

The logo for PMSE NEWS features the letters P, M, S, and E in a stylized font, with the 'S' being significantly larger and positioned inside a hexagonal shape. The word NEWS is written in a bold, sans-serif font to the right of the PMSE letters.

Polymeric Materials: Science and Engineering Division of the American Chemical Society

SPRING 2004

Message From Our Chair, Jay Dias

It is my pleasure to serve you as Chair of PMSE in 2004. Variety is the name of the game. I hope you are looking forward to the variety in our 2004 Spring ACS meeting in Anaheim. We have a terrific program and our thanks go out to our Division Vice-Chair, Benny Freeman, for assembling the program. As always an up-to-date version of the program can be found on our website at <http://membership.acs.org/P/PMSE/meetings/>. Benny has also put in place an experiment based upon feedback from attendees. He has scheduled regular breaks in the program and also added a meeting room, near the technical sessions, to continue discussion beyond that possible within the session. We also must thank the Technical Program Chairs, Tim Bunning, Vladimir Tsukruk, outgoing chair, Rick Roesler and incoming new chair, Zhenan Bao. Their role as technical program chairs is to develop our future programs. If programming is your interest then contact our program chairs. Most of your feedback is that our program is a key aspect of your divisional membership.

Our program is strong in part because it relies heavily on a partnership between the program chairs and volunteers to organize and participate in relevant symposia. PMSE has attempted to actively recruit new volunteers to organize symposia in rapidly developing growth areas of polymer science and technology. PMSE has also actively pursued joint programs with other ACS divisions as well as other scientific societies like the Optical Society of America and the Society of Plastics Engineers. We encourage every member to make suggestions on possible symposia topics, organize a symposium, or chair a session. We particularly want to hear from you regarding areas of polymer science and engineering that you feel PMSE should program more aggressively.

Our division is also taking a proactive approach to address PMSE's strategy for the future. Last year PMSE commissioned a Long Range Planning Committee led by Chris Ober and composed of Paul Valint, Ray Dickie, Michael Jaffee, Ted Provder and Marek Urban. The committee was asked to consider possible issues confronting the division. This is an attempt by PMSE to redirect attention toward strategic long-range planning. Activities like these are important for shaping future activities and developing new initiatives. Suggestions from the committee included: more effective use of electronic media to better serve membership; actively recruit members from new areas in polymer science and technology into the division and its leadership; and explore ways to expand the division horizons to include both the local and global polymer community. The committee felt that the highest priority be placed on assessing PMSE membership to answer two questions; what is the makeup of our current


membership, and what needs does the membership have? A new committee headed by our membership chair will conduct this activity. If you are contacted please help PMSE by providing your honest feedback. A professional society must meet the needs of its members. Our strength in numbers, diversity and education affords us the ability to meet the changing needs of our members. This is a tough challenge and I can think of no greater group of volunteers than those of PMSE! It's not always an easy task, but it's what makes PMSE successful. We are one of the world's premier organizations representing polymer materials. There are volunteer opportunities available in all aspects of our divisional activities. Our surveys over the last several years have shown that individuals join PMSE for a variety of reasons. PMSE volunteers become actively involved for any number of reasons. I got involved for what I would consider one of the most important reasons, I was asked. Someone valued my help in making a strong productive professional society. I said "yes" and I wanted to become involved. Consider this my request to you, "will you become a PMSE volunteer?" If your answer is yes then contact any member of our executive committee. Our contact information is at <http://membership.acs.org/P/PMSE/about/officers.html>. Have you checked our website lately for information (<http://membership.acs.org/P/PMSE/>)? The site can give you some idea about most our divisional activities. Your help is welcome in all of these activities including: awards, operations, education, membership, books, advertising and leadership.

If any of this sounds interesting to you please contact us. If you plan to attend the Spring ACS meeting in Anaheim, stop by the membership table and say hello. One of the highlights of the PMSE Spring Meeting is the Award Luncheon and Award Reception. These activities honor our PMSE awardees and PMSE fellows as well as two national ACS award winners. I urge you to attend these and congratulate the awardees. Tickets for the Monday luncheon can be purchased in advance or during registration at the meeting. The Monday evening Award Reception is funded by the division and contributions, and is open to all members.

I look forward to seeing you in Anaheim.

A. Jay Dias
PMSE Chair

Why more scientists rely on Wyatt instruments to measure macromolecules.



Wyatt instruments are up to 25 times more precise.

a Wyatt DAWN[®] instrument is the only way to *directly* measure molecular weights and sizes without column calibration or reference standards.

But that's just part of the story. Wyatt also offers the widest range of instruments, providing equally superior measurements for all sample

types, from polymers and proteins to carbohydrates and particles. And because we provide the only multi-angle modular solution, you can choose only the detectors you need. You can read all about it in more than 1300 peer-reviewed articles that cite Wyatt instruments.

Maybe that's why 28 of the top 30 chemical, pharmaceutical and biotechnology companies choose Wyatt instruments. Or why all major federal regulatory agencies and national laboratories use Wyatt.

Since 1968, when Wyatt first commercialized laser light scattering, our instruments

Wyatt instruments are cited in 80 times as many peer-reviewed articles.

have helped thousands of scientists, from Nobel laureates to members of the National Academy of

The simple answer is that Wyatt multi-angle light scattering detectors are up to 25 times more precise than pseudo light scattering techniques. In fact, using



Our staff, including ten PhD scientists, provides unmatched service, support and training.



Scientists choose Wyatt instruments ten to one over the competition.

Sciences to researchers in over 50 countries worldwide. One corporate scientist recently wrote us to say: "I am grateful beyond description for your state-of-the-art technology."

While we appreciate his comment, we're just as enthusiastic about our service, support and training.

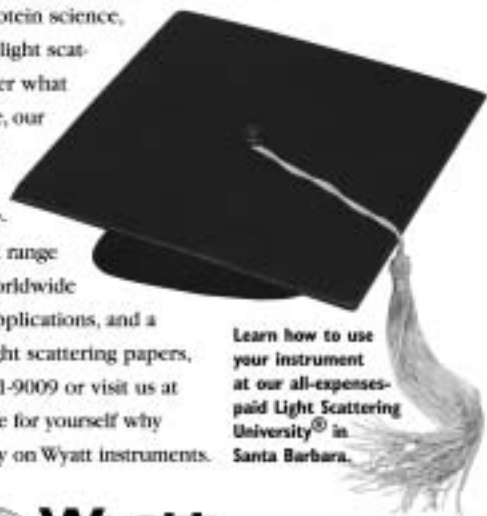
Our three-day, all-expenses-paid Light Scattering University[®] course in Santa Barbara, California is designed to give you the greatest proficiency with our instruments in the least amount of time (*U.S. customers only*).

We also provide ongoing access to our ten PhD scientists with broad expertise in liquid chromatography, polymer chemistry, protein science, biochemistry and light scattering. So no matter what challenge you face, our staff will help you find the solution.

For more information on our full range of instruments, worldwide dealer network, applications, and a bibliography of light scattering papers, please call 805-681-9009 or visit us at wyatt.com. And see for yourself why more scientists rely on Wyatt instruments.



Only Wyatt designs and manufactures all of its hardware and software.



Learn how to use your instrument at our all-expenses-paid Light Scattering University[®] in Santa Barbara.



Program For Anaheim

March 28 - April 1

Combinatorial Approaches to Materials. Cher H. Davis, NIST Combinatorial Methods Center, 100 Bureau Drive, 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, toppotyrailo@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

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; Darrin J. Pochan, Dept. of Mats. Sci., Univ. of DE, 303 Spenser Laboratory, Newark, DE 19716, (302) 831-3569, FAX (302) 831-4545 pochan@udel.edu.

Metal-Containing Polymers and Materials (Cosponsored POLY; POLY is primary). Ulrich S. Schubert, Depts. Of Macromolecular Chem. & Nanoscience, Eindhoven Univ, of Tech., P.O. Box 513, Eindhoven 5600 MB Netherlands.

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 (Cosponsored PHYS). 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.

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.

Response-Driven Polymeric Films and Coatings. Marek W. Urban, Univ. of Southern MS., School of Polymers and High Performance Materials, Dept. of Polymer Sci., P.O. Box 10076, Hattiesburg, MS 39406 (601) 266-6868, marek.urban@usm.edu.

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.

Program Committee

Zhenan Bao

Bell Laboratories
Lucent Technologies
600 Mountain Ave., Rm. 1A-261
Murray Hill, NJ 07974
Phone: (908) 582-4716
email: zbao@lucent.com

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

Vladimir Tsukruk

Dept. of Materials Science
& Engineering
Iowa State University
3155 Gilman Hall
Ames, Iowa 50011-2714
Phone: (515)294-6904
email: vladimir@iastate.edu

THREE SELECTED AS PMSE FELLOWS IN 2004

The American Chemical Society Division of Polymeric Materials: Science and Engineering (PMSE) has just completed its process to select a new class of Fellows for 2004, and the following people have been chosen:

Nikos Hadjichristidis

Bill MacKnight

Don Schulz

They will be inducted as the fifth class of PMSE Fellows during the Awards Lunch at the Anaheim ACS Meeting on Monday, March 29th. PMSE is pleased to welcome this distinguished group of polymer scientists and engineers to the ranks of fellows. Following is a short description of each of them.

Professor Nikos Hadjichristidis obtained his B.Sc. degree from the University of Athens, Greece, in 1966, his Ph.D. at the University of Liège, Belgium in 1971, and his D.Sc. from the University of Athens in 1978. He conducted postdoctoral research at the University of Liège with Professor V. Desreux (1971–1972) and at the National Research Council of Canada with Dr. J. Roovers (1972–1973). Professor Hadjichristidis has been part of the Chemistry Department of the University of Athens since 1973, becoming Full Professor in 1988, and serving as Director of the Industrial Chemistry Laboratory since 1994 and as department chairman (1991–1995 and since 1999). He has also been a visiting scientist at the University of Liège, the NRC of Canada, and at the University of Akron. He has been a visiting professor at ExxonMobil Research and Engineering Co., Annandale, NJ since 1984. Prof. Hadjichristidis has served as President of the European Polymer Federation (1995–1996), Member of the National Advisory Research Council (since 1994), President of the State Highest Chemical Board (since 1995), and Director of the Institute of “Organic and Pharmaceutical Chemistry” of the National Hellenic Research Foundation (2000-2001). He has received the Academy of Athens Award for Chemistry (1989), the Empirikion Award for Sciences (1994), the Greek Chemists Association Award (2000) and the ACS PMSE A. K. Doolittle Award (2003). He has published more than 250 refereed papers and he is the co-author of a book on “*Block Copolymers*”.



Professor William J. MacKnight received his bachelor's degree in Chemistry (with Distinction) from the University of Rochester, and his master's in Chemistry and Ph.D. in Physical Chemistry from Princeton. He was a Research Associate at Princeton with A. V. Tobolsky (1964-5). Professor MacKnight has been at the University of Massachusetts since 1965, serving as the Head of the Polymer Science and Engineering Department for 16 years, holding the rank of Distinguished University Professor since 1996, and Wilmer D. Barrett Distinguished Professor since 1998. Professor MacKnight has served on many committees, review and editorial boards, and has received a number of international and national awards. These include the High Polymer Physics Prize (co-recipient) of the American Physical Society (1984), American Chemical Society Award in Polymer Chemistry (1997), Distinguished Service Award in Advancement of Polymer Science administered by The Society of Polymer Science, Japan (1998), and the Herman F. Mark Award administered by the Division of Polymer Chemistry of the American Chemical Society (2002). In 1998 he was elected to the National Academy of Engineering. He is a fellow of the American Physical Society and the AAAS. He has authored or co-authored over 300 publications, 7 patents, and co-authored 2 books.

FELLOWS, Cont.

Dr. Donald N. Schulz is currently Senior Scientific Advisor at the Corporate Strategic Research Laboratories of ExxonMobil Research and Engineering Co. in Annandale, NJ. At ExxonMobil he has held a variety of research and research management positions. He was the Section Head or Program Leader over 4 commercializations. Prior to joining ExxonMobil, Don was a Group Leader at the Central Research Laboratories of the Firestone Tire and Rubber Co. He received his Ph.D. from the University of Massachusetts in Amherst, Massachusetts in 1971 and was the CUMIRP Lecturer there in 1991. His research interests include polymer synthesis/modification, catalysis, functional polymers, and structure-property relationships. He is the coeditor of 5 books, author or co-author of over 90 publications, and inventor or co-inventor of over 55 issued U. S. Patents. He has served on the Editorial Boards of *Rubber Reviews* (Chairman), *Rubber Chemistry and Technology*, *PMSE Preprints* (Editor), *Heteroatom Chemistry*, and *Isotopics* (Editor). In addition he has chaired two Gordon Research Conferences (“Ion-Containing Polymers” and “Elastomers, Networks and Gels”), as well as a number of symposia at ACS National meetings. Dr. Schulz is also a Past Chair, Vice Chair, Treasurer, and Program Chair of the PMSE Division of the ACS and Past Secretary General of ACS Macromolecular Secretariat.



ICI Student Award Finalists

The six finalists who presented at the 226th ACS National meeting in New York, NY, their presentation titles, and academic institutions are:

Yushan Hu, Case Western Reserve University, “Structural Model for Oxygen Permeability of a Liquid Crystalline Polymer”

Brian K. Johnson, Princeton University, “NanoPrecipitation of Organic Active using Mixing and Block Copolymer Stabilization”

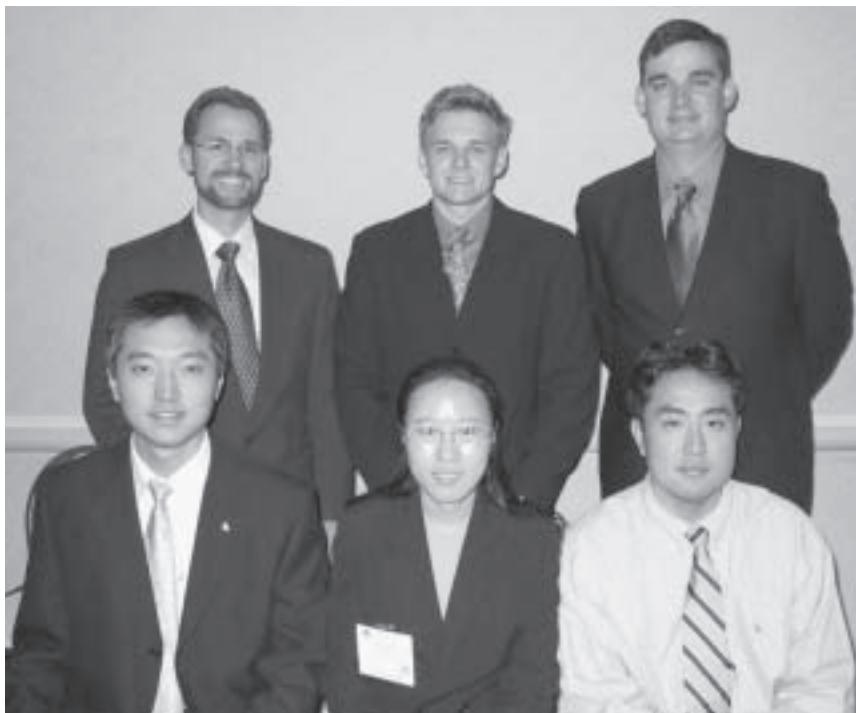
Benjamin Falk, Rensselaer Polytechnic Institute, “Optical pyrometry: A Novel Method for Monitoring Photopolymerizations”

Won Jae Chung, Georgia Institute of Technology, “Structure-Property Relationships for Pd-Catalyzed Poly(norbornene) Derivatives”

Christopher W. Bielawski, California Institute of Technology, “Synthesis of Cyclic Polymers Using Ring-Opening Metathesis Polymerization (ROMP)”

Chunyan Chen, University of Michigan, “Molecular-Level Understanding of Polymer Silane Interacting Mechanism by SFG Vibrational Spectroscopy”

The award consists of \$1600 and a plaque. The winner will be presented at the 227th ACS National Meeting, Spring 2004.



Left to right (standing): Brian K. Johnson, Christopher W. Bielawski, Benjamin Falk
Left to right (seated): Yushan Hu, Chunyan Chen, Won Jae Chung

New York Ford Travel Grants Awarded

The Division of Polymeric Materials: Science and Engineering (PMSE) is pleased to announce the winners of the Ford Travel Grant for the Fall 2003 ACS Meeting in New York. This competitive award is sponsored by the Ford Motor Company and provides a certificate and \$500 in travel assistance to graduate student women and underrepresented minorities to present research at national ACS meetings. The winners are Ms. Irada Isayeva, Ms. Hoa Lam, Ms. Keri Lee, and Ms. Kenya Powell.

Ms. Isayeva is completing her Ph.D. in the Department of Polymer Science at the University of Akron under the supervision of Professor Joseph P. Kennedy. Her presentation at the ACS meeting was entitled "Synthesis and Characterization of Novel POSS-Reinforced Amphiphilic Membranes." This presentation partially reflected her dissertation on the synthesis and characterization of novel amphiphilic polymer membranes for biomaterials.

Ms. Lam is a third year Ph.D. student in the Materials Science and Engineering Department at Drexel University, and her thesis supervisor is Dr. Frank Ko. Her thesis project focuses on electrospinning multifunctional nanocomposite nanofibers (carbon nanotube reinforced polymers and nanofibers from conductive polymers).

Ms. Lee is completing her Ph.D. in the Chemistry Department at the University of Pittsburgh, and her Ph.D. advisor is Professor Toby M. Chapman. Her Ph.D. project, and the subject of her presentation at the New York meeting, centered on star polymers that contain a dendritic poly(L-lysine) core with poly(ϵ -caprolactone) arms. Hydroxyapatite was synthesized in the presence of the polymers producing films with good mechanical properties and the potential for use in bone tissue engineering.

Ms. Powell is a third year Ph.D. student in the Chemistry Department at Washington University, and her thesis supervisor is Professor Karen L. Wooley. Ms. Powell's work focuses on designing and characterizing linear fluorinated poly (benzyl ethers) as part of a comparison study with hyperbranched fluoropolymers to prepare low surface energy coatings for marine anti-fouling applications.



Ford Travel Grant Winners: left to right, Lee, Powell, Isayeva, and Lam.

Doolittle Award Winner Announced

The winners for papers presented at the New Orleans meeting are R. C. Advincula, M-K Park (University of Houston), S. Pispas, N. Hadjichristidis (University of Athens-Greece) and J. Mays (University of Tennessee), for their paper "Adsorption Phenomena of Polyelectrolytes, Amphiphilic Block and Star Copolymers on Surfaces as Investigated by the Quartz Crystal Microbalance Method."

The Arthur K. Doolittle Award, established by the Union Carbide Corporation, is given to the authors of an outstanding paper presented before the Division at each national meeting of the ACS. A prize in the amount of \$1,000.00 is financed with the gift of royalties from A. K. Doolittle's book, *Technology of Solvents and Plasticizers*. All papers appearing in the Preprint Book are evaluated on the basis of content, with emphasis on originality and development of new concepts, and on the quality of presentation. Recipients are selected by an anonymous panel of judges appointed by the Chairman of the Doolittle Award Committee.

2004 Cooperative Research Award



The 2004 winner of the Cooperative Research Award in Polymer Science and Engineering presented by the American Chemical Society's (ACS) Division of Polymeric Materials: Science and Engineering (PMSE) is Professor Krzysztof (Kris) Matyjaszewski, JC Warner Professor of Natural Sciences and Director, Center for Macromolecular Engineering at Carnegie Mellon University. Dr. Brian Benicewicz, Chair of the PMSE Cooperative Research Award Committee, announced the award, which is endowed by the Eastman Kodak Company, and has been presented annually since 1992.

Professor Matyjaszewski won the 2004 award for his highly productive and sustained collaborative endeavors with a number of leading researchers working at a spectrum of industrial organizations in the area of controlled/living radical polymerization (CRP). Kris formed two research Consortia namely, the Atom Transfer Radical Polymerization (ATRP) Consortium (1996-2000) and the CRP Consortium which started 2001, to cooperate with a range of industries that would benefit from improved control of processes used for preparation of materials based on radically (co)polymerizable monomers. Both consortia were set up to address the industrial sponsors' primary concerns with this new technology and expedite the transfer of knowledge on the fundamentals of CRP to industry. The primary industrial concerns were elucidation of all aspects of the mechanism and process, preparation of higher activity catalysts, catalyst removal, catalyst recycle, an extension of the range of monomers that could be copolymerized by a controlled radical polymerization

process and correlation of the molecular structure of the new materials prepared by CRP with their properties.

A close relationship has been sustained for over eight years with several corporations because Kris has addressed the issues that the corporations felt were important, thus allowing them to quickly and efficiently gain an understanding of the mechanism, catalyst and process variables and concentrate internal research on development of viable products for commercialization in their specific markets. The fact that a large number of focused patent applications have issued to consortium members is a direct result of this approach cooperative research. Thirteen consortia members have over 100 patents and published patent applications, based on the fundamental work conducted in Kris' group. Several of his former students and post-docs have been active in applying the knowledge gained in Kris' lab to their industrial research programs targeting new materials desired by their companies while maintaining cutting edge skills through continuing interaction via the Consortia; eleven former group members have filed applications for their present employers in the field of CRP. Members of the ATRP and CRP Research Consortium have included 3M, Akzo, Asahi, AtoFina, Bayer, BF Goodrich, Boston Scientific, BYK, Cabot, Ciba, Degussa, Elf, GIRSA, Geon, JSR, Kaneka, LG Chemical, Mitsubishi Chemical, Mitsui, Motorola, Nalco, Nippon Synthetic Chemical, Nitto Denko, PPG, Rohm & Haas, RohMax, Sasol, Solvay, Teijin and Zeon.

Kris has participated in various professional activities directed towards the transfer of knowledge from academia to industry. He is the co-editor of "Progress in Polymer Science" and serves on the editorial boards of ten other polymer journals. He is currently an adjunct professor at Polish Academy of Sciences and University of Pittsburgh. His contribution to education includes supervising over 100 graduate students and postdoctoral fellows. He has organized five ACS Symposia, and two workshops for industry on the topics of controlled polymerizations. Several of his papers and patents are amongst the most cited publications in the field of radical polymerization, (one of the first papers on ATRP, published in JACS in 1995, has been cited over 800 times and the fundamental patent on ATRP, which issued in June 1998 as 5,763,548, had been cited over 70 times. Kris has received several awards including American Chemical Society (ACS) Creative Polymer Chemistry Award (1995), Humboldt Award for US Senior Scientists (1999), ACS Pittsburgh Award (2001) and ACS Polymer Chemistry Award (2002).

The award, which includes a \$1,500.00 prize, will be presented at PMSE's awards luncheon and will be recognized by the Symposium "Cooperative Research Award honoring Krzysztof Matyjaszewski" at the 227th American Chemical Society meeting in Anaheim, California (March 2004).

For more information, contact Brian Benicewicz, Rensselaer Chairman, PMSE Cooperative Research Award Committee, Telephone: 518-276-2534, benice@rpi.edu.

Award Winners in New York



Paul Valint presents the Tess Award to Rose Ryntz at the Tess Award Symposium in New York.



Christopher Bielawski receives the 2003 Unilever Award from Unilever's K. P. Ananth at the Fall 2003 New York ACS meeting.

Symposia for Upcoming National Meetings

Abstracts and PMSE preprints must be submitted electronically through ACS OASYS (Online Abstract Submittal). Follow instructions given at <http://www.acs.org/meetings/>. Preprints must be submitted electronically through OASYS as word processing or PDF files in conjunction with abstract submittal; approved templates for preprints may be downloaded at <http://membership.acs.org/PPMSE/meetings/template.html>. For further information, see the published PMSE "Instructions for Authors" and home page, <http://membership.acs.org/PPMSE/>.

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 or tprovder@att.net

Fire and Polymers. Gordon Nelson, FL Inst. of Tech., College of Science & Liberal 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 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.

SAN DIEGO – March 13-17, 2005

Confinement Effects on Relaxation Properties of Polymers. Peggy Cebe, STC-208, Tufts Univ., Physics Dept., 4 Colby St., Medford, MA 02155, (617) 627-3365, FAX (617) 627-3744, peggy.cebe@tufts.edu; Jim Runt, Penn State Univ., Dept of Mats. Sci & Engg., 101 Steidle Bldg., University Park, PA 16802, (814) 863-2749, runt@matse.psu.edu.

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.

Polymer Coated Medical Devices. Shrirang V. Ranade, Corporate R&D, Boston Scientific Corp., 1 Boston Scientific Pl., Natick, MA 01760, (508) 652-5143, FAX (508) 647-2405, ranades@bsci.com; Signe E. Varner, Doheny Eye Institute, Keck School of Medicine, USC, 1450 San Pablo Street, Suite 3600, Los Angeles, CA 90033, varner@usc.edu

Polymer Nanocomposites. Richard Vaia, Air Force Research Laboratory, Materials & Manufacturing Directorate, AFRL/MLBP, Bldg. 654, 2941 P St., Wright-Patterson AFB, OH 45433-7750, (937) 255-9184, FAX (937) 255-9157, richard.vaia@wpafb.af.mil; RR. Krishnamoorti, Univ. of Houston, Dept. of Chem. Engg., 4800 Calhoun, Houston, TX 77004, (713) 743-4312, FAX (713) 743-4323, ramanan@bayou.uh.edu.

Polymeric Thin-Film Electronics. Michael Chabinyk, Palo Alto Research Center, 3333 Coyote Hill Rd., Palo Alto, CA 94304 (650) 812-4169, mchabinyk@parc.com; Lynn Loo, Department of Chemical Engineering 4.422 CPE Building, C0400, The University of Texas at Austin, Austin, TX 78712, (512)471-6300, FAX (512)471-7060, lloo@che.utexas.edu.

Toward Noninvasive Delivery and Diagnostics: Proteins, Genes and Cells. Steven Dinh, Emisphere Technologies, Inc., 765 Old Saw Mill River Rd., Tarrytown, NY 10591, (914) 785-4756, sdinh@emisphere.com; John D. DeNuzzio, Becton Dickinson Technologies, 21 Davis Dr., Research Triangle Park, NC 27709, (919) 597-6127, john.d.denuzzio@bd.com.

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

WASHINGTON – August 28 - September 2, 2005

Green Polymer Chemistry. Graham Swift, (919) 960-0832, grahamswift@aol.com.

International Symposium in Advances in Organometallic Polymers. Alaa Abd-El-Aziz, University of Winnipeg, (204) 786-9944, a.abdelaziz@uwinnipeg.ca; Charles Pittman, Mississippi State University, (601) 325-7616, cpittman@ra.msstate.edu; John Sheats, Rider University, (609) 895-5413, sheats@rider.edu; Martel Zeldin, Holbert & William Smith College, (315) 781-3613, zeldin@hws.edu; Charles Carraher, Florida Atlantic University, (561) 297-2107, carraher@fau.edu.

Scattering from Polymers. Peggy Cebe, Tufts University, Physics Dept. (617) 627-3365, peggy.cebe@tufts.edu.

Tess Award Symposium. David R. Bauer, Ford Motor Co., (313) 594-1756, dbauer3@ford.com.

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

General Papers/New Concepts in Polymeric Materials. Elliot Douglas, University of Florida, Dept. of Mats. Sci. & Engg., (352) 846-2836, edoug@mse.ufl.edu.

2004 PMSE Officers

CHAIR

A. JAY DIAS

ExxonMobil Chemical Company
Baytown Polymer Center
5200 Bayway Drive
Baytown, TX 77520-5200
(281) 834-5199, jay.dias@exxonmobil.com

CHAIR ELECT

BENNY FREEMAN

University of Texas at Austin
Department of Chemical Engineering
10100 Burnet Road, Building 133
Austin, TX 78758
(512) 232-2803, freeman@che.utexas.edu

VICE CHAIR

RONALD N. DeMARTINO

11 Mandeville Drive
Wayne, NJ 07470
(973) 696-8839, rdemart@verizon.net

SECRETARY

ELLIOT P. DOUGLAS

Dept. of Materials Science & Engineering
University of Florida
P.O. Box 116400, 323 MAE
Gainesville, FL 32611
(352) 846-2836, edoug@mse.ufl.edu

TREASURER

E. BRYAN COUGHLIN

Dept. of Polymer Science & Engineering
University of Massachusetts
120 Governors Drive
Amherst, MA 01003-4530
(413) 577-1616; Coughlin@mail.pse.umass.edu

PAST CHAIR

PAUL L. VALINT, JR.

Department of Chemistry
University at Buffalo
State University of New York
Buffalo, NY 14260
(716) 645-6800, plvjr@aol.com

COUNCILORS

RAY A. DICKIE

6429 Mt. Mitchell Road
Efland, NC 27243
(919) 563-9617, rdickie@mebtel.net

MICHAEL JAFFE

New Jersey Institute of Technology
Medical Device Concept Laboratory
111 Lock Street
Newark, NJ 07103
(973) 353-1462, jaffe@admin.njit.edu

DAVID J. LOHSE

ExxonMobil Research & Engineering Co.
1545 Route 22 East
Annandale, New Jersey 08801
(908) 730-2541, david.j.lohse@exxonmobil.com

THEODORE PROVDER

Eastern Michigan University
430 West Forest Avenue
Ypsilanti, MI 48197
(734) 487-2203, ted.provder@emich.edu

PROGRAM CO-CHAIRS

TIMOTHY J. BUNNING

Air Force Research Laboratory
Materials and Manufacturing Directorate
3005 P. St., Suite 1
WPAFB, OH 45433
(937) 255-3808 x3167
timothy.bunning@wpafb.af.mil

VLADIMIR TSUKRUK

Dept. of Materials Science & Engineering
Iowa State University
3155 Gilman Hall
Ames, IA 50011-2714
(515) 294-6904, vladimir@iastate.edu

ZHENAN BAO

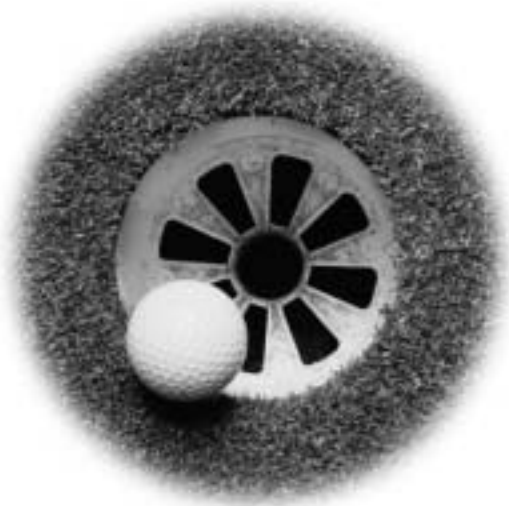
Bell Laboratories
Lucent Technologies
600 Mountain Avenue – Rm. 1A-261
Murray Hill, New Jersey 07974
(908) 582-4716, zbao@lucent.com

MEMBERSHIP CHAIR

LISA SAUNDERS BAUGH

ExxonMobil Research & Engineering Co.
1545 Route 22 East
Annandale, New Jersey 08801
(908) 730-2240, lisa.s.baugh@exxonmobil.com

How do you know you'll get a hole-in-one?



Because you use Waters Alliance®
HPLC and LC/MS systems.



Waters

For Complete  Polymer Analysis

POLYMER STANDARDS

GPC Standards * Monomers * Polymers
Plasticizers * Analytical Services
Custom Polymer Synthesis



Scientific Polymer Products, Inc.
6265 Dean Parkway, Ontario, NY 14519
Phone: 585/265-0413 Fax: 585/265-1390
www.scientificpolymer.com
ISO 9002 Certified

Polymer Analysis Services

- Complete Deformation of Polymers, Fillers & Additives
- Identification and Quantitation
- Competitive Product Analysis
- Product Failure / Defects



CHEMIR
Analytical Services

ISO 9001
Certified

2672 Metro Blvd.
Maryland Heights, MO 63043

chemir.com (800) 659-7659

PMSE News Team

Debra Tindall
(Editor)

Eastman Chemical Co.
Kingsport, TN 37662
(423)229-8637
dtindall@eastman.com

John W. Gilmer
(Assistant Editor)

Eastman Chemical Co.
Kingsport, TN 37662
(423)229-8637
jwgilmer@eastman.com

Lisa Saunders Baugh
(Awards)

ExxonMobil Research & Engineering Co.
Corporate Strategic Research Laboratories
Route 22 East, Annandale, NJ 08801
(908)730-2240
lisa.s.baugh@exxonmobil.com

Patrick Malenfant
(Advertising)

General Electric Company
Global Research Center - Niskayuna
K-1 4A49, 1 Research Circle
Niskayuna, NY 12309
(518)387-7212
malenfant@crd.ge.com



ACS-PMSE

Dr. J. W. Gilmer
Eastman Chemical Company
Kingsport, Tennessee 37662

NON-PROFIT ORG.
U.S. POSTAGE
PAID
WYTHEVILLE, VA
24382
PERMIT #172

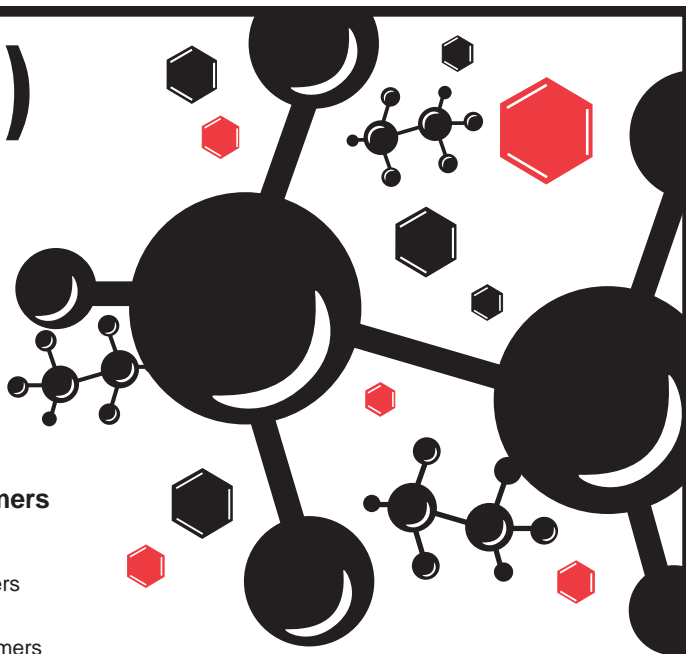
Hey, we (like you) have standards.

You require the most accurate standards available. Polysciences, Inc. provides a comprehensive series of carefully characterized, polymer and particle standards for use in quality control, particle sizing, and instrument calibration.

- **Polymer Molecular Weight Standards**
- **NIST Traceable Precision Particle Size Standards**
- **Ask Us About Our Specialty Monomers and Polymers**

Polymer Microspheres
Acid-Functional Monomers & Polymers
Biodegradable Polymers
Conductive Polymers

Crosslinking Monomers
Halogen-Containing Polymers
Photoactive Polymers
Reactive Monomers & Polymers



To request a 2004-2005 Catalog call 1-800-523-2575 or visit our web site at www.polysciences.com.

400 Valley Road | Warrington, PA 18976 | 1-800-523-2575 | www.polysciences.com

