EPE Newsletter – November 2020

Next EPE ECCE Europe Conference

¬



September 6-10, 2021 | Ghent, Belgium

The 23rd European Conference on Power Electronics and Applications











NEWSLETTER CONTENTS:

- EPE'21 ECCE Europe
 - o Call for Papers: Synopsis Submission Deadline Extended: 9 December 2020!
 - Highlighted Topics
- ECPE: Calendar of Activities
- Future EPE ECCE Europe and Technically Sponsored Conferences
- Social Media: We are on LinkedIn & Facebook. Join us!
- Advertise in future editions of this Newsletter

EPE Association - Become a member or renew your membership



Be part of a network of recognized experts

A free subscription to the recognized EPE Journal

Online access to EPE Journal articles

Online access to EPE Conference Proceedings

Online access to EPE-PEMC Conference Proceedings

✓ EPE Secretariat service

Reduced registration fees for EPE Conferences and events

And much more ...

Join EPE Association





September 6-10, 2021 Ghent, Belgium







9 December 2020

18 November 2020: Receipt of synopses

• 3 March 2021: Notification of provisional

acceptance

 3 June 2021: Receipt of full typescript for final review





Organization and Venue

The Power Electronics community will gather in **Ghent**, Belgium, from 6 to 10 September 2021, to exchange views on research progress and technological developments in the various topics described hereunder. On Monday 6 September a number of tutorials will be organised, and on Friday 10 September several technical visits are planned.

The 23rd Conference on Power Electronics and Applications (and Exhibition), EPE'21 ECCE (Energy Conversion Congress and Expo) Europe is co-sponsored by the EPE Association and IEEE PELS. It will take place at the Gent ICC – International Convention Center in Ghent, Belgium.

Aims of the Conference

The EPE ECCE Europe conference is the largest in its field, attracting experts from numerous countries every year to join in the discussions. With the objective to exchange and meet fellow professionals and academics, the EPE ECCE Europe conference brings together researchers, engineers, etc. working at the forefront of power electronics technologies. For this type of event, where the future role of power electronics in this ecological and technological revolution will be explored, the EPE ECCE Europe conference is one of the privileged places. EPE ECCE Europe Ghent 2021 will provide the opportunity to discuss a number of subjects, not only during the lecture and poster sessions of the conference but also at the exhibition, industrial forums and tutorials.

Topics

Electrification of mobile and non-mobile systems is progressing fast. Novel battery systems are being developed not only for drones, passenger cars and heavy-duty vehicle applications, but also for stationary storage applications. They need intelligent Battery Management Systems and control units as well as appropriate charging devices. For vehicle applications, high-power charging stations are being developed to reduce charging time. Bi-directional V2X charging systems allow for better grid management and, when combined with smart charging, for an increased share of renewables in the electricity mix. Power electronics interfaces, with their emerging wide bandgap (WBG) technologies (such as SiC and GaN), are a key element in these developments towards high energy-efficient systems. The reliability aspect is crucial in these and many other applications. Considering the reliability aspect in the design phase of battery systems, drivetrains, charging systems with both AC and DC networks, etc., will improve the lifespan of those systems and provide more robustness with less maintenance.

On top of the tutorials, lecture and dialogue sessions and technical visits, the organising committees will propose several discussion sessions within the industrial forums as well as special sessions of power electronics related trends. The conference will specifically focus on the following challenging topics:

Tuesday, the 7th of September 2021: **Battery Systems** (BMS, Balancing Circuits, Control Units,...)

Wednesday, the 8th of September 2021: **Transportation Electrification** (Charging Systems, V2X, Energy Management,...)

Thursday, the 9th of September 2021: **Reliability of Power Electronic Systems and Components** (Failure Mechanisms, Predictive Algorithms,...)

The conference topics are as follows:

I POWER ELECTRONICS COMPONENTS AND CONVERTERS

Topic 1: DEVICES, COMPONENTS, PACKAGING AND SYSTEM INTEGRATION

- 1.a. Passive Components
- 1.b. Active Devices and Components (Si)
- 1.c. Active Devices and Components (Wide Bandgap and other new materials)
- 1.d. Components and Devices for Specific Applications, including for Pulsed Power
- 1.e. System Integration, Packaging & Thermal Management
- 1.f. Reliability & Life-Time

Topic 2: POWER CONVERTERS TOPOLOGIES

- 2.a. Modular Multilevel Converters
- 2.b. Solid State Transformers
- 2.c. Grid Connected Converters
- 2.d. Resonant Converters
- 2.e. HF Power Converters
- 2.f. Wide-Band Gap Power Electronics

Topic 3: CONVERTER MODELLING, DESIGN AND LOW-LEVEL CONTROL

- 3.a. Converter Design and Optimisation
- 3.b. Converter Modelling and Low-level Control, including Gate-Drives
- 3.c. EMI/EMC in Power Electronics including HF Phenomena

Topic 4: MEASUREMENT, SUPERVISION AND CONTROL FOR POWER CONVERTERS

- 4.a. Standard and Advanced Modulation Techniques
- 4.b. Standard and Advanced Current / Voltage / Synchronization Control Techniques
- 4.c. Estimation, Identification and Optimisation Methods
- 4.d. Measurement Techniques, Sensors and State Observers
- 4.e. Condition Monitoring and Life-Time Prediction

II POWER ELECTRONICS APPLICATIONS

Topic 5: ELECTRICAL MACHINES AND DRIVE SYSTEMS

- 5.a. Electrical Machines and Actuators
- 5.b. Adjustable-Speed Drives and Converter-Machine Interactions
- 5.c. Design, Optimisation and Control of Electric Drives
- 5.d. Condition Monitoring and Life-Time Prediction

Topic 6: RENEWABLE ENERGY POWER SYSTEMS

- 6.a. Wind-Energy Systems
- 6.b. Solar-Energy Systems

- 6.c. Other Renewable-Energy Systems
- 6.d. Energy Harvesting
- 6.e. Energy Storage Systems for Renewable Energy

Topic 7: GRIDS, SMART GRIDS, AC & DC

- 7.a. Power Electronics in Transmission and Distribution Systems
- 7.b. HVDC & FACTS
- 7.c. Micro-Grids
- 7.d. Smart Grids
- 7.e. Mobile Power Stations
- 7.f. Power Quality Issues and Power Factor Correction Techniques
- 7.g. DC Grids including Fault Coordination and Protection
- 7.h. Hybrid Circuit Breakers
- 7.i. Real-Time Simulation and Hardware in the Loop

Topic 8: E-MOBILITY

- 8.a. Electric Drive Trains for On- and Off-Road Vehicles
- 8.b. Electric Drive Trains for Rail Vehicles
- 8.c. Electric Drive Trains for Aerospace and Space Applications
- 8.d. Electric Drive Trains for Marine Applications (Offshore, Subsea and Ships)
- 8.e. On-Board Power Converters
- 8.f. Batteries: Management Systems (BMS), Monitoring and Life-Time Prediction
- 8.g. Vehicle Battery Chargers: Contact and Contactless
- 8.h. Fuel Cells: Converters, Control, Diagnostics and System Integration
- 8.i. Smart Charging and Vehicle to Grid Interaction

Topic 9: POWER SUPPLIES AND INDUSTRY-SPECIFIC APPLICATIONS

- 9.a. Low Voltage DC Power Supplies
- 9.b. High Voltage DC Power Supplies
- 9.c. Distributed Power Supplies
- 9.d. Uninterruptible Power Supplies (UPS)
- 9.e. Lighting: Solid-State Lighting and Electronic ballasts
- 9.f. Contactless (Wireless) Power Supply
- 9.g. Industry-Specific Applications (Cement, Steel, Paper, Textile, Mining, etc...)
- 9.h. Applications in Physics Research and Related Areas

Topic 10: DATA ANALYSIS, ARTIFICIAL INTELLIGENCE AND COMMUNICATION

- 10.a. Data Analysis applied to Power Electronics and Drive Systems
- 10.b. Application of Artificial Intelligence to Power Electronics and Drive Systems
- 10.c. Communication for Power Electronics and Drive Systems
- 10.d. Wireless Control
- 10.e. Diagnostics



Presentation of Papers

Contributions to EPE'21 ECCE Europe must be presented either as a lecture presentation or as a dialogue presentation. A manuscript must be submitted in English in both cases for inclusion in the Conference Proceedings (electronic version only). Papers for lecture sessions will be strictly limited and selected on the basis of wide audience appeal, ease of understanding and potential stimulation of broad ranging discussion.

No lecture session will be organized during the dialogue session timeslots

Content of Synopses

The synopses should consist of a 3 to 5 page anonymous summary, including an abstract with no more than 50 words; topic number and indication of the preference for dialogue or lecture presentation (to be clearly mentioned), key diagrams and a references list.

The synopses will be submitted using the host of the conference on the Internet. A link to the site will be available from http://www.epe-association.org. Detailed information and guidelines can be downloaded from the conference website to help you prepare the needed material for submitting a synopsis. The site will soon be open for upload.

Authors of papers provisionally selected for presentation will receive a notification and can download the instructions for preparing the dialogue papers and/or the lecture papers from the website. Final selection will be based on the full paper. The paper will only be included in the Conference Proceedings after receipt of one full registration fee per paper in due terms. Student registration fee is only valid for student participants, not for authors. One single author may not present more than two (2) papers. The publication date of the accepted conference papers will be two weeks before the conference.

A selection of outstanding conference papers will be published afterwards in the EPE Journal, which is an ISI registered journal.

The conference proceedings will be submitted to the IEEE Xplore[®] digital library.

All presented papers will be listed in the Web of Science (formerly Web of Knowledge), INSPEC database for Engineering. Selected papers published in the EPE Journal will be automatically included in the Web of Science – Core Collection and get a WOS-Accession number. The Organising Committee works toward ensuring that all conference papers are listed in the Core Collection as well. It is already the case since the 2014 edition.

Tutorials – Call for Proposals

Several tutorials will be held prior to the conference. Authors willing to propose a tutorial at EPE'21 ECCE Europe are invited to send a proposal to Dr. David OLIVA URIBE at the scientific secretariat (EPE Association, c/o VUB-IrW-ETEC, Pleinlaan 2, B-1050 Brussels, Belgium, e-mail: David.Oliva.Uribe@vub.be) before 11 January, 2021. The proposal will consist of a three-page summary including tutorial title, name and affiliation of the lecturer(s), tutorial objectives and audience, topical outline and provisional schedule of the tutorial.

The tutorials will be organized on **Monday 6 September 2021**.

Tutorial proposals related to all conference topics are welcome.

EPE'21 ECCE Europe provides the best experience

EPE'21 ECCE Europe is committed to providing solutions to the delegates so that they have the best experience of participating in the conference, whether in-person or remotely. Many delegates enjoy virtual participation in conferences while others prefer in-person exchange and networking opportunities. EPE'21 ECCE Europe will endeavour to provide the best experience possible, as well as promote the reduction of the CO2 footprint in travelling to the conference.

Deadlines

Intending authors should note the following deadlines:

Receipt of synopses: 18 November 2020 9 December 2020

Notification of provisional acceptance: 3 March 2021

Receipt of full typescript for final review: 3 June 2021

Working Language

The working language of the conference is English, which will be used for all printed material, presentations and discussions.

Programme and Registration

The provisional programme and registration form will be available from the Internet site early summer 2021. Additional information will be available on: http://www.epe2021.com

Venue

The conference will take place at the Gent ICC – International Convention Center. The conference venue is at walking distance from the main railway station and the city center of Ghent. "Gent Sint-Pieters", the city's main railway station, is about 1 hour from the Airport in Brussels. The conference venue offers facilities and services of international quality meeting standards. Wi-Fi access will be free for attendees, everywhere in the congress center.

Exhibition

As with previous editions, an industrial (and scientific) exhibition will be part of the event. Detailed information is available at www.epe2021.com
You can also contact us via e-mail to Carol.Appelmans@vub.be

Conference Organizing Committees

<u>Conference Chairman</u> Alex Van den Bossche, UGent

<u>Conference Co-Chairs</u> Pavel Bauer, Technische Universiteit Delft

Rik De Doncker, RWTH - ISEA

Braham Ferreira, University of Twente

Johan Gyselinck, Université Libre de Bruxelles

Omar Hegazy, Vrije Universiteit Brussel

Elena Lomonova, Technische Universiteit Eindhoven

Wilmar Martinez, KU Leuven & Energyville Joeri Van Mierlo, Vrije Universiteit Brussel

Local Committee Members Frederik De Belie, UGent

Hendrik Vansompel, UGent

<u>Programme Chairman</u> Sjoerd Bosga, ABB Corporate Research, Sweden



Organising Committee

Ahola Jero Lappeenranta University of Technology

Allard Bruno Université de Lyon

Bacha Seddik Université de Grenoble - G2ELAB

Bakran Mark Universität Bayreuth

Bauer Pavol Delft University of Technology

Benchaib Abdelkrim SuperGrid Institute

Biela Jürgen ETH Zürich

Blaabjerg Frede Aalborg University

Bordry Frédérick C.E.R.N.
Boroyevich Dushan Virginia Tech

Bosga Sjoerd ABB Corporate Research / KTH Royal Institute of Technology

Bouscayrol Alain L2EP, Université de Lille 1
Cacciato Mario University of Catania
De Doncker Rik RWTH Aachen ISEA

Doppelbauer Martin Karlsruhe Institut für Technologie (KIT)

Ferreira Braham University of Twente
Katic Vladimir University of Novi Sad

Kennel Ralph Technische Universität München

Kjaer Philip Carne Vestas Wind Systems A/S
Krievs Oskars Riga Technical University

Lamnabhi-Lagarrigue Françoise LSS Supelec

Lataire Philippe Vrije Universiteit Brussel

Lomonova Elena Eindhoven University of Technology

Lorenz Leo ECPE E.V.

Malinowski Mariusz Warsaw University of Technology

Marchesoni Mario Università di Genova Mawby Philip University of Warwick

Mermet-Guyennet Michel Alstom

Mertens Axel Leibniz Universität Hannover

Munk-Nielsen Stig Aalborg University

Nee Hans-Peter Royal Institute of Technology

Perriard Yves Ecole Polytechnique Fédérale de Lausanne (EPFL)

Rabkowski Jacek Warsaw University of Technology

Ribickis Leonids Riga Technical University

Robyns Benoît Ecole des Hautes Etudes d'Ingénieur

Rufer Alfred Ecole Polytechnique Fédérale de Lausanne (EPFL)

Schumacher Walter TU Braunschweig Semail-Lemaire Betty University Lille 1 Sudria Antoni UPC - CITCEA

Thomas Jean-Luc CNAM

Van Den Bossche Alex Universiteit Gent

Van Mierlo Joeri Vrije Universiteit Brussel
Wheeler Patrick University of Nottingham
Zanchetta Pericle University of Nottingham
Zawirski Krzysztof Technical University of Poznan

International Scientific Committee

Ahola Jero Lappeenranta University of Technology

Akagi Hirofumi Tokyo Institute of Technology

Allard Bruno Université de Lyon



Azzopardi Stéphane Safran

Bacha Seddik University of Grenoble - G2ELAB

Bakran Mark Universität Bayreuth
Bassett Roger EPE Association

Bauer Pavol Delft University of Technology

Benchaib Abdelkrim SuperGrid Institute
Blaabjerg Frede Aalborg University
Böcker Joachim University of Paderborn

Bordry Frédérick C.E.R.N.
Boroyevich Dushan Virginia Tech

Bosga Sjoerd ABB Corporate Research / KTH Royal Institute of Technology

Bouscayrol Alain L2EP, Université de Lille 1

Braun Michael Karlsruher Institut für Technologie

Briff Pablo GE Renewable Energy

Brock Stefan Poznan University of Technology

Cacciato Mario University of Catania

Carpita Mauro University of Applied Sciences of Western Switzerland

Colombi Silvio ABB Switzerland
Davari Pooya Aalborg University

De Belie Frederik UGent

De Doncker Rik RWTH Aachen ISEA

Dede Enrique

Dieckerhoff Sibylle Technische Universität Berlin
Diikhuizen Frans ABB Corporate Research

Doppelbauer Martin Karlsruher Institut für Technologie (KIT)

Dujic Drazen Ecole Polytechnique Fédérale de Lausanne - EPFL

Eckel Hans-Günter University of Rostock
Ferreira Braham University of Twente

Friebe Jens Leibniz Universität Hannover

Gaubert Jean-Paul Université de Poitiers - LIAS - ENSIP

Gennaro Francesco STMicroelectronics

Gyselinck Johan Université Libre de Bruxelles

Hahn Ingo Friedrich-Alexander Universität Erlangen-Nürnberg

Hegazy Omar Vrije Universiteit Brussel

Hendrix Marcel Eindhoven University of Technology
Hiller Marc Karlsruhe Institute of Technology (KIT)

Hofer Matthias Technische Universität Wien

Hoffmann Klaus F. Helmut-Schmidt-University Hamburg
Hofmann Wilfried Technische Universität Dresden

Jennings Michael Swansea University

Jung MarcoHochschule Bonn-Rhein-SiegKarlsson PerCG Drives & AutomationKatic VladimirUniversity of Novi Sad

Kazmierkowski Marian P. Warsaw University of Technology Kennel Ralph Technische Universität München

Kjaer Philip Carne Vestas Wind Systems A/S Krievs Oskars Riga Technical University

Kyyra Jorma Aalto University Lamnabhi-Lagarrigue Françoise LSS Supelec

Lataire Philippe Vrije Universiteit Brussel



Li Yongdong Tsinghua University

Lindemann Andreas Otto-von-Guericke-University Magdeburg
Liserre Marco Christian-Albrechts-Universität Kiel

Lomonova Elena Eindhoven University of Technology

Lorenz Leo ECPE E.V
Lutz Josef TU Chemnitz

Malinowski Mariusz Warsaw University of Technology
Mallwitz Regine Technische Universität Braunschweig

Marchesoni Mario Università di Genova
Martinez Wilmar KU Leuven & Energyville
Mawby Philip University of Warwick

Mermet-Guyennet Michel Alstom

Mertens Axel Leibniz Universität Hannover

Meuret Regis Hispano-Suiza

Monmasson Eric Université de Cergy-Pontoise

Montesinos Daniel CITCEA-UPC

Morancho Frederic LAAS - CNRS

Munk-Nielsen Stig Aalborg University

Musumeci Salvatore Politecnico di Torino

Nami Alireza ABB AB Corporate Research
Nee Hans-Peter Royal Institute of Technology

Orlik Bernd Universität Bremen

Peftitsis Dimosthenis
Norwegian University of Science and Technology
Perriard Yves
Ecole Polytechnique Fédérale de Lausanne (EPFL)
Pietrzak-David Maria
Université Toulouse Midi Pyrénées -Laboratoire PLA

Pouresmaeil Edris Aalto University

Rabkowski Jacek Warsaw University of Technology
Ranstad Per KTH Royal Institute of Technology

Ribickis Leonids Riga Technical University

Richardeau Frédéric LAPLACE - University of Toulouse Robyns Benoît Ecole des Hautes Etudes d'Ingénieur

Rodic Miran University of Maribor

Rufer Alfred Ecole Polytechnique Fédérale de Lausanne (EPFL)

Schanen Jean-Luc G2ELAB

Scheuermann Uwe Semikron Elektronik GmbH

Schierling Hubert Siemens AG

Schröder Günter University of Siegen
Schumacher Walter TU Braunschweig
Semail-Lemaire Betty University Lille 1

Siala Sami GE Energy Power Conversion

Siemaszko Daniel Power Electronics and Systems Consultancy

Siemieniec Ralf Infineon Technologies Austria AG

Sneyers Brigitte EPE Association
Sudria Antoni UPC - CITCEA

Sumner Mark University of Nottingham

Tenconi Sandro

Thomas Jean-Luc CNAM

Turki Faical Compleo Charging Solutions GmbH. Dortmund

Ufnalski Bartlomiej Warsaw University of Technology

Van Den Bossche Alex Universiteit Gent

Van Mierlo Joeri Vrije Universiteit Brussel Vemulapati Umamaheswara Reddy ABB Corporate Research

Vezzini Andrea Berne University of Applied Sciences

Victor MatthiasSMA Solar Technology AGViitanen TeroABB Power ConversionWheeler PatrickUniversity of Nottingham

Wijnands Korneel Eindhoven University of Technology

Wu Zhihong Tongji University
Yuan Xibo University of Bristol
Zanchetta Pericle University of Nottingham
Zawirski Krzysztof Technical University of Poznan
Zobaa Ahmed Brunel University London

EPE/IEEE-PELS Coordination Committee

The overall management of the Congress is conducted by the Coordination Committee to ensure consistency in strategy, scope and content of the Conferences from year to year. The committee issues a Call for future locations of the Conferences, and forwards its recommendations to the EPE Executive Council as well as to the IEEE-PELS Administrative Committee for final approval.

Members

EPE representative members:

Martin Doppelbauer, Philip C Kjaer, Elena Lomonova, Leo Lorenz, Yves Perriard, Jean-Luc Thomas

IEEE-PELS representative members:

Liuchen Chang, Rik De Doncker, Braham Ferreira, Ralph Kennel, Mario Pacas, Pat Wheeler

Secretariat

EPE Secretariat
Philippe Hamacher
EPE Association
C/o Vrije Universiteit Brussel - IrW - ETEC
Pleinlaan 2, Boulevard de la Plaine
B-1050 Brussels
Tel: +32 (0)470 65 79 90

Fax: +32 (0)2 629 36 20 E-mail: Philippe.Hamacher@vub.be

Local Secretariat

Ghent University
Faculty of Engineering and Architecture
Department of Electromechanical, Systems and Metal Engineering
E-mail: epe2021@ugent.be



2 EPE'21 ECCE Europe - Highlighted Topics

Electrification of mobile and non-mobile systems is progressing fast. Novel battery systems are being developed not only for drones, passenger cars and heavy-duty vehicle applications, but also for stationary storage applications. They need intelligent Battery Management Systems and control units as well as appropriate charging devices. For vehicle applications, high-power charging stations are being developed to reduce charging time. Bi-directional V2X charging systems allow for better grid management and, when combined with smart charging, for an increased share of renewables in the electricity mix. Power electronics interfaces, with their emerging wide bandgap (WBG) technologies (such as SiC and GaN), are a key element in these developments towards high energy-efficient systems. The reliability aspect is crucial in these and many other applications. Considering the reliability aspect in the design phase of battery systems, drivetrains, charging systems with both AC and DC networks, etc., will improve the lifespan of those systems and provide more robustness with less maintenance.

On top of the tutorials, lecture and dialogue sessions and technical visits, the organising committees will propose several discussion sessions within the industrial forums as well as special sessions of power electronics related trends. The conference will specifically focus on the following challenging topics:

Battery Systems	Transportation Electrification	Reliability of Power Electronic
(BMS, Balancing Circuits, Control Units,)		Systems and Components
Management,)	(Failure Mechanisms, Predictive Algorithms,)	

The conference topics are available via this link: https://epe-ecce-conferences.com/epe2021/topics/

3 FCPF: Calendar of Events 2020-2021

- ECPE Online Tutorial <u>'Testing Automotive Power Modules according to the ECPE Guideline AQG 324'</u> 20 21 Januar 2021, *Digital Event via Webex*
- ECPE Online Tutorial 'Drivers and Control Circuitry for IGBTs and MOSFETs' (Programme coming soon) 23 24 February 2021, Digital Event via Webex
- ECPE Workshop <u>'ECPE SiC & GaN User Forum Potential of Wide Bandgap Semiconductors in Power Electronic Applications'</u> (Programme coming soon)
 2 3 March 2021, Erding/Munich, Germany

Note: In case of COVID-19 restrictions the Workshop will be organized as Hybrid/Online event.

- ECPE Tutorial <u>'EMC in Power Electronics'</u>
 11 12 March 2021, Eindhoven*, Netherlands
- ECPE Tutorial <u>'Use and Assessment of Power Device Models in Power Electronic Simulation'</u>
 15 April 2021, Nuremberg, Germany
- ECPE Lab Course 'EMC Optimised Design (Parasitics in Power Electronics) (make-up-date 2020)
 19 20 April 2021, Berlin, Germany
- ECPE Workshop <u>'Capacitors in Power Electronics'</u>
 20 21 April 2021, Hamburg, Germany
- ECPE Online Tutorial 'Wide Bandgap User Training' (Programme coming soon) 19 20 May 2021, Digital Event via Webex
- ECPE Tutorial <u>'High-Precision Power Electronics'</u> Spring 2021, Eindhoven*, Netherlands
- ECPE Tutorial <u>'Thermal Engineering of Power Electronic Systems Part I: Thermal Design and Verification'</u> 15 - 16 June 2021, Nuremberg, Germany
- ECPE Tutorial <u>'Model Predictive Control for Power Electronics, Drives and Power Grid Applications'</u> 17 - 18 June 2021, Lyon*, France



^{*}short-term changes from face-to-face to online format are possible.

4 Future EPE ECCE Europe and Technically Sponsored Conferences

2020:

> IPEMC2020 - ECCE Asia, 29 November – 2 December, Nanjing, China http://ipemc2020.com/

2021:

ECCE, 10 - 14 October 2021, Vancouver, Canada http://www.ieee-ecce.org/2021/

2022:

> EPE 2022 ECCE EUROPE, 5 - 9 September 2022, Hannover, Germany http://www.epe2022.com



5 Social Media

We are on Social Media! Let's get social!





6 Advertise in this newsletter?

Do you know how to reach thousands of engineers across the world? A simple and easy way is to publish in our monthly newsletter.

More information: **EPE ECCE Europe Advertisement Opportunities**



