3rd Workshop on Non-linear deformation behavior of Polymer Nanocomposites

Date
September 9-11, 2013

Venue
CEITEC, Brno, Czech Republic
MU Campus, Brno-Bohunice, Building ..., Room....

Chair
Prof. Josef Jancar, jancar@fch.vutbr.cz

Discussion leaders
Prof. Leon Govaert (University of Eindhoven, NL)
Prof. Alan J. Lesser (University of Massachusetts, USA)
Prof. Alessandro Pegoretti (University of Trento, Italy)
Prof. H. Daniel Wagner (Weizmann Institute, Izrael)

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THEMES
The main theme of this year 3rd Workshop is recent understanding of the physics governing the non-linear deformation behavior of polymer nanocomposites, effects of NP dispersion and interface/interphase on mechanics of nanocomposites.

WHO SHOULD ATTEND
Scientists and engineers from academia and industry working in the field of synthesis, characterization and applications of polymer based nanocomposites in engineering, medicine and other fields should attend. Ample space for discussions with world leaders in the field will be provided.

GUIDELINE FOR WORKSHOP
Our meeting will consist of 5 blocks (one block will last approximately 3 hours, last block will summarize the discussions). Each discussion leader (DL) will chair one discussion block. Each block should involve an introductory 20 minute oral presentation brought forward by the DL summarizing the state of the art. The presentation is intended to define the framework for discussion by the participants moderated by DL. Role of the DL will be to encourage discussion and prevent drifting of the discussion away from the session topic. The role of DL also includes a draft of a session synopsis addressing of main aspects of the controversies and possible ways to resolve them resulting from the discussion. In the meeting room, white board and data projector will be available. The DL as well as the participants are encouraged to bring few slides with current results relevant for support of their position on the topic. DL can allow 5-10 minutes informal presentation of these results by the participants upon their request. Participants should come forward with their request to present results before starting the session.
PROGRAM

Monday, September 9, 2013
9:00-9:30  Registration
9:30-12:00 Yielding and strain hardening phenomena in glassy and semicrystalline matrix nanocomposites (DL: Leon Govaert)
12:00-13:30 Lunch
13:30-16:00 Interface/interphase phenomena in polymer nanocomposites (DL: Daniel Wagner)

Tuesday, September 10, 2013
9:00-12:00 Mechanics of multiscale composites (DL: Alan Lesser)
12:00-13:30 Lunch
13:30-16:00 Effects of NP dispersion, self assembly, etc. on various physico-chemical properties (DL: Alessandro Pegoretti)
19:00  Dinner (Restaurant “U kašny”, Rajhrad)

Wednesday, September 11, 2013
9:00-12:00 Summary and outlook of future science and technology of polymer nanocomposites for industrial and medical applications (DL: Josef Jancar)

POSITION PAPERS

Participants including DLs should submit a position paper on any or all the topics of the workshop prior the workshop or during it. The position paper should have a form of a short communication (letter) maximum 5-7 pages of double spaced text with at least a 2.5-cm (1-inch) margin and no more than 3 pages of figures/drawings/photos plus a separate title page, headed by a concise, meaningful title (no abbreviations). This page should provide the name and affiliations of each contributing author and an abstract, consisting of a single paragraph, text only, of 100-200 words to be headed by the title and the names and addresses of the authors. Define any abbreviations for substances or methods (such as ABS, SAXS, etc.).

Review papers resulting from the discussions in the sessions and selected position papers will be published in a special issue of POLYMER COMPOSITES after the usual peer review process. Manuscript format should comply with the Author’s guidelines of the Journal.