



Coatings Science International 2009

Conference Program

Hotels van Oranje Noordwijk
22 June – 26 June 2009
The Netherlands



Coatings Science International

This Conference is sponsored by:



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Mission Statement

The Coatings Science International Conference strives to be the leading European Conference on the Science and Technology of Coatings. By creating strong international bonds and by inviting top-notch speakers from around the world, we want to create a high-quality platform for free exchange of scientific knowledge between both academic and industrial scientists that will strengthen the innovation power of the global coatings community.

Just another Coatings Conference?

No, where other Conferences primarily try to reach a broad public and focus on commercial applications of new technologies, this Conference intends to focus on the scientific backgrounds of the newest technological developments relevant to Coatings. In the convenient setting of 5-star hotel on the North Sea beach and with a maximum of 120 participants, Coatings Science International 2009 will breathe the atmosphere of a Gordon-type conference, reminiscent of the famous Athens Conferences (1974-2003). High-quality speakers, ample time for scientific discussions, and every opportunity to establish rewarding contacts are Conference values we want to uphold.

Organizing Committee COSI 2009

Prof. Dr. Rolf van Benthem	Chair, TU/e, The Netherlands
Dr. Johannes Benckhoff	CIBA, Switzerland
Dr. Keimpe van den Berg	AkzoNobel Car Refinishes, The Netherlands
Prof. Dr. Gordon Bierwagen	North Dakota State University, USA
Prof. Dr. Wolfgang Bremser	Universität Paderborn, Germany
Dr. Horst Hintze-Bruening	BASF Coating AG, Germany
Dr. Catherine Dekerckheer	Institut Meurice-Heldb, Belgium
Prof. Dr. Mats Johansson	Royal Institute of Technology, Sweden
Dr. Joseph L. Keddie	University of Surrey, UK
Drs. Ad Overbeek	DSM NeoResins, The Netherlands
Dr. Marcel Piens	Coating Research Institute (CORI), Belgium
Anna Saar McGonigle	Elsevier, USA
Prof. Dr. Masamitsu Shirai	Osaka Prefecture University, Japan
Dr. Bettina Vogt	Dupont Performance Coatings, Germany
Prof. Dr. Bert de With	TU/e, The Netherlands
Imanda Scholten-Kamstra	Secretary, TU/e, The Netherlands

Monday 22 June 2009

Arrival

20:00- 22:00 hrs Registration / Reception



Tuesday 23 June 2009

Functional Coatings

Chair: Horst Hintze-Bruening

- 08:45 – 09:00 Opening
- 09:00 - 09: 45 Erik Risberg, Jotun R&D Marine and Protective Coatings, Norway
Current trends and challenges in the field of antifouling coatings for naval applications
- 09:45 - 10:15 Mariëlle Wouters, TNO Science and Industry, The Netherlands
Surface structuring and coating performance: Novel biocidefree nanocomposites antifouling coatings
- 10:15 - 10:45 Catarina Esteves, Eindhoven University of Technology, The Netherlands
Light emitting coatings from cross-linked PDMS/garnet composites
- 10:45 – 11:15 Break

Ecofriendly Systems

Chair: Horst Hintze-Bruening

- 11:15 - 11:45 Marjorie Dubreuil, VITO (Flemish Institute for Technological Research),
Materials Technology , Belgium
Environmental-friendly adhesion enhancement of polymeric substrates through atmospheric pressure plasma coating deposition
- 11:45 - 12:15 Claudia Philipp, Fraunhofer-Institute for Wood Research, Wilhelm-Klauditz-Institut, Germany
Biobased polyurethane dispersions (PUD) for furniture coatings
- 12:15 - 12:45 Eun-Hee Kim, School of Nano & Advanced Materials Engineering,
Changwon National University, Korea
Fabrication and characterization of eco-friendly functional multilayered-floor plate prepared using nonmetallic minerals
- 12:45 – 14:30 Buffet Lunch

Characterization and HTE

Chair: Gordon Bierwagen

- 14:30 - 15:00 Wolfgang Schrof, BASF SE, Germany
Close-to-reality high-throughput screening for coatings
- 15:00 - 15:30 Olaf Kohler, Chemspeed Technologies AG, Switzerland
Accelerating formulation R&D by automated high output solutions
- 15:30 - 16:00 Chen-Wu Wu, Institute of Mechanics, Chinese Academy of Sciences, PR
China
On a novel method of impact with front-end-coated bullet to evaluate the interface adhesion of the film and substrate
- 16:00 - 16:30 Break
- 16:30 - 22:00 Poster Session + Drinks
- 20:00 – 22:00 Buffet Dinner

Wednesday 24 June 2009

Morphology

Chair: Catherine Dekerckheer

- 8:45 - 9:30 Henk Huinink, Department of Applied Physics, Technical University
Eindhoven, The Netherlands
*The interplay between water uptake and mechanics in multi-layered
coatings – an NMR imaging study*
- 9:30 - 11:00 Ad Overbeek, DSM NeoResins, Waalwijk, The Netherlands
Polymer Heterogeneity in Waterborne Coatings
- 11:00 – 11:30 Break

Interfaces and Organic / Inorganic Hybrid Materials

Chair: Catherine Dekerckheer

- 11:30 - 12:00 Ulrich Nolte, Head of Synthesis Group Nano BYK-Chemie GmbH,
Germany
*Highly dispersed carbon nano tubes - an innovative way to functionalize
modern coatings*
- 12:00 - 12:30 Phil Martin, Bioengineering and Surface Engineering Materials Group,
CSIRO Materials Science & Engineering, Australia
Nanostructured Thin Film Materials
- 12:30 - 13:00 Bérangère Toury, Laboratoire des Multimatériaux et Interfaces, UMR
5615 CNRS, Université Lyon 1, FRANCE
Non oxide ceramic coatings using the PCDs approach
- 13:00 – 14:00 Buffet Lunch
- 14:15 – 14:15 Arrival coaches at Hotels van Oranje
- 14:30 Departure to Leiden for the **social program**
- 15:30 – 17:00 Visit museum Naturalis
- 21:00 Return trip from Leiden to Noordwijk

Thursday 25 June 2009

Rheology & Film Formation

Chair: Ad Overbeek

- 8:45 - 9:30 Bart Reuvers, DSM Research, The Netherlands
From rheology to performance of high solid trim paints
- 9:30 - 10:00 Jurgen Scheerder, DSM NeoResins, Waalwijk, The Netherlands
The development of a novel polymer composition for use in waterborne primers with excellent anti-knot bleeding properties
- 10:00 - 10:30 Wiebke Becker, Dupont Performance Coatings GmbH & KoKG, Germany
Rheological measurements as tool to study curing of waterborne clear coats
- 10:30 – 11:00 Break

UV Curing Systems

Chair: Ad Overbeek

- 11:00 - 11:45 Patrice Roose, Research Scientist, Physical Characterisation Department, CYTEC, Belgium
Aqueous dispersions of acrylated urethane oligomers: colloidal, rheological and particle aggregation characteristics
- 11:45 - 12:15 Yoshiki Nakagawa, Kaneka Corporation, Liquid Polymers Division, Japan
Novel UV curable telechelic polyacrylates and their coating applications
- 12:15 - 12:45 Xavier Allonas, Département de Photochimie Générale, Université de Haute Alsace, Mulhouse France
Recent developments in UV curing
- 12:45 – 14:30 Buffet Lunch

New Chemistry

Chair: Keimpe van den Berg

- 14:30 - 15:15 Alexander Yahkind, AkzoNobel Coatings Inc, USA
Polyols based on isocyanates and melamines and their applications in 1K and 2K coatings
- 15:15 - 15:45 Antoine Carroy, CIBA, Switzerland
Novel Metal Catalysts for 2K Systems
- 15:45 - 16:15 Akikazu Matsumoto, Osaka City University, Department of Applied Chemistry, Graduate School of Engineering, Japan
Synthesis, property and applications of peroxide polymers
- 16:15 – 16:45 Break
- 16:45 - 17:15 Martin Vollmer, Bayer MaterialScience AG, BU Coatings, Adhesives, Specialties, Marketing & Business Development Dispersions, Germany
2K Waterborne Polyurethane Coatings on the rise – from property to function
- 19:00 – 22:00 Conference Dinner



Friday 26 June 2009

Corrosion

Chair: Mats Johansson

- 8:45 - 9:30 Gordon Bierwagen, North Dakota State University, Department of Coatings and Polymer Materials, USA
A totally chromate-free corrosion protective coating system for aircraft requiring no chromate pretreatment
- 9:30 - 10:00 D.N.N. Singh, Deputy, Corrosion & Protection, National Metallurgical Laboratory, India
Performance and mechanism of action of self priming organic coating on oxide covered steel surface
- 10:00 - 10:30 Per Aggerholm Sørensen, Department of Chemical and Biochemical Engineering, Technical University of Denmark, Denmark
Cathodic delamination of anticorrosive coatings: quantification of ionic transport rates along coating-steel interfaces
- 10:30 – 11:00 Break

Weathering

Chair: Mats Johansson

- 11:00 - 11:30 Xiaohong Gu, Materials and Construction Division, Polymer Division, National Institute of Standards and Technology, USA
Studying long-term performance of a nano-ZnO filled waterborne polyurethane coating using spectroscopies and microscopies
- 11:30 - 12:00 Stuart G. Croll, Department of Coatings and Polymeric Materials, North Dakota State University, USA
Recovery of photodegradation features at the surface of an epoxy coating
- 12:00 - 12:30 James Regan, Q-Lab Weathering Research Service, USA
Outdoor weathering must verify accelerated testing
- 12:30 – 13:00 Closing and COSI Awards Presentation
- 13:00 – 14:00 Buffet lunch



Coatings Science International

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