



CALL FOR PAPERS

SIXTH INTERNATIONAL SYMPOSIUM ON POLYIMIDES AND OTHER HIGH TEMPERATURE/HIGH PERFORMANCE POLYMERS SYNTHESIS, CHARACTERIZATION AND APPLICATIONS; to be held November 9-11, at the Florida Institute of Technology, Melbourne, FL, USA

This symposium will be the sixth in a series the first of which was held in Newark, NJ in 1999. In a relatively small but significant departure from the previous symposia, this symposium will be concerned not only with the well established polyimides but also the entire range of high temperature/high performance polymers. As a loose definition this would include all polymeric materials which exhibit thermal stability above 200 C and in addition have outstanding thermal, mechanical, electrical, optical, surface and rheological properties. An example would be the Poly(p-phenylene benzobisoxazole) materials and Carbon Nanotube composites. These materials exhibit exceptional thermal, mechanical and electrical properties. Other examples would include the entire range of rigid rod polymers as well as fluorinated hydrocarbon chains that can exhibit extraordinary surface properties.

Of all these materials the polyimides have found the widest range of application in such diverse areas as the aerospace industry and microelectronic components. The unique combination of physical and chemical properties make these materials highly attractive for demanding applications where chemical inertness, high temperature stability, low

dielectric constant, mechanical toughness and processability are primary concerns. In addition, their ability to adhere to a range of inorganic materials including metals, ceramics, glasses and semiconductors have made these materials predominant in coating and composite applications. In this regard the issue of adhesion and interaction with other materials will be one of the major focal points of this symposium.

It is also our pleasure to announce that this symposium will be held in collaboration with Prof. Gordon Nelson of the Florida Institute of Technology and Dr. Martha Williams and Trent Smith of the NASA Kennedy Space Center. These individuals have been active in the area of high temperature polymers especially in regard to aerospace applications.

The invited speakers have been selected so as to represent widely differing disciplines and interests, and they hail from academic, governmental and industrial research laboratories. This meeting is planned to be a truly international event both in geographic coverage as well as in spirit. The technical program will contain both invited overviews and contributed original research papers

TOPICS OF INTEREST INCLUDE:

- ▶ Chemistry, synthesis and characterization
- ▶ Surface chemistry and surface modification

OTHER HIGH TEMP./HIGH PERFORMANCE MATERIALS

- ▶ Examples include
 - ▶ Aramids
 - ▶ Carbon nanotubes
 - ▶ Poly phenylenes
 - ▶ High. temp. epoxies
 - ▶ Fluorinated materials
 - ▶ etc.

PHYSICO-CHEMICAL PROPERTIES

- ▶ Thermal-mechanical properties
- ▶ Electrical properties
- ▶ Adhesion properties and adhesion improvement
 - ▶ Surface treatment
 - ▶ Use of coupling agents
 - ▶ Controlling stress level
- ▶ Encapsulation and barrier properties
- ▶ Effects of aging and environment on long term stability, reliability and durability

APPLICATIONS

- ▶ Polyimides as adhesives and insulators.
- ▶ Polyimides as dielectrics, photoresists and encapsulants in microelectronic and biomedical structures
- ▶ Metallization of polyimide and investigation of interfaces.
- ▶ Composite applications

CHARACTERIZATION

- ▶ Chain architecture
- ▶ Bulk morphology
- ▶ Surface morphology
- ▶ Surface chemistry

NOVEL AND ADVANCED FORMULATIONS

- ▶ Ultralow dielectric materials, low thermal expansion liquid crystals, polyimide blends, nanocomposites, copolymers, foams,... etc.

This symposium is being organized by MST Conferences, under the direction of Dr. K. L. Mittal, Editor, Journal of Adhesion Science and Technology. 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 **September 15, 2009** to the conference chairman by any of the following methods:

E-mail: rhlacombe@compuserve.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, abstract submission and registration via the Internet will be maintained on our web site:

<http://mstconf.com/polyimd6.htm>