

Wednesday, 1 October 2008

9:00 Résumé of the workshops

Organic Synthesis

- 9:40 **P:** Jan Genzer (North Carolina State University/USA)
Unraveling chemistry, molecular orientation, and growth mechanisms in self-assembled monolayers on surfaces through combinatorial screening
- 10:40 **I:** Oliver Kappe (University of Graz/A)
High-throughput organic synthesis using microwave heating technology
11:20 Bavarian breakfast and open discussions
- 14:00 **PE** Poster session and exhibition

Data Mining and Modelling

- 16:30 **P:** Gadi Rothenberg (University of Amsterdam/NL)
Predictive modelling: From dream to reality
- 17:30 **P:** Fred Hamprecht (Heidelberg University/D)
Pattern recognition and image processing
- 18:30 **I:** Laurent Baumes (University of Valencia/E)
Using computers to assist solving problems of materials science
19:10 Transfer to Lambach 20:00 – 23:00 Conference dinner

Thursday, 2 October 2008

Electronic Materials

- 9:00 **P:** Toyohiro Chikyow (NIMS/J)
System to create a combinatorial thin film library
- 10:00 **I:** Seong Ihl Woo (KAIST/ROK)
Discovery of novel FRAM and transparent conductive metal oxide using high-throughput screening methods
10:40 Coffee break
- 11:00 **I:** Isao Ohkubo (University of Tokyo/J)
Combinatorial screening of resistant RAM materials
- 11:40 **H:** Johan Paul (FLAMAC/B)
Accelerated coating research via high-throughput experimentation
- 12:00 **H:** Bret J. Chisholm (North Dakota State University/USA)
Research and Development of Contact-Active, Antimicrobial Surface Coatings Using Combinatorial/High-Throughput Methods
- 12:20 Final remarks
- 13:00 End of conference

5th International Conference on Combinatorial and High-Throughput Materials Science

Programme

Sunday, 28 September 2008

16:00 Registration

18:45 Welcome and opening

Polymers

- 19:00 **P:** Ben Muir (CSIRO/AUS)
High-Throughput research with polymeric materials: From nanoparticle phase transfer to screening biomaterial surface interactions
- 20:00 **I:** Kathryn L. Beers (NIST/USA)
Microreactors for copolymer design
- 20:40-23:00 Informal get-together*

P = Plenary lecture
I = Invited lecture
H = Hot-slot lecture
W = Workshops
PE = Poster session and exhibition

Polymers

9:00 I: Damian A. Hajduk (Symyx Technologies Inc/USA)
High-throughput at high viscosities: From reactive materials to polymer melts

Catalysis

9:40 P: Gerhard Mestl (Süd-Chemie AG/D)
High-throughput screening from an industrial perspective

10:40 *Coffee break*

11:00 I: Jens Klein (hte AG/D)
Catalysis - challenges and solutions

11:40 H: Paul Gravejat (IRCELYON/F)
Discovery of an efficient HC-SCR Denox catalyst: from HT screening to pilot testing

12:00 H: Heidi Thomas (Marburg University/D)
Combinatorial sensorarrays for the screening of oxidation catalysts

12:20 *Lunch*

Sensors and Fuel Cells

13:20 P: Alfred Ludwig (Bochum University/D)
Combinatorial development of multifunctional materials

14:20 I: Ulrich Simon (RWTH Aachen/D)
High-throughput screening of gas sensing materials

Biocatalysts and Biomaterials

15:00 P: Joachim Kohn (Rutgers University/USA)
Combinatorial discovery approaches accelerate the development of bioresorbable medical implants

16:00 PE Poster session and exhibition

18:00 *Dinner*

19:30 P: Matthew L. Becker (NIST/USA)
Using combinatorial approaches to your advantage in biomaterials research

20:30 PE Poster session and exhibition

Devices and Multiplexing

9:00 P: Patrick Maestro (Rhodia/F)
Tools and methodologies to increase R&D productivity: Devices and multiplexing at Rhodia Lab of the Future

10:00 I: Oliver Trapp (MPI for Coal Research/D)
High-throughput screening techniques in catalysis

10:40 *Coffee break*

11:00 H: Hideomi Koinuma (University of Tokyo and NIMS/J)
Totally ultra-clean combinatorial material complex of uni-sized modules: Concept system development and test run Hot-slot lecture

11:20 H: Roman Koetitz (Rhodia/F)
Fully automated image processing for quantitative HT applications

11:40 H: James N. Cawse (ProtoLife/I)
Efficient discovery and optimization using high-throughput experimentation in large, complex experimental spaces

12:00 H: Ichiro Takeuchi (University of Maryland/USA)
Combinatorial discovery of an environmentally-friendly Pb-free piezoelectric material with properties comparable to Pb(Zr,Ti)O₃

12:20 *Lunch*

13:20 *Visit to Herrenchiemsee*

18:00 *Dinner*

Industrial Applications

19:00 P: Jay Eylem (P&G/USA)
High throughput capabilities in P&G fabric and home care

20:00 I: John Hammond (Syngenta/UK)
Formulating for the future – making beer better

20:40 W: Workshops (provisional)

W1: Pitfalls for a successful implementation of HT materials science

W2: Educational aspects of HT technologies

W3: Emerging fields in HT materials science

W4: The role of data mining and modeling