlstein Hall
Tel.: 312.567.3045
Fax: 312.567.8874
Email: gidaspow@iit.edu
Web: www.chee.iit.edu/~gidaspow



Award Description:

Recognizes an individual's outstanding scientific/technical accomplishment which has made a significant impact in the field of fluid-particle systems or in a related field with potential for cross-fertilization.

PSRI Lectureship Award

(Sponsored by Particulate Solid Research, Inc.)

Yong JIN

Contact Details:

Prof. Yong JIN
Department of Chemical Engineering,
Tsinghua University
Beijing 100084, PR China



Award Description:

Recognizes an individual's outstanding scientific/technical research contributions with impact in the field of fluidization and fluid-particle flow systems.

Best Ph.D in Particle Technology

(Sponsored by Procter & Gamble)

Griselda Bonilla

Contact Details:

AdTech BEOL Integration
Microelectronics
Route 52, Zip 32A
Hopewell Junction, NY 12533
845.892.0507 (office)
845.892.6483 (fax)



IBM
2070

Award Description:

Recognizes an outstanding original dissertation in particle science and engineering.

PTF Banquet Dinner

- Date: Wednesday, November 15, 2006
Time: 6:30 – 7:30 pm, reception
7:30 – 10:00, dinner and awards presentation
Location: Yank Sing Restaurant, 101 Spear Street, inside Rincon Center
Cost: \$65 at registration (seating limited so register early), includes gratuity, taxes, reception drinks (wine, Chinese beer, soda)
Menu: Hot and Sour Soup, Shanghai Dumpling, Potsticker, Crispy Wonton, Minced Chicken in Fresh Lettuce Cup; Peking Duck; Orange Sesame Chicken; Mongolian Beef; Shittake Sautee'd w/snap Peas; Yank Sing Chow Mein; Chilled Mango Pudding; Custard Tart; Fortune Cookie; Premium Jasmine Tea



A word from our sponsor....



From 1997 through 2005, Fluor has sponsored, through the Fluor Foundation, the PTF Lectureship Award in Fluidization. I am honored to have championed this award on behalf of Fluor and Fluor Foundation. Further I want to thank Fluor and the Fluor Foundation for their support of this important award over these past 8 years.

The Lectureship Award in Fluidization recognizes an individual's outstanding scientific and technical research contributions with impact in the field of fluidization and fluid-particle flow systems. The awardees sponsored by Fluor represent both academia and industry and were from China, Europe, Japan, and USA.

While Fluor is widely recognized for their contribution to Engineering and Construction of Projects throughout the world, Fluor does not have a research facility but does recognize the need for R & D and the benefits that R & D brings to society. In this vein, Fluor supported the PTF Lectureship Award in Fluidization and other targeted fundamental and applied research to resolve engineering issues. As a result Fluor has successfully leveraged this approach in developing its portfolio of licensed technologies in gas processing, hydrotreating, and more recently hydrogen production. Over the past 18 years and up to the current time, Fluor engineers have also successfully supported their client's R&D organizations to scale-up and design many first of a kind commercial plants for a number of fluid bed based processes, including butane oxidation, SZorb, black liquor gasification, and high purity silicon production.

I am pleased to announce that starting 2006, the Lectureship Award will be sponsored by PSRI Inc. I like to take this opportunity to thank the PTF members and the PTF selection committee for nominating and selecting the recipients.

Behzad Jazayeri, Principal Process Engineer, Fluor

PTF Election Results

The PTF Executive Committee election was held over four weeks between September 13 and October 11. Electronic voting was administered by Simon Spitalny of AIChE. Of those contacted, 67 voters participated and cast a total of 200 votes. Total voter participation was 18.3%. The following candidates have been elected: Academic Members Jennifer Curtis, University of Florida; Joseph McCarthy, University of Pittsburgh; Non-Academic Members: George Fotou, Cabot, Ecevit Bilgili, Merck.

Because an Academic position opened on the committee during the current term, a fifth candidate was also elected to serve out the remainder of the term. The winner of this election is: Raj Davé, New Jersey Institute of Technology.

Congratulations to all of the winners!

Ecevit Bilgili



Jennifer Sinclair Curtis



Rajesh N. Davé



George P. Fotou



Joseph McCarthy



APS-DFD Conference

The 59th Annual DFD Meeting – Tampa, Florida, November 19-21, 2006

The 59th Annual DFD Meeting will be held at the Tampa Marriott Waterside Hotel and Marina, Tampa, Florida, November 19-21. The meeting is hosted by the University of Florida.



About the Program

Scientific Program

This year's scientific program will include three award lectures, eight invited lectures, four minisymposia, contributed papers, poster sessions, exhibits, and the Gallery of Fluid Motion. The invited lectures are selected to illustrate the richness of topics, techniques, and applications inherent in the study of fluid dynamics. More than 1500 contributed abstracts, divided into 20 concurrent sessions, are anticipated.

Awards Program

Each year the APS Division of Fluid Dynamics presents several awards: the Fluid Dynamics Prize, the Francois Frenkiel Award, and the Andreas Acrivos Dissertation Award. Winners of these awards will be announced in the fall. A lecture by each award winner will be given at the meeting.

For further information see the Website: <http://www.tampavisitorinformation.com/> .

**Thanks to WCPT5
Organizers**



Upcoming Conference Calendar



2006

Annual AIChE Meeting

November 12-17, 2006, San Francisco Hilton, San Francisco, California

Abstract Deadline: Passed

Website: <http://www.aiche.org/Conferences/AnnualMeeting/index.aspx>

APS Division of Fluid Dynamics 59th Annual Meeting (DFD06)

November 19-21, 2006, Tampa Bay, Florida

Abstract Deadline: Passed

Website: <http://dfd2006.mae.ufl.edu/>

2007

Statics and Dynamics of Granular Media and Colloidal Suspensions

**July 4-6, 2007, Partenope Hall in the Congress Center of the Univ. di Napoli "Federico II",
Via Partenope 36 - 80121 Napoli.**

Abstract Deadline: December 23, 2006

Website: <http://stphsatna07.na.infn.it/>

Discrete Element Methods (DEM) 07

August 27-29, 2007, Brisbane, Australia

Abstract Deadline: Still Accepting

Website: <http://www.min-eng.com/dem07/index.html>

Annual AIChE Meeting

November 4-9, 2007, Salt Palace Convention Center, Salt Lake City, Utah

Abstract Deadline: December 15, 2006

Website: <http://www.aiche.org/Conferences/AnnualMeeting/future.aspx>

Officer and Committee Listing



Officers:

Chair 2004-2006: Professor Alan Weimer, alan.weimer@colorado.edu, 303-492-3759

Vice-Chair 2004-2006: Dr. Shrikant Dhodapkar, sdhodapkar@dow.com, 979-238-7940

Immediate Past Chair 2002-2004: Dr. Ralph D. Nelson, erptmged@aol.com, 302-239-0409

Secretary 2004-2006: Dr. Patrick Spicer, spicer.pt@pg.com, 513-634-9628

Treasurer 2004-2006: Professor Alan Weimer, alan.weimer@colorado.edu, 303-492-3759

Liaisons:

Academic 2002-2006: Professor Hugo S. Caram, hsc0@lehigh.edu 610-758-4259

Academic 2002-2006: Professor Brij Moudgil, BMoudgil@erc.ufl.edu 352-846-1194 x 225

Academic 2004-2008: Professor Christine Hrenya, hrenya@colorado.edu, 303-492-7689

Industry 2002-2006: Professor Manuk Colakyan, colakymc@dow.com, 304-747-4580

Industry 2002-2006: Dr. Costas Coualoglou, costas.a.coulaloglou@exxonmobil.com

Industry 2004-2008: Dr. Ray Cocco, raycocco@mac.com, 989-631-1166

Industry 2004-2008: Dr. Pat Spicer, spicer.pt@pg.com, 513-634-9628

AICHe-CTOC: Esin Gulari, egulari@nsf.gov, 703-292-7026

AICHe Staff Associate: Mr. Simon Spitalny, simos@aiche.org, 212-591-7478

Standing Committees (Chairs):

Awards Committee 2004-2006: Dr. Shrikant Dhodapkar, sdhodapkar@dow.com, 979-238-7940

Education: Professor George Chase, gchase@uakron.edu, 330-972-7943

Membership: Dr. Manuk Colakyan, colakymc@ucarb.com, 304-747-4580

Newsletter Editor: Professor Christine Hrenya, hrenya@colorado.edu, 303-492-7689

Nominations: Dr. Ralph Nelson, erptmged@aol.com, 302-239-0409

Recognition: Professor Sotiris Pratsinis, pratsinis@ivuk.mavt.ethz.ch, 41-1-732-3180

Technical Programming Area Liaison and Group Chairs

The main focus of the PTF has been arranging for the extensive technical programs at the annual AIChE meeting in November. A lot of hard work goes into developing session themes, negotiating for sufficient time and reasonable scheduling of the sessions, attracting and screening papers, finding and training new session chairs, and making sure the whole process flows smoothly. Shrikant Dhodapkar, our Area 3 Liaison, attends an all-day session each January to plan the technical sessions at the Annual Congress and to arrange for co-sponsored sessions with other Divisions and Forums. Participation in this process is excellent training in and proof of management capabilities. The leaders selected this fall were

<u>Position</u>	<u>Person</u>	<u>Affiliation</u>
Area 3 Liaison	Dr. Manuk Colakyan	The Dow Chemical Co.
Area 3 Vice Liaison	Prof. Alan Weimer	University of Colorado
<i>Group 3a – Particle Production and Characterization</i>		
Chair	Prof. Rajesh N. Dave	New Jersey Inst. of Technology
Vice-Chair	Dr. Patrick Spicer	Procter & Gamble Co. CETL
<i>Group 3b – Fluidization and Fluid-Particle Systems</i>		
Chair	Dr. Ray Cocco	Dow Chemical Co. University
Vice Chair	Prof. Jingxu Zhu	Univ. of Western Ontario
<i>Group 3c – Solids Flow, Handling, and Processing</i>		
Chair	Dr. James Davis	Procter & Gamble Co.
Vice Chair	Prof. Benjamin Glasser	Rutgers University
<i>Group 3d - Nanoparticles</i>		
Chair	Dr. George Fotou	Cabot, Inc.
Vice Chair	Professor Yangchuan Xing	University of Missouri
<i>Group 3e – Energetic Materials</i>		
Chair	Chester Clark.	Naval Surface Warfare Center
Vice Chair	Charles Painter	Naval Surface Warfare Center

Report from the Treasurer



Treasurer's Report Al Weimer, October 9, 2006

Current Balance (August 31, 2006): \$15,023.37 (NY Account) + \$329.73 (CO account)
= \$15,353.10

Income in 2006

PTF AIChE Member Dues: \$2,042
PTF Non-AIChE member Dues: \$325
Investment Interest: \$653.07
Corporate Donation: \$400.00

Expenses in 2006

Sponsorship of WCPT5 Poster Session: (\$2,500)
Supplies (i.e. Posters) for WCPT5: (\$196.84)
Delivery Service for WCPT5: (\$25.06)
WCPT5 Coffee/Beverages for Breaks: (\$1,918.52)
Down Payment for 2006 Annual Banquet Dinner (\$2,000)
Domain Name Registration, Entre' Computer Center (\$125.00)
Website Hosting, Entre' Computer Center (\$233.70)

Additional Expenses for 2006

Remainder for PTF Banquet Dinner: (\$6,475.50)
PTF Awards and Plaques:
Subsidy for PTF Banquet Dinner: (\$675.50) = \$8,475.50 - \$7,800, i.e. 120 attendees x \$65/ea.
Dinners for 4 Awardees and significant others + John Chen (AIChE President), Hank Kohlbrand (AIChE Director), Joe Cramer (Programming Chair), and Jeff Wood (AIChE Events Manager); 12 total dinners @ \$65/ea = (\$780)

Additional Income for 2006

120 @ \$65 for Banquet Dinner: \$7,800
Corporate Sponsor Money for Awards

Anticipated PTF Balance after Annual Meeting ~ \$15,000

From the Editor's Desk



The *PTF Newsletter* is published twice a year as a vehicle for communication for all PTF members. PTF members are encouraged to send in news and information of general interest to PTF members. Please address your communication to

Professor Christine M. Hrenya
Department of Chemical and Biological Engineering
University of Colorado
Boulder, CO 80309-0424
Tel: (303) 492-7689; Fax: (303) 492-4341
email: hrenya@colorado.edu

If you would prefer to continue receiving a hard copy of the newsletter instead of the electronic version, please send a note to this effect to the editor at the above address.

Advertisements may also be placed in the newsletter. The rates on a per issue basis are:

1/4 page \$40

1/2 page \$60

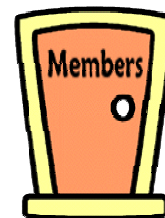
Full page \$110

Moving? New E-mail?



Help us get PTF news to your new address by filling in and e-mailing a change of address form. See the PTF web page at

<http://www.erpt.org/ptf/addrchng.txt>



Membership Information

Membership Application for the Particle Technology Forum, AIChE

CONTACT INFORMATION (print or type):

Name: _____ Title: _____

Category (check only one): AIChE Member [# if you are a member = _____]

Not an AIChE member

Company or University: _____

Address: _____

City: _____ State: _____ ZIP: _____ Country: _____

Work Phone: _____ FAX: _____

Email: _____

MEMBERSHIP DUES (check only one line below) [Note that dues are for a calendar year]:

15.00 \$US for one year. Anyone use this option. For AIChE members dues will be listed on your AIChE dues invoice after your first year in PTF. Nonmembers don't receive a dues notice.

75.00 \$US for five years dues. **Only** nonmembers of AIChE are eligible for this option, which is provided as a courtesy so that non-members won't have to send in five small checks.

METHOD OF PAYMENT (check and fill-in only one line below):

check (must be in \$US on a U.S. bank or on a foreign bank with a New York City branch.)

Make payable to **Am. Inst. of Chem. Engineers**. Mail with form to the address below.

money order (an international money order in \$US is acceptable)

Make payable to **Am. Inst. of Chem. Engineers**. Mail with form to the address below.

credit card (only VISA or MasterCard are accepted)

I agree to pay the amount checked-off above to the **Am. Inst. of Chem. Engineers**

3 Park Avenue, New York, NY 10016-5991, United States of America

according to the merchant agreement through my VISA or my MasterCard

Card Number: _____ / _____ / _____ / _____ Expiration Date ____/____

Cardholder's Signature _____ Date: _____

Cardholder's Daytime Telephone Number: _____

Print cardholder's name and address below if different from CONTACT INFORMATION:

Mail to the address below or FAX to (212)-591-8888 (in the United States)

**AIChE, Particle Technology Forum
Document Processing
3 Park Avenue
New York, NY 10016-5991**