



Press release

26 June 2017

www.photovoltaiic-technical-conference.com

PVTC 2017

The Photovoltaic Technical Conference (PVTC) demonstrated once again the high quality and versatility of all presentations which were given from April 26th to 28th 2017 in Marseille.

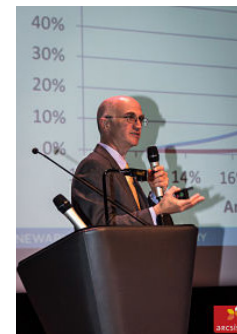
Both renowned and upcoming speakers which participated to this 8th edition have given a broad overview of most PV-related hot topics.

Complementing other more specialized PV conferences, the strength of this event is to propose, in a nutshell, a thorough review of the different fields which make up the international PV community while giving to all participants a hint on how their own work and field of expertise complements and influence others.

The topics addressed included Silicon-based cells & modules (both homo & heterojunctions)¹, thin film materials², Quantum dots³, Concentrated photovoltaics⁴, Organic cells, dye-sensitized solar cells and their most promising offspring perovskites⁵. The high level characterization⁶ and simulation tools⁷ (DFT, Monte Carlo, Project Multiscale solar EC) necessary to further understand and improve materials, processes and devices were detailed. The conference kept true to its words presenting not only "advanced materials & processes⁸" such as spatial ALD (MeyerBurger), Plasma Ion Immersion (IBS) or Low temperature pulsed electron gun (CNR-IMEM) but also innovative applications⁹ in BIPV, PIPV (Radovan Kopecek, ISC Konstanz), plasmonic coloured cells, semi-transparent PV windows (Crosslux, SunPartner), innovative inks (Genes'ink), flexible PV (Armor, Soliance).



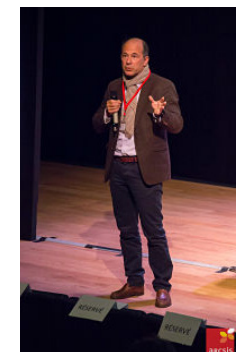
Finally, Robert MARGOLIS Senior Analyst from NREL (USA) and Amaury KORNILOFF Deputy Managing Director of SolaireDirect (ENGIE, France) gave a glimpse of a possible future when PV will generate electricity at a near zero cost thus opening the way for improved energy usages. Soon, PV will be the most competitive electricity generation technology both in developing countries as well as in developed countries. This is already the case in areas of the world which benefit from high sun irradiation, an advantage often partly counterbalanced by harsh desert environments¹⁰ which require specific modules designs and O&M procedures. These promising results leave open many areas of work which will continue to require hard-working, committed scientists, engineers and technicians to achieve the necessary grid flexibility¹¹ through smart usages, regulation and storage, plenty of topics which are aimed to be further covered in next year's edition.



Robert Margolis - Keynote speaker

Cédric Broussillou (Photowatt) member of PVTC Scientific Committee

- ¹ Silicon : I. Mack, EPFL : Silicon oxide/silicon layers... ; H. Shiriaï, Silicon heterojunction...
- ² Thin Films : T. Sidali : Semi-transparent...
- ³ QD : S. Hoogland Univ. Toronto: Silicon augmenting solar layers based on quantum dots
- ⁴ CPV : S. Fafard Vertical Epitaxial Heterostructure Architecture
- ⁵ OPV & Perovskites : L. Wagner, Fraunhofer ISE, Hodgkinson Univ. Salford; S. Shannugam "Technology development for up-scalable manufacturing of perovskite cells"
- ⁶ Characterization: ESRF + CEA, Plasma profiling Horiba, ECV/SIMS Probian, Semilab
- ⁷ Simulation : Multiscale Solar, DFT, Monte Carlo, Rectenna
- ⁸ Manufacturing processes : MeyerBurger, IBS, e-gun for CIGS, Armor
- ⁹ Applications : Radovan Kopecek (ISC Konstanz), SMEs, Armor, Soliance
- ¹⁰ PV in harsh environments (Session 5) : Badr Ikken, director of IRESEN in Morocco; A. Abdallah : Qatar Environment and Energy research institute
- ¹¹ Grid flexibility : R. Margolis NREL, B. Cicero Capenergies FLEXGRID program



Amaury KORNILOFF - Keynote speaker



contact@photovoltaic-technical-conference.com

Keys Figures of PVTC 2017

117 experts among which 53 % from France and 47 % coming from all over the world.

Five prominent keynote speakers :

- **Sjoerd Hoogland**, Canada Research Chair in Nanotechnology, University of Toronto (Canada),
- **Dr. Radovan Kopecek**, Solar Energy Research Center Konstanz e.V. - ISC Konstanz (Germany),
- **Dr. Robert Margolis**, Senior Energy Analyst, National Renewable Energy Laboratory, Washington DC (USA),
- **Edward CLERKX**, BU Manager, Meyer Burger (The Netherlands),
- **Amaury Korniloff**, Deputy Managing Director, Solairedirect (France).

3 guest speakers :

- **Pr. Simon Fafard**, University of Sherbrooke (Canada),
- **Pr. Alessio GAGLIARDI**, Technische Universität München (Germany)
- **Badr Ikken**, Director-General, Institute of Research in Solar Energy and New Energies, IRESEN (Morocco)

More than 20 companies : ADVANSOLAR Mobility, ARMOR, Crosslux, Dracula Technologies, EDF R&D, ENGIE, France Innovation Scientifique et Transfert, Horiba France, IBS, Kelenn Technology, Meyer Burger, Photowatt, Pro-bion Analysis, SEMILAB, Solairedirect, STMicroelectronics, S'Tile, Sunpartner Technologies, TFSC Instrument, Volta-lia...

50 laboratories and research centres : AIT, Aix Marseille University, Carinthia University of Applied Sciences, CEA, Churchill College, CINAM-CNRS, CNR-Italy, Delft University of Technology, DETP di Torino, Doshisha University, Eindhoven University of Technology, EPFL, ESRF, Fraunhofer, Helmholtz-Zentrum Berlin, IM2NP, IIT Madras , IIT Kampur, INES, Institut des Nanotechnologies de Lyon, IPVF, IRESEN, ISC Konstanz, Izmir Institute of Technology, Joanneum Research Forschungsgesellschaft, Korea Research Institute of Chemical Technology, LITEN, , Middle East Technical University, NREL, Qatar Environment and Energy Research Institute, Saitama University, Scholl for advanced studies IMT Lucca, St.Petersburg Academic University, Solliance-Holst Centre, Tallinn University of Technology, Technische Universität München, Technische Universität Wien, The University of Western Ontario, Tianjin University of Techno-logy, UMMTO, Université de Sherbrooke and Azastra Opto Inc, University Assane Seck of Ziguinchor, University of Cambridge, University of Montpellier, University of Salford, University of Toronto, ZAE Bayern...

21 countries : Algeria, Austria, Canada, China, Estonia, France, Germany, Hungary, India, Italy, Japan, Morocco, Qatar, Russia, Senegal, South Korea, Switzerland, United Kingdom, The Netherlands, Turkey, USA.

ARCSIS is a trade Association for the Research on Components and Secured Integrated Systems in the Provence-Alpes-Côte d'Azur region in Southern France. It is dedicated to the microelectronics and semiconductor activities and contributes to sustainability, full economic development and enhanced competitiveness of the regional industry.

ARCSIS also manages a major collaborative research and development program, CIM PACA (PACA integrated Microelectronics Center), which groups together the microelectronics community around three interconnected platforms: Design, Characterization and Micro-PackS.

ARCSIS is also the microelectronics component of the world-ranking competitiveness cluster «Secured Communicating Solutions», uniting for the first time on common projects, companies, laboratories and universities of microelectronics, software and telecommunications in innovative governance modes.

Organized by:



www.arcsis.org

Sponsored by:



In partnership with



Hosted by :

