

Polymeric Materials: Science and Engineering Division of the American Chemical Society Fall 2003 ~ Election Issue

# 2003 PMSE Fellows

Six new PMSE Fellows were inducted during the PMSE Awards Lunch at the New Orleans ACS Meeting on Monday, March 24, 2003.



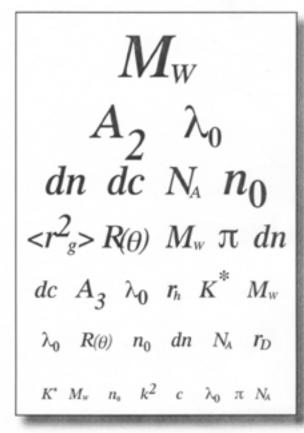
New PMSE Fellows inducted in New Orleans. From left: Virgil Percec, Guy C. Berry, Kenneth B. Wagener, Frank E. Karasz, Moshe Narkis, Dennis G. Peiffer

PMSE is pleased to welcome this distinguished group of polymer scientists and engineers to the ranks of fellows. Please look for further information on them in the *PMSE Preprints* and *Chemical and Engineering News*. The Division thanks everyone who has helped in this process by submitting nominations or participating in the selection. We will be inducting the fifth class at the 2004 Spring meeting in Anaheim.

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# Program For New York September 7-11, 2003

Advances in Epoxide and Polyurethane Coatings. Mark D. Soucek, Dept. of Polymer Engg. Univ. of Akron, Akron, OH 44325-3909, (330) 972-2583, FAX (330) 972-2339, msoucek@uakron.edu.

Assembly and Applications of Soft Interfaces. S. Michael Kilbey, Dept. of Chemical Engineering, Clemson University, Clemson, SC 29634-0909, (864) 656-5423, FAX (864) 656-0784, mike.Kilbey@ces.clemson.edu; Igor Luzinov, 263 Sirrine Hall, School of Mats Sci. and Engg., Clemson Univ., Clemson, SC 29634-0971, (864) 656-5958, FAX (864) 656-5973, luzinov@clemson.edu.

**Memorial Symposium in Honor of Vivian P. Stannett.** *(Cosponsored POLY),* Donald R. Paul, Texas Materials Institute, Univ. of TX, Dept. of Chem. Engg., Austin, TX 78712-1062, (512) 475-8480, FAX (512) 475-8482, drp@che.utexas.edu.

Polyolefin Elastomers. Sudhin Datta, ExxonMobil Chem. Co., Baytown Polymer Ctr., 5200 Bayway Dr., Baytown, TX 77520, (281) 834-5092, FAX (281) 834-2863, sudhin.datta@exxonmobil.com.

Nanostructured Liquid Crystal Materials and Applications. L. C. Chien, Chemical Physics Program and Liquid Crystal Institute, Kent State Univ., Kent, OH 44242, (330) 672-3827, FAX (330) 672-2796, Icchien@Ici.kent.edu; Timothy J. Bunning, Air Force Research Lab, MLPJ, 3005 P. St., Ste. 1, WPAFB, OH 45433, (937) 255-3808, x3167, (FAX (937) 255-1128, timothy.bunning@afrl.af.mil.

**Polymers as Additives.** Abhimanyu O. Patil, ExxonMobil Res. & Engg. Co., Rt. 22 E., Annandale, NJ 08801, (908) 730-2639, FAX (908) 730-2536,

abhimanyu.o.patil@exxonmobil.com; Margaret M. Wu, ExxonMobil Res. & Engg. Co., Rt. 22 E., Annandale, NJ 08801 (908) 730-2157, FAX (908) 730-3314 margaret.m.wu@exxonmobil.com; Thomas S. Coolbaugh, ExxonMobil Res. & Engg. Co., Rt. 22 E., Annandale, NJ 08801, (908) 730-3233, FAX (908) 730-2536, thomas.s.coolbaugh@exxonmobil.com.

Polymeric Drug Delivery: Science and Applications. Sonke Svenson, The Dow Chemical Co., 1712 Bldg., Midland, MI 48674, (989) 636-0974, Fax (989) 636-6558, ssvenson@dow.com.

Smart Nano-Assemblies. Yuri M. Lvov, Inst. of Inst. of Micro-manufacturing, P.O. Box 10137, LA Tech. Univ., Ruston, LA 71272, (318) 257-5144, FAX (318) 257-5144, ylvov@coes.latech.edu; Fotios Papadimitrakopoulos, Inst. of Mats. Sci., U-36, Univ. of CT, Storrs, CT 06269-3136, (860) 486-3447, FAX (860) 486-4745, papadim@mail.ims.uconn.edu.

**Tess Award Symposium.** David R. Bauer, Ford Motor Co., MD-3182, SRL, P.O. Box 2053, Dearborn, MI 48197, (313) 594-1756, FAX (313) 323-1129, dbauer3@ford.com.

ICI Student Award Symposium. Thomas Hahn, National Starch & Chem. Co., 10 Finderne Ave., Bridgewater, NJ 08807, (908) 685-5672, FAX (908) 685-7037, tom.hahn@nstarch.com.

General Papers/New Concepts in Polymeric Materials. Benny Freeman, Univ. of Texas at Austin, Dept. of Chem. Engg., 10100 Burnet Rd., Bldg. 133, Austin, TX 78758, (512) 232-2803, FAX (512) 232-2807, freeman@che.utexas.edu.

## **Program Committee**

#### Vladimir Tsukruk

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email: vladimir@iastate.edu

Timothy J. Bunning

AFRL/MLPJ University of Iowa Bldg. 651, 3005 P. St., Ste 1 Wright-Patterson AFB, OH 45433-7702 Phone: (937)255-3803 x3167 email: Timothy.Bunning@WPAFB.AF.MIL

# Symposia for Upcoming National Meetings

ANAHEIM - March 28-April 1, 2004

Functional Polymer Thin Films for Switching, Sensing and Adaptive Applications. Manfred Stamm, Institut für Polymerforschung Dresden, Hohe Strasse 6, 01069 Dresden, Germany, +49 351 4658 224, stamm@ipfdd.de; Curt Frank, Dept. of Chem. Engg., Stauffer III, 381 North-South Mall, Stanford Univ., Stanford, CA 94305-502, (650)723-4573, curt@chemeng.stanford.edu; Sergey Minko, Institut für Polymerforschung Dresden, Hohe Strasse 6, 01069 Dresden, Germany, +49 351 4658 271, minko@ipfdd.de.

Interface of Polymers and Biomimetics. Morley Stone, Rajesh Naik, Lawrence Brott, AFRL/MLPJ, Building 651, 3005 P St., Wright-Patterson Air Force Base, OH 45433-7702, (937)255-3808 x3180, (937) 255-1128, morley.stone@afrl.af.mil; Rajesh Naik, Air Force Research Laboratory, MLPJ, Bldg. 651, 3005 P St., Wright-Patterson, AFB, OH 45433-7702, (937)255-3808 x3270, FAX (937)255-1128, rajesh.naik@wpafb.af.mil; M; Lawrence L. Brott, Air Force Research Laboratory, MLPJ, Bldg. 651, 3005 P St., Wright-Patterson, AFB, OH 45433-7702, (937)255-3808 x3174, FAX (937)255-1128, lawrence.brott@wpafb.af.mil.

Polymers in Micro- and Nano-electronics. Qinghuang Lin, IBM T. J. Watson Research Ctr., P.O. Box 218, Rt. 134, MS 6-250, Yorktown Heights, NY 10598, (914)945-2366, (914)945-2141, qhlin@us.ibm.com; Raymond A. Pearson, Dept. of Mats. Sci. & Engg., Lehigh Univ., 5 E. Packer Ave., Bethlehem, PA 18015, (610)758-3857, FAX (610)758-4244, rp02@lehigh.edu; Robert D. Miller, IBM Almaden Res. Ctr., 650 Harry Rd., San Jose, CA 95120, (408)926-1646, FAX (408)926-3310, rdmiller@almaden.IBM.com.

Nanocomposite Fibers. David Schiraldi, Case Western Reserve, Cleveland, OH 44106, das44@po.cwru.edu; Satish Kumar, School of Textile & Fiber Engg., Georgia Inst. of Tech., Atlanta, GA 30332 (404)894-7550, satish.kumar@tfe.gatech.edu.

Nanoscale Probing of Intermolecular Interactions. Aleksandr Noy, Chem. & Mats. Sci. Directorate, L-234, Lawrence Livermore National Laboratory, 7000 East Ave., Livermore, CA 94550, (925)424-6203, noy1@llnl.gov; C. Daniel Frisbie, Dept. of Chem. Engg. and Mats. Sci., Univ. of MN, 421 Washington Ave., S.E., Minneapolis, MN 55455, (612)625-0779, frisbie@cems.umn.edu. Polyelectrolyte, Colloidal and Nanoparticle Assemblies in Ultrathin Films. Rigoberto C. Advincula, Univ. of AL at Birmingham, Dept. of Chem., 901 14th St., Birmingham, AL 35294-1240, (205)934-8286, gobet@vab.edu.

Response-Driven Polymeric Films and Coatings. Marek W. Urban, Univ. of Southern MS., School of Polymers & High Performance Materials, Dept. of Polymer Sci., P.O. Box 10076, Hattiesburg, MS 39406 (601)266-6868, marek.urban@usm.edu. Combinatorial Approaches to Materials. Cher H. Davis, NIST Combinatorial Methods Center, 100 Bureau Dr., STOP 8542, Gaithersburg, MD 20899-8542, (301)975-6488, FAX: (301)975-4924, cher.davis@nist.gov; Alamgir Karim, NIST, 100 Bureau Dr., Stop 8542, Gaithersburg, MD 20899-8542, (301)975-6488, alamgir.karim@nist.gov; Radislav A. Potyrailo, Combinatorial Chemistry Lab., GE Global Res. Ctr., P.O. Box 8, Schenectady, NY 12301, (518)387-7370,FAX (518)387-5604,potyrailo@crd.ge.com; Marc D. Porter, Iowa State Univ., Dept. of Chem., 42 Spedding Hall, Ames, IA 50011, (515) 294-6433, FAX (515) 294-3254, mporter@porter1.ameslab.gov

**Polymer Coated Medical Devices**. Shrirang V. Ranade, Corporate R&D, Boston Scientific Corp., 1 Boston Scientific PI., Natick, MA 01760, (508)652-5143, FAX (508)647-2405, ranades@bsci.com. **Metal-Containing Polymers and Materials** (*Cosponsored with POLY*). Ulrich S. Schubert, Depts. of Macromolecular Chem. &

Nanoscience, Eindhoven Univ, of Tech., P.O. Box 513, Eindhoven 5600 MB Netherlands.

Cooperative Research Award. Brian C. Benicewicz, Rensselaer Polytechnic Inst., NYS Center for Polymer Synthesis, Cogswell Laboratory, Troy, NY 12180, (518)276-2534, FAX (518)276-6434, benice@rpi.edu.

General Papers/New Concepts in Polymeric Materials. Benny Freeman, Univ. of Texas at Austin, Dept. of Chem. Engg., 10100 Burnet Rd., Bldg. 133, Austin, TX 78758, (512)232-2803, FAX (512)232-2807, freeman@che.utexas.edu.

#### PHILADELPHIA - August 22-26, 2004

Emerging Frontiers in Polyolefins (cosponsored with POLY and SPE). Pal Arjunan, Exxonmobil Chem. Co., Baytown Polymer Ctr., 5200 Bayway Dr., Baytown, TX 77520-5200, (281)834-1533, FAX (281)834-2480, pal.arjunan@exxonmobil.com.

**Film Formation**. Theodore Provder, Coatings Rsrch. Inst., Eastern Michigan Univ., 430 W. Forest Ave., Ypsilanti, MI 48197, (734)487-2203, FAX (734)483-0085, ted.provder@emich.edu.

Fire and Polymers. Gordon Nelson, FL Inst. of Tech., College of Science & Liberals Arts, 150 W. University Blvd., Melbourne, FL 32901, (321)674-7260, FAX (321)674-8864, nelson@fit.edu; Charles A. Wilkie, Marquette Univ., Dept. of Chem., P.O. Box 1881, Milwaukee, WI 53201-1881, (414)288-7239, (414)288-7066, charles.wilkie@marquette.edu.

Functional Polymers And Dendrimers: From Synthesis To Applications. Jean M.J. Fréchet, University of California, Department of Chemistry, Berkeley, CA 94720-1460, 510-643-3077, Fax: 510-643-3079, frechet@cchem.berkeley.edu; Virgil Percec, Department of Chemistry, University of Pennsylvania, 231 South 34th Street, Philadelphia, PA 19104-6323, (215)573-5527, FAX (215)573-7888 percec@sas.upenn.edu.

Organic Thin Films for Photonic Applications (Cosponsored with Optical Society of America). Randy Heflin, Dept. of Physics, VA Tech, Blacksburg, VA 24061, (540)231-4504, FAX (540)231-7511, rheflin@vt.edu; J. Paul Armistead, Office of Naval Rsrch., 800 N. Quincy St., Arlington, VA 22217, (703)696-4315, FAX (703)696-6887, armistj@onr.navy.mil; Ghassan E. Jabbour, Optical Sciences Ctr., Univ. of AZ, Tucson, AZ 85721, (520)626-8324, FAX (520)621-4442, gej@optics.arizona.edu; Dennis Smith, Dept. of Chem., Clemson Univ., Clemson, SC 29634, (864)656-5020, FAX (864)656-6613, dwsmith@clemson.edu.

Semicrystalline Polymers. Hervé Marand, Dept. of Chem., VA Tech, Hahn Hall, Rm. 2103, Blacksburg, VA 24061-0212, (540)231-8227, FAX (540)231-8517,

hmarand@chemserver.chem.vt.edu; Srivatsan Srinivas, Exxonmobil Chem. Co., Baytown Polymer Ctr., 5200 Bayway Dr., Baytown, TX 77520-5200, (281)834-2932, FAX (281)834-2316, srivatsan.srinivas@exxonmobil.com.

Vibrational Spectroscopic Advances in Polymer Characterization. Clara D. Craver, Goose Creek Lake, Highway Y, P.O. Box 265, French Village, MO 63036-0265, (573)358-2589 or (941)485-0820, FAX (573)358-2589 claracraver@comcast.net. Tess Award Symposium. David R. Bauer, Ford Motor Co., MD-3182, SRL, P.O. Box 2053, Dearborn, MI 48197, (313)594-1756, (313)323-1129, dbauer3@ford.com.

**ICI Student Award Symposium**. Thomas Hahn, National Starch & Chem. Co., 10 Finderne Ave., Bridgewater, NJ 08807, (908)685-5672, FAX (908)685-7037, tom.hahn@nstarch.com.

**General Papers/New Concepts in Polymeric Materials**. Ron DeMartino, 11 Mandeville Dr., Wayne, NJ 07470, (973)696-8839, rdemart@bellatlantic.net.

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# Dr. Larry R. Dalton Recieves 2003 ACS Chemistry of Materials Award



The recipient of the 2003 ACS Award in the Chemistry of Materials is Dr. Larry R. Dalton for his research on electroactive materials and electro-optic materials. He is recognized as an innovator in statistical mechanical theoretical analysis, a pioneer of the organic synthesis of new nanostructured materials, a developer of new concepts in materials processing and device fabrication, and the inventor of a number of new devices.

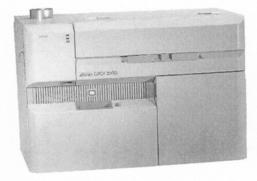
Dr. Dalton is currently Professor of Chemistry and Electrical Engineering at the University of Washington, Seattle, where he also serves as Director of the National Science Foundation Science and Technology Center on Materials and Devices for Information Technology Research, and Director of the Department of Defense (DoD) Multidisciplinary University Research Initiative (MURI) Center for Polymeric Smart Skin Materials. At the University of Washington, Dr. Dalton leads the National Science Foundation Nanotechnology Integrated Research Team on Optoelectronic Materials. He also holds appointments at the University of Southern California, including the Harold and Lillian Moulton Chair of Chemistry, Scientific Co-Director (with Professor and 1994 Nobel Laureate in Chemistry George Olah) of the Loker Hydrocarbon Research Institute, and Professor of

Materials Science and Engineering. Until recently, Professor Dalton directed, at the University of Southern California, the DoD MURI Center on Materials and Processing at the Nanometer Scale.

Dr.Dalton received B.S. and M.S. degrees in chemistry from the Honors College of Michigan State University, graduating with highest honors in 1965 and 1966 respectively, and recently was awarded the 2000 Distinguished Alumni Award of Michigan State University. He received A.M. and Ph.D. degrees in chemistry from Harvard University in 1971. Dr. Dalton began his teaching career with a faculty position at Vanderbilt University, and later held positions at SUNY at Stony Brook and University of Southern California. In 1998, Professor Dalton accepted his current joint appointment between the University of Washington and the University of Southern California.

Professor Dalton is a dedicated teacher and is ranked by student evaluations as one of the best teachers at both the University of Southern California and the University of Washington. He has pioneered the use of computers as teaching tools at both the University of Southern California and the University of Washington through his creation of computer assisted instruction, freshman chemistry websites, and through his role as principal investigator for the IBM Socrates Program.

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# Rose A. Ryntz Named Winner of Roy W. Tess Award in Coatings



Dr. Rose Ryntz, Manager and Staff Technical Fellow with Visteon Corporation, will receive the Roy W. Tess Award in Coatings for 2003. Dr. Ryntz is recognized as one of the world's leading experts in the area of automotive plastics coatings. She has applied her broad fundamental understanding of how plastic materials and processes interact with coating formulations to develop optimum paints and coatings for the automotive market. She has developed new techniques to study paint on plastic performance including scratch and gouge resistance. Dr. Ryntz has published over 75 papers and has received 25 patents in the paint and plastics field. She has also edited two books, "Adhesion to Plastics: Molding and Paintability" and "Plastics and Coatings: Durability, Stabilization, and Testing".

Dr. Ryntz earned a B.S. in Chemistry from Wayne State University and a Ph.D. in Organic Polymer Chemistry from the University of Detroit. She recently earned a M.B.A. degree from Michigan State University (2002). After obtaining her Ph.D., she joined Dow Chemical as Senior Research Chemist in 1983. Dr. Ryntz joined the Mt. Clemens Paint Plant of Ford Motor Company in 1985 and

moved to DuPont Automotive Coatings following their purchase of Ford's paint facility. In 1989, she joined Akzo Coatings, Inc. and was appointed Technical Director for Plastics and Industrial Finishes. In 1992, Dr. Ryntz rejoined the Ford Motor Company working as a Sr. Technical Specialist in the Plastics & Trim Products Division (now Visteon). Dr. Ryntz has received a number of awards, including the Roon Foundation Award and George B. Heckel Award from the Federation of Societies for Coatings Technology, the Henry Ford Technology Award from the Ford Motor Company, the Gold Award, and the Outstanding Leadership Award from the Engineering Society of Detroit for leadership and contributions to advancing the knowledge of science and engineering.

Dr. Ryntz will receive the Tess Award from Dr. Paul Valint, Jr., Chair of the PMSE Division, on Monday, September 8, 2003 during the 226th Meeting of the American Chemical Society in New York, NY. Dr. Ryntz will present an Award Address at that time. An evening reception sponsored by Visteon and the PMSE Division will follow the Award Symposium.

# 2003 Unilever Award Winner, Christopher W. Bielawski



The recipient of the 2003 Unilever Award for Outstanding Graduate Research is Dr. Christopher W. Bielawski, who received his doctorate in October 2002 from the California Institute of Technology, Pasadena, CA under the direction of Professor Robert H. Grubbs. Dr. Bielawski's research efforts were directed toward new concepts and strategies in macromolecular synthesis through the development of designer Ru catalysts. For example, the efficient synthesis of copolymers with segments that require two or more different polymerization techniques remains challenging, as multiple steps are usually necessary. To circumvent this drawback, Bielawski developed a series of catalysts that are capable of simultaneously mediating two mechanistically distinct polymerizations (i.e., ring-opening metathesis polymerization and atom-transfer radical polymerization). This has enabled the preparation of a variety of complex block copolymers in a single pot. A second aspect of Bielawski's research was focused on the synthesis of cyclic polymers. Traditionally, such polymers are made through the intramolecular coupling of linear

precursors. However, such cyclizations are rarely quantitative and extremely dilute conditions are required, which places limits on the ability to prepare substantial amounts of pure cyclic polymer. By adding monomer to a "cyclic" catalyst, Bielawski demonstrated that both ends of the growing polymer chain remain attached to the catalyst so the topology of polymer remains cyclic throughout the entire reaction.

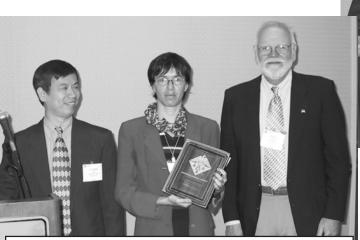
The Unilever Award, which will be presented at the New York meeting of the American Chemical Society (Sept. 7-11) is administered by the Polymer Education Committee of the Polymer Chemistry and Polymeric Materials Science and Engineering Divisions, and is sponsored by Unilever, a global manufacturer of consumer products, foods and specialty chemicals. The Unilever award recognizes and encourages outstanding graduate research in the design, synthesis and physical chemistry of polymers.

## Awards Luncheon in New Orleans





Paul Valint presenting the award to Ted Provder



2002 Doolittle Award Presented to Isabella Camurati by Yu-Chin Lai (left), and Paul Valint (right) for the paper "New catalysts designed for the simultaneous control over polypropylene molecular mass and stereoregularity"



Presented to Jinsang Kim by Carmine P. Iovine (ICI) and Paul Valint for his paper "Funneling fluorescence energy via vectorial energy transfer within conjugated polymer thin films"

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## **Election Candidates**

#### Candidates for Councilor

#### Michael Jaffe

Professor Michael Jaffe is presently a faculty member at the New Jersey Institute of Technology and Rutgers University. He is the Director of the Medical Device Concept Laboratory and is Chief Scientist for Industrial Programs of the New Jersey Center for Biomaterials. Previously, he was a Research Fellow at the Hoechst Celanese Corporation, which he joined upon completion of his Ph.D. in Chemistry from Rennselaer Polytechnic Institute in 1967. His work has focused on understanding the structure-property relationships of polymers and related materials, the application of biological paradigms to materials design, and the translation of new technology to commercial reality. He is a member of the National Materials Advisory Board, is a past chairman of PMSE, and was selected as a PMSE fellow in 2001. He has authored more than 50 technical publications, six book chapters, and 14 patents.

Personal Statement: Polymeric Materials research is undergoing fundamental change – macromolecular research is shifting from synthetic to biological polymers, the industrial research infrastructure is being dismantled – entrepreneurs and universities are trying to take the lead in new product discovery and commercialization. These trends are causing major dislocations in the polymer industry and in polymer education; the ACS and PMSE have to act creatively to help the membership to define opportunities in this changing technical environment. I look forward to continuing to playing a role in PMSE and the ACS in meeting these challenges.

#### David R. Bauer

David Bauer is currently a Senior Staff Technical Specialist in the Materials Research and Advanced Engineering Department at Ford Motor Company, carrying out research on long-term durability of polymeric materials. He received his B.S. in Chemistry from the California Institute of Technology in 1971, and his Ph.D. in Chemical Physics from Stanford University in 1975. He was a post-doctoral fellow in the Chemistry Dept. of the University of Illinois from 1975 to 1977 and joined the Research Laboratory of Ford Motor Company in 1977. He has over 100 publications in technical journals and has made over 100 presentations. He is on the Editorial Review Boards of Polymer Degradation and Stability and the Journal of Coatings Technology. In 1996, he was selected to give the Mattiello Lecture at the International Coatings Exposition of the Federation of Societies for Coatings Technology. In 2000 at the Washington, DC ACS Meeting he received the Roy W. Tess Award in Coatings. He is a member of Sigma Xi, the Society of Plastics Engineers, and the American Chemical Society. He is a past Chairman of the Polymeric Materials: Science and Engineering Division of the American Chemical Society and currently serves as an Alternate Councilor. As Councilor, he would work to improve the usefulness of the ACS to its industrial members.

## Candidates for Member at Large

#### Jamil Baghdachi

Dr. J. Baghdachi is a Professor of Polymers and Coatings at the Coatings Research Institute of Eastern Michigan University. Prior to joining academia he held positions as Senior Scientist at BASF Corporation, Coatings Division and Atlantic Richfield Chemical Company. His present research interests include polymer synthesis and modification, specialty purpose coating formulations, interpenetrating polymers, nanotechnology and polymers from renewable resources with emphasis on commercial applications. He holds 18 U.S. and 12 International patents and has coauthored over 58 papers in the areas of polymers and coatings, and adhesion science. He is the Editor of Polymers and Coatings published monthly and has authored a monograph on "Adhesion Aspects of Polymeric Coatings." He serves as the Chair for the Professional Development Committee and a Distinguished Lecturer for the Federation of Societies for Coating Technology.

Dr. Baghdachi's educational background includes a Ph.D. in Organic Chemistry from the University of Mississippi, an M.S. and B.S. from the University of Tennessee, and conducted Postdoctoral work at the University of Massachusetts, Amherst. Dr. Baghdachi has been a member of the American Chemical Society since 1977, and also enjoys membership in other scientific and professional societies such as Adhesion Society, American Oil and Color Society, and Society of Manufacturing Engineers.

Personal Statement: If elected, I look forward to taking on an active role serving all PMSE Division members and in particular working hard to strengthen Coating Science and Applied Polymer research.

#### Lisa S. Baugh

Lisa S. Baugh (formerly Lisa S. Boffa) is a Senior Chemist at ExxonMobil's Corporate Strategic Research Laboratory in Annandale, New Jersey, where her research focuses on functional polyolefins and late transition metal / main group polymerization catalysis. She received her B.S. Chemistry degree from the University of Texas in 1991 and her Ph.D. from U. C. Berkeley (as an NSF Predoctoral Fellow) in 1996, having carried out the last two years of her Ph.D. work in the Polymer Science & Engineering Department of the University of Massachusetts, Amherst. She has been with ExxonMobil since 1997. Her recent publications include a *Chemical Reviews* article on olefin / polar comonomer polymerization and two edited books, *Late Transition Metal Polymerization Catalysis* and *Transition Metal Catalysis in Macromolecular Design*.

Dr. Baugh has served PMSE Division in a number of capacities (and hopes to continue doing so as a 2003 - 2004 Member-at-Large), including Catalysis & Surface Science Secretariat Representative, Awards Publicity Coordinator, Electronic Preprints Committee, previous Member-at-Large, awards judge, and symposium organizer / moderator. She served a

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## **Electrion Candidates, Cont.**

term as CATL Secretary-General / Program Chair in 2001, and currently is an Associate of the Women Chemists Committee and WCC liasion to the editorial board of *Chemistry* magazine. She has written a number of essays for college chemistry textbooks and periodically presents lectures to graduate students on industrial research and job searching. Dr. Baugh is also a member of the ACS POLY division and Alpha Chi Sigma (Beta Theta Chapter). Outside of work, she is Principal Viola of the Hunterdon (NJ) Symphony and a violinist with the Central Jersey Symphony.

#### **Brian Benicewicz**

Brian C. Benicewicz is the Director of the New York State Center for Polymer Synthesis and Professor of Chemistry at Rensselaer Polytechnic Institute in Troy, NY. He received his B.S. from Florida Institute of Technology in 1976 and his Ph.D. in polymer chemistry from the University of Connecticut in 1980. He held positions as a Research Scientist at Celanese Research Company, Senior Scientist at Ethicon, Inc., and Section Leader and Deputy Group Leader at Los Alamos National Laboratory before joining the faculty of Rensselaer in 1997. While at Los Alamos, he was awarded the Excellence in Industrial Partnerships Award, the Distinguished Patent Award, and the NASA Distinguished Patent Award (for work conducted jointly with researchers at Kennedy Space Center). His research interests are focused in the areas of polymer fuel cell membranes, liquid crystalline polymers and thermosets, electrically conducting polymers, and controlled free radical polymerization. He has been a member of the ACS for over 20 years.

#### John W. Gilmer

John Gilmer is presently employed as a Research Associate at Eastman Chemical Company in Kingsport, Tennessee where he is currently involved in the research and development of high performance polyester resins. He received his B.S. in Chemistry from the College of William and Mary and his Ph.D. in Physical Chemistry under Professor Richard Stein at the University of Massachusetts. From 1983 to 1985, he was a postdoctoral fellow with Professor Gerhard Zachmann at the University of Hamburg in Germany. Prior to joining Eastman in 1994, Dr. Gilmer worked as a Principal Scientist at EniChem Americas and served as Assistant Professor of Polymer Science at Penn State University. His research interests include the engineering uses of polyesters, the phase behavior of copolymers and blends, reactive extrusion, nanocomposite materials, and polymer morphology. Dr. Gilmer has more than 40 patents and publications. For the past 10 to 15 years, Dr. Gilmer has been active in the PMSE Division as Editor of the PMSE News and as Publicity Coordinator.

#### Ellen Lee

Ellen Lee is a Technical Specialist in the Plastics Research group at Ford Motor Company's research laboratory in Dearborn, Michigan. She earned her B.S. in chemical engineering from Northwestern University in 1993 and her Ph.D. from the University of California, Berkeley in 1998, also in chemical engineering. Her graduate research involved fundamental measurements of single chain polymer dynamics using flow light scattering techniques. These measurements, along with rheological behavior of bulk systems, allow better modeling and understanding of complex processing conditions. Her work in this area secured her the ICI Student Award in Applied Polymer Science in 1997. Dr. Lee's current research at Ford is in the area of novel filler polymer composite materials, including nanocomposites and natural fiber reinforced composites. She has studied aspects of material development, effect of fillers on structure property relationships, as well as the effects of processing conditions on material mechanical properties. In 2002, she was awarded the ACS Regional Industrial Innovation Award for her work on nanocomposites. She has given four invited talks and holds four U.S. patents (issued and pending). Dr. Lee has been a member of ACS since 1998 and is a member of the PMSE technical division. She has been active as a member-atlarge and has also served on the electronic preprints committee for PMSE.

#### **David Martin**

Prof. David C. Martin is the Director of the Macromolecular Science and Engineering Center and Associate Professor of Materials Science and Engineering and Biomedical Engineering at the University of Michigan. He received his undergraduate degree in Materials and Metallurgical Engineering Summa Cum Laude in 1983, and a Master of Science degree in Macromolecular Science and Engineering in 1985 from the University of Michigan. He graduated in 1989 with a Ph.D. in Polymer Science and Engineering from the University of Massachusetts at Amherst under the direction of Prof. Edwin L. Thomas, now at MIT. After graduating Dr. Martin spent a year as a visiting scientist at DuPont Central Research and Development working with Kenn Gardner and Larry Berger. He was named an NSF National Young Investigator in 1992, and spent a year as a Humboldt fellow in the laboratory of Prof. Gerhard Wegner at the Max Planck Institute for Polymer Research in Mainz. Germany. He served as the meeting chair for the fall MRS meeting in Boston in December 2002. Prof. Martin was the recipient of a Special Creativity Award from the National Science Foundation in 2003. His research interests involve the structural characterization of polymers and organic molecular crystals in thin films by high resolution electron microscopy, and the development of polymer coatings for improving the biocompatibility of microfabricated neural prosthetic devices. His e-mail address is milty@umich.edu and his web page addresses are msewww.engin.umich.edu/ people/milty and www-personal.engin.umich.edu/~milty.

#### Rose Ryntz

Dr. Ryntz is recognized as one of the world's leading experts in the area of automotive plastics coatings, applying her

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## **Election Candidates, Cont.**

expertise in developing optimum paints and coatings for the automotive market and new techniques to study paint on plastic performance including scratch and gouge resistance. Dr. Ryntz has published over 75 papers and received 25 patents in the paint and plastics field. She has also edited two books, "Adhesion to Plastics: Molding and Paintability" and "Plastics and Coatings: Durability, Stabilization, and Testing".

Dr. Ryntz earned a B.S. in Chemistry from Wayne State University, a Ph.D. in Organic Polymer Chemistry from the University of Detroit, and a M.B.A. from Michigan State University (2002). She joined Dow Chemical in 1983, then joined the Mt. Clemens Paint Plant of Ford Motor Company in 1985, moving to DuPont Automotive Coatings following their purchase of Ford's paint facility. In 1989, she joined Akzo Coatings, Inc. as Technical Director for Plastics and Industrial Finishes. In 1992, Dr. Ryntz rejoined the Ford Motor Company working in the Plastics & Trim Products Division (Visteon). She is currently Senior Manager for Advanced Material and Fastener Engineering and also holds the technical scientist position Staff Technical Fellow within Visteon.

Dr. Ryntz has also served as an adjunct professor at the University of Detroit/Mercy, the University of Wisconsin, Kent State University, and the University of Southern Mississippi. She was the Technical Chair for the Detroit Society for Coatings Technology from 1988-1994 and served as Chair of the Younger Chemists Steering Committee for the American Chemical Society from 1988-1990. Dr. Ryntz has held numerous positions in the Federation of Societies of Coatings Technology including Technical Advisory Board, Chair of the Professional Development Committee, Editorial Review Board, Board of Directors, Chair of the Industrial Relations Task Force, and Coatings Industry Research Fund.

Dr. Ryntz's awards include the Roon Foundation Award and George B. Heckel Award from the Federation of Societies for Coatings Technology, the Henry Ford Technology Award and several Customer Driven Quality Awards from the Ford Motor Company, the Gold Award and Outstanding Leadership Award from the Engineering Society of Detroit, and most recently the Roy Tess Award from the PMSE.

"I believe I can contribute a sense of urgency and passion to the PMSE as a Board Member at Large. In this time of global restructuring and reduction in volunteer time and energy it is important to maintain attributes that are essential to a society's longevity and success. By utilizing the global network and knowledge gained in my 20 year industrial career I believe I can add to the strength of the PMSE as a whole".

#### **David Schiraldi**

David A. Schiraldi is currently an Associate Professor of Macromolecular Science & Engineering at Case Western Reserve University (CWRU). Prior to moving to academia in 2002, Dr. Schiraldi held various R&D positions for Celanese/Hoechst Celanese/KoSa over a 20 year career, working in chemical catalysis, development of engineering plastics, polymer recycle, and longer range research in polyester polymers and monomers. He received a B.A. in Chemistry

from the University of California, San Diego (1978), followed by a Ph.D. in organometallic chemistry from the University of Oregon (1982). While in industry, Dr. Schiraldi successfully developed and commercialized a number of new products and processes in the PET and PBT product areas, established, managed and actively participated in the Hoechst Celanese/KoSa university-based research program (funding as many as 20 students per year) as well as playing a significant role in university recruiting for the corporation. At CWRU, the Schiraldi research group is working in the areas of polymer nanocomposites, polymer blends, and catalysis of condensation polymerizations; new activities include design and synthesis of metal chelating polymers, new methods for polymer recycle, and development of polymers from renewable resources. A member of the ACS for 26 years, and a former Program Chair of the South Texas ACS Chapter, Dr. Schiraldi is the author of over 60 papers, 10 U.S. patents, coauthor of over 40 papers presented at ACS meetings, Associate Editor for the Journal of Applied Polymer Science, and a member of the International Advisory Board of the Journal of Industrial and Engineering Chemistry.

Personal Statement: As PMSE is the place where fundamental science and practical applications of polymers come together within the ACS, this division has long played an important role in my development as a scientist. I am excited about the opportunity to give back to the division and our scientific community, and am especially interested in contributing in areas of technical program planning and new, innovative methods for attracting young people into the sciences.

#### Les H. Sperling

Dr. L. H. Sperling is a professor emeritus of the Chemical Engineering Department of Lehigh University. He earned his Ph.D. in Chemistry at Duke University in 1959, and from 1958 to 1965, he was employed by the Buckeye Cellulose Corporation, Memphis, Tennessee. During this period, he was also a night instructor at Christian Brothers College in Memphis. From July 1965 to May 1967, he was a postdoctoral research associate at Princeton studying under Dr. A. V. Tobolsky. Dr. Sperling joined the staff of Lehigh University in June 1967 as Assistant Professor of Chemical Engineering and Senior Staff Member, Materials Research Center.

Dr. Sperling was selected as a Fellow of the PMSE Division in 2002, and has had the privilege of serving PMSE on the Board, through symposia chaired, and in other ways since the mid-1970s. His research interests are on the physical and mechanical behavior of polymers, particularly interpenetrating polymer networks. He has over 300 reviewed publications, 15 books written or edited, and is currently working on future books.

#### Kathryn Uhrich

Dr. Kathryn Uhrich is an Associate Professor of Chemistry at Rutgers University. She received her B.S. degree in

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## **Election Candidates, Cont.**

Chemistry from the University of North Dakota (1986), then her Ph.D. in Organic Chemistry from Cornell University (1992). Before moving to her present post at Rutgers, Kathryn held post-doctoral positions at AT&T Bell Laboratories and Massachusetts Institute of Technology. Trained in organic and polymer synthesis, her research interests have included linear and dendritic polymers; photoresists; and biomaterials for bone replacement. The focus of her current research is the synthesis and characterization of biocompatible polymers for medical and dental applications, mainly drug delivery and tissue engineering. Kathryn has received the PMSE Sherwin-Williams Student Symposium (1991), Johnson & Johnson Discovery (1996), Hoechst Celanese Innovative Research (1996 and 1997), and National Science Foundation CAREER (2000) awards. She is co-founder of Polymerix, the 2003 recipient of New Jersey's "Best Life Sciences/Healthcare Company", and a recently elected Fellow in the American Institute for Medical and Biological Engineering (2003). She organizes and chairs symposia for both PMSE and POLY (1997-present) and is the BTEC representative for POLY (1999present). Kathryn looks forward to her continued role in PMSE as a Member-at-Large, particularly in promoting interactions with POLY.

Dont forget to mail in your ballot!

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