

Day 1 - 12 March 2012, Monday

08:00 Registration & Coffee

09:00 Chairman's Welcome & Introduction

Module Producer's Session

09:10 **Leveraging Cost & Quality: Module Manufacturer's Perspective**

Maximilian Schurade
Research Engineer (Module R&D/Technology)
Q-Cells SE

09:40 **Reliability Testing of Polymeric Materials for Flexible Solar Modules**

- Influences on the flexible module package and the polymeric materials
- Observations and failure modes in accelerated tests
- Analysis and characterization of polymeric materials in the encapsulation and interconnection of flexible PV-modules

Annegret Reithe
Research Engineer (Module Development)
Solarion AG

Material Substitution

10:10 **Innovative Materials Solve Challenges for Building Integrated Photovoltaics**

- Edge protection and encapsulation
- Light weight frame with integrated functionality

Dr. Bernd Rothe, Research Scientist
Bayer MaterialScience AG

10:40 Discussion followed by Refreshment Break

11:10 **Market & Innovation of Polymeric Substitutes for PV Modules**

Karlheinz Brust, Technical Director
KREMPEL GmbH Solar Materials

Encapsulants

11:40 **Polymeric PV Encapsulation Materials - State of Technology and Perspectives from a Polymer Engineering and Science Viewpoint**

Prof. Reinhold W. Lang, Head of Institute of Polymeric Materials & Testing
University of Linz

12:10 **Influence of Mechanical Properties of Encapsulants on the Stresses in PV Modules**

- Mechanical parameters of encapsulants for Finite - Element - simulation
- Effect of geometrical and mechanical parameters of encapsulants on the mechanical stresses and the reliability of PV modules
- Comparison of stresses for different module designs

Dr.-Ing. Matthias Ebert, Group Leader (Module Reliability) & Team Leader (Module Characterization)
Fraunhofer - Center for Silicon Photovoltaics CSP

12:40 Discussion followed by Networking Lunch

14:00 Chairman's Remarks

Backsheet

14:05 **Biobased PV Backsheet**

- Advantages over conventional backsheets
 - Certifications
 - Materials, manufacturing and testing
- Dr. Stan Levy, Chief Technology Officer
BioSolar Inc.

14:35 **Current Trends in Backsheet Evolution**

- Properties of backsheets and their influence on the module performance

Marina Temchenko, R&D Manager
Madico Inc.

15:05 **High Speed Automated Production of Durable PV Modules: The Contribution of Cost Effective Adhesive Integrated and Weldable Backsheets**

Ir. Francois Rummens, Quality Research & Technical Support Manager
Renolit Belgium NV

15:35 Discussion followed by Refreshment Break

16:05 **Traceability of Polymeric Components of PV Modules**

- Counterfeiting and piracy of products / BOM (bill of materials)
- Experiences in the field
- Brand risk management
- Analytical methods to assign products fingerprints

Dr. Nicolas Bogdanski
Research and Development
TUV Rheinland

Extrusion Technology

16:35 **Extrusion Dies to Develop Cost-Competitive Solar Panels**

Andrei Stapinoiu, Sales Director
Extrusion Dies Industries LLC

17:05 **High Performance Extrusion Line for Production of EVA Flat Film/Encapsulants**

Marco Schoenekaess, Sales Manager (Sheet Extrusion Lines)
KraussMaffei Berstorff GmbH

17:35 Discussion followed by End of Day 1

Day 2 - 13 March 2012, Tuesday

08:30 Chairman's Remark

Organic PV

08:35 **Organic Photovoltaics - Status and Perspectives**

- Principles of Organic Solar Cells
- Optimizing Efficiency of Organics Solar Cells
- Lifetime
- Low-Cost Manufacturing Techniques

Prof. Dr. Karl Leo, Director
Institute for Applied Photophysics (IAPP)

09:05 **Organic Solar Cells for Building-Integrated Applications**

- Why organic PV?
- Technology & challenges
- Product design (BIPV)

Dr. Markus Scharber
Director of Innovation Management
Konarka Austria

EVA Market & Tech

09:35 **EVA Cross Linking During Manufacturing of Solar Modules**

Dr. Stefan-H Schulze
Team Leader Polymer Materials

Fraunhofer - Center for Silicon Photovoltaics CSP

10:05 Discussion followed by Refreshment Break

10:30 **EVA Market Update: Trends, Drivers, Capacities, Supply & Manufacturing Costs of Key Polymer Processes**

David Anderson, Business Director (Global Polyolefin Solutions)
Townsend Solutions

Adhesives & Plastics

11:00 **Characterization of Conductive Adhesives for Solar Cell Interconnection**

- Determination of process parameters
- Evaluation of electrical and mechanical properties
- Principal mechanical behaviour of conductive adhesive interconnects

Matthias Pander
Team Module Characterization
Fraunhofer - Center for Silicon Photovoltaics CSP

11:30 **Engineering Plastics for Junction Box and Other PV Components for Polymer Apps in PV**

- Resistance toward weather and temperature
- Meeting technical, processing and regulatory requirements

Walter Kern, Application Development & Technical Support Mgr (Fire Resistance Market)
Rhodia Polyamide

12:00 Final Discussion followed by Closing Lunch

13:00 End of Conference

Per Person Fee for Conference:	(EUR)
Regular Fee for 1	1195.00
Group Fee for 3 or more	895.00

3 Ways To Register

Online: www.cmtevents.com
Email: sasha@cmtsp.com.sg
Tel: (65) 6346 9124

CUSTOMISED SPONSORSHIP OPPORTUNITY

Package available include **Corporate, Exclusive Luncheon & Cocktail sponsor.** Exhibition / catalogue display can be arranged upon request.
Contact nisha@cmtsp.com.sg or (65) 6346 9130