

EPE Newsletter August 2010

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1. **EPE 2011: 30 August to 2 September 2011, Birmingham, United Kingdom - Call for papers– Website for upload synopses opens on 1 September 2010**

Receipt of synopses: 1st of November 2010

Notification of provisional acceptance: 1st of March 2011

Receipt of full typescript for final review: 1st of June 2011

<http://www.epe2011.com>

2. **ICPE'2011-ECCE Asia, IEEE 8th International Conference on Power Electronics, 30 May to 3 June 2011, Jeju, Korea**

Abstract and Digest Submission: December 10, 2010

Notification of Acceptance: February 11, 2011

Final Manuscript Submission: April 8, 2010

<http://www.icpe2011.org>

3. **LDIA 2011, The 8th International Symposium on Linear Drives for Industry Applications, 3-6 July 2011, Eindhoven, The Netherlands**

Receipt of abstract: 1st of November 2010

Notification of acceptance: 1st of February 2011

Receipt of full paper: 1st of April 2011

<http://www.ldia2011.com>

4. Electrimacs 2011, 10th International Conference on Modeling and Simulation of Electric Machines Converters and Systems, 6-8 June 2011, Paris, France

Deadline for submission of full paper: November 15, 2010

Acceptance notification: 1st of March 2011

Submission of final manuscript and full registration: April 15, 2011

<http://www.u-cergy.fr/electrimacs2011>

5. “Commande directe propre aux moteurs asynchrones et synchrones”, by Jean-Claude Alacoque (in French), available in libraries and on the Internet now

Variable speed drives in the industrial and transport field evolved much in half a century, benefiting from the technological advances of control and power electronics, as well as theoretical and practical developments of the automation. But, if the current control laws are satisfying, the engineer remains confronted with many design problems: technology, economics, performance, compatibility, efficiency, safety, reliability, availability...

To allow a solution independent of the dimensioning objectives, this book presents for the first time in French a new practical method of real-time control for the various types of electric motors, under the ultimate conditions of dynamic performance and under the pressure of the limitations specific to the process.

This method, based on a discrete model of the motor/converter association, is the result of many years of study and research, on all types of recent control methods and their evolution, supported by several practical realisations. This work is addressed to R& D engineers in real-time microprocessing, electrical engineering and automation, whose applications concern many sectors: industry, car, transport... It will also be of interest for the students.

The author

Jean-Claude Alacoque worked in industry throughout his career. In collaboration with various university research teams and various laboratories, he directed in particular several R& D teams to develop hardwares and practical solutions in industry and transport, in connection with real-time microprocessing, automation, power electronics and electrical engineering.

Summary

Preface, Foreword, Introduction

Chapter 1 : The asynchronous motor

Chapter 2 : Surface permanent magnet synchronous motor

Chapter 3 : Buried permanent magnet synchronous motor

Chapter 4 : LC filter - Power supply of the inverter - Conclusions

General bibliography. Index

In French

Editions Tec& Doc – Lavoisier • 248 pages • 15,5 x 24 cm • June 2010 • ISBN : 978-2-7430-1279-3 • 75 €

For sale in bookshop and on Internet: <http://www.lavoisier.fr/>

6. Position of PostDoc in Usage and valorization of storage system for the electrical grid at The laboratoire d'Electrotechnique et d'Electronique de Puissance, Lille, France

Post-doctoral fellowship

Oct 2010-Apr 2012 (18 months)

Usage and valorization of storage system for the electrical grid

Context of the project:

Nowadays large scale Compressed Air Energy Storage (CAES) is one of the best alternative solutions to existing pumped-storage systems. Indeed, in France, most of the potential exploitation sites for pumped-storage are already used and further development of hundreds of MW storage systems could be achieved through CAES. However, this method requires important investments and has low power efficiency.

The objective of this project is to analyze the economic value and the technical interest for the power system of medium power storage systems (15-30MW) and high power storages systems (100-300MW).

Considering a business plan only based on electrical price variation, CAES are barely profitable. An increase in the profitability will require for the storage systems to offer other services. An optimal localization, an optimal sizing and an optimal dynamic supervision of a storage system will need to be developed to reach such objectives.

Proposed study:

The study concerned by this 18 months post-doc is developed in strong collaboration between the laboratory L2EP and EDF R&D and is part of a larger project.

The objective of this study is:

- To propose a methodology to quantify the contribution of a large scale Compressed Air Energy Storage (CAES) to the management of the power system and to optimally localize and size this storage systems.
- To develop time optimal supervision of such storage systems to maximize ancillary services as well as profitability of the system.

Research Team:

The Laboratoire d'Electrotechnique et d'Electronique de Puissance de Lille (L2EP) is based on 4 establishments that work in partnership: The University Lille 1 - Science and Technology, Arts et Métiers ParisTech, Ecole Centrale de Lille and Ecole Hautes Etudes d'Ingénieur (HEI). The idea was to bring together, in the same laboratory, all the regional research activities in electrical engineering. The L2EP was established in Lille and is a major international role-player in its research areas.

The work will be developed within the research group "Réseaux" and more precisely in strong collaboration with Dr Jonathan SPROOTEN and Prof. Benoît ROBYNS.

For more details, please contact jonathan.sprooten@hei.fr.

Send motivation letter and complete curriculum vitae to: jonathan.sprooten@hei.fr

7. Technically sponsored conferences

1-3 September 2010, Lille, France
VPPC 2010, Vehicle Power and Propulsion Conference
– Clean Tech for Transportation
<http://www.vppc2010.org>

EPE-PEMC 2010, 6-8 September 2010, Ohrid, Republic
of Macedonia
<http://www.epe-pemc2010.com>

ECCE 2010, 12-16 September, 2010, Atlanta, Georgia,
USA
Second IEEE Energy Conversion Congress and
Exposition on September
www.ecce2010.org

21st International Conference and Exhibition on
Electricity Distribution (CIRED 2011)
Frankfurt (Germany), 6-9 June 2011
<http://www.cired2011.org>

ICPE'2011-ECCE Asia, 30 May to 3 June 2011,
Jeju, Korea
8th International Conference on Power Electronics
<http://www.icpe2011.org>

LDIA 2011, 3-6 July 2011, Eindhoven,
The Netherlands
The 8th International Symposium on Linear Drives
for Industry Applications,
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Electrimacs 2011, 6-8 June 2011, Paris, France
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Simulation of Electric Machines Converters and
Systems
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8. ECPE Calendar of Events 2010

Full programmes are available from http://www.ecpe.org/education/seminars_e.php

Date	Location	Event	Topic
6- Sept. 2010	Ohrid, Macedonia	Conference	EPE-PEMC 2010, 14th Int. Power Electronics and Motion Control Conference with ECPE Panel Session on “ Thermal Management and Reliability”
28-29 Sept 2010	Västerås, Sweden	ECPE Workshop	Advanced Multilevel Converter Systems
5 – 6 Oct. 2010	Zurich, Switzerland	ECPE Tutorial	EMC in Power Electronics Course Instructor: Dr. E. Hoene (Fraunhofer IZM) Prof. J.L. Schanen (G2ELab)
11 - 15 Oct. 2010	Gaeta, Italy	Symposium	ESREF 2010 with ECPE Workshop Session ‘Reliability’
19 - 20 Oct. 2010	Nuremberg, Germany	ECPE Tutorial	Thermal Engineer II (thermal management and reliability) Course Instructor: Prof. E. Wolfgang (ECPE)
18-19 Nov. 2010	Munich	ECPE Workshop	Smart Power ICs – Devices and Applications
Dec 2010	Bordeaux, France	ECPE Tutorial	Reliability of Power Electronic Systems