

Program Meeting Materials 2015: Materials of the Future
TUESDAY 8 DECEMBER 2015 – CONFERENCE HOTEL DE RUWENBERG

Registration

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| 08:30-09:30 | Registration + Coffee | Desk D-Lounge |
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Plenary session

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| 09.30-09:40 | Rob Boom Chair (M2i Senior Scientific Advisor) - <i>Welcome</i> | Atrium |
| 09.40-10.05 Keynote | Paul Blom (Max Planck, Mainz) - <i>Charge and energy transport in conjugated polymers</i> | Atrium |
| 10.05-10.30 Keynote | Wim van der Meer (Tata Steel) - <i>Revision of the High Tech Materials Roadmap</i> | Atrium |
| 10.30-11.00 | Coffee break | D-Lounge & A-Lounge |

Theme Materials of the Future (along lines new materials roadmap)

Presentations at various TRL levels to show new horizons, new developments and new (ready to use) materials in all four areas. Presentations by M2i researchers and supervisors, FOM materials working group, 3TU. HTM postdoc program, industrial partners and other industry, members of Bond van Materialen Kennis and Brightland Materials Center.

| 11:00-12:30 | Next Generation Engineering Materials / metals 1 Room: D2 | Additive manufacturing Room: D678 | Materials for Sustainable Energy 1 Room: A3 | Composites 1 Room: A2 |
|--------------------|---|--|--|---|
| Chair | Marc Geers, TU/e | Fred van Keulen, TUD | Fokko Mulder, TUD | Ton Peijs, QMUL |
| 11.00-11.30 | Roumen Petrov, Ugent <i>Microstructure and texture of advanced high strength steels after ultrafast annealing</i> | Steffen Grünewald, CRH <i>3D printing in Concrete</i> | Marc Koper, ULeiden <i>Electrocatalysis for fuel production: a tale of electron, protons, and volcanoes.</i> | Wim Van Paepegem, UGent <i>Structural composites in industrial applications: future solutions for today's engineering challenges in design and simulation</i> |
| 11.30-11.50 | Dr. Yuri Kadin, SKF <i>Modeling of crack propagation in rolling contact fatigue.</i> | Emiel van de Ven, NLR <i>Topology optimization for additive manufacturing with process constraints (TopAM)</i> | Jean Marc de Wilde, Elsyca Predictive modeling in surface finishing and corrosion processes | Marnix van Gorp, BMC <i>Brightlands Materials Center: a new R&D center in the field of polymeric materials</i> |

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| 11.50-12.10 | Jan Harmen Wiebenga, TriboForm Engineering <i>Simulation of tribology, friction and lubrication in sheet metal forming processes.</i> | Tessa ten Cate, TNO/BMC <i>Innovations in polymer additive manufacturing</i> | Amarante Bottger, TUD <i>Materials for a Hydrogen Economy</i> | Emanuela Bosco, TU/e <i>A multiscale experimental-numerical study of the influence of humidity on the mechanics of paper</i> |
| 12.10-12.30 | Verdiere, An (UGent) <i>High Cycle Fatigue in Continuously Variable Transmission push belts</i> | Jaco Saurwalt, ECN | Jacques Dam, TU/e <i>LNG toepassingen</i> | Hans Muller, Solico |

Lunch

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| 12.30-13.30 | Lunch | Restaurant |
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| 13.30-15.00 | Next Generation Engineering Materials / metals 2 Room: D2 | Functional materials Room: D678 | Materials for Sustainable Energy 2 Room: A3 | Composites 2 Room: A2 |
| Chair | Leo Kestens, UGent | Herman Terryn, VUB | Frans Vos, KUL | Aart Willem van Vuure, KUL |
| 13.30-14.00 | Xiaolong Zhang, Endures <i>Maritime & corrosion</i> | Maurice Mourad, BMC/TNO <i>Nanocomposite materials for optical coatings</i> | Axel Schonecker, RGS <i>Novel Materials for cost efficient, thermoelectric conversion of industrial waste heat.</i> | Warden Schijve, Sabic <i>New thermoplastic composite solutions to make automotive lightweighting a reality</i> |
| 14.00-14.20 | Maloney, Kevin, M2i <i>Dynamic performance of adhesive joints</i> | Yves van Ingelgem, Zensor <i>Smart sensing for timely maintenance</i> | <i>To be confirmed</i> | Chris de Ruijter, Promolding <i>Creating Polymer Solutions using functional thermoplastic materials</i> |

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| 14.20-14.40 | Emiel Amsterdam, NLR <i>Fatigue performance</i> | Rodrigo Montoya, VUB <i>Impact of Self-Healing Engineered materials on steel Corrosion in reinforced Concrete (Modelling the transport of corrosive agents in concrete)</i> | Pim Donkers, TU/e <i>Salt hydrates studied for thermochemical heat storage.</i> | Johan Paul, FLAMAC <i>High Throughput</i> |
| 14.40-15.00 | Joachim Antonissen, OCAS/MaDurOS <i>Material Durability under Combined Severe Operating Conditions</i> | Niels de Greef, REIN4CED <i>3D-printing of composites: stronger and lighter than aluminum!</i> | Rogier Nijssen, WMC <i>Developments in testing for wind energy materials and structures</i> | Guy van Assche, VUB <i>Self-healing polymers and their performance</i> |
| 15.00-15.30 | Drinks & Snacks | | | De Ronding |
| 15.30-16.15 Key note | René Janssen (TUE) Spinoza prize winner 2015 - <i>Light & Materials</i> | | | Atrium |
| 16.15 | Closure & Drinks | | | Atrium & De Ronding |