

# Advanced Characterization Methods for PV

Freiburg, Fraunhofer ISE

Thursday, January 14th 2016

## 10:30 Welcome & Introduction

### Session I: Materials: (10:30-12:10)

10:35 I. Lauerma, **HZB** (D), "X-ray based analysis of PV materials and components"

10:50 B. Bissig, **EMPA** (CH), "Electron beam induced current and time resolved photoluminescence technique for TF solar cell characterization"

11:10 C. del Cañizo, **UPM** (ES). "Characterization of intermediate band materials and solar cells"

11:30 S. Binetti, **Unimib** (I), "Photoluminescence and Raman spectroscopy for defect identification in Silicon, CIGS and CZTS thin films"

11:50 V. Jordi, **CEA INES** (F), "Characterization of oxygen-related defects in high-efficiency Czochralski silicon wafers"

### Session II: Solar Cells & Modules (13:00-14:35)

13:00 M. Corazza, **DTU** (DE), "Characterization of organic solar cells: Mechanical, electrical and photovoltaic stability"

13:20 I. Gordon, **IMEC** (BE), "Advanced material and device characterization techniques for Silicon and thin-film based photovoltaics"

13:40 F. Castro, **NPL** (GB), "Identification of degradation and manufacturing issues using multi-parameter mapping of organic solar cells"

14:00 K. Bittkau, **FZ Juelich** (D), "Electro-optical Characterization of Thin-film Solar Cells and Modules: From nanophotonic cell characterization to macroscopic module characterization"

14:20 Solar Cell Discussion

### Session III: Modules & Systems (15:10-17:30)

15:10 M. Machado, **Tecnalia** (ES), "Analytical prediction of photovoltaic modules efficiency for different encapsulation schemes"

15:30 N. Talyor, **EC Joint Research Center** (BE), "Precision PV Performance Assessment at the JRC's European Solar Test Installation"

15:50 M. Rennhofer, **Austrian Institute of Technology AIT** (AU), "Degradation and electric behavior in thin film photovoltaic devices"

16:10 J. Kroon, **ECN** (NL), "Accurate yearly yield calculation using PV module fingerprint method applied for MWT, H-pattern and thin film modules"

16:30 G. Halabalakis, **CRES** (GR), "CRES's labs for PV system characterization and analysis"

16:40 Solar Systems Discussion and Idea Generation Forum

