

## Scientific contribution

Contributors shall send a 1 page abstract containing:

- the sub-topic, what it is made for (indicate if it is in the frame of TRR 154)
- the intended type of presentation (oral, poster)
- the authors (presenting author underlined with his Email address)
- the title and a short description of the results. The formats are given here: [www.isenec.com](http://www.isenec.com)

After the acceptance of your abstract, your full paper (4-8 pages) will be reviewed by the program committee. The proceedings of the iSEnEC 2020 containing all final accepted scientific papers will be published by Springer Vieweg.

Together with the submission of the abstract the main author has to agree also for his co-authors that the full version of his contribution can be published by Springer. Please note, that all pictures and graphics will be printed in b&w. The abstract has to follow the formal requirements given here: [www.isenec.com](http://www.isenec.com)

## Poster presentations

iSEnEC 2020 will be completed by a comprehensive poster presentation. Research institutes, companies and other organizations will be offered the opportunity to present scientific posters to all participants.

For any further questions regarding iSEnEC poster presentation please contact the conference organizer.

## Important dates

Submission of abstracts:	21.01.2020
Notification of acceptance of abstracts:	18.02.2020
Submission of full papers:	20.03.2020
Review of full papers:	27.03.2020
Decision:	10.04.2020
Submission of final full papers:	30.04.2020

Bildquelle: Uwe Niklas

## Venue and accomodation

### Maritim Hotel Nuremberg

Frauentorgraben 11  
90443 Nuremberg, Germany  
Phone: +49 911 23630

**Preferential Rate:** Single Room 112 € incl. breakfast and VAT, Please make your reservation directly with the hotel at the latest till 23.06.2020, quoting iSEnEC 2020.

### Conference Fee

Category	Participation fee until 15 <sup>th</sup> of April 2020*
Participant	690 EUR
Speaker/Presenter	430 EUR

\*Participants who register after 15<sup>th</sup> April 2020 will be charged a surcharge of 200 EUR.

Scientific employees of the universities receive a discount of 10 %. Conference Fee, VAT not included.

The Conference Fee includes:

- 2-Day-Scientific-Conference
- more than 35 presentations
- Get-together with 200 scientific experts
- Printed conference proceedings
- Full board (6 coffee breaks, 2 lunches, evening reception)

Accommodation is not included.

### Conference organizer

FAPS-IPC GmbH  
Flößbastr. 22a  
90763 Fürth  
Phone: +49 911 235 8854-0  
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### Contact conference organizer

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# iSEnEC 2020

Integration of Sustainable Energy  
CONFERENCE

22<sup>nd</sup> and 23<sup>rd</sup> July 2020  
Maritim Hotel Nuremberg, Germany

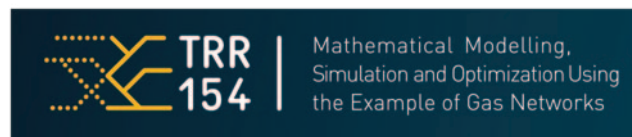
## Structure and abstracts of iSEnEC 2020

The iSEnEC 2020 continues the successful events of Ise-nec 2016 and 2018 conferences, but is more focused and has two general topics as “systems” and “storages” (see below). Each lecture or poster should demonstrate the contribution to an energy system, the motto of this conference.

The Programme Committee will rank the abstracts and will put together an oral and a poster programme in two parallel sessions.

## Conference chairman

**Prof. Dr. Wolfgang Arlt,**  
University of Erlangen-Nuremberg (GER)



## iSEnEC 2020 - main topics

### 1. Design of Energy Systems

■ **Sustainable Energy Networks: Electricity and Gas**  
The session deals with research and developments aspects of resilient energy grids and provides attendees with practical solution-oriented topics for network planning, operation and control. Major areas to be addressed are transmission, distribution and microgrids. Furthermore, the session topics are dedicated to the integration of renewable energy systems and storages including sector coupling concepts.

■ **Future Energy Markets**  
The shift towards an energy system based on renewable sources not only poses technological challenges, but also raises market design issues. This session will focus on innovative contributions that analyze technology choice, investment, production and consumption decisions in future energy markets and also take adjustments to the current framework conditions into account. Important topics include, but are not limited to decentralized smart energy markets and the consideration of sector coupling.

■ **Modelling and optimization of electricity and gas networks (including TRR 154)**  
Methods for Simulation and Optimization are still one of the pillars in computational engineering bridging the gap between theory and practice.  
In this session we focus on new developments in this field, among them are the coupling of integer programming with nonlinear or PDE optimization, respectively, where uncertainties may play an additional role. Special attention will be given to the discussion on data-driven versus model-driven methods.

■ **Photovoltaics: emerging trends in technology, application development and systems integration**  
The future energy supply will be based to a large extent on renewable electricity from photovoltaics and wind. Photovoltaics is already making visible contributions to the worldwide energy supply, but lacks significant volume compared to conventional fossil fuels. The central challenge for the next decade are the development of measures that can significantly accelerate the expansion of photovoltaics. This requires further technological advances - such as the current innovation push in the area of perovskite PV, new application developments - such as the integration of PV in facades or for energy-autonomous transport, as well as new market models for the combined expansion of photovoltaics, storage and distribution.

## iSEnEC 2020 - main topics

### 2. Chemical and electrochemical storages

On the way towards an energy system based on the spatially and temporally inhomogeneously produced renewable energy it is mandatory to find suitable energy storage solutions. In this track we will concentrate on latest developments in chemical energy storage. The scope encompasses Power-to-X scenarios such as hydrogen-based systems including fuel cells and water electrolysis e. g. using liquid organic hydrogen carrier systems, CO<sub>2</sub> reduction, but also synthetic fuels and advanced batteries.

### 3. Start-ups

The conference will - as usual - have a workshop for founders of start-ups. All participants are invited to attend, oral contributions are by invitation.

In the field of sustainable energy production new firms with innovative technologies as well as business models are emerging. In this session we will discuss with the entrepreneurs, experience their strategies, innovations and business models. Although most of the start-up firms work on their own, they can also be considered as partners for cooperations with established firms.

### Venue

**iSEnEC 2020** will take place in Maritim Hotel Nuremberg. Only a 3-minute walk to the main train station and easy access to the motorway and the airport will enable you to travel quickly and easily.

Absolutely worth seeing is the medieval old town including the mighty Kaiserburg. During the tour through picturesque alleys, historic buildings harmonize with modern architecture. Museums and sights and shopping malls make Nuremberg a vibrant city with lots of atmosphere and flair.

## Publication chairman

Prof. Dr. Jörg Franke,  
University of Erlangen-Nuremberg (GER)

## Programme committee

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University of Erlangen-Nuremberg (GER)

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