



Coatings Science International 2011

Conference Program

**Hotels van Oranje Noordwijk
27 June – 1 July 2011
The Netherlands**



Coatings Science International

This Conference is sponsored by:



ELSEVIER



TU/e



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 2011 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 2011

Prof. Dr. Rolf van Benthem	Chair, TU/e, The Netherlands
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. Catherine Dekerckheer	Institut Meurice-HELdB, Belgium
dr. Horst Hintze-Bruening	BASF Coating AG, Germany
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. Dean C. Webster	North Dakota State University, USA
Prof. Dr. Bert de With	TU/e, The Netherlands
Prof. Dr. Limin Wu	Fudan University, P.R. China
Imanda Scholten-Kamstra	Secretary, TU/e, The Netherlands

Monday 27 June 2011

Arrival

20:00- 22:00 hrs Registration / Reception



Tuesday 28 June 2011

Functional Coatings I

Chair: Gordon Bierwagen

8:45 – 9:00	Opening
9:00 – 9:45	Jamil Baghdachi, Eastern Michigan University, USA <i>Investigation, design and development of self-stratifying coatings.</i>
9:45 - 10:15	Kostadinka Gesheva, Bulgarian Academy of Sciences, Bulgaria <i>Transition metal oxide films: technology and “smart windows” electrochromic device performance.</i>
10:15 - 10:45	Jacco Eversdijk, TNO Science and Technolgy, The Netherlands <i>Development of a biocide containing nano-clay composite for prolonged antifungal activity.</i> Lecture will be presented by Dr. Bart Erich (TNO).
10:45 – 11:15	Break

Functional Coatings II

Chair: Gordon Bierwagen

11:15 - 11:45	Alexander Irzh, Bar-Ilan University, Israel <i>Super-fast deposition of transparent super-hydrophobic layers on various surfaces using microwave plasma.</i>
11:45 - 12:15	Nadine Tenn, University of Rouen, France <i>Water barrier properties of plasma treated EVOH and PLA films.</i>
12:15 - 12:45	Christine Lin, University of New South Wales, Australia <i>Mn-doped titania thin films prepared by spin coating.</i>
12:45 – 14:30	Buffet Lunch

Characterization & Modelling

Chair: Catherine Dekerckheer

14:30 - 15:15	Viktor Baukh, Eindhoven University of Technology, The Netherlands <i>Water transport in multilayer organic coatings.</i>
15:15 - 15:45	Gordon Bierwagen, North Dakota State University, USA <i>Incorporation of conductive fillers into Mg-rich primers.</i>
15:45 - 16:15	Polina Volovitch, Ecole nationale superieure de chimie de Paris, France <i>New approach for measuring reactivity and degradation of complex surfaces: a review of recent results.</i>
16:15 – 16:45	Break
16:45 - 17:15	Alexandros Kakaroglou, Vrije Universiteit Brussel, Belgium <i>Characterization of plasma polymerized poly (allyl methacrylate) coatings.</i>
17:15 - 17:45	Dirk Eierhoff, BASF Coatings GmbH, Germany <i>On cloud nine – A potential evaluation tool for local fluctuations of the viewing angle dependent brightness of automotive effect coatings.</i>
19:00 – 22:00	Conference Barbecue

Wednesday 29 June 2011

Hybrid Materials & Nanocomposites I

Chair: Mats Johansson

8:45 - 9:30 Anwar Ahniyaz, YKI, Institute for Surface Chemistry, Sweden
Synthesis and surface modification of functional nanoparticles to improve coating performance.

9:30 - 10:00 Giabriela Ciobanu, Technical University of Iasi, Romania
The effect of vitamins to hydroxyapatite growth on porous polyurethane substrate.

10:00 – 10:30 Jerneja Godnjavec, Center of Excellence for Polymer Materials and Technologies, Slovenia
Polyhedral oligomeric silsesquioxanes as titanium dioxide surface modifiers for transparent acrylic UV blocking hybrid coating.

10:30 – 11:00 Break

Hybrid Materials & Nanocomposites II

Chair: Mats Johansson

11:00 - 11:30 Guy Applerot, Bar-Ilan University, Israel
ZnO nanoparticles coatings for antibacterial and medical applications.

11:30 - 12:00 Siriwan Phattanarudee, Chulalongkorn University, Thailand
Preparation of biodegradable nanocomposite emulsions.

12:00 - 12:30 Mohsen Mohseni, Amirkabir University of Technology, Iran
Structural and morphological studies of scratch resistant sol-gel based UV cured nano composite films on polycarbonate.

12:30 - 13:00 Hirotugu Yasuda, University of Missouri, USA
Green system approach interface engineering for coating of metals; DC plasma polymerization and magneto-plasma polymerization.
Lecture will be presented by Dr Olcaytu (University of Freiburg, Germany).

13:00 – 14:00 Buffet Lunch

14:15 – 14:15 Arrival coaches at Hotels van Oranje

14:30 – Departure to Den Haag for the **social program**

15:30 – 18:00 Visit museum Mauritshuis

21:00 Return trip from Den Haag to Noordwijk

Thursday 30 June 2011

Weathering

Chair: Keimpe van den Berg

08:45 - 09:30 Mark Nichols, Ford Motor Company, USA
Accelerated weathering testing: A new approach to anticipating Florida exposure results.

09:30 - 10:00 Russell Varley, CSIRO Materials Science and Engineering, Australia
Investigation of factors impacting the in-service degradation of aerospace coatings.

10:00 - 10:30 Stuart Croll, North Dakota State University, USA
The effect of pigments on the long term durability of artists' oil paint.

10:30 – 11:00 Break

Colloids & Interfaces

Chair: Keimpe van den Berg

11:00 - 11:45 Martien Cohen Stuart, Wageningen University, The Netherlands
Chemistry and physics of associative thickeners.

11:45 - 12:30 Andriy Voronov, North Dakota State University, USA
Interfacial behavior of self-assembled micellar nanostructures from stimuli-invertible macromolecules.

12:30 - 13:00 Audrée Andersen, BASF Coatings GmbH, Germany
Adhesion of coatings, an interfacial challenge.

13:00 – 14:00 Buffet Lunch

14:00 – 15:30 Poster Session I

15:30 – 16:00 Break

Chemistry & Photochemistry

Chair: Horst Hintze-Bruening

16:00 - 16:30 Andreas Kandelbauer, Reutlingen University, Germany
Photocrosslinkable vegetable oil modified resin for fiber reinforced composite and wood surface coating application.

16:30 - 17:00 Claudia Philipp, Fraunhofer Institute for Wood Research, Germany
Waterborne polyurethane wood coatings based on rapeseed fatty acid methyl esters.

17:00 - 17:30 Yong He, South China University of Technology, China
A recycling model of excess 2, 4-and 2, 6-toluene diisocyanate in the preparing of polyurethane prepolymer.

17:30 – 18:00 Ingo Alig, Deutsches Kunststoff Institut, Germany
Monitoring of photopolymerization kinetics and network formation by ultrasonic reflectometry and near-infrared spectroscopy.

18:30 - 20:00 Poster Session II + Drinks

20:15 – 22:00 Buffet Dinner

Friday 1 July 2011

Material Properties

Chair: Wolfgang Bremser

8:45 - 9:30 Gustavo Guerriero, Delft University of Technology, The Netherlands
Mechanical properties of liquid crystalline thermosetting coatings.

9:30 - 10:00 Massimiliano Barletta, University of Rome "Tor Vergata", Italy
Micro-scratch deformation contributions of epoxy-polyester films deposited on substrates after different surface treatments.

10:00 - 10:30 Harald Oehler, Deutsches Kunststoff Institut, Germany
Investigation of delamination mechanisms in coatings by scanning acoustic microscopy.

10:30 – 11:00 Break

Corrosion

Chair: Wolfgang Bremser

11:00 - 11:30 Thibault Muselle, Vrije Universiteit Brussel, Belgium
Multiple action self-healing coatings for the corrosion protection of metals.

11:30 - 12:00 Anthony Hughes, Commonwealth Scientific and Industrial Research Organisation, Australia
Using X-ray tomography, PALS and Raman spectroscopy to characterisation inhibitors in epoxy coatings.

12:00 - 12:30 Christoph Regula, Fraunhofer Institute for Manufacturing Technology and Applied Materials Research, Germany
Corrosion protection of metal surfaces by atmospheric pressure plasma jet treatment.

12:30 – 13:00 Closing, Awards Presentation

13:00 – 14:00 Buffet lunch



Coatings Science International

Local Organization:

Eindhoven University of Technology
Department of Chemical Engineering and Chemistry
Laboratory of Materials and Interface Chemistry
The Netherlands

Contact:

conferences@tue.nl

www.coatings-science.com

