



CALL FOR PAPERS

i-PVTC 2018

For 2018, the [PhotoVoltaic Technical Conference](#) addresses new topics covering integration and usages and becomes i-PVTC, integrated PhotoVoltaic Technical Conference: "From advanced materials and technologies to multiscale integration and usages". i-PVTC 2018 is the 9th annual event of a series of international PV specialty conferences and will take place on **September 10-12, 2018** in Cassis (Southern France) at the «Domaine La Dona Tigana».



Photo credit: Solar Cloth System

Since its beginning in 2010, PVTC has brought together international attendees representing over 35 countries from all continents. 45 keynote and invited speakers of international renown have participated in previous editions where they presented their latest achievements in advanced photovoltaic technologies contributing to the transition to renewable energy.

This 9th edition will be organized into 5 PLENARY SESSIONS covering all TOPICS OF INTEREST of the whole PV value chain. Presentations from academics, industrialists and decision-makers are welcome for all the sessions.

SESSION 1 (academics): Materials and Technologies for Advanced Solar Cells

- *Si, III-V, II-VI and others compounds, perovskites, chalcogenides, polymers, molecules, dye, nanowires, quantum dots, 2D materials...*
- *Multifunctional coatings, TCO, antireflective, encapsulation, emitters, connections, optics...*
- *Characterization: physicochemical, morphological, electrical, optical, thermal, mechanical*
- *New concepts and architectures of solar cells: intermediate band, hot carriers, photon management (up/down conversion, plasmonics, Bragg reflectors)...*
- *Multiscale modelling and validation for solar cells and modules*

SESSION 2 (industrialists): Manufacturing Processing, Equipment and Challenges

- *Chemical and physical deposition: CVD, ALD, MBE, sputtering, electrodeposition ...*
- *Printing: screen printing, inkjet, spray, nanoimprint...*
- *Equipment for processing and metrology: batch, roll-to-roll...*
- *Encapsulation barriers, technical polymers, dedicated glasses, module assembly...*
- *Automation, in-line monitoring, numerical control...*

SESSION 3 (products): Products Integrated (PIPV), Vehicles Integrated (VIPV) and Building Integrated - PhotoVoltaics (BIPV)

- *Aesthetic and adaptable modules: semi-transparent, colored, design...*
- *Emerging applications: IoT objects, urban furniture, wearable, textile ...*
- *Flexible PV and challenges*
- *Bi-facial modules*
- *Hybrid smart energy (thermal, thermoelectric, piezoelectric, mechanical...), storage and PV modules*

SESSION 4 (systems): Photovoltaic Energy Management, Storage & Energetic Systems

- *O&M experience on PV plants*
- *Performance monitoring and quality control*
- *Life cycle analysis, energy budget*
- *Systems predictability, maintenance, and energy production efficiency*
- *Self-production/consumption, home automation & building control systems*
- *Reliability, lifetime, ageing, on-site testing*
- *Safety, recycling...*

SESSION 5 (implementation): Photovoltaic in Mediterranean, Desert, Mountain, Tropical and Nordic Climates

- *PV plants in all climates and conditions: floating PV, CPV...*
- *Specificities of BIPV in all environments...*
- *Isolated sites, storage, self-production and self-consumption*
- *Ageing and O&M: soiling, degradation...*
- *Grid integration & Smart grids*
- *PV Policies & Applications*

Efficiency may be improved by combining physical principles (thermophotovoltaic, thermoelectricity, ferroelectricity, piezoelectricity...) for the generation and conversion of electricity (session 1). PV is expected to be more and more present in many daily life objects, such as those of the Internet of Things... each requesting a mobile energy source. The production of renewable energies is inseparable of the storage of energy. For photovoltaic's, electrical storage may be hybridized at the solar cell level (session 1: thin film batteries, supercapacitors), at the module (session 3) and energetic system (session 4) levels. PV must grow everywhere and in all conditions (session 5). Any illuminated surface is exploitable and all our objects and equipments will need energy autonomy. These are among the things we would like to promote.

In that respect, the i-PVTC Conference offers an excellent opportunity for the whole value chain, from equipment and material suppliers up to application driven players and from academic research institutions up to downside industry, to share and to discuss scientific issues and leading-edge technologies.

INSTRUCTIONS FOR ABSTRACTS



Photo credit: @Colas_Joachim BERTRAND

Abstracts, to be written according to “Instructions for abstracts” document, will include one page of text with a title, the authors’ names, their affiliation and a three-part summary:

- 1) Context / Study motivation
- 2) Description of approaches and techniques
- 3) Results / Conclusions / Perspectives

An additional page can be submitted with illustrations.

Presentations from academics, industrialists and decision-makers are welcome for all the sessions.

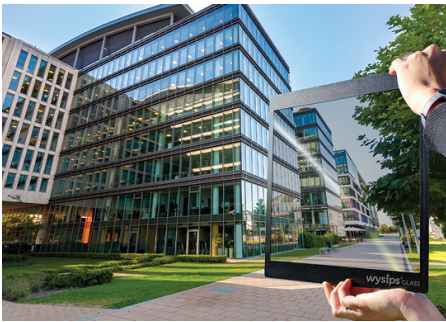


Photo credit: Sunpartner Technologies

We invite you to indicate the session and whether you prefer to present an oral presentation, a poster with a 3-minute flash talk or only a poster. Young scientists that performed remarkable work in recent years could be selected as invited speakers.

DEADLINE for Abstract Submission: Tuesday, June 5, 2018 (included)

Notice of acceptance: Friday, June 8, 2018

Abstracts will be selected for either an oral presentation, or a poster with a three-minute flash-talk presentation, or a poster.

Best papers of the conference will be submitted to SOLMAT, EPJ or JRSE journals for publication.

**Please send your abstract to the following email address:
contact@photovoltaic-technical-conference.com**

LOCATION OF THE EVENT

Domaine La Dona Tigana, 25 Route Pierre Imbert, 13260 [Cassis \(Southern France\)](#)



Photo credit: Cassis Tourist Office

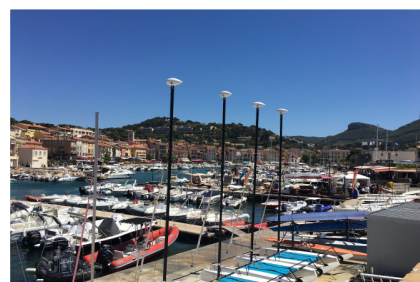


Photo credit: Cassis Tourist Office

Contacts:

Corinne JOACHIN / Séverine LEMERI

Organization Committee: contact@photovoltaic-technical-conference.com

Website: www.photovoltaic-technical-conference.com