

Novel Trends in Rheology VII

ZLIN, CZECH REPUBLIC
JULY 26 – 27, 2017



Figure 1: Conference book.

The biennial international conference “Novel Trends in Rheology VII” (<http://noveltrends7.ft.utb.cz/>) has been organized by the Polymer Centre, Faculty of Technology, Tomas Bata University in Zlin in cooperation with the Applied rheology division, the Society of Plastics Engineers (USA), and the Czech Group of Rheology, which belongs to the Czech Chemical Society. The meeting has captured recent developments in areas of novel rheological techniques, constitutive equations for polymer melts, non-Newtonian fluid mechanics, flow instabilities (slip, frictional heating, melt fracture, die drool, die swell, neck-in, flow vortices, coextrusion and melt blown instabilities), degradation and stability, rheology of polymers/composites/blends/gels/complex fluids and applied rheology for polymeric nanofibers. All conference lectures were given by invited speakers which have been carefully selected to guarantee a very high level of both presentations and scientific papers. Each invited speaker was gifted with a framed certificate. There was special category called ‘invited posters’ whereas the regular poster submission was open for all registered participants. During the conference, it was possible to visit exhibition at which novel experimental devices for rheological characterization of polymers were presented.

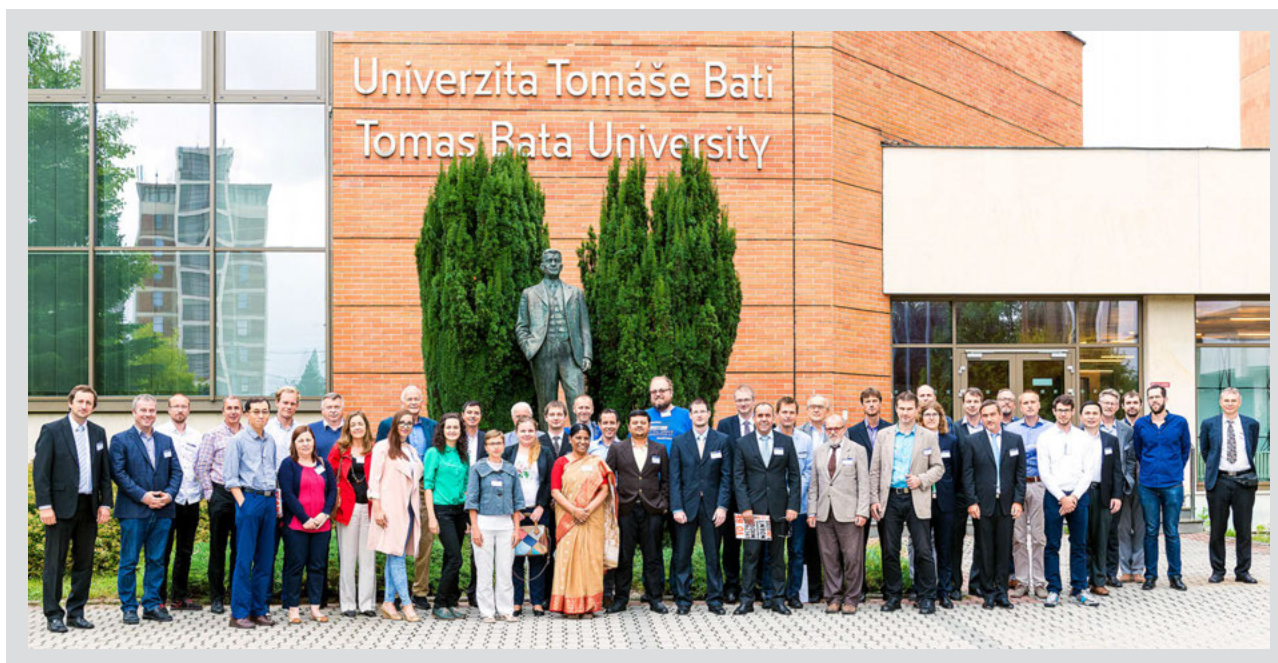


Figure 2: Conference participants.



Figure 3: Christopher W. Macosko (left) receiving the certificate from Helmut Münstedt (right) for lecture 'Long chain branching of PLA'.



Figure 4: Olivier Catherine (right) receiving the certificate from Savvas G. Hatzikiriakos (left) for lecture 'Polymer melt rheology and flow simulations applied to cast film extrusion die design: An industrial perspective'.



Figure 5: Donggang Yao (left) receiving the certificate from Manfred H. Wagner (right) for lecture 'Dynamics and rheology of finitely extensible polymer coils: An overview'.



Figure 6: Olga Sousa Carneiro (left) receiving the certificate from Alan Jeffrey Giacomin (right) for lecture 'Computer aided die design: A new open-source methodology'.



Figure 7: José Pérez-González (right) receiving the certificate from Yong Woo Inn (left) for lecture 'Slip and frictional heating of extruded polyethylene melts'.



Figure 8: Manfred Wilhelm (left) receiving the certificate from Christopher W. Macosko (right) for lecture 'Shear rheology and ^1H TD-NMR combined to low-field RheoNMR: Set-up and application to quiescent and flow-induced crystallization of polymers'.



Figure 9: Conference room.



Figure 10: Poster session.

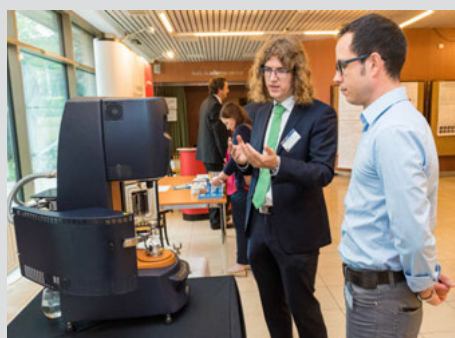


Figure 11: Exhibition.



Figure 12: Refreshment.



Figure 13: Dinner.

Conference participants were coming from 14 different countries (Mexico, USA, Canada, China, Portugal, England, Greece, Belgium, Sweden, Italy, Germany, Austria, Slovak Republic and Czech Republic). We would like to thank our sponsors (Anton Paar, CJTEK, Polymertest, Pragolab, TA Instruments and Thermo Scientific) for the financial support. The conference was hosted at the Academia Centre, Tomas Bata University in Zlin, Czech Republic and the conference proceedings have been published by the American Institute of Physics as a book with CD-ROM entitled as “Novel Trends in Rheology VII” having the following ISBN: 978-0-7354-1513-3.

When asked about the conference, Olivier Catherine (Cloeren Incorporated, USA) said: ‘I was very impressed by the very professional organization of the conference. Yet there was a very nice and friendly atmosphere. The diversity and quality of topics and presenters made it very useful for my company to attend – I wish to come again for the next edition in two years’ Savvas G. Hatzikiriakos (The University of British Columbia, Canada) said: ‘This is the third NTR conference in a row that I am participating and every time I enjoy it more and more. Professor Zatloukal is selecting very carefully the speakers and places them in an order than make sense thematically. This

makes the overall program very interesting keeping the interest of the audience at a high level. The large number of question after each talk is an indication of the high level of science presented and discussed in this conference. The fact that the poster session, the lunch area and the exhibitors are in the same area contributes significantly to keeping the participants active continuously. I am already looking forward to the next one in July 2019.' Christopher W. Macosko (University of Minnesota, USA) said: 'It was my first time to attend and I appreciated the high quality of the contributions and the pleasant venue. The advantage of a small conference with only one track is that one can make good connections with the speakers and attendees.' Helmut Münstedt (Friedrich-Alexander University Erlangen-Nürnberg, Germany) said: 'As the conferences before, Novel Trends in Rheology VII provided a high standard of presentations and offered an excellent environment for fruitful discussions.' Manfred H. Wagner (Berlin Institute of Technology, TU Berlin, Germany) said: 'It is always good to come to this very interesting and superbly organized rheology meeting at Zlin every 2 years to meet and exchange ideas with old and new colleagues, to discuss the progress in the field of rheology and polymer processing, and last but not least to enjoy the warm hospitality of our colleagues of Tomas

Bata University. Vivant sequentes!.' Manfred Wilhelm (Karlsruhe Institute of Technology (KIT), Institute for Chemical Technology and Polymer Chemistry, Germany) said: 'This conference is very special, it is rather small but the Presenters are from all over the world. The level of the presentations is very high and direct communication is much more possible as in many other places. So, if you have the chance, go there, it is really worth going! I myself was there the first time, and if possible I will attend also the next conference in 2 years.' Donggang Yao (School of Materials Science & Engineering, Georgia, Institute of Technology, Atlanta, Georgia, USA) said: 'This conference is one of the best rheology conferences I have ever attended. I was thrilled to meet many internationally renowned scholars and pioneers in rheology. The conference had a balanced theme in theory and applications. The discussions after presentations were intriguing and inspiring too. It was a total success!!'

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1. Klebstoffseminar

Materialcharakterisierung und Prozessüberwachung

Mit dem Seminar gibt das ifw Jena in Kooperation mit der Anton Paar Germany GmbH einen Überblick über die rheologischen und dynamisch-mechanischen Eigenschaften von Klebstoffen und die experimentellen Methoden zu ihrer Bestimmung. Ziel ist es, einen umfassenden Einblick in die Methoden der Rheologie und DMTA für die Praxis aus Forschung und Industrie zu geben. Unter dem Titel „Materialcharakterisierung und Prozessüberwachung“ wird zu folgenden Themen referiert:

- › Grundlagen der Rheologie, DMTA und Reaktionskinetik
- › Methoden zur Analyse rheologischer und dynamisch-mechanischer Eigenschaften
- › Deutung der Messdaten mit relevanten Grundlagen
- › Anwendungsbeispiele
- › Neue Messtechniken zur Charakterisierung und Überprüfung von Klebstoffen

Der Kurs ist an alle Anwender gerichtet, die sich mit der Materialcharakterisierung und Prozessüberwachung von Klebstoffen befassen und behandelt die wesentlichen Themenkomplexe anhand praxisrelevanter Beispiele.

Im ersten Programmteil werden die Grundlagen und die experimentellen Techniken der Rheologie erläutert. Der zweite Teil beinhaltet die erweiterten Methoden der Rheologie für verschiedene Klebstoffsysteme.

Ausgebucht!

am 23. und 26. Oktober 2017
und am 27. und 28. März 2018 in Jena

INFORMATIONEN UND ANMELDUNG ZUM SEMINAR
www.ifw-jena.de/klebstoffseminar

ifw Jena



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