

IEEE VPPC 2010

Vehicle Power and Propulsion Conference
September 1-3, 2010 – Lille, France

Clean Tech for Transportation

<http://www.vppc2010.org/>



Special Session on

MULTIPHASE DRIVES FOR VEHICLE POWER AND PROPULSION

Chair: Dr. Xavier KESTELYN, Arts et Métiers ParisTech-L2EP (France)

Email: Xavier.Kestelyn@ensam.eu

Co-chair: Prof. Emil LEVI, LJMU, School of Engineering (United Kingdom)

Email: E.Levi@ljmu.ac.uk

Call for Papers

Due particularly to their facility to be controlled and their inherent low polluting emissions, electrical drives take a growing place in vehicle propulsion (road vehicles, ships, trains, aircrafts...). Specific constraints such high power distribution, high power density with low DC bus voltage and fault tolerant capabilities lead to the use of multiphase drives.

This special session intends to present last innovations in multiphase drives in the context of vehicle power and propulsion. Since they offer one extra degree of freedom, three-phase topologies with independent phases or with four wires are considered as multiphase drives.

Topics of interest include, but are not limited to:

- Innovative multiphase drive topologies for vehicle propulsion:
 - automotive applications (hybrid and electric vehicles)
 - subway or railway traction systems
 - ship propulsions
 - aircraft applications
- Specific design of multiphase motors and multiphase power converters
- Modelling and simulation of multiphase drives
- Variable speed control schemes for multiphase drives
- Specific modulation strategies for multiphase inverters
- Machine monitoring and diagnosis of multiphase drives
- Fault tolerant operation of multiphase machines

- Deadlines -

Submission of abstracts:	March 15, 2010
Notice of acceptance:	April 15, 2010
Submission of full papers:	June 15, 2010
Deadline for registration:	July 30, 2010

All the instructions for abstracts are included in the conference website <http://vppc2010.org/> :

- Special Session title, paper title, authors, affiliation(s), mailing and e-mail address(es),
 - corresponding author clearly identified,
- Abstract of 100-300 words and a digest of 3-5 pages.

The regular papers presented at the conference could be submitted to IEEE trans. on Power Electronics or Trans. on Vehicular Technology as extended version (50% of change). Moreover a special section will be organized in IEEE transactions on Vehicular Technology.