European Association for the
Development of Renewable Energies,
Environment and Power Quality

ICREPQ - SPECIAL SESSION

Dear Colleague,

The Steering Committee, the Local Organizing Committee and the Responsible People (Chairmen) of the Special Sessions are glad to invite you to the next "***International Conference on Renewable Energies and Power Quality (ICREPQ)***".

WEB SITE: http://www.icrepq.com

We strongly encourage you to submit papers(*) for the special session of the ICREPQ.

19.- Model Predictive Control for Power Electronics Converters Dedicated to Renewable Energies systems

Model Predictive Control (MPC) is a very powerful alternative control approach which can be applied for power electronics converters, its main idea is based on considering a model of the concerned system in orderto predict its future behavior over a horizon in time.
Nowadays MPC becomes very attractive due to the advances in modern microprocessors and easy implementation. It offers a number of several advantages compared to the other control methods, such as avoiding the use of the controllers even in the presence of nonlinearities, no need to the modulators, the easy implementation etc.
The aim of this special session is to attract researchers concerning by the control of power electronics converter used in renewable energies systems (Photovoltaic, Wind, Ocean, fuel cells etc.) to discuss and interchange of their experiences and ideas.
Topics of interest include, but are not limited to the use of MPC in:

1. Different topologies of DC-DC converters;
2. AC-DC-AC conversion;
3. Interface converter of PV-grid connected
4. Interface converter of Wind Generator-grid connected
5. Interface converter of FC-grid connected;
6. Matrix converters
7. For other conversion converters used in renewable energies systems.

Responsible people and Chairmen: **Prof. Dr. Kouzou Abdellah**

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The ICREPQ is an International Conference where specialists of industrial and academic world can discuss together in a pleasant location about recent developments and actual trends in the field of Renewable Energies and Power Quality. Within these areas, ICREPQ has the aim to identify the most relevant applications evidencing main problems and strategies.

The list of all the Special Sessions selected for ICREPQ and the chairmen are included in the following table:

ICREPQ - SPECIAL SESSIONS		
No.	**TITLE**	**CHAIRMEN**
1	Control and integration of wind energy systems	Mario J. Duran Martínez and Mohamed A. H. El-Sayed
2	Microgrids and Smart grids	Gevork B. Gharehpetian and Alfredo Vaccaro
3	Electric vehicles	Pere Andrada
4	Solar Technologies	Silvano Vergura and Gianpaolo Vitale
5	Applications of Multi-Level Converters and Inverters in Power Quality Improvement	P. N. Tekwani
6	Sustainable Energy Mix	Mohamed A.H. El-Sayed
7	Wind Turbines of the Future: Economics, Design & Operation	Hashem Oraee
8	Harmonics and Power Quality	András Dán and Dávid Raisz
9	Ecodesign, regulation standards and efficiency improvement of electric motors	Ramón Bargalló
10	Ocean Energy (Wave, tidal and offshore wind)	Ahmed Zobaa
11	Power Electronics for Renewable Energy Systems	Silvano Vergura and Gianpaolo Vitale
12	Net Zero Energy Building	Antonio Gagliano and Francesco Nocera
13	Economic, Financial and Social aspects of Renewable Energy Penetration	Mihail Predescu
14	Nanotechnology for Renewable Energy	Basma El Zein and Elhadj Dogheche
15	Low & High Temperature Fuel Cells	Etim Ubong
16	Power Quality and Renewable Energy	André Martinez and Shahrokh Saadate
17	Renewable energies for developing countries	Vít BRŠLICA and Alfredo Vaccaro
18	Strategic Energy Planning	Roberto Cesar Betini and Emilio Torrente Lujan
19	Model Predictive Control for Power Electronics Converters Dedicated to Renewable Energies systems	Kouzou Abdellah
20	Impacts of renewable energy for industrial development and sustainable economics	Amine Boudghene Stambouli and Samir Flazi
21	FACTS (SVC,STATCOM, UPFC, HVDC,...)	Manuel Pérez Donsión

(*) The interested authors can send proposals of papers (digest of a minimum of two double columns pages), or preferable provisional full papers (from 4 to 6 double columns pages), for ICREPQ. The authors must fill up one sheet, that is on the web site, with their preferences about the presentation of the paper. If they prefer an oral presentation they must select the special session that they consider the most adequate for their paper presentation. The proposals of papers can be sent to: icrepq@icrepq.com,donsion@icrepq.com or secretariat@icrepq.com

The definitive full papers will be included in the International Conference on Renewable Energies and Power Quality web page: https://www. icrepq.com, in the USB Memory and in the Renewable Energy, Environment and Power Quality Journal (REE&PQJ), with ISSN: 3020- 531X and DOI: https://doi.org/10.24084/reepqjxx.xxx or included in the Energies and Quality Journal (E&Q Journal) with ISSN:2659-8779 and DOI: doi.org/10.24084/eqjxx.xxx