



Coatings Science International 2007

Conference Program

**Hotels van Oranje Noordwijk
25 June – 29 June 2007
The Netherlands**



Coatings Science International

This Conference is sponsored by:



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Mission Statement

The Coatings Science International Conference strives to become 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 2007 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 2007

Prof. Dr. Rolf van Benthem	Chair, TU/e, The Netherlands
Dr. Johannes Benkhoff	CIBA, Switzerland
Prof. Dr. Gordon Bierwagen	North Dakota State University, USA
Prof. Dr. Wolfgang Bremser	Universität Paderborn, Germany
Dr. Catherine Dekerckheer	Institut Meurice-Helde, Belgium
Dr. Piet van Hensbergen	Akzo Nobel N.V., The Netherlands
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. Wolfgang Paulus	BASF Coating AG, Germany
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
Dr. Douglas A. Wicks	The University of Southern Mississippi, USA
Prof. Dr. Bert de With	TU/e, The Netherlands
Imanda Scholten-Kamstra	Secretary, TU/e, The Netherlands

Monday 25 June 2007

Arrival

20:00- 22:00 hrs Registration / Reception



Tuesday 26 June 2007

Polymer Chemistry I: Controlled properties

Chair: B. Vogt

08:45 – 09:00	Opening
09:00 – 09:45	J. Omeis, BYK-Chemie, Germany <i>The evolution of structured copolymers for coating applications</i>
09:45 – 10:15	S. Ma, DuPont, Germany <i>Structured acrylic polymers and their use in coating applications</i>
10:15 – 10:45	M. Groenewolt, BASF Coatings AG, Germany <i>Highly scratch resistant coatings for automotive applications</i>
10:45 – 11:15	Break

Polymer Chemistry II: New polymers

Chair: M. Johansson

11:15 – 11:45	R. Jans, AkzoNobel Decorative Coatings Europe, The Netherlands <i>A new reactive diluent for decorative paints in view of 2010</i>
11:45 – 12:15	M. Plehiers, Sigma Coatings, Belgium <i>Synthesis of silyl acrylates for marine coatings</i>
12:15 – 12:45	L. Molhoek, DSM Resins, The Netherlands <i>Amorphous polyamide resins: new versatile binders for fast curing powder coatings</i>
12:45 – 14:30	Buffet Lunch

Polymer Chemistry III: UV and radical reactions

Chair: W. Paulus

14:30 – 15:15	W. Shi, University of Science and Technology of China, China <i>Hyperbranched acrylate prepolymers and their potential applications for UV powder coatings</i>
15:15 – 15:45	K. van der Berg, AkzoNobel Car Refinishes, The Netherlands <i>Development of waterborne UV-A curable clear coat for car refinishes</i>
15:45 – 16:15	A. Matsumoto, Kansai University, Japan <i>Design of network polymers based on the mechanistic discussion of multivinyl crosslinking polymerization</i>
16:15 – 16:45	Break
16:45 – 17:15	K. Studer, Ciba Specialty Chemicals Inc, Switzerland <i>Novel curing agents: Thermal radical initiators as viable alternatives to peroxides</i>
18:00 – 22:00	Poster session + drinks
20:00 – 22:00	Buffet Dinner

Wednesday 27 June 2007

Weathering

Chair: C. Dekkerckheer

08:45 – 09:30	M. Akahori, Nippon Paint Co. Ltd, Japan <i>A new test method for weatherability prediction of coatings: Radical shower technique using a remote plasma reactor</i>
09:30 – 10:00	J. Mallégo, Arcelor Research, University of Liège, Belgium <i>UV weathering of prepainted steel: Influence on corrosion resistance</i>
10:00 – 10:30	S. Croll, North Dakota State University, USA <i>The interplay of physical aging and degradation during weathering for two crosslinked coatings</i>
10:30 – 11:00	Break

Hybrid and filled systems

Chair: P. v. Hensbergen

11:00 – 11:30	M. Špírková, Institute of Macromolecular Chemistry, Czech Republic <i>The view from the core onto the surface of self-assembled nanocomposite coatings</i>
11:30 – 12:00	N. Verghese, DOW Automotive, USA <i>The effect of rigid inorganic fillers on the mechanical and thermo-mechanical properties of epoxy thermosets: experimental and theoretical considerations</i>
12:00 – 12:30	M. Klanjšek Gunde, National Institute of Chemistry, Slovenia <i>Dispersions of carbon black pigments in epoxy-based medium</i>
12:30 – 13:00	F. Maile, Merck KGaA, Germany <i>Orientation of transparent effect pigments and its influence on their appearance in polymer films</i>
13:00 – 14:00	Buffet Lunch
14:15 – 14:15	Arrival coaches at Hotels van Oranje
14:30 –	Departure to Amsterdam for the social program ,
15:30 – 18:00	Visit Van Gogh museum, Amsterdam
21:00	Return trip from Amsterdam to Noordwijk

Thursday 28 June 2007

Characterization I: Waterborne systems

Chair: A. Overbeek

8:45 – 9:30 J. Stubbs, DSM NeoResins, USA
The dynamics of morphology development in multi-phase latex particles

9:30 – 10:00 F. Brouwer, Van 't Hoff Institute for Molecular Sciences, The Netherlands
Real-time imaging of film formation using fluorescence spectroscopy

10:00 – 10:45 D. Johannsmann, Clausthal University of Technology, Germany
Maps of the stress distributions occurring during drying of latex dispersions

10:45 – 11:15 Break

Characterization II: Methods

Chair: J. Keddie

11:15 – 11:45 I. Alig, Deutsches Kunststoff-Institut, Germany
Microcalorimetry for characterization of film formation and cure of Coatings and adhesives

11:45 – 12:15 R. Bao, Fusion UV Systems Inc. USA
A new method of analyzing double bond conversion as a function of film thickness

12:15 – 12:45 A. Brun, Formulaction, France
Film formation of coatings studied by diffusing wave spectroscopy

12:45 – 14:30 Buffet Lunch

Surface properties

Chair: J. Benkhoff

14:30 – 15:15 A. Kharitonov, Russian Academy of Sciences, Russia
Enhancement of commercial properties of polymeric articles by direct fluorination

15:15 – 15:45 E. Malmström, KTH, Sweden
Covalent surface modification by controlled polymerization

15:45 – 16:15 T. Inaba, Chuo University, Japan
Bonding adhesive strength due to pre-treatment on metal surface for plasma spray with cathode spots of low pressure arc after grit blasting

16:15 – 16:45 Break

Photochemistry

Chair: J. Benkhoff

16:45 – 17:30 R. Nothhelfer-Richter, Forschungsinstitut fur Pigment und Lacke, Germany
Investigations of the photo catalytic activity of pigments and pigmented organic coatings using the reactor method

17:30 – 18:00 D. Wu, Eindhoven University of Technology, The Netherlands
Nature-inspired Superhydrophobic Coating

19:00 – 22:00 Conference Dinner

Friday 29 June 2007

Corrosion I: New concepts

Chair: W. Bremser

08:45 – 09:30 H. Adler, Technische Universitaet Dresden, Germany
Ultrathin layers as new concepts for corrosion inhibition and adhesion promotion

09:30 – 10:00 S. Lamaka, University of Aveiro, Portugal
Hybrid organic-inorganic sol-gel films as anticorrosion coatings for magnesium alloy AZ31B

10:00 – 10:30 W.J. Soer, Eindhoven University of Technology, The Netherlands
Novel crosslinking systems for surfactant-free latexes based on maleic anhydride containing polymers

10:30 – 11:00 Break

Corrosion II: Methods

Chair: W. Bremser

11:00 – 11:45 D. de la Fuente, Max Planck Institute for Iron Research, Germany
Fundamental investigation on the stability of the steel/coating interfaces contaminated by submicroscopic salt particles

11:45 – 12:15 M. Dornbusch, BASF Coatings, Germany
The use of modern electrochemical methods in the development of corrosion protective coatings

12:15 – 12:45 J. Tardiff, Ford Motor Company, USA
Automotive pretreatment – limitations of existing technology and enablers for future technology

12:45 – 13:00 Closing, Awards Presentation

13:00 – 14:00 Buffet lunch



Coatings Science International

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