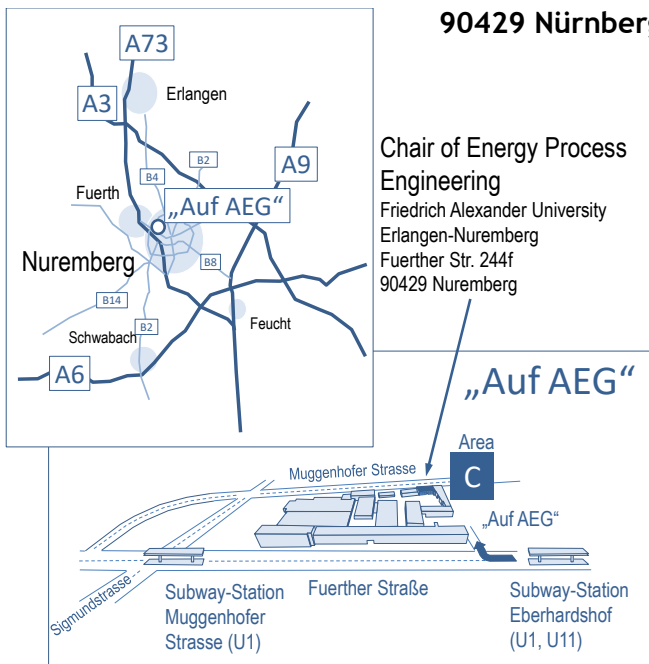


## Venue and Directions

**Lehrstuhl für Energieverfahrenstechnik  
Fürther Straße 244f  
90429 Nürnberg**



Chair of Energy Process  
Engineering  
Friedrich Alexander University  
Erlangen-Nuremberg  
Fürther Str. 244f  
90429 Nuremberg

## Hotels and Accommodation

We kindly recommend these hotels offering a good connection to the conference location "Auf AEG"

**Best Western Hotel Nürnberg City West**  
Regerstr. 6, 90429 Nuremberg, Tel. +49 911 21750  
[www.nuernberg-citywest.bestwestern.de](http://www.nuernberg-citywest.bestwestern.de)  
(in walking distance)

**Derag Livinghotel Nürnberg**  
Obere Kanalstr. 11, 90429 Nürnberg, Tel. +49 911 92950  
<https://www.deraghotels.de/hotel-nuernberg/>  
(three subway stations to conference location at AEG)

**Hotel Prinzregent**  
Prinzregentenufer 11, 90489 Nürnberg  
Tel. +49 911 588188  
<http://www.prinzregent.net/>  
(close to main station, 10 min with subway to AEG)

## Registration

Please register until **Friday, April 15<sup>th</sup> 2018** by Fax  
(+49 911 5302 9030) or via

[www.evt.tf.fau.de](http://www.evt.tf.fau.de)

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Company/  
Organization \_\_\_\_\_  
Address \_\_\_\_\_  
ZIP, Town \_\_\_\_\_  
Country \_\_\_\_\_  
Fax \_\_\_\_\_  
Tel \_\_\_\_\_  
Email \_\_\_\_\_

I will participate in

- Methanation Workshop on Thursday, May 24<sup>th</sup>
- Methanation Workshop on Friday, May 25<sup>th</sup>
- Dinner on Thursday, May 24<sup>th</sup>
- Sightseeing tour before Dinner
  
- I plan to give a presentation during the  
"Open Session"

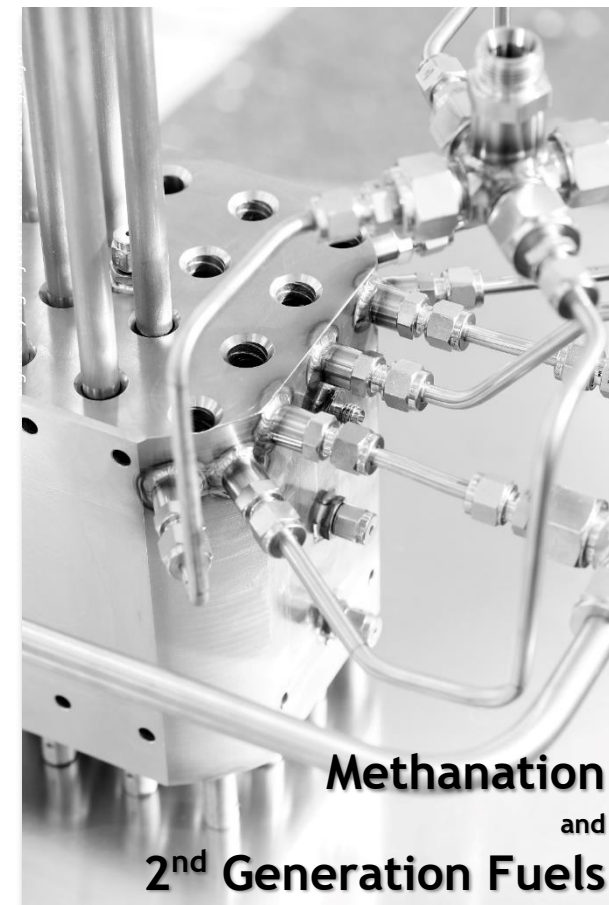
Registration fees

- Early bird registration 230 €  
(deadline February 29<sup>th</sup> 2018)
- Regular (after March 1<sup>st</sup> 2018) 330 €
- Students (BSc and MSc level only) 60 €

I am  Student  Invited Speaker

The registration fee includes coffee/lunch breaks, dinner,  
and sightseeing tour. Presentations will be made available  
online after the workshop.

## Invitation to the 4<sup>th</sup> Nuremberg Workshop



**Methanation  
and  
2<sup>nd</sup> Generation Fuels**

Chair of Energy Process Engineering  
Friedrich-Alexander-University Erlangen-Nürnberg  
Nuremberg, 24<sup>th</sup> - 25<sup>th</sup> May 2018

## About this Workshop

Dear Colleagues,

our first Nuremberg workshop on “Methanation and Second Generation Fuels” started already six years ago in 2012. The focus of the first event of this series was mainly Methanation of coal and biomass derived syngas. A second and third Workshop in 2014 and 2016 continued intense and inspiring scientific discussions with researchers and guests from all over Europe.

The need for renewable gases and fuels became more and more obvious during these years. Mainly due to the increasing share of renewables in the electricity sector. New trends like Power-to-X and biological methanation provide new opportunities and new technologies. Chemical storage is one of the key topics of the world’s “Energiewende”.

New conference series discuss business opportunities and societal impacts of these technologies. But the need for an open and in-depth discussion of technical and scientific details becomes more evident day by day.

The 2018 workshop will address in particular the sources for renewable energy carriers - carbon and hydrogen. The only renewable carbon source - biomass is still one of the main topics of this event. The second focus - flexibilization of reactor concepts - will discuss technical solutions for the integration of volatile hydrogen sources.

Now we are glad to announce the 4<sup>th</sup> Workshop of this series and we are proud that most of the renowned key researchers, companies and research groups from all over Europe and beyond agreed to join this workshop and present their latest results, products, and developments. We kindly appreciate your interest and encourage you to present your latest news in an “Open Session”.

We are looking forward to meeting you at the Energy Campus in Nuremberg!



Prof. Dr.-Ing. Jürgen Karl  
Chair of Energy Process Engineering  
Friedrich-Alexander-University  
Erlangen-Nürnberg

## Thursday, May 24<sup>th</sup>, 2018

### 1. Session: Second Generation Fuels - Fundamentals and Trends

9:30	Registration	
10:00	Welcome address	J. Karl FAU Erlangen-Nürnberg, Germany
10:15	100 years of Methanation	B. Hansen Haldor Topsoe, Denmark
11:00	Ammonia for energy storage: Current activities at thyssenkrupp Industrial Solutions	Ö. Yildirim thyssenkrupp Industrial Solutions, Germany
11:30	Use of agricultural residues for production of biofuels and platform chemicals	S. Max Clariant, Germany

#### Lunch break

13:30	Diversity and Potential of archaeal Microorganisms for the biological Methanation	H. Huber University Regensburg, Germany
14:00	Opportunities and challenges of synfuels	F. Müller-Langer DBFZ, Germany

### 2. Session: Hydrogen and Carbon-Sources

14:30	Fuels and Chemicals from the Sun and Air - pilot test experiences	P. Simell VTT, Finland
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#### Coffee break

15:30	Dynamic production and use of hydrogen in reversible SOEC/SOFC systems	M. Dillig FAU Erlangen-Nürnberg, Germany
16:00	Upgrade of CO <sub>2</sub> streams from biogas plants	T. Schildhauer PSI, Switzerland
16:30	GoBiGas - technical success or fiasko	M. Seemann Chalmers University, Sweden

*Sightseeing tour in the historic city center of Nuremberg*

*Conference Dinner*

## Friday, May 25<sup>th</sup>, 2018

### 3. Session: Flexibilisation and Reactor Concepts

9:00	Heat Transfer Intensification in Catalytic Reactors by Optimized Catalyst Support Geometries	H. Freund FAU Erlangen-Nürnberg, Germany
9:30	ATMOSTAT Catalytic Methanation : From Pilot to Demonstration units	E. Chauvin ATMOSTAT, France

#### Coffee break

10:30	Heatpipe cooled reactor concept for methanation	M. Neubert FAU Erlangen-Nürnberg, Germany
11:00	Process engineering for bio-methanation processes	L. Rachbauer Bioenergy2020+, Austria

### Open Session

11:30	Latest News from the audience	all
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#### Lunch break

### 4. Session: Industrial Integration and Commercial Perspectives

13:30	Thermochemical Synthesis Fuels Research in California - An Overview of Current Topics at UCSD, UCD, and West Biofuels	M. Long University of California, Davis, USA
14:00	Validation of a methanation model for bio-SNG production from plasma assisted waste gasification	M. Materazzi, University College London, United Kingdom

#### Coffee break

15:00	Combined Power-to-Gas and biomass gasification integrated to a steel plant	M. Lehner Montanuniversität Leoben, Austria
15:30	Progress in Methanol Synthesis Technology	T. Schuhmann Air Liquide, Germany
16:00	Summary and Conclusions	J. Karl FAU Erlangen-Nürnberg, Germany