

FINAL PROGRAM

SEVENTH INTERNATIONAL SYMPOSIUM ON POLYMER SURFACE MODIFICATION: RELEVANCE TO ADHESION

To be held July 12-15, 2009; University of Maine, Orono, Maine,
USA

This symposium continues the tradition set by the first in the series entitled: "Polymer Surface Modification: Relevance to Adhesion" which was held in Las Vegas, NV, 1993. As with its predecessors, this symposium is concerned with the technological areas where surface modification is a key technology which allows for the processing and manufacture of products which would otherwise be unobtainable.

We are indeed happy to announce that this the 7th symposium in the series will be organized in collaboration with Prof. Douglas Gardner in the Advanced Engineered Wood Composites Center at the University of Maine, Orono, Maine. Prof. Gardner is well acquainted with problems of polymer surface modification as applied to wood composites and is also serving on the editorial board of the Journal of Adhesion Science and Technology for which the Conference Director Dr. Mittal is the Editor-in-Chief

Prof. Gardner has been an active researcher in the field and he and his group look forward to hosting this symposium and greeting all participants from both academia and industry from all corners of the globe.

Proper adhesion characteristics are vital to the success of any practical implementation of polymer materials. Though polymers are generally not very adhesionable, careful surface modification can result in greatly improved adhesion without altering bulk properties. This symposium is organized to bring together scientists, technologists and engineers interested in all aspects of polymer surface modification, to review and assess the current state of knowledge, to provide a forum for exchange and cross-fertilization of ideas, and to define problem areas which need intensified efforts.

All presenting authors are invited to submit their papers for publication in the Journal of Adhesion Science and Technology (JAST).

SUNDAY JULY 12, 2009, 6:00-9:00 PM: SOCIAL HOUR/MIXER, HILL AUDITORIUM LOBBY UNIVERSITY OF MAINE CAMPUS

SESSION I: MONDAY, JULY 13, 2009

8:00-8:05: INTRODUCTORY REMARKS

8:05-8:35: F. Bessueille, S. Gout, S. Cotte, Y. Goepfert, M. Romand, A. Errachid and **D. Léonard**; Université de Lyon, Lyon, France. Laboratoire des Sciences Analytiques (CNRS, UMR # 5180), Bâtiment J. Raulin, Université Claude Bernard - Lyon 1, 69622 Villeurbanne Cedex, FRANCE; **Fabrication of Metallic Micro/Nano-Structures on Polymeric Substrates by Using Plasma or UV/VUV Treatments, Micro-Contact Printing and Selective Electroless Plating**

8:35-9:05: **K.-D. Weltmann**, R. Brandenburg, R. Foest, E. Kindel, M. Stieber, and T. V. Woedtke; Leibniz-Institute for Plasma Science and Technology e.V. (INP Greifswald), Felix-Hausdorff-Str. 2, D-17489 Greifswald, GERMANY; **Atmospheric Pressure Plasma Jets for Surface Treatment and Medical Applications**

9:05-9:35: **Yiping Qiu**; College of Textiles, Donghua University, 2999 North Renmin Road, Songjiang District, Shanghai 201620, P.R.CHINA; **Influence of Moisture on Atmospheric Pressure Plasma Treatment of Fibers and Polymers**

9:35-10:05: **Claus-Peter Klages**, Alena Hinze and Michael Thomas; Institut für Oberflächentechnik, Technische Universität Braunschweig, Bienroder Weg 53, D-38108 Braunschweig, GERMANY; **Atmospheric-Pressure Plasma Amination of Polymer Surfaces**

10:05-10:35: **Hyuk Yu**; Department of Chemistry, University of Wisconsin, Madison, Wisconsin 53706; **Plasma Treatment of Hydrocarbon Polymers & Post-treatment Dynamics of Surface Polarity**

10:35-10:50: COFFEE BREAK

10:50-11:20: **F. J. Guild** and B. R. K. Blackman; Department of Mechanical Engineering, Imperial College London, South Kensington Campus, London SW7 2AZ, UK; **Air-plasma Pre-treatment for Promotion of Thermoplastic Adhesion**

11:20-11:50: N.Gomathi, Debasish Mishra , Tapas Kumar Maity and **Sudarsan Neogi**; Department of Chemical Engineering, Indian Institute of Technology, Kharagpur 721302, INDIA; **Low Pressure Radio Frequency Plasma Treatment of Polypropylene for Improved Cell Adhesion**

11:50-12:20: **Sandra Günther**, Nico Teuscher, Andreas Heilmann, Renate Hänsel, Hans-Michael Voigt, and Andreas Kiesow; Fraunhofer-Institute for Mechanics of Materials, D-06120 Halle/S., GERMANY; **In-line Analytical Investigations of Atmospheric Pressure Plasma Processes in Correlation with Surface Analysis**

12:20-12:50: **Ranjit Joshi** and Jeorg Friedrich; Bundesanstalt für Materialforschung und -prüfung (BAM), Unter den Eichen 87, D-12205 Berlin, GERMANY; **Underwater Plasma and Glow Discharge Electrolysis (Liquid Electrode) for Polymer Surface Modification**

12:50-2:00: LUNCH

SESSION II: MONDAY, JULY 13, 2009

2:00-2:30: **Roel Dams**; VITO - Flemish Institute for Technological Research, Materials Technology Department, Boeretang 200, 2400 Mol, BELGIUM; **Inline Plasma Processes in Modified Gas Atmosphere for Adhesion Improvement**

2:30-3:00: **Muhammad Akram**; Delft University of Technology, Aerospace Materials Group, Faculty of Aerospace Engineering, Kluyverweg1, 2629HS Delft, THE NETHERLANDS; **Surface Modification of Polyimide Using Atmospheric Plasma for Increasing Adhesive Bond Strength**

3:00-3:30: **Hernando S. Salapare III**, Gene Q. Blantocas, and Henry J. Ramos; Plasma Physics Laboratory, National Institute of Physics, University of the Philippines, Diliman, Quezon City 1101, PHILIPPINES; **Cellular Adhesion Performance of Polytetrafluoroethylene (PTFE) after Surface Modification Using Hydrogen and Oxygen Low-Energy Gas Discharges**

3:30-4:00: **T. Tanaka**, K.Vutova, E.Koleva, G.Mladenov and I.Koyama; Department of Electronics and Photonic System Engineering, Hiroshima Institute of Technology, 2-1-1 Miyake Saeki-ku, Hiroshima 731-5193, JAPAN; **Room Temperature PBII Sterilization of Materials**

4:00-4:15: COFFEE BREAK

4:15-4:45: **E. V. Shun'ko** and V. S. Belkin; WINTEK Electro-Optics Corporation, 1665 Highland Dr., Ann Arbor, Michigan 48108; **Cleaning and Improving Adhesion of Surfaces by Their Treatment With Excited Nitrogen**

4:45-5:15: **Yao Wang**, Ke Yao and Zhi-Kang Xu; Institute of Ophthalmology, and Eye Center, Affiliated Second Hospital, College of Medicine, Zhejiang University, Hangzhou 310009, P. R. CHINA; **Surface Modification of Artificial Intraocular Lenses with Plasma Techniques**

SESSION III: TUESDAY, JULY 14, 2009

8:00-8:30: M. Razdan, A. Entenberg, T. Debies, B. Parekh, P. Rai, and **G. A. Takacs**; Department of Chemistry, Center for Materials Science and Engineering, Rochester Institute of Technology, Rochester, NY 14623; **Surface Oxidation of Polyimides with UV Photo-oxidation in the Absence of Ozone**

8:30-9:00: **Takaomi Kobayashi**; Department of Chemistry, Nagaoka University of Technology, 1603-1 Kamitomioka, Nagaoka, Niigata, JAPAN; **Surface Modification of Polymer Textiles by Thermally Dried Ozone**

9:00-9:30: **Susan B. Sinnott**; Department of Materials Science and Engineering, University of Florida, Gainesville FL, 32611-6400; **Selective Chemical Modification of Polymer Surfaces through Low-Energy Ion-Beam Deposition**

9:30-10:00: **Gloria S. Oporto**, Douglas J. Gardner, and David J. Neivandt; Advanced Engineered Wood Composites (AEWC) Center, University of Maine, Orono, ME 04469; **Quantifying Short Range Adhesion Forces on Wood-Plastic Composite (WPC) Surfaces**

10:00-10:30: **Sam Siau**; Surface Functionalisation, ArcelorMittal R&D Industry Gent, OCAS NV, Pres. J. F. Kennedylaan 3, BE-9060 Zelzate, BELGIUM; **Adhesion Improvement of Polymers and Glues to Steel Substrates by Various Surface Modifications**

10:30-10:45: COFFEE BREAK

10:45-11:15: **Wolfgang Weinhold**; NNOWEP GmbH, Measuring and Testing, Haugerring 6, D-97070 Wuerzburg, GERMANY; **In Situ Microtribology with High Local Resolution on Nano-modified Surfaces on Polymers**

11:15-11:45: M. K. Mazumder, M. N. Horenstein, P. K. Srirama and R. S. Sharma; Boston University, Boston, MA; **Development of Surface Engineered Low Cohesivity Fine Powders for Respiratory Drug Delivery using Dry Powder Inhalers**

11:45-12:15: Zhi-Kang Xu; Key Laboratory of Macromolecular Synthesis and Functionalization (Ministry of Education), Department of Polymer Science & Engineering, Zhejiang University, Hangzhou 310027, CHINA; **Surface Engineering of Microporous Polypropylene Membranes**

12:15-12:45: Erhan Piskin; Hacettepe University, Beytepe, Ankara, TURKEY; **Self-Assembling of Molecules at the Surface**

12:45-2:00: LUNCH

SESSION IV: TUESDAY, JULY 14, 2009

2:00-2:30: Ulrike Schulz, Fraunhofer Institute of Applied Optics and Precision Engineering, A.-Einstein-Str. 7, D-07745 Jena, GERMANY; **Plasma Modification of Polymers for Optical Applications**

2:30-3:00: Horst-Christian Langowski; TU Muenchen, WZW Center of Life and Food Science, Chair of Food Packaging Technology, Weiherstephaner Steig 22 D-85350 Freising-Weiherstephan, GERMANY; **Surface Modification of Polymer Films for Improvement of the Adhesion of Deposited Metal Layers**

3:00-3:30: Thomas Strunskus; Ruhr University Bochum, D-44780 Bochum, GERMANY; **Ion Modifications of Metal/Polymer Interfaces**

3:30-4:00: Peter Vicca, Soeren Steudel, Jan Genoe and Paul Heremans Polymer & Molecular Electronics Group, IMEC, Kapeldreef 75. B-3001 Leuven, BELGIUM; **Polymer Adhesion Layers for Ag Layers Deposited in OLED Processing**

4:00-4:15: COFFEE BREAK

4:15-4:45: H. Willeck, W. Eberhardt and H. Kück; Hahn-Schickard-Institute of Microassembly Technology HSG-IMAT, Stuttgart, GERMANY; **A New Measuring Tool for Determining the Adhesive Strength of Micro Structured Metal Layers and Conductors Directly on Polymer Micro Devices**

4:45-5:15: D. Schaubroeck, J. De Baets, E. Schacht and A. Van Calster; Centre for Microsystems Technology (CMST)/ELIS, IMEC, Ghent University, Technologiepark 914A, BE-9052 Ghent -Zwijnaarde, BELGIUM; **Chemical Modification of a Photo Definable Epoxy Resin to Improve Adhesion with Electroless Copper**

5:15-5:45: P. Slepíčka, A.Vasina, V. Švorčák; Department of Solid State Engineering, Institute of Chemical Technology, 166 28 Prague, CZECH REPUBLIC; **Metal Nanolayers on Plasma Treated Polypropylene**

5:45-6:15: Alexander Stadnick and Grigoriy Kyryk; Ukrrosmetall Concern, International Institute, 6 Kursky Avenue, Sumy 40020, UKRAINE; **New Ways of Drawing Metal Films on Polymeric Materials**

SESSION V: WEDNESDAY, JULY 15, 2009

8:00-8:30: F.J. Xu, S.J. Yuan, G. L. Li, K.G. Neoh and E.T. Kang; Dept. of Chemical and Biomolecular Engineering, National University of Singapore, Kent Ridge, SINGAPORE 119260; **Surface Functionalization via Controlled Radical Polymerizations**

8:30-9:00: Thomas Bahners and Eckhard Schollmeyer; Deutsches Textilforschungszentrum Nord-West e. V., Adlerstr. 1, D-47798 Krefeld, GERMANY; **Photo-initiated Inter-Linking of Coatings on Textiles and Other Polymer Substrates**

9:00-9:30: S.A. Pihan, T. Tsukruk, A. Chifen, R. Förch; Max-Planck-Institut für Polymerforschung, Ackermannweg 10, D-55128 Mainz, GERMANY; **Plasma Polymerized Hexamethyl Disiloxane in Adhesion Applications**

9:30-10:00: Karina Grundke, Jan Roth, Victoria Albrecht, Mirko Nitschke, Cornelia Bellmann, Frank Simon, Stefan Zschoche, Stefan Michel, Claudia Luhmann and Brigitte Voit; Leibniz Institute of Polymer Research Dresden, P. O. Box 120 411, D-01005 Dresden, GERMANY; **Surface Functionalization of Silicone Elastomers to Form Permanently Stable Adhesion Joints**

10:00-10:15: COFFEE BREAK

10:15-10:45: Denis Dowling; University College Dublin, Room 223 Engineering Building, UCD, Belfield, Dublin 4, IRELAND; **Influence of Processing Conditions on the Adhesion Performance of Atmospheric Plasma Polymerized Primer Coatings on Steel**

10:45-11:15: N. A. Darwish, A. A. El-Wakil and A. I. Abou-Kandil; National Institute of Standards, Tersa Street. El-Haram. El-Giza.P.O.Box: 136 Giza. Post Code: 12211, EGYPT; **Graft Co-Polymerization of 1, 5 daminonaphthalene to improve adhesion between EPDM Rubber and Polyester Fabric**

11:15-11:45: Gijo Raj, Eric Balnois, Christophe Baley and Yves Grohens; Laboratoire d'Ingénierie des MATériaux de Bretagne (LIMATB), Université de Bretagne Sud, Rue de Saint Maudé, BP 92116, F-56321 Lorient Cedex, FRANCE; **Interfaces in Biocomposites: Colloid Force Measurements Between Cellulose and Polylactic Acid**

11:45-12:15: Sang Wook Park and Dai Gil Lee; Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology, ME3221, Guseong-dong, Yuseong-gu, Daejeon 305-701, REPUBLIC OF KOREA; **Adhesion Characteristics of Surface-treated Glass/Epoxy Composite with Nano-particle**

12:15-1:30: LUNCH

SESSION VI: WEDNESDAY, JULY 15, 2009

1:30-2:00: F. Griffon, C. Delval and P. Hoffmann; EPFL, Station 17, Lausanne VD 1015, SWITZERLAND; **Hot-Embossing: a Novel Technique for the Replication of Superhydrophobic Polymer Samples**

2:00-2:30: Arthur J. Coury; Warren Avenue, Boston, Massachusetts 02116; **Exploiting Biomaterial-Tissue Interactions for Effective Medical Device Performance**

2:30-3:00: Z. L. Shi, F. Zhang, E. T. Kang and K. G. Neoh; Department of Chemical and Biomolecular Engineering, National University of Singapore, Kent Ridge, Singapore 119260, SINGAPORE; **Exploiting Natural Biopolymers for Selective Bio-interactivity with Bacteria and Bone Cells in Orthopedic Applications**

3:00-3:30: K. Schröder, B. Finke, F. Lüthen, J. B. Nebe, J. Rychly, U. Walschus, M. Schlosser, A. Ohl and K. D. Weltmann; Leibniz Institute for Plasma Science and Technology (INP), F.-Hausdorff Straße 2, D-17489 Greifswald, GERMANY; **Plasma Polymer Coatings for Improved Cell Adhesion to Titanium Surfaces**

3:30-3:45: COFFEE BREAK

3:45-4:15: José M. Kenny, Ilaria Armentano and Serena Dotori; European Centre for Nanostructured Polymers, University of Perugia, Loc. Pentima bassa 21, 05100 Terni, ITALY; **Plasma Modification and Surface Functionalization of Biodegradable Polymers for Controlling the Adhesion of Stromal Cells**

4:15-4:45: Sean X. Liu; Cereal Products and Food Science Research Unit, National Center for Agricultural Utilization Research, U.S. Department of Agriculture, ARS, 1815 N. University Street, Peoria, IL 61604; **The Effect of Polymer Surface Modification on Polymer-Protein Interaction via Interfacial Polymerization and Hydrophilic Polymer Grafting**

4:45-5:15: Charles Anamelechi; Biomedical Engineering Department, Duke University (CIEMAS 1313), 144 Hudson Hall, Durham, NC 27708; **Endothelial Cell Adhesion to Synthetic Vascular Grafts Using Biotinylated Fibronectin in a Dual Ligand Protein System**

5:15-5:45: M-L. Abel, J. Bertho, P. Zdhan, V. Stolojan and J. F. Watts; The Surface Analysis Laboratory, Faculty of Engineering and Physical Sciences, University of Surrey, Guildford Surrey GU2 7XH, UK; **Effect of Incorporation of Silanes within Epoxy Adhesives on Interface Chemistry: A Surface Analysis Study**

5:45-6:15: M. Masudul Hassan, Marco Mueller and Manfred H. Wagner Technical; University of Berlin, Institute of Material Science and Technology, Polymertechnik/Polymerphysik, Fasanen Str. 90, D-10623 Berlin, GERMANY; **Improvement of Mechanical Performance of Hybrid Seaweed/Rice Straw Polypropylene Composite: Effect of Maleic Anhydride**

6:15-6:45: N. Kasálková, Z. Makajová, K. Kolijová, P. Slepíčka, L. Bačijková, M. Pačzek and V. Švorčák; Department of Solid State Engineering, Institute of Chemical Technology, 166 28 Prague, CZECH REPUBLIC; **Cytocompatibility of Plasma-treated and Grafted Polyethylene**

This symposium is being organized by MST Conferences under the direction of Dr. K. L. Mittal, Editor, Journal of Adhesion Science and Technology (JAST) and in collaboration with Prof. Douglas Gardner of the University of Maine, Orono. It is planned to publish the proceedings of this symposium in the Journal of Adhesion Science and Technology, edited by the conference chairman Dr. Mittal. Please notify the conference chairman of your intentions to present a paper as early as possible. An abstract of about 200 words should be sent by **March 15, 2009** to the conference chairman by any of the following methods:

E-mail: rhl@mstconf.com
FAX: 212-656-1016
Regular mail:

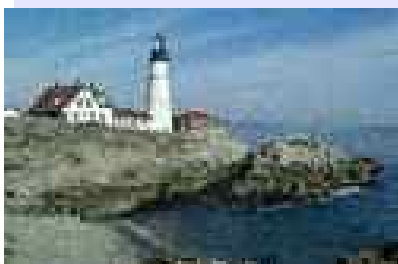
Dr. Robert H. Lacombe
Conference Chairman
3 Hammer Drive
Hopewell Junction, NY 12533

Contact by phone: 845-897-1654; 845-227-7026
Full conference details and registration via the Internet will be maintained on our web site:

<http://mstconf.com/surfmod7.htm>

Or mail response form below to the conference chairman at the address above.

We invite all symposium participants to join us at the University of Maine this Summer and, if you have a little extra time, you should also try to enjoy the countryside and seashore of the state of Maine which has long been regarded as a Summer vacationland in the US. On the Maine Coast, you'll find elegant Country Inns and Bed and Breakfasts, luxury resorts, family motels, and fabulous full service campgrounds. Discover Maine Vacations that cater to every taste. Maine is considered to be a vacation land by many in the continental US and the month of July is close to the height of the season with a number of pleasant attractions including the Acadia National seashore pictured below:



REGISTRATION INFORMATION

DATES:

JULY 12-15, 2009: SEVENTH INTERNATIONAL SYMPOSIUM ON POLYMER SURFACE MODIFICATION: RELEVANCE TO ADHESION

JULY 15-18, 2009: SEVENTH INTERNATIONAL SYMPOSIUM ON SILANES AND OTHER COUPLING AGENTS

LOCATION:

University of Maine, Orono, Maine

<http://www.umaine.edu/>

HOTEL TRAVEL

These area hotels are offering special conference room rates for the nights of July 10 – 19, 2009 on a first come first serve basis.

Additional nights may be available. Continental breakfast and wireless access are included at each hotel. Rooms in July go fast. Call now to book your room.

To receive these rates, you must mention the MST Conference.

University Inn Academic Suites

5 College Ave, Orono, ME 04473

Tel: (207) 866-4921
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Fax: (207) 866-4550

\$95.00 per night/single occupants
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\$109.95 per night
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Hampton Inn	(207) 990-4400
Holiday Inn - Odlin Rd.	(207) 947-0101
Ramada Inn	(207) 947-6961
Super 8 Motel – Bangor	(207) 945-5681

AIRPORT AND TRAVEL:

Please see the comprehensive listing on the website:

<Http://www.flybangor.com/>

Taxis are available at the exit doors on a 24 hour basis.

REGISTRATION:

Speaker/student \$395 each; regular attendee \$595 each. A 20% discount applies if you are attending both symposia. An additional 10% discount applies if more than 1 person are participating from the same organization.

ON CAMPUS HOUSING

Housing on campus is also available at a location conveniently nearby the conference meeting room. Full details on reserving accommodations are given in the form at the end of this document. Registrants are asked to fill in the form and FAX it to the number listed on the form. Questions should be directed to Debra Wright at the University of Maine. Her telephone number and E-mail address are listed at the bottom of the form. Online details are available at:

www.umaine.edu/conferences

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Dr. Robert Lacombe
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Hopewell Junction, NY 12533-6124, USA

SHORT COURSE ON APPLIED ADHESION MEASUREMENT METHODS

JULY 10 and 19, 2008: Associated with these symposia MST gives a short course on adhesion measurement methods. Since nearly all of the MST symposia have some relation to adhesion phenomena, the ability to quantify the adhesion of one material layer to another is clearly one of the unifying themes. This course is designed to mesh with the topical symposia by presenting an overview of the most useful adhesion measurement techniques which are being used to evaluate the **PRACTICAL ADHESION** of coatings. Emphasis will be given to methods which can be carried out in a manufacturing environment as well as in the lab and which give results that are directly relevant to the durability and performance of the coatings. The effects of material elastic properties and residual stress are considered as well as other external influences which affect coating adhesion.

How You Will Benefit From This Course:

- ▶ Understand advantages and disadvantages of a range of adhesion measurement techniques.
- ▶ Gain insight into mechanics of adhesion testing and the role of intrinsic stress and material properties
- ▶ Learn optimal methods for setting adhesion strength requirements for coating applications.
- ▶ Learn how to select the best measurement technique for a given application.
- ▶ Gain perspective from detailed discussion of actual case studies of product manufacturing and development problems.

A complete syllabus of the short course is available at:

www.mstconf.com/AdhesionShortCourse.pdf

SHORT COURSE ON DURABILITY OF ADHESIVE JOINTS AND COMPOSITES

JULY 11, 2009: When you make an adhesive joint or a composite as part of some device or product there is always the concern of the durability of the joint bond or

the strength of the filler/matrix adhesion. Whether the product is something as prosaic as a cereal box or as high tech as a jet aircraft, the consequences of failure can range anywhere from an annoying nuisance to the endangerment of lives. Thus this course will give an overview of the technology and tools available for evaluating beforehand the expected performance of adhesive joints and composites subjected to the environmental and load conditions under which they must survive.

How You Will Benefit from this Course:

Understand advantages and disadvantages of a range of test methods for adhesive joints and composites

Gain insight into mechanics of adhesion testing and the role of material properties

Explore the full range of phenomena affecting composite and joint reliability including: adhesion to substrate, thermal-mechanical properties of adhesive and matrix binder materials and the effect of residual stress.

Review most important non-destructive inspection methods for discovering flaws in joint formation and composite structure

Gain perspective from detailed discussion of actual case studies of product manufacturing and development problems

A complete syllabus of the short course is available at:

www.mstconf.com/JointDurabilityV2.pdf

Audience: Both of the above short courses are tailored to meet the needs of scientists and professional staff in R&D, manufacturing, processing, quality control/reliability involved with adhesion aspects of coatings, laminate structures, composite materials or adhesive joining processes.

Level: Beginner to Intermediate

Prerequisites: Elementary background in chemistry, physics or materials science.

Duration: 1 day

Registration fee: \$595: Includes course notes, handouts and a copy of the newly published handbook and reference volume: **ADHESION MEASUREMENT METHODS: THEORY AND PRACTICE** (CRC Press, 2006).

CANCELLATIONS: Registration fees are refundable, subject to a 15% service charge, if cancellation is made by **June 20, 2009**. **NO** refunds will be given after that date. All cancellations must be in writing. Substitutions from the same organization may be made at any time without penalty. MST Conferences reserves the right to cancel any of the symposia or the short course if it deems this necessary and will, in such event, make a full refund of the registration fee. No liability is assumed by MST Conferences for changes in program content.

REGISTRATION FORM: CHECK ALL THAT YOU WANT TO ATTEND

SEVENTH INTERNATIONAL SYMPOSIUM ON POLYMER SURFACE MODIFICATION, JULY 12-15, 2009 (speaker/student)	\$395
SEVENTH INTERNATIONAL SYMPOSIUM ON POLYMER SURFACE MODIFICATION, JULY 12-15, 2009 (regular attendee)	\$595
SEVENTH INTERNATIONAL SYMPOSIUM ON SILANES AND OTHER COUPLING AGENTS, JULY 15-18, 2009 (speaker/student)	\$395
SEVENTH INTERNATIONAL SYMPOSIUM ON SILANES AND OTHER COUPLING AGENTS, JULY 15-18, 2009, (regular attendee)	\$595
Sub Total	
Deduct 20% if attending both Symposia. Deduct additional 10% if more than 1 participant from same institution	
Short Course on Applied Adhesion Measurement Methods, Select Date: <input type="checkbox"/> July 10; <input type="checkbox"/> July 19	\$595
Short Course on Durability of Adhesive Joints and Composites, <input type="checkbox"/> July 11	\$595
TOTAL REGISTRATION FEE	

METHOD OF PAYMENT, CHECK WHICH METHOD YOU PREFER

CREDIT CARD: Check here and fill out box below	
BANK WIRE TRANSFER: Check here and contact the symposium Chairman, Dr. Lacombe for bankwire information either by phone, FAX or E-mail: Tel. 845-897-1654 FAX: 212-656-1016 E-mail: rhlacombe@compuserve.com	
CHECK: Make check payable to MST Conferences, LLC and mail to: Dr. Robert H. Lacombe Conference Chairman 3 Hammer Drive Hopewell Junction, NY 12533-6124, USA	

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MST Conference July 9 - 19, 2009

Housing Registration Form . Deadline for form return – Friday, June 16, 2009

Cancellation policy: Through July 1, full payment will be refunded less the \$15 processing fee.

PLEASE CHECK ONE: Male: _____ Female: _____

Name: _____ Day phone _____

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Lodging on campus will be available on the nights of July 9, 2009 through July 19, 2009

Check in date: _____	Check out date: _____	
Single room ~ twin bed	\$60.50 per night for _____ nights	_____
Double room ~ twin beds	\$40.65 <u>per person</u> per night for _____ nights	_____
Processing fee	\$15.00	_____ 15.00
	TOTAL REMITTED	_____

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Important: Please submit card information by fax only (207) 581-4097, not via email.

Card Number: _____

Signature: _____ Expiration Date: _____

Lodging will be at Edith Patch Hall in suites with a living area and kitchen facilities (refrigerator, stove, but no coffee maker, cooking vessels, china, or utensils). Suites have between 2 and 4 bedrooms. In suites with two bedrooms, the bedrooms are doubles. In suites with three bedrooms, there are two singles and one double. In suites with four bedrooms, there are four singles. Thus, you may list up to 4 suite mates (being sure that those you list also list you!). If you don't list suite mates, those bedrooms may be assigned to others in your program.

- | | |
|---------|---------|
| 1 | 3 |
| 2 | 4 |

Please use a separate form with payment for each individual

Special needs: Please tell us about any special needs, such as access to accommodations:

Please fax or mail completed housing form and payment to:

University of Maine
Conference Services Division – MST Conference
5713 Chadbourne Hall
Orono, ME 04469-5713

Tel (207) 581-4094, Fax: (207) 581-4097

Questions about housing at the University of Maine: Debra Wright at tel (207) 581-4094

Email: Debra.Wright@umit.maine.edu

Meting space details of residence halls can be viewed at:

www.umaine.edu/conferences/meetingspacegallery/meetingspace.htm