



CALL FOR PAPERS

ELEVENTH INTERNATIONAL SYMPOSIUM ON PARTICLES ON SURFACES: DETECTION, ADHESION AND REMOVAL

University of Maine, Orono, Maine, USA, July 16-18, 2008

This will be the eleventh event in the series of symposia on particles on surfaces initiated as part of the Fine Particle Society meeting in 1986. Particles are yield detractors in the manufacture of sophisticated and sensitive electronic components and are very undesirable in many other technologies. Contamination of optical surfaces and shorting of microelectronic circuits by conducting particles, among other concerns, underscore the importance of particle detection, adhesion and removal. On the other hand,

however, in certain instances particle adhesion to surfaces is necessary. The purpose of this symposium is to address the vast ramifications of particles on solid surfaces by bringing together specialists in many allied fields to discuss their latest findings and to identify areas for further investigation. Various types of substrates and particles --metals, oxides, glass, and polymers-- will be covered. The technical program will comprise both invited and contributed papers ranging from topical overviews to original research and industrial applications.

THE SYMPOSIUM WILL EMPHASIZE THE FOLLOWING TOPICS:

- ▶ **Sources and mechanisms of particle contamination**
 - ▶ Intrinsic and extrinsic
 - ▶ Nanometer to micrometer scale
- ▶ **Factors that influence particle adhesion:**
 - ▶ Chemistry, topography, shape, size, relative humidity, medium, etc.
- ▶ **Particle adhesion measurement techniques**
 - ▶ Forces affecting adhesion: JKR theory, Hamaker theory
- ▶ **Detection, identification and characterization of particles on surfaces**
 - ▶ Micrometer scale
 - ▶ Nanometer scale
- ▶ **Techniques for particle removal**
 - ▶ Challenge of nanoscale removal
 - ▶ Fluid dynamics of particle removal
- ▶ **Implications of particle contamination**
 - ▶ Microelectronic applications
 - ▶ Biomedical applications
 - ▶ Optics and precision tool applications
- ▶ **Thermodynamics of particle removal**
 - ▶ Including interactions with fluids, electrolytes and solvents
- ▶ **Detection and Removal of bacteria/viruses considered as particles**

This symposium is being organized under the direction of Dr. K. L. Mittal, Editor, Journal of Adhesion Science and Technology by MST Conferences, LLC. A proceedings volume is planned for this symposium and further details will be provided in due course. 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, 2008** 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/particle11.htm>

Or mail response form below to conference chairman at address above

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I PLAN TO:

- ATTEND
- PRESENT A PAPER

TENTATIVE TITLE: _____

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