

MRS SYMPOSIUM PROCEEDINGS

Volume 1613 • IMRC 2013

New Trends in Polymer Chemistry and Characterization

EDITORS

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New Trends in Polymer Chemistry and Characterization

**MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1613**

**New Trends in Polymer Chemistry
and Characterization**

Symposium held August 11–15, 2013, Cancún, México

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Materials Research Society
Warrendale, Pennsylvania



CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press
32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org
Information on this title: www.cambridge.org/9781605115900

Materials Research Society
506 Keystone Drive, Warrendale, PA 15086
<http://www.mrs.org>

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First published 2014

CODEN: MRSPDH

ISBN: 978-1-60511-590-0 Hardback

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PREFACE

This volume contains papers presented at Symposium 4D, “New Trends in Polymer Chemistry and Characterization” of the XXII International Materials Research Congress organized by the Sociedad Mexicana de Materiales A. C. in collaboration with the Materials Research Society (MRS), USA, which was held from August 11 - 15, 2013, in Cancún, Mexico. The symposium was devoted to fundamental and technological applications of polymeric materials, and continued the tradition of providing a forum for scientists from various backgrounds with a common interest in the development and use of polymeric materials to come together and share their findings and expertise.

The papers contained in this volume are a collection of invited and contributed papers. This year, the symposium was attended by participants from Brazil, Canada, Chile, China, Colombia, Czech Republic, France, Germany, Japan, Mexico, Puerto Rico, Saudi Arabia and the United States. All papers have been thoroughly reviewed by at least two referees and edited to the standards of the Materials Research Society. We are grateful to all the authors who made additional efforts to prepare their manuscripts.

The “New Trends in Polymer Chemistry and Characterization” symposium has been held for the last 10 years with the objective of presenting overviews and recent investigations related to polymer engineering, polymer physics, and polymer chemistry both in academia and industry. This symposium provides a forum to debate with some of the most distinguished scientists and engineers in the international polymer science community. The topics included step-growth and chain-growth polymerizations, macromolecular architecture and topology, well-defined and uniform polymers, building blocks for nanoscience, polymer characterization by new and combined techniques, polymer morphology, dendrimers and hyperbranched polymers, smart and functional polymers, composite materials and coatings, computer-aided design and modeling of polymers and polymer forming reactions, simulation methods in polymer chemistry and physics, and environment friendly polymers and biopolymers.

The organizing committee gratefully acknowledges the enthusiastic cooperation of all symposium participants. The financial support of the Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México (IIM-UNAM, México) is also acknowledged. We hope that all readers will come to consider the “New Trends in Polymer Chemistry and Characterization” symposium in Cancún, Mexico, as a suitable forum to present the results of their recent research and experience.

Lioudmila Fomina
Gerardo Cedillo Valverde
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January 2014

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