



2023
13th International
Electric Drives
Production
Conference
November 2023
Bavaria, Germany
CALL FOR PAPERS

SUBMIT YOUR CONTRIBUTION UNTIL
30.05.2023

Experts of industry and science are invited to present a contribution on the topics listed or on other topics that correspond to the general subject of the conference. Abstracts of about 200 words containing significant facts should be submitted online in English to the conference office containing the following information:

- Title of the contribution
- Subject/topic of the contribution
- 3 – 6 keywords
- Full name, organization or company, postal and email addresses of all authors

Abstracts will be examined before a full paper (Scientific Contribution) or presentation (Industrial Contribution) can be uploaded. All scientific full papers have to pass an intensive reviewing process before final acceptance.

CONFERENCE CHAIRMAN

Prof. Franke J., University of Erlangen-Nuremberg (DE)

ABOUT E|DPC

Increasing power consumption, CO₂ and NO_x reduction, growing mobility and progressing automation – all of these future megatrends are impossible without powerful electric drives. The electrification of the automobile powertrain system is considered crucial, as the whole sector is facing difficulties resulting from the substitution of the complete conventional powertrain. Besides advancing ideas on the design of powerful electric drives, the organization of the manufacturing processes and systems is of utmost importance. The International Electric Drives Production Conference offers an outstanding platform for the exchange of experiences from developers, researchers and potential users. The focus of the conference is set on the presentation of highly innovative products from various industries as well as manufacturing processes and strategies. Additionally there will be an accompanying table top exhibition, poster presentation, technical tours and an associated program.

APPLICATION-ORIENTED CONTRIBUTION

In particular, industry experts are invited to present an issue within an application-oriented industrial track without the necessity of preparing a full paper. After the final acceptance of your abstract, the presentation/slides will be published via our conference app to all participants. An application-oriented contribution is an ideal platform for exhibitors and non-exhibitors to present their top recent technologies.

IMPORTANT DATES FOR APPLICATION-ORIENTED CONTRIBUTIONS

Submission of application-oriented abstracts:	10.07.2023
Notification of acceptance of abstracts:	24.07.2023

SCIENTIFIC CONTRIBUTION

After the acceptance of your abstract, your full paper (6–8 pages) will be reviewed by the program committee. The proceedings of the E|DPC containing all final accepted scientific papers is intended to be published by IEEE and indexed by Scopus and Google Scholar. Two discussion opportunities are provided for each scientific paper. Please find more information on our website www.edpc.eu

IMPORTANT DATES FOR SCIENTIFIC CONTRIBUTIONS

Submission of scientific abstracts:	30.05.2023
Notification of acceptance of abstracts:	12.06.2023
Submission of full papers:	24.07.2023
Review of full papers:	04.09.2023
Submission of final full papers:	25.09.2023

TOPICS

INNOVATIVE ELECTRIC MACHINE DESIGN

- Advanced electric motor topologies
- Noise Vibration Harshness (NVH) considerations
- Effective cooling techniques
- Super conductivity
- Changes in production processes

POWER ELECTRONICS AND CONTROL METHODS

- Sensors and sensorless control technologies
- New testing methods and quality assurance
- Power electronics production processes
- Mechatronic integration approaches

NEW MATERIALS AND SEMI-FINISHED PRODUCTS

- High performance electrical steel types
- Cables, fishbones, enameled and litz wires
- Advanced insulation materials
- Lightweight materials for electric drives

MAGNET MATERIALS AND PROCESSING

- Raw material and alloy processing
- Processing of hard magnetic materials
- Magnetization process and equipment
- Optimization of process chain

MANUFACTURING TECHNOLOGIES FOR SOFT MAGNETIC MATERIALS

- Manufacturing of soft magnetic composites
- New sheet metal and coating processes
- Joining technologies
- Productive cutting technologies

WINDING TECHNOLOGIES

- New kinematics and advanced tools
- Optimization of filling factor
- New wire geometries and materials
- Winding simulation and validation
- Application of hairpin windings

INSULATION TECHNOLOGIES

- Insulation materials and heat transfer solutions
- Application processes
- Qualification and testing

ASSEMBLY AND HANDLING TECHNOLOGIES

- Innovative magnet assembly methods
- New balancing methods
- Final assembly and test

ELECTRIC DRIVES PRODUCTION SYSTEMS

- New automated production lines
- Quality management methods
- Global value chains
- Lean production implementation
- Computer-Integrated manufacturing

PRODUCTION OF ELECTRICAL ACTUATORS

- Piezoelectric actuators
- Dielectric elastomer actuators
- Magnetostrictive actuators

INDUSTRY 4.0 APPLICATIONS IN ELECTRIC DRIVES PRODUCTION

- Cloud-based process control
- Knowledge-based engineering
- Simulation and digital twin
- Data analytics and machine learning
- Interfaces for machine linking

SUSTAINABILITY IN PRODUCT LIFECYCLE

- Recycling and disassembly of electric motors
- Raw material availability and preservation
- Energy-efficient production processes

NEW APPLICATIONS FOR ELECTRIC DRIVES

- Transportation and material handling
- Mechanical and plant engineering
- Household appliances
- Energy generation

ELECTROMOBILITY

- High volume production
- Specific automotive requirements
- Strategies for transition of added volume
- Integrated drive concepts
- Powertrain components of EV

ELECTRIC DRIVES SPECIFIC TESTING

- Stator and rotor specific testing technology
- Application of inline and end-of-line testing strategies
- Process control

ACCOMPANYING ECONOMIC RESEARCH

- Operations research and systems engineering
- Supply chain and logistics engineering
- Management science and management engineering
- Ergonomics, human factors and safety engineering

ADDITIVE MANUFACTURING

- Additive manufacturing technologies
- Product innovations due to additive technologies
- Material science

ENERGY TRANSFER FOR ELECTRIC VEHICLES (E|TEV)

- High efficient power transfer technologies
- Production and assembly technologies
- System integration
- Applications and markets

INTERCONNECTING TECHNOLOGIES

- Power and signal interconnection
- Skinning and contacting processes
- Inspection of electrical contacts

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E|DPC TABLE TOP EXHIBITION

E|DPC 2023 will be completed by a comprehensive Table Top exhibition. Companies, research institutes and other organizations will be offered the opportunity to present their products and services to all participants. It is a perfect opportunity to meet your target audience. Detailed technical discussions will be guaranteed. The exhibition is organized by SV Veranstaltungen GmbH. For any further questions regarding E|DPC Table Top Exhibition please contact Mr. Sebastian Woerle, Phone: +49 (0)162 2825449, E-Mail: sebastian.woerle@sv-veranstaltungen.de or visit the website www.edpc.eu.

VENUE

The venue of the EDPC 2023 has not yet been determined. It will take place in a bavarian city in november 2023.

CONFERENCE FEE (Participation in presence)

Registration	Until 20 June 2023	After 20 June 2023
Standard Fee	€ 995,-	€ 1195,-
Reduced Fee*	€ 695,-	€ 795,-
One Day Fee	€ 795,-	€ 795,-

CONFERENCE FEE (online-participation)

Registration	Until 20 June 2023	After 20 June 2023
Standard Fee	€ 895,-	€ 995,-
Reduced Fee*	€ 695,-	€ 795,-
One Day Fee	€ 595,-	€ 695,-

* Reduced fee for international program committee members, speakers (including one paper), participating co-authors and university members and fee to be paid per additional paper.

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