# EPE Newsletter – May 2018

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# EPE 2018 ECCE Europe, RIGA, LATVIA, 17 to 21 September 2018







IEEE



All currently available information:
The REGISTRATION is OPEN – Register NOW:

http://www.epe2018.com/ http://www.epe2018.com/registration/

#### LAST MINUTE CALL TO ENTER THE EXHIBITION!

Do not miss the opportunity to meet fellow experts and discuss the future designs, future products, future markets!

Please follow this link to read about our Sponsorship & Exhibition Opportunities: <a href="http://www.epe2018.com/sponsorship-opportunities/">http://www.epe2018.com/sponsorship-opportunities/</a>

#### Join our sponsors and exhibitors:

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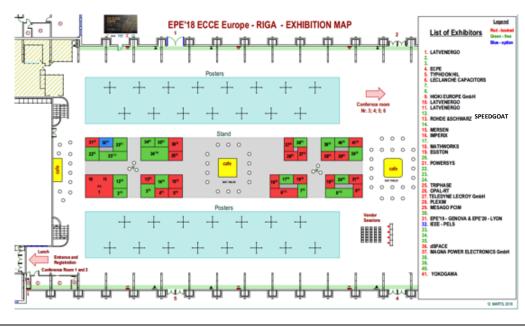
Platinum sponsor: <u>Latvenergo</u> (<u>https://www.latvenergo.lv/eng/</u>)



# **EXHIBITORS:**

dSPACE, ECPE, Egston, HIOKI EUROPE GmbH, imperix, Leclanché Capacitors, Magna-Power Electronics GmbH, MathWorks – Speedgoat, Mersen, Mesago PCIM, Opal-RT, Plexim, Powersys, Rohde & Schwarz, Teledyne LeCroy GmbH, TRIPHASE, Typhoon HIL, Yokogawa

# Contact for the Exhibition: bsneyers@vub.ac.be



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Full-time tenured Professorship/Associate Professorship in "Digital Control of Power Electronics for Cyber-Physical Systems" at The Department of Electric Power Engineering, NTNU, Trondheim, Norway Application deadline: June 1, 2018. Reference no: IE-088-2018.

https://www.jobbnorge.no/en/available-jobs/job/151131/professor-associate-professor-in-digital-control-of-power-electronics-for-cyber-physical-systems-ie-088-2018

Digitalization is gaining momentum in a wide range of energy sectors. In the electricity grid, this trend is enabled by advances such as operational flexibility ensured by power electronic converters, high volumes of data due to the low costs of sensors and data storage, and increased connectivity with faster and cheaper data transmission. Digital control is fundamental to facilitate the transformation of the electric grid into a full cyber-physical system. For the successful applicant, this represents a unique opportunity to play a central role in shaping the development of this exciting interdisciplinary field as part of a larger ongoing digitalization drive.

# Information about the Department

Currently there are 12 Professors, 7 Associate Professors and 4 Lecturers at the Department of Electric Power Engineering. The present faculty at the group of Energy Conversion at the Department are Professor Roy Nilsen (Electric Drives), Professor Robert Nilssen (Electric Machines), Associate Professor Dimosthenis Peftitsis (Power Electronics), Professor Elisabetta Tedeschi (Renewable Energy Integration) and Professor Emeritus Tore Undeland (Power Electronics).

The Department is also in charge of The National Smart Grid Laboratory (https://www.ntnu.edu/smartgrid).

Further details about the position can be obtained from:

Professor Elisabetta Tedeschi, elisabetta.tedeschi@ntnu.no

or Associate Professor Dimosthenis Peftitsis, <u>dimosthenis.peftitsis@ntnu.no</u>

or the Head of Department, Professor Ole-Morten Midtgård, ole-morten.midtgard@ntnu.no

# <u>2 PhD Scholarships in Power Electronics (PE) interfaces and control system for Electric (hybrid) systems</u> <u>Vrije Universiteit Brussel (VUB), Brussels, Belgium</u>

http://mobi.vub.ac.be/mobi/job/phd-scholarship-in-power-electronics-pe-interfaces-and-control-system-for-electric-hybrid-systems/

# Context

The position is in the department "Electric Engineering and Energy Technology" which is part of the Faculty of Engineering Sciences of the Vrije Universiteit Brussel. The candidate will work in the interdisciplinary research group MOBI. MOBI is a leader in electromobility research and socio-economic evaluations for sustainable mobility and logistics. It has an enthusiastic, international and multidisciplinary team of 100 specialists. Over the past 5 years the group participated in 21 EU projects, 59 projects with the industry and 61 projects funded by national organizations.

6 new European project proposals have been accepted by the European Commission in the framework of the Green Vehicle initiative, opening up opportunities to join our team.

#### Scholarship Topic

2 scholarships in Power Electronics (PE) interfaces and control system for Electric (hybrid) systems: Focusing on scalable power electronics converters and their integration in Vehicles.

#### <u>Tasks</u>

- Development and implementation of PE converters with topology selection and advanced control techniques;
- Modelling of electrical Machines;
- Development of modular subsystem models and efficient model interfaces to be integrated in the drivetrain (DT) simulation platform;
- Writing research reports and scientific articles;
- Presenting research at (international) seminars and conferences;
- Coach master thesis students.

#### Profile

The candidate should have:

- an academic Master/Engineering degree in Electrical Engineering;
- VERY strong theoretical knowledge and interest in both experimental and modeling work in the field of power electronics, Real-time workshop (RTW) implementation, their control systems and optimization;
- good communication skills in English (speaking and writing);
- ability to work both in a team and independently while carrying out complex tasks;
- ability to take initiative;
- a proactive attitude in the projects (s)he is involved.
- Preferred skill requirements include knowledge of power electronics (i.e. DC/DC converters, charging systems, DC/AC inverters, etc.), electric machines, (hybrid) electric vehicles, control and optimization strategies and Matlab/Simulink.

# Our offer

1 year scholarship (can be extended up to a total of 4 years)

Dynamic, international and multi-lingual work environment in a green oasis in Brussels

Hospitalization coverage

Free use of public transport for travel to and from work

Extensive sporting facilities and a nursery on campus

# How to apply?

Please send your application directly to: Prof. dr. Omar Hegazy

T: +32 2 629 29 92 E: Omar.Hegazy@vub.be

All applications must at least include the following attachments: A brief CV

Comprehensive details of academic portfolio

At least 2 recommendation letter(s) Diplomas, Transcripts and scores

Cover / motivation letter

## **ECPE: Calendar of Events 2018**

Date	Location	Event	Торіс
14-15 May	Vienna, Austria	ECPE Tutorial	ECPE Tutorial 'EMC in Power Electronics' Chairmen: Prof. E. Hoene (Fraunhofer IZM), Prof. JL. Schanen (INPG-LEG-ENSIEG - G2ELab) (Fully booked)
19 - 20 June	Husum, Germany	ECPE Workshop	ECPE Workshop 'Power Electronics for Grid Integration of Wind Energy' Chairmen: Prof. M. Liserre (CAU Kiel), Prof. F. Blaabjerg (Aalborg University)
27-28 June	Aalborg, Denmark	ECPE Tutorial	ECPE Tutorial 'Power Electronics Packaging (EE) Chairmen: Prof. U. Scheuermann (Semikron), Dr. J. Popovic-Gerber (TU Delft)
2-3 July	Frankfurt, Germany	ECPE Tutorial	ECPE Tutorial 'Model Predictive Control for Power Electronics, Drives and Power  Grid Applications' Chairman: Prof. R. Kennel (TU Munich)
24-25 July	Erlangen, Germany	ECPE Tutorial	Thermal Engineering of Power Electronic Systems Part I (thermal design and verification) Chairmen: Prof. U. Scheuermann (Semikron), D. Malipaard (Fraunhofer IISB)
10-11 September	Copenhagen, Denmark	ECPE Tutorial	'Passives in Power Electronics: Magnetic Component Design and Simulation' Chairmen: Prof. G. Hurley (Nat. Univ. of Ireland), Dr. Z. Ouyan (Techn. Univ. of Denmark)
4-5 October	Catania, Italy	ECPE Tutorial	Power Semiconductor Devices & Technologies Chairmen: Dr. A. Mauder (Infineon), Prof. D. Silber (Univ. of Bremen)
17-18 October	Lyon, France	ECPE Tutorial	Power Circuits for Clean Switching and Low Losses Chairman: Dr. R. Bayerer (Infineon)

For the information about ECPE Workshops and Tutorials please visit the ECPE website www.ecpe.org

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# **Future EPE ECCE Europe and Technically Sponsored Conferences**

# 2018:

IPEC 2018 ECCE Asia – 20-24 May 2018, Niigata, Japan:

http://www.ipec2018.org/

Field-Based Insights into the Implementation of Renewable Energies – 12-17 August 2018, Mont-Soleil, Saint-Imier, Switzerland:

http://www.societe-mont-soleil.ch

> IEEE-PEMC - 26-30 August 2018, Budapest, Hungary:

http://www.ieee-pemc2018.org/

► EPE 2018 ECCE Europe, 17 – 21 September 2018, Riga, Latvia:

http://www.epe2018.com

2018 IEEE Energy Conversion Congress and Exposition (ECCE) – 23-27 September 2018, Portland, USA

http://www.ieee-ecce.org/2018/

29th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis, ESREF 2018, Aalborg, Denmark – 1-5 October 2018

http://www.esref2018conf.org/

## 2019:

ICPE 2019 – ECCE Asia, 27-31 May 2019 Busan, Korea (South)

http://www.icpe2019.org/

LDIA 2019, 1-3 July 2019 at MICROCITY EPFL Neuchatel, Switzerland

https://ldia2019.epfl.ch/

➤ EPE 2019 ECCE EUROPE, 2 - 6 September 2019, Genova, Italy

http://www.epe2019.com/

# 2020:

➤ EPE 2020 ECCE EUROPE, 7-11 September 2020, Lyon, France

#### 2021:

EPE 2021 ECCE EUROPE, 6-10 September 2021, Ghent, Belgium

#### 2022:

▶ EPE 2022 ECCE EUROPE, 5-9 September 2022, Hanover, Germany

# Renew your EPE Association membership or become a member

Become a member of the EPE community and enjoy:

- Being part of a network of recognized experts
- A free subscription to the recognized EPE Journal
- Reduced registration fees for the EPE ECCE Conferences and other EPE events
- Online access to recent and older EPE Journal articles
- Online access to recent and older EPE Conference proceedings
- Online access to the proceedings of other EPE Supported Conferences
- EPE secretariat Service
- And much more...

For on-line registration go to <a href="http://www.epe-association.org/">http://www.epe-association.org/</a>, click on 'Join EPE now!' and follow the procedure. EPE members in 2017 should proceed through the members area.

When you have made your payment, you will receive a confirmation e-mail and have access to the member's area of the website.

Tariffs: Europe/International

Regular Membership EUR 148.10 per year (incl. 21.00 % VAT)
Student Membership EUR 68.51 per year (incl. 21.00 % VAT)

For off-line membership (new or renewal): Nancy Langsberg (nlangsbe@vub.ac.be)

#### Group membership (without the service of the EPE Journal)

Starting with 5 people, one invoice, no service of the EPE Journal, get 20% discount on the membership fee, i.e. in 2018, 120€ for full member and 55€ for students, VAT included.

The Services are same as above, except subscription to EPE Journal.

#### Contact:

Nancy Langsberg (<a href="mailto:nlangsbe@vub.ac.be">nlangsbe@vub.ac.be</a>)

