

Plenary lectures 30th of September 2009
Prof. Dr. Jean-Pierre Pascault (INSA Lyon, Laboratory of Macromolecular Materials, Villeurbanne, France) "Nanostructured epoxies: From model networks to advanced materials"
Prof. Dr. Ekkehard Straube (Martin-Luther-University Halle-Wittenberg, Department of Physics, Halle/Saale, Germany) "Characterization of rubberelastic networks by scattering methods"
Dr. Dong Yang Wu (Boeing Research and Technology Australia, Melbourne, Australia) "An overview of self-healing polymeric materials and recent developments"
Dr. Ian Hamerton (University of Surrey, Senior Lecturer of Organic Chemistry, Surrey, UK) "Modern developments in molecular simulation: Studying network development and final properties in high performance polymers"
Dr. Luis Pilato (Pilato Consulting, Nanotechnology, Resin Matrix Systems, Phenolic Resin Technology, Bound Brook, USA) "Phenolic resins: Opportunities into the next century"

Session 1: Chemistry 1st of October 2009
Invited Speaker Prof. Dr. Reinhard Lorenz (University of Applied Sciences Münster, Department of Chemical Engineering, Steinfurt, Germany) "70 years unsaturated polyester resins – Past and future"
Invited Speaker Prof. Dr. Werner Mormann (University of Siegen, Department of Macromolecular Chemistry, Siegen, Germany) "Liquid crystalline thermosets – Episode in thermoset history or more?"
Invited Speaker Prof. Dr. Ivana Partridge (Cranfield University, Composites Centre, Bedfordshire, UK) "Mechanical and electrical performance of a ternary epoxy/rubber/nanotube system"
Invited Speaker Dr. Horst Stenzenberger (Evonik Technochemie GmbH, Dossenheim, Germany) "Bismaleimide resins: Past, present, future"
Dr. Ulrich Arnold (ITC-CPV, Karlsruhe Research Center, Eggenstein-Leopoldshafen, Germany) "Cationic polymerization of epoxy resins initiated by silver complexes"
Prof. Dr. Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) "55 years cyanate ester resins – Past and future"
Dr. Christian Dreyer (Leoni AG, Nürnberg, Germany) "Thermosets for optical applications – An overview with selected examples"
Dr. Renata Drozdak (Telene S.A.S., Drocourt, France) "pDCPD: A specialty thermoset with a bright future"
Dr. Sergey Evsyukov (Evonik Technochemie GmbH, Dossenheim, Germany) "Compimide® 1224: A new toughened bismaleimide resin for PWB application"

Session 1: Chemistry 1st of October 2009
Jürgen Lang (Dynea Erkner GmbH, Erkner, Germany) "100 years industrial production of phenolic resins"
Dr. Frans Setiabudi (Huntsman Advanced Material GmbH, Basel, Switzerland) "Benzoxazine chemistry: A new material to meet fire retardant challenges of aerospace interiors applications"
Christoph Uhlig (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) "Influence of conversion on fracture behaviour and thermophysical properties of model networks and some aspects of toughening thermosetting resins"

Session 2: Filled thermosets 1st of October 2009
Invited Speaker Dr. Armin Pfeil (Hilti Entwicklungsgesellschaft mbH, Kaufering, Germany) "Chemical anchors – High performance structural fastenings in structural and civil engineering"
Dr. Herbert Barthel (Wacker Chemie AG, München, Germany) "Silicon containing modifiers for toughening of thermosets"
Dr. Mathias Dietz (Clariant GmbH, Hürth-Knapsack, Germany) "Flame retardants based on phosphorus chemistry for thermosets"
Dr. Matthias Zweynert (Cytec Surface Specialities Austria GmbH, Graz, Austria) "Flame retardant gelcoats"

Session 3: Processing 1st of October 2009
Invited Speaker Dr. Wolfgang Dudenhausen (DLR e.V. – German Aerospace Center, Stuttgart, Germany) "Multicurved surfaces, stacked with non-crimped fabrics as an example for possible automation in serial production"
Invited Speaker Prof. Dr. Yichu Yin (Shanghai European-Asian Synthetic Material Company, Shanghai, China) "Fireproof phenolic foam in building Applications"
Arnaud Concord (EADS Innovation Works, München, Germany) "Structural adhesives with debonding ability for rework and repair"
Prof. Dr. Monika Bauer (Fraunhofer PYCO, Teltow, Germany) "Organic – Inorganic hybrid resins for RTM"
Dr. Gianluca Cicala (University of Catania, Engineering Faculty, Catania, Italy) "Cellular composites showing auxetic behavior: Processing and properties"

Session 3: Processing
1st of October 2009
Bram Fieten

(DSM Composite Resins AG, Schaffhausen, Switzerland)

"The use of unsaturated polyester and vinyl ester products in windmill blade production"

Jakob Wölling

(Fraunhofer Institut for Silicate Research ISC, Bayreuth, Germany)

"Thermosetting resins for the LSI-process"

Session 4: Characterization & Modeling
1st of October 2009
Invited Speaker
Dr. Ingo Alig

(German Plastic Institute, Darmstadt, Germany)

"Monitoring and simulation of thermoset curing"

Invited Speaker
Dr. Kaspar Jansen

(Technical University Delft, Faculty of Mechanical Maritime & Materials Engineering, Delft, Netherlands)

"Tailoring of epoxy properties"

Emmanouella Dermitzaki

(MicroMaterials Center Berlin, Fraunhofer Institute for Reliability and Microintegration IZM, Berlin, Germany)

"Molecular modeling approach to estimate property changes resulting from systematic variation of an epoxy structure"

Dr. Joel Foreman

(University of Sheffield, Department of Engineering Materials, Sheffield, UK)

"Predicting the thermomechanical and engineering properties of cured epoxy resin blends using group interaction modelling"

Stephan Günzel

(BAM, Federal Institute for Materials Research and Testing, Berlin, Germany)

"Characterization of crack propagation in epoxy resins and adhesives"

Dr. Gerhard Kalinka

(BAM, Federal Institute for Materials Research and Testing, Berlin, Germany)

"Local mechanical relaxation time spectroscopy with using the nano indentation technique"

Dr. Wolfgang Stark

(BAM, Federal Institute for Materials Research and Testing, Berlin, Germany)

"On-line process monitoring using sensors in the thermoset mould"

Dr. Hans Walter

(Micro Materials Center Berlin, Fraunhofer Institute for Reliability and Microintegration IZM, Berlin, Germany)

"Determination of humidity sensitive materials parameters of microelectronic relevant thermosetting polymers"

Bülent Yagimli

(Universität der Bundeswehr München, Neubiberg, Germany)

"Modeling and simulation of curing adhesives in continuum mechanics: Fundamentals and examples"

Session 5: Fiber-reinforced thermosets 2nd of October 2009
Invited Speaker Prof. Dr. Terry McGrail (University of Sheffield, Composites Centre, AMRC with Boeing, Sheffield, UK) "Polymer matrix composites – Opportunities and challenges"
Enrique Diaz (AIMPLAS - Instituto Tecnológico del Plastica, Paterna, Spain) "New developments of biocomposites as structural composites"
Dr. Bernd Hövel (Dow Deutschland GmbH & Co. OHG, Mietingen-Baltringen, Germany) "Advanced epoxy technology for wind turbine blades"
Dr. Sabine Kummer-Dörner (Toho Tenax Europe GmbH, Wuppertal, Germany) "Carbon fiber technology"
Dr. Johannes Willem Luinge (EADS Innovation Works, München, Germany) "Ceramic modification of structural aerospace composites for increased FST properties"
Dr. Christian Marotzke (BAM, Federal Institute for Materials Research and Testing, Berlin, Germany) "Influence of the interface on the strength of fiber reinforced polymers"
Dr. Amol Ogale (Quickstep GmbH, Ottobrunn, Germany) "Rapid and controlled curing of resins to manufacture composite components via quickstep process"
Dr. Andreas Palinsky (CTP Advanced Materials GmbH, Rüsselsheim, Germany) "New developments concerning epoxy resins for vacuum infusion of large scale composites"
Tobias Potyra (Fraunhofer Institute for Chemical Technology ICT, Pfingstal, Germany) "New and innovative process for thermoset compression moulding: Direct strand moulding compound (D-SMC)"

Poster presentations
Yvonne Chowdhury, Dirk Dietrich, Annette Bauer (InnoMat GmbH, Teltow, Germany) "Volume dilatometry as measurement instrument for curing processes"
Siegfried Vieth, Ralf Müller, Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany and Brandenburg University of Technology, Cottbus, Germany) "Composites and laminates from a linseed epoxide resin and fly ash"
Marco Rettig, Hagen Zollfrank, Thomas Mühlenberg, Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) „Flame-retardant and toughened electron beam curable acrylate resins based on renewable resources"
Thomas Surmann, Jürgen Schneider, Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) „Stability of unsaturated polyester resins in alkaline media used as polymeric matrix for pultrusion materials in armored concrete"
Dieter Dohnau (RESPECTA Maschinenbau GmbH, Wülfrath, Germany) "Respecta® - Processing technology for automated metering and mixing in continuous production"
Dirk Ewald, Tareq Hasson (Hexion Specialty Chemicals GmbH, Duisburg, Germany) "Toughened epoxy resin systems with reduced cycle time for RTM applications"

Poster presentations
<p>Arnaud Favier (O1dB-Mettravib / DMA Division, Limonest, France) „Dynamic mechanical analysis, a powerfull technic for thermosets characterization and performances improvement“</p>
<p>Jens Hammacher, Michael Dost, Bettina Seiler, Elke Noack, Wolfgang Faust, Bernd Michel (Chemnitzer Werkstoffmechanik GmbH, Chemnitz, Germany and Fraunhofer ENAS, Dept. Micro Materials Center, Chemnitz, Germany) „UniDAC - a cross-correlation based image analysis method for the determination of material properties and the analysis of components behavior“</p>
<p>Berthold Just, Holger Keller, Karl Menting (Schill + Seilacher “Struktol” AG, Hamburg, Germany) „9,10-Dihydro-9-oxa-10-phosphaphenathrene-10-oxide - A versatile FR-Building block“</p>
<p>Arunjunai raj Mahendran, Günter Wuzella (Wood Carinthian Competence Centre, Kompetenzzentrum Holz GmbH, St. Veit an der Glan, Austria) „Thermal cure kinetics of lignin phenol formaldehyde resin“</p>
<p>Christoph Uhlig, Olaf Kahle, Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) „Optical crack tracing (OCT) – An efficient tool both for elastic and elastic-plastic fracture mechanical testing“</p>
<p>Olaf Kahle, Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) “The calcium-test – Some new insights concerning the measured permeation values“</p>
<p>Lars Ischtschuk (R+D / SAERTEX GmbH & Co. KG, Saerbeck, Germany) “SAERfix® – EP?“</p>
<p>Jan Ahlers, Siegfried Vieth, Rajko Wurzel, Karina Klauke, Thomas Höppner, Monika Bauer, Marietta Uhlmann, Petra Meinhardt (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany and Brandenburg University of Technology, Cottbus, Germany) „Cyanate ester resins based foams for light-weight structures“</p>
<p>Dietmar Völkle, Florian Hesselbach, André Pfetscher, Claude Reckinger, Rajko Wurzel, Monika Bauer (Diehl Aircabin GmbH, Laupheim, Germany and Fraunhofer-Einrichtung für Polymermaterialien und Composite PYCO, Teltow, Germany) „Resin development for carbon fibre slit tapes“</p>
<p>Karina Klauke, Rajko Wurzel, Monika Bauer (Fraunhofer Research Institution for Polymeric Materials and Composites PYCO, Teltow, Germany) „Recycling of cyanate-based thermosets for fiber-reinforced plastics“</p>
<p>H.-J. Gusovius, P. Ay, Ralf Kommolk (Brandenburg University of Technology Cottbus, Germany) “New quantitative image analysis method for the characterization of mineral and fibrous materials“</p>