

## SUBMIT YOUR CONTRIBUTION

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 300 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 fullpaper (Scientific Contribution) or presentation (Industrial Contribution) can be uploaded.

### Application-oriented Contribution

In particular, experts of industry are invited to present an issue within an application-oriented industrial track without the necessity of preparing a fullpaper.

**After the acceptance of your abstract, the presentation / slides will be published in the accompanying industrial transcript.**

The application-oriented contribution is an ideal platform for exhibitors and non-exhibitors to present technologies.

### Scientific Contribution

For scientific contributions authors have to prepare a fullpaper (4-8 pages) that will be reviewed and accepted by the International Program Committee.

The proceedings of the E|PTS containing all final accepted scientific papers are published on **FAUPress**.

Please find more information on our website [www.e-pts.de](http://www.e-pts.de).

### IMPORTANT DATES

Submission of abstracts:	2022 - 12 - 15
Notification of acceptance of abstracts:	2023 - 01 - 15
Early registration:	2023 - 02 - 28
Submission of full papers:	2023 - 03 - 15
Notification of acceptance of fullpapers:	2023 - 04 - 15
Submission of final fullpapers:	2023 - 04 - 15
Registration of speaker as participant:	2023 - 04 - 15

## E|PTS Table Top Exhibition

E|PTS 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 Friedrich-Alexander-Universität Erlangen-Nürnberg. For any further questions regarding E|PTS Table Top Exhibition please contact Eva Russwurm ([eva.russwurm@faps.fau.de](mailto:eva.russwurm@faps.fau.de)) or visit the website [www.e-pts.de](http://www.e-pts.de).

### VENUE AND ACCOMMODATION

The E|PTS 2023 will take place at the Congress Centrum Bamberg, Germany. For your accommodation, several hotels are booked all over the city.

### CONFERENCE FEE

Registration	until Feb. 28, 2023	after Feb. 28, 2023
Standard Fee	€ 780,-	€ 980,-
Reduced Fee *	€ 490,-	€ 580,-
One Day Fee	€ 590,-	

\* Reduced fee for speakers, program committee members, university members and authors  
All prices plus VAT

### ABOUT E|PTS

Increasing power consumption, CO<sub>2</sub> reduction, growing urbanization and mobility combined with progressing automation and digitalization – all of these future megatrends are impossible without efficient production technologies and systems. The electrification of powertrains in all kinds of mobility is considered crucial, as the whole mobility sector is facing difficulties resulting from the substitution of conventional propulsion technologies. Besides advancing ideas on the design of new propulsion technologies, the organization of the manufacturing processes and systems is of utmost importance.

The CIRP sponsored Conference on Production Technologies and Systems for E.Mobility 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 industrial exhibition poster presentation and an associated program.



# E|PTS

Production Technologies  
and Systems for E-Mobility

1<sup>th</sup> International Conference  
and Exhibition

# Production Technologies and Systems for E-Mobility

June 14<sup>th</sup> - 15<sup>th</sup>, 2023  
Bamberg, Germany

**CALL FOR PAPERS**

## CONTACT

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In cooperation with



Friedrich-Alexander-Universität  
Technische Fakultät

## TOPICS

### Power Electronics Production

- Automated processes and machinery for the manufacturing of power electronics
- New joining technologies, e.g. silver sintering, diffusion soldering, transient liquid phase soldering (TLPS), thick wire bonding
- New material systems, e.g. Cu instead of Al
- New durability tests, e.g. active power cycling, H3TRB, HTGB / HTGSP
- Application of mechatronic integrated devices (MID)

### Production Technologies for Power Supply & Transfer

- Automated processes and machinery for the manufacturing of stationary charging systems
- Technological developments in automated processes for manufacturing of inductive charging systems or dynamic charging systems
- Automated processes and machinery for the manufacturing of fuel cells and hydrogen storage systems
- Highly specialized cutting and joining operations for cell production
- Handling systems for stack components with highest precision and dynamics
- High quality forming and joining technologies for production of hydrogen storage systems

### Battery Production

- Automated processes and machinery for the manufacturing of Li-ion batteries and post-lithium material systems
- New electrolyte systems, e.g. solid instead of liquid
- New electrode materials, e.g. Si-based instead of Li- or C-based
- Integration instead of modularization techniques
- Design for remanufacturing and recycling

### Electric Drives Production

- Automated processes and machinery for the manufacturing of electric drives
- Alternative motor technologies for EVs, e.g. reluctance motor, PM synchrony
- Higher system integration, e.g. integrated power electronics, integrated cooling system
- Alternative winding technologies, e.g. (Continuous-) Hairpin instead of round enameled wire, basket insertion instead of pull-in insertion
- New joining technologies, e.g. ultrasonic or induction supported instead of hot crimping or laser welding instead of crimping

### Lifecycle Assessment

- Lifecycle Assessment
- Lifecycle Assessment in production environments and link to absolute sustainability
- Influencing factors on energy consumption of electric vehicles in all phases of the product lifecycle
- Optimization potentials in manufacturing processes
- Integrating the carbon footprint into economic evaluations

### Production Systems

- Systems and machinery for the manufacturing of electrified aviation
- Systems and machines for the manufacturing of ground-based E-Mobility
- Systems and machines for the manufacturing of electrified nautical mobility

## CONFERENCE CHAIRMAN

Prof. Franke J., Friedrich-Alexander-Universität Erlangen-Nürnberg (DE)

