

PRELIMINARY PROGRAM
NINTH INTERNATIONAL SYMPOSIUM ON
POLYMER SURFACE MODIFICATION
RELEVANCE TO ADHESION:

To be held June 17-18, 2013 in collaboration with the

Center for Polymer Science and Engineering, Lehigh University,
Bethlehem, Pennsylvania, USA

SYMPOSIUM HISTORY AND MOTIVATION

This symposium ninth in the series which 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 will be 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.

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.

AUDIENCE AND PARTICIPATION

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.

SUBMITTING A PAPER

This symposium is being organized by MST Conferences under the direction of Dr. K. L. Mittal, Editor Reviews of Adhesion and Adhesives. 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 May 31, 2013 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, USA

Contact by phone: 845-897-1654; 845-227-7026

Full conference details and registration via the Internet will be maintained on our web site:

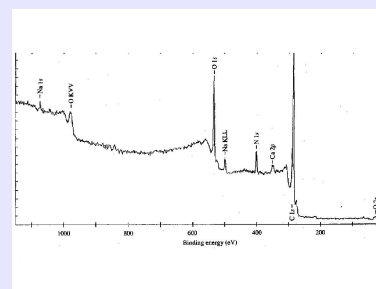
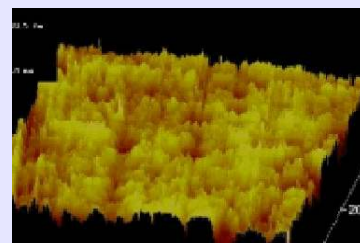
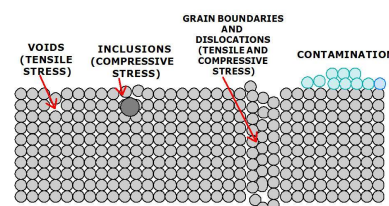
<http://mstconf.com/surfmod9.htm>

ONLINE RESPONSE FORM: www.mstconf.com/resp-sprg-2013.htm



Photo courtesy of Plasmatreat

A VARIETY OF DEFECT STRUCTURES AND IMPERFECTIONS
MAKE DETERMINING THE SURFACE ENERGY/SURFACE TENSION OF
SOLIDS VERY DIFFICULT



ORGANIZERS AND CONTACT INFORMATION:

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AMONG TOPICS TO BE COVERED ARE:

SURFACE MODIFICATION TECHNIQUES

- ▶ Plasma, ultraviolet, corona, laser, ion beam, atmospheric plasma, flame ...
- ▶ Mechanical roughening
- ▶ Monolayer deposition, grafting and wet chemical

POLYMER SURFACE MODIFICATION FOR ADHESION IMPROVEMENT OF:

- ▶ Metal layers (metallized plastics)
- ▶ Organic coatings, inks, composites, adhesive joints, microorganisms

APPLICATIONS AND SURFACE CHARACTERIZATION

- ▶ Packaging, composites
- ▶ Biomedical applications
 - i. implants
 - ii. sterilization
 - iii. improved cell adhesion
- ▶ Microelectronics, aerospace, marine...
- ▶ All methods for characterization of surface chemistry and morphology, (Contact Angle, XPS, SIMS, AFM ...)



While at the symposium you can also enjoy a number of the attractions of the Lehigh University campus. Further details are available on the campus website at:

www.lehigh.edu

THE FOLLOWING IS A SAMPLE OF PAPERS TO BE PRESENTED AT THE SYMPOSIUM

Arthur J. Coury; 154 Warren Avenue, Boston, MA.; Adherent Barrier Films for the Prevention of Surgical Adhesions

J. Dutroncy, E.Jouvet and T.Sindzingre; AcXys Technologies, 148 rue des vingt Toises, 38950 St Martin le Vinoux FRANCE; Atmospheric Pressure Plasma, Competitive and Efficient as a One-step Surface Preparation

Robert F. Hicks; Chemical Engineering and Materials Science, University of California, Los Angeles, CA; Surface Preparation of Polymer Composites for Adhesion Using Atmospheric Pressure, Capacitive Discharge Plasmas

Stephen L. Kaplan; 1260 Elmer Street, Belmont, CA 94002; The Best Kept Secret in Industry

Dounya Baritt, Houda Ennaceri, Ahmed Ennaoui, Adil Chaboun and Asmae Khaldoun; Nanocoating and Testing; a Step Towards the Improvement of CSP Reflectors for less Intensive Maintenance Both in Terms of Labor and Water

S. Kreling, F. Fischer and K. Dilger; Technische Universität Braunschweig, Institute of Joining and Welding, 38106 Braunschweig, GERMANY; Comparison of Atmospheric-pressure Plasma and Laser Surface Bonding Pre-treatment of CFRP

Jihye Lee and Yeonhee Lee; Advanced Analysis Center, Korea Institute of Science and Technology, Seoul 136-791, KOREA; Surface and Interface Modification of Polymeric Materials by Various Plasma Techniques

Siyuan Ma; Materials Eng. Program, State University of New York at Binghamton, Microflow Laboratory, Mechanical Engineering Dept., 85 Murray Hill Rd., Vestal, NY 13850; The Plasma Post-Deposition Process for Inkjet Manufacturing

Zac MacKay and Andy F. Stecher; Plasmamatreat North America, 1480 Sandhill Dr. Unit 8, Ancaster, ON, CANADA L9G 4V5; Openair® Plasma Improves Adhesion of LSR to Medical Grade Polymer Substrate Materials

Liam O'Neill; Irish Surface Engineering, 22 Summerhill North Cork, IRELAND; Improving Adhesion on Polymer Surfaces Through Plasma Enhanced Coating Deposition

B. Riedl, V. Vardanyan, A. Kaboorani, B. Poaty and G. Chauve; Département des sciences du bois et de la forêt, faculté de géomatique, géographie et foresterie, Centre de recherche sur le bois, Université Laval, Québec Canada G1K 7P4; Modified Nanocellulose for Composite Coatings

Luc Stafford; Department of Physics, University of Montreal, Montreal, Quebec H3C 3J7, CANADA; Growth of Nanocomposites on Heat-sensitive Polymers Using Cold, Atmospheric-pressure Plasmas

Brian J. Meenan; Nanotechnology and Integrated Bioengineering Centre (NIBEC), School of Engineering, University of Ulster, Newtownabbey, Northern IRELAND, BT37 0QB; Directing the Biological Response to Polymeric Biomaterials Using Atmospheric Pressure Plasma Modification Strategies

L. Oliveira, F. Lu, L. Andrews, M. Mehan, T. Debies and G. A. Takacs; School of Chemistry and Materials Science, Rochester Institute of Technology, Rochester, NY 14623, UV Photo-Chlorination and -Bromination of Single-walled Carbon Nanotubes

David Waugh and J. Lawrence; University of Lincoln, School of Engineering, Brayford Pool, Lincoln LN6 7TS, UK; Wettability Characteristics Modification of Polymeric Materials Using Laser Surface Treatment

REGISTRATION INFORMATION

DATES:

JUNE 17-18, 2013: NINTH INTERNATIONAL
SYMPOSIUM ON POLYMER SURFACE
MODIFICATION: RELEVANCE TO ADHESION

www.mstconf.com/surfmod9.htm

LOCATION:

Rauch Business Center Room 091
Lehigh University
Bethlehem, PA 18015

CONTACT:

Anne Marie Lobley
Graduate Coordinator Phone: 610-758-4222 email:
amme@lehigh.edu

REGISTRATION:

Speaker/student \$395 each; regular attendee \$595 each. A 10% discount applies if more than 1 person is participating from the same organization.

HOTEL

The following hotels are recommended in order of proximity to the university:

Comfort Suites
120 West Third Street
Bethlehem, Pennsylvania USA
PH: (610)882-9700
(Mention Lehigh University for a discount)

Hotel Bethlehem
437 Main St
Bethlehem, PA 18018
PH: (610) 625-5000

Sayre Mansion Inn
250 Wyandotte St
Bethlehem, PA 18015
PH: (610) 882-2100

Sands Casino Resort Bethlehem
77 Sands Boulevard
(Please use 901 Daly Ave on GPS devices)
Bethlehem, PA 18015
PH: 1-877-726-377

ON CAMPUS HOUSING

Vacant student housing on campus will also be available to symposium participants. Those interested should apply to the conference chairman at rhl@mstconf.com

TRANSPORTATION:

Lehigh University is located equal distant from Newark and Philadelphia airports, which offer a better selection of flights. However, it is possible to fly directly into Lehigh International Airport (ABE), which is only 10 minutes away from Lehigh University (Delta, United, US Air, etc. fly into ABE). Comfort Suites offers a free shuttle service to and from ABE. Comfort Suites is within walking distance of the Rauch Business Center (where the conference will be held). Taxis are also possible.

TO REGISTER FOR SYMPOSIUM:

BY PHONE: 845-897-1654; 845-227-7026
BY FAX: 212-656-1016
E-mail: rhl@mstconf.com

REGISTER ONLINE:

www.mstconf.com/RegMST.htm

BY MAIL: SEND COMPLETED FORM TO:

Dr. Robert Lacombe
Chairman
MST Conferences
3 Hammer Drive
Hopewell Junction, NY 12533-6124, USA

CANCELLATIONS: Registration fees are refundable, subject to a 15% service charge, if cancellation is made by June 1, 2013. 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

NINTH INTERNATIONAL SYMPOSIUM ON POLYMER SURFACE MODIFICATION, June 17-18, 2013 (speaker/student)	\$395
NINTH INTERNATIONAL SYMPOSIUM ON POLYMER SURFACE MODIFICATION, June 17-18, 2013 (regular attendee)	\$595
Sub Total	
Deduct additional 10% if more than 1 participant from same institution	
Short Course on <u>Applied Adhesion Measurement Methods</u> (June 19, 2013)	\$695
TOTAL REGISTRATION FEE	

METHOD OF PAYMENT, CHECK WHICH METHOD YOU PREFER

CREDIT CARD: Check here and fill out box below	
<p>BANK WIRE TRANSFER: Check here and contact the symposium Chairman, Dr. Lacombe for bank wire information either by phone, FAX or E-mail:</p> <p>Tel. 845-897-1654 FAX: 212-656-1016 E-mail: rhlacombe@compuserve.com</p>	
<p>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</p>	

CREDIT CARD INFORMATION

- ☐ VISA
- ☐ MASTER CARD
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ADDRESS INFORMATION	
NAME:	
ADDRESS: ¹	
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PHONE:	FAX:

The security code is the 3 digit number typically to the right of signature and last 4 digits of card

Card Number: _____ Card Holder Name: _____
(As it appears on card)

¹ As a further security measure card companies require the billing address on the credit card. The main items are the street address and zip code.