Thirteenth International Conference on
Ecological Vehicles & Renewable Energies
EVER'2018, April 10-12, 2018, Monte-Carlo (Monaco)

Call for Contributions to the Special Session on Conversion Units for Future Flexible DC Grids

by **Dr. Amin Bahmani, Chalmers University of Technology**
Dr. Alireza Nami, ABB Corporate Research, Sweden

Thematic: It is expected that DC technology plays a more important role in the future medium-voltage and high-voltage electrical energy systems. This is what has already been practiced in low-voltage distribution systems, e.g. data centers or naval applications, and point to point HVDC systems, due to the superior performance of DC systems compared to the AC counterpart.

Energy distribution are likely to benefit DC technology in terms of inter-connected DC grids consisting of multi-terminal HVDC, as well as MVDC distribution and collector grids of renewable energies. Moreover, this will facilitate the integration of storage systems which are essential to cope with the volatility of the renewable supplies. High-power isolated DC-DC converter is one of the key-enabling components to realize such HV/MV inter-connected DC grids. In contrast to the medium power converters (5 to 100 kW) which have been essentially investigated by the automotive and traction applications, megawatt and medium voltage range isolated converters with a several kilohertz isolation stage are still in an expansive research phase.

The main objective of this special session is to bring the ideas of the worldwide research community into common platform, to present the latest advances and developments in design, mathematical modeling, power electronic advances, computer simulation tools, and practical implementation of renewable energy systems based on DC technology. Topics of interest of this special session include, but are not limited to:

- DC/DC converters for MV and HV DC grids
- HV SiC MOSFET Devices
- Power electronics and Passive Components for solar/wind and Energy storage systems
- Multi-Terminal HVDC in renewable dominated grid

Submission: Prospective authors are invited to submit comprehensive abstracts of three A4 pages each, written in English. Abstracts should be sent by e-mail to the special session organizer: bahmani@chalmers.se and alireza.nami@se.abb.com

Important Dates:

November 15, 2017	submission of abstracts
December 8, 2017	notification of Provisional acceptances
January 15, 2018	submission of full papers
February 2, 2018	notification of final acceptances