

1st European Technical Coatings Congress

(ETCC 2012)

**Lausanne, Switzerland
4-6 June 2012**

ISBN: 978-1-62748-139-7

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



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10:00 – 10:30 **Openig Session** Berlin

N. Frick (Zollikon, CH)

10:35 – 11:40 **Parallel Sessions 1**

Binders & Resins Berlin

10:35 Combined acrylic and polyester chemistries: hybridized polyols for low VOC 2K PU topcoats of superior appearance 1
C. Le Fevere de Ten Hove, C. Steinbrecher, D. Heymans
Momentive Specialty Chemicals Research Belgium S.A.
(Ottignies Louvain-la-Neuve, BE)

11:10 Recent developments of co-solvent free polyurethane dispersions for 2K waterborne polyurethane coatings: a contribution to a green environment PDE
M.C. Schrunner, T. Stingl, M. Melchiors
Bayer MaterialScience AG (Leverkusen, DE)

Pigments Albertville

10:35 *P. Winkelmann, Eckart GmbH (Hartenstein, DE)*

11:10 Non-chromate anticorrosive concepts for high performance applications: past-present-future HF
L. Kirmaier, Heubach GmbH (Langelsheim, DE)

Testing & Measurement Melbourne

10:35 Estimation of the acid-base properties of pigment and filler surfaces Í F
E.A. Indeikin, YarLI (Paint Research Institute) (Yaroslavl, RU)

11:10 Evaluation of the corrosion protection performance of automotive coatings Í J
M. Wanner (1), K. Krawczyk (1), H. Greisiger (1), T. Schauer (1),
R. Mayrhofer (2), M. Bayer (2)
(1)Fraunhofer IPA (Stuttgart, DE);
(2)Daimler AG (Sindelfingen, DE)

11:40 – 13:10 **Lunch Break**

13:15 – 14:20 **Parallel Sessions 2**

Binders & Resins

Berlin

- 13:15 Climate protection with energy efficient façade coatings Í J
M. Kreuzpointner, Wacker Chemie AG (Burghausen, DE)
- 13:50 New hydrophilic polyisocyanates for the best balance between performance and Environmental concern Ì H
A. Jomier, P. Olier, Application manager Coatings and Adhesives, PERSTORP (Saint Fons, FR)

New Technology

Albertville

- 13:15 Assessing cradle-to-grave carbon footprints of interior wall paints J Í
J. Rommens (1), S. Cappelle (1), E. Thiele (1), C. Alles (2)
(1)DuPont (Mechelen, BE);
(2)DuPont (Geneva, CH)
- 13:50 "Mini-MoFa" the world's most compact paint factory on 30m² Ë €J
R. Hohmann (1), H. Seeger (2)
(1)Hemmelrath Lackfabrik GmbH (Klingenberg, DE);
(2)Ystral GmbH (Ballrechten-Dottingen, DE)

Testing & Measurement

Melbourne

- 13:15 Measuring and controlling color of effect paints and coatings with interference pigments Ë €€
M. C. G. Hilhorst, X-Rite Europe GmbH (Regensdorf, CH)
- 13:50 Epoxy-coated reinforcement – Quantitative assessment of the water absorption by use of single-sided NMR Ë €DE
M. Zintel, C. Gehlen, A. Volkwein,
Technische Universität München (München, DE)

14:20 – 14:55 **Coffee Break**

15:00 – 16:05 **Parallel Sessions 3**

Binders & Resins

Berlin

- 15:00 New versatile technology for low MFFT binders for optimal film formation of high PVC paints Äí €
J.Y. Loze (1), I. Betremieux (2), A. Boone (1)
(1)Arkema Coating Resins (Verneuil-en-Halatte, FR);
(2)Arkema Coating Resins (Colombes, FR)
- 15:35 The drying properties of alkyd emulsions: investigations and results Äí €
M. Schneider, ATCOAT GmbH (Düren, DE)

Additives

Albertville

- 15:00 Biopolymer based matting agent for coatings Äí €
J. Hajas, R. Krijns, M. Bodi, P. Lenz, BYK-Chemie GmbH (Wesel, DE)
- 15:35 The influence of porous silica particles on matting efficiency and the physiochemical properties of modern matted coatings Äí G
T.E. Fletcher, Grace GmbH & Co. KG (Worms, DE)

Testing & Measurement

Melbourne

- 15:00 Drying Process Characterization of Polymer by Optical Interferometry Äí H
J.A. Olivares (1), J. Galvan-Miyoshi (1), F.L.S. Cuppo (1),
A. Garcia-Valenzuela (2)
(1)COMEX (Mexico, MX);
(2)UNAM (Mexico, MX)
- 15:35 Water transport and water-polymer interactions during water uptake in a waterborne basecoat/p-urethane clearcoat system Äí Jì
L.G.J. van der Ven (1), P.J.A. Geurink (1), T. Scherer (1), V. Baukh (2),
H.P. Huinink (2), O.C.G. Adan (2), S.J.F. Erich (2)
(1)AkzoNobel (Sassenheim, NL);
(2)Eindhoven University of Technology (Eindhoven, NL)

16:05 – 16:30 **Coffee Break**

16:35 – 17:40 **Parallel Sessions 4**

Binders & Resins

Berlin

16:35 I have a dream – waterborne epoxy anticorrosion primers for outdoor use in heavy duty applications
M. Gerlitz, Huntsman Advanced Materials Switzerland (Basel, CH)

AGI

17:10 Fluoro-acrylic exterior wood coatings
V. Landry, P. Blanchet, FPIInnovations (Québec City, CA)

GHF

Additives / Binders & Resins

Albertville

16:35 The Matting of 100% UV-curing coatings – a comprehensive model is giving guidance
*M. Weimer, R. Behl, K. Schottenloher, J. Bükler
Evonik Industries AG (Hanau, DE)*

AGI

17:10 Polymer nanocomposites as binders for magnetic powders. Preliminary results
*M. Zielecka (1), E. Bujnowska (1), D. Jamanek (1), B. Slusarek (2)
(1)Industrial Chemistry Research Institute (Warsaw, PL);
(2)Tele and Radio Research Institute (Warsaw, PL)*

AG F

Testing & Measurement / New Technology

Melbourne

16:35 A new method to predict open time for waterborne trim paints
*J.M. Akkerman (1), M. Bosma (2), R. vd Horst (2), E. Rensen (2),
F. Fallani (2), A. Roelofs (2)
(1)Nuplex Resins (Bergen op Zoom, NL);
(2)Nuplex Resins (Wageningen, NL)*

AG G

17:10 Tuning the electronic structure of the ZnO surface
*T. Van Regemorter (1), S. Nénon (2), R. Méreau (2), S. Salman (2),
F. Castet (2), D. Beljonne (1), J. Cornil (1)
(1)University of Mons (Mons, BE);
(2)Université de Bordeaux (Talence, FR)*

AG EF

09:00 – 10:05 **Parallel Sessions 5**

Binders & Resins

Berlin

09:00 New waterborne resins for decorative and industrial coatings meeting TVOC and indoor air quality requirements
A. Sanderse, J. Rommens, D. Mestach, J. Akkerman
Nuplex Resins (Bergen op Zoom, NL)

ÁFG

09:35 Unique performances of highly durable FEVE coatings
P. Hering (1), T. Takayanagi (2)
(1)AGC CHEMICALS EUROPE (Amsterdam, NL);
(2)AGC (Tokyo, JP)

ÁGÍ

Pigments

Albertville

09:00 Determination of the absorption cross section in titanium dioxide by a Z-scan technique
J.A. Olivares (1), F.L.S. Cuppo (1), A. Garcia-Valenzuela (2),
F. Curiel (3), R.G. Barrera (3)
(1)COMEX (Mexico, MX);
(2)UNAM (Mexico, MX);
(3)IF-UNAM (Mexico, MX)

ÁHÏ

09:35 Nubiola's cost-efficient high-performance solutions for heat cured coatings
F. Requeijo, Nubiola (Barcelona, ES)

ÁHÎ

Testing & Measurement

Melbourne

09:00 Summer overheating of vehicles and the role of bodywork color
A. Libbra, A. Muscio, University of Modena and Reggio Emilia (Modena, IT)

ÁHÏ

09:35 Theoretical and experimental aspects of paint film leveling
C. Hager, M. Schneider, U. Strohbeck, Fraunhofer IPA (Stuttgart, DE)

ÁH H

10:05 – 10:35 **Coffee Break**

10:40 – 11:25 **Poster Sessions 1 – 4**

Poster Session 1

- 10:40 Driers suitable for high solids alkyd paints ÁPDE
J. Nasadova, SYNPO, a.s. (Pardubice, CZ)
- 10:55 Depletion layers in nanocomposite coatings ÁPDE
K.N.S. Adema, G. de With
Eindhoven University of Technology (Eindhoven, NL)
- 11:10 The influence of polymeric surfactants on rheological and surface properties of coil coatings ÁPDE
O. Kulikova, E. Manerov, E. Indeikin
YarLI (Paint Research Institute) (Yaroslavl, RU)

Poster Session 2

- 10:40 Nano-structured impact modifiers for powder coatings ÁPDE
J. Trzaskowska (1), J. Kozakiewicz (1), I. Ofat (1), H. Kuczynska (2)
(1)Industrial Chemistry Research Institute (Warsaw, PL);
(2)Institute for Engineering of Polymer Materials and Dyes (Gliwice, PL)
- 10:55 Weathering stability of superdurable powder coatings ÁPDE
M. Witter, C. Dreyer, Institut für Lacke und Farben e.V. (Magdeburg, DE)
- 11:10 Neutron imaging of wetting and drying behavior in ETICS ÁPDE
C. Peretti (1, 2), T. Wangler (1, 2), A. Kaestner (3), J. Carmeliet (1, 2)
(1)ETH (Zürich, CH); (2)EMPA (Dübendorf, CH); (3)PSI (Villigen, CH)

Poster Session 3

- 10:40 Sorption studies of hexanal on selected silicates ÁPDE
M. Bentlage, U.H. Kynast, H. Kätker, Fachhochschule Münster (Steinfurt, DE)
- 10:55 Thermoanalysis of UV-initiated free radical and cationic polymerisations by LED-UV-DSC ÁPDE
U. von Arx, I. Mayer, M. Noël, S. Weber
Bern University of Applied Sciences (Biel, CH)
- 11:10 Semi-finished carbon dispersions for electrically conductive coatings ÁPDE
P. A. Ulmann, T. Hucke, F. C. F. Mornaghini, S. Stallone, M. E. Spahr
TIMCAL Graphite & Carbon (Bodio, CH)

Poster Session 4

- 10:40 Stability of polyurethane dispersions based on natural oil ÁPDE
J. Bullermann, Synthopol Chemie (Buxtehude, DE)
- 10:55 A greener set of solvents to study the solubility profile of polymers and resins according to Hansen approach ÁPDE
A. Benazzouz (1), L. Moity (1), C. Pierlot (1), V. Molinier (1), M. Sergent (2), J.-M. Aubry (1)
(1)Université Lille Nord de France (Villeneuve d'Ascq, FR);
(2)Université Paul Cézanne Aix Marseille III (Marseille, FR)

11:30 – 12:35 **Parallel Sessions 6**

Additives

Berlin

- 11:30 NANOBYK® additives: tiny particles for functional coatings and plastics
M. Berkei, N. Hanitzsch, BYK-Chemie GmbH (Wesel, DE) ÁHI
- 12:05 The architecture of Silicone Slip Additives, and an informed choice for the formulator
J.C Corcuera (1), K. Quackenbush (2), V. James (1)
(1)Dow Corning Europe S.A. (Seneffe, BE);
(2)Dow Corning Corporation (Midland, US) ÁF€

New Technology

Albertville

- 11:30 Improvement of appearance of 3-coat-1-bake multilayer film on automotive bodies
S. Yomo, T. Narita, K. Tachi, Toyota Central R&D Labs., Inc. (Aichi-ken, JP) ÁDE
- 12:05 Which shade of green would you like?
S. Struck, P. Glöckner
Evonik Industries (Essen, DE) ÁFI

Binders & Resins

Melbourne

- 11:30 Self-stratification in epoxy-silicone coatings: film thickness, curing agent and substrate effects
K. Ekbatani, A. Abbasian, Science and Research branch, Islamic Azad University (Tehran, IR) ÁGJ
- 12:05 Antifriction coatings based on chemical grafted polyamideimide-PTFE
M. Gedan-Smolka (1), D. Lehmann (1), A. Marschner (1), K. Kunze (2), R. Franke (3), I. Haase (3)
(1)Leibniz-Institut für Polymerforschung Dresden e. V. (Dresden, DE);
(2)Institut für Leichtbau und Kunststofftechnik (ILK) der TU Dresden (Dresden, DE);
(3)Struktur- und Werkstoffmechanikforschung Dresden gGmbH (SWM) an der TU Dresden (Dresden, DE) ÁI€

12:35 – 14:05 **Lunch Break**

14:10 – 15:15 **Parallel Sessions 7**

Additives

Berlin

- 14:10 New insulating coatings based on Aerogel fillers Á Î Ñ
T. Adebahr, Worlée-Chemie G.m.b.H. (Hamburg, DE)
- 14:45 Nuodex DryCoat a cobalt-free future Á Î Ñ
B. Acklam, K. Kuiphuis, Rockwood Pigments (Durham, UK)

New Technology

Albertville

- 14:10 Understanding dispersing Á Î Ñ
L. Fischer, S. Knape, AC Serendip AG (Walchwil, CH)
- 14:45 Influence of the substrates on water-based paints emissions Á Î Ñ
T. Cerulli (1), R. Leoni (1), M. Decio (1), F. Abbà (2)
(1)Mapei S.p.A. (Milan, IT);
(2)Vinavil S.p.A. (Villadossola, IT)

Biocides

Melbourne

- 14:10 Functionality and environmental impact of nanosilver and conventional biocides in wood façade coatings Á Î Ñ
T. Künniger (1), A. Gerecke (1), R. Haag (1), M. Heeb (1), A. Huch (1), P. Kunz (2), A. Ulrich (1), R. Vonbank (1), A. Wichser (1)
(1)Empa (Dübendorf, CH);
(2)Ecotox Centre – Eawag (Dübendorf, CH)
- 14:45 Controlled synthesis of silica nanospheres with immobilized nanosilver: synthesis, characterization and evaluation of their antibacterial activities. Á Î Ñ
M. Wenda, M. Zielecka, R. Jeziórska, E. Bujnowska, B. Kepska
Industrial Chemistry Research Institute (Warsaw, PL)

15:15 – 15:50 **Coffee Break**

15:55 – 17:35 **Parallel Sessions 8**

Additives

Berlin

- 15:55 Waterborne coatings: faster in service and longer lasting with nano additives Á €
D. Burgard, M. Herold, K. Steingröver, Bühler PARTEC GmbH (Saarbrücken, DE)
- 16:30 New strategies in defoamer-formulations and theorie behind Á G
*L.B. Bemert, D.O. Oberste, H.G. Gibbs
 OMG Borchers GmbH (Langenfeld, DE)*
- 17:05 VOC and Formaldehyde Free Indicator System– the future of emulsion polymerization Á | €
J. Hofmann, M. Lubik, Brüggemann Chemical (Heilbronn, DE)

Biocides

Albertville

- 15:55 Innovative biocide systems for the long term protection of surface coatings against algal and fungal growth Á | Ì
T. Wunder, Thor GmbH (Speyer, DE)
- 16:30 Modern biocidal protection for more sustainability Á Î G
C. Schaller, W. Duttlinger, Sto AG (Stühlingen, DE)
- 17:05 Impact of the new biocidal product regulation on the European coating industry Á Ï |
J.F.M. Warnon, CEPE (Brussels, BE)

New Technology

Melbourne

- 15:55 Low surface energy ceramic coatings Á J €
*M. Pinali, V. Paternò, L. Eusebio, P. Gronchi
 Politecnico di Milano (Milan, IT)*
- 16:30 Design and application of a hybrid nano-structured anti-corrosive coating for reinforcing steel Á K €
*K. Matziaris, M. Stefanidou, G. Karagiannis
 Aristotle University of Thessaloniki (Thessaloniki, GR)*
- 17:05 Product and application certification – minimising maintenance costs Á L FG
K.J. Lofhelm, CSIRO (Highett, AU)

09:00 – 10:05 Parallel Sessions 9

Pigments

Berlin

- 09:00 Selecting a suitable titanium dioxide pigment Å GJ
J. Winkler, crenox GmbH (Krefeld, DE)
- 09:35 The use of TiO₂-polymer composites to lower environmental impact and improve performance of waterborne paints Å I F
A. Trapani, M. Bleuzen, H. Kheradmand, A. Koller
Dow Coating Materials (Valbonne, FR)

Additives

Albertville

- 09:00 New latent catalysts for powder coatings Å I H
M. Amaike (1), K. Ono (1), N. Amanokura (2), T. Ito (1)
(1)Nippon Soda Co.,Ltd (Ichihara, Chiba, JP);
(2)Nippon Soda Co.,Ltd (Tokyo, JP)
- 09:35 Improving application properties of high-gloss alkyd emulsion paints with nonionic synthetic associative thickeners Å I I
H. Esselbrugge, A. Schaeffer, H. Vonhogen, S. Dijksman
Ashland Specialty Ingredients (Barendrecht, NL)

Binders & Resins / Biocides

Melbourne

- 09:00 Polyamid-polydimethylsiloxane-block-copolymers forming patterned tethered liquids on the surface: use as self lubricating- and anti fouling coatings Å DE
W. Bremser (1), J. Ressel (1), O. Seewald (1), V. Stenzel (2)
(1)University Paderborn (Paderborn, DE);
(2)Fraunhofer IFAM (Bremen, DE)
- 09:35 Nanocopper particles immobilized on silica as innovative antifungi product Å I I
B. Kepska, R. Jeziórska, M. Zielecka, E. Bujnowska, M. Wenda
Industrial Chemistry Research Institute (Warsaw, PL)

10:05 – 10:35 Coffee Break

10:40 – 11:25 Poster Sessions 5 – 7

Poster Session 5

- 10:40 Chemical immobilization of singlet oxygen photogenerators – a novel type of active coatings Å DE
K. Krukiewicz, A. Blacha-Grzechnik, J. Zak
Silesian University of Technology (Gliwice, PL)

10:55 Ceramic films on cast iron for high temperature treatments A DE
M. Pinali, V. Paternò, L. Eusebio, P. Gronchi
Politecnico di Milano (Milan, IT)

11:10 Addition of organic acids to PUR coatings A DE
P. Vlasak (1), K. Dusek (2), M. Duskova-Smrckova (2)
(1)SYNPO, a.s. (Pardubice, CZ);
(2)IMC (Prague, CZ)

Poster Session 6

10:40 Photocatalytic degradation of air contaminants by interior paints P DE
T. Böttge, N. Hinzelmann, iLF Forschungs- und Entwicklungsgesellschaft
Lacke und Farben mbh (Magdeburg, DE)

10:55 Plasma top coating – Multiple functionalization of conventional surface coatings by plasma-nano-layers P DE
U. Holzhausen, Institut für Lacke und Farben e.V. (Magdeburg, DE)

11:10 Leaching of dry film biocides from façade coatings P DE
N. Hinzelmann, iLF Forschungs- und Entwicklungsgesellschaft
Lacke und Farben mbH (Magdeburg, DE)

Poster Session 7

10:40 Impact of salt solutions on the emissions of alkyd paints P DE
K. Schlitter, V. Jordan, K. Schulte, R. Brezina, FH Münster (Steinfurt, DE)

10:55 Investigations into new binders for UV crosslinkable electrodeposition coatings P DE
H. Lehmann, N. Pietschmann
Institut für Lacke und Farben e.V. (Magdeburg, DE)

11:10 Encapsulation of biocides using modified calcium carbonate (MCC) to control the delivery rate of the antimicrobial and increase its stability P DE
P. Schwarzentruher, N. Di Maiuta, J. Schölkopf, C.J. Ridgway, P. Gane
Omya Development AG (Oftringen, CH)

11:30 – 12:35 Parallel Sessions 10

Pigments

Berlin

11:30 Shear rate dependent structure of polymer stabilized TiO₂ dispersions A I G
A. Van Dyk, M. Johnson, P. Storme
The Dow Chemical Company (Spring House, US)

12:05 Solutions for buildings A JI
R. Maul, ECKART GmbH (Hartenstein, DE)

New Technology

Albertville

- 11:30 UV-LED-curing of wood coatings Ä €
M. Noël, I. Mayer, U. von Arx, Bern University of Applied Sciences (Biel, CH)
- 12:05 Compliance with REACH Ä €
P. Vesel, scienceindustries (Zurich, CH)

Additives

Melbourne

- 11:30 Studies of the effect of silicone resin composition on properties of powder coatings modified with silicone-acrylic nanopowders Ä €
I. Ofat (1), J. Kozakiewicz (1), J. Trzaskowska (1), H. Kuczynska (2)
(1)Industrial Chemistry Research Institute (Warsaw, PL);
(2)Institute for Engineering of Polymer Materials and Dyes (Gliwice, PL)
- 12:05 The effect of the structure of multifunctional CNT polyurethane coatings on their heat conductivity Ä HG
I.J. Zvonkina, D. Nemeč, M. Hilt, S. Getto, Fraunhofer Institute for Manufacturing Engineering and Automation IPA (Stuttgart, DE)

12:35 – 13:05 **Lunch Break**

13:10 – 13:40 **Parallel Sessions 11**

Pigments

Berlin

- 13:10 The material nature of color. Why the pigment is important Ä I
K. Trautwein, kt.COLOR AG (Uster, CH)

Additives

Albertville

- 13:10 Application of a novel natural mineral matting agent in coil coatings Ä I
N. Patel (1), N. Wood (2)
(1)Imerys Performance Minerals (Lompoc, US);
(2)Imerys Performance Minerals (Par, UK)

Testing & Measurement

Melbourne

- 13:10 Microbial control of your various components in aqueous phase by quantitative ATP-metry Ä I
M. Raymond, Aqua-tools (Aubergenville, FR)

13:45 – 14:45 **Closing Session**
ETCC-Awards