

**FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA**

Faculty of Chemistry and
Earth Sciences



ORGANIC BATTERY DAYS 2019

Preliminary Programme

3 - 5 June 2019 | Jena (Germany)



GENERAL INFORMATION

Date

3 - 5 June 2019

Venue

Friedrich Schiller University Jena
Center for Energy and Environmental
Chemistry Jena (CEEC Jena)
Philosophenweg 7a
07743 Jena
Germany

Website

www.orgabattdays2019.de

Registration

Please register via the online form on
our conference homepage.

Full Registration Fee:	350 €
Reduced Registration Fee (PhD-students and students):	150 €
Employees of FSU Jena and Members of CEEC Jena:	100 €
Workshops:	20 €

Scientific Advisory Board

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(Houston/US)

SCIENTIFIC PROGRAMME

Monday, 3 June 2019

08:30 am REGISTRATION

09:30 am CONFERENCE OPENING

Welcome notes

Prof. Dr. Ulrich S. Schubert
Chairman, Friedrich Schiller University
Jena, Jena (DE)

Wolfgang Tiefensee
Thuringian Minister of Economic Affairs,
Science and Digital Society

Prof. Dr. Alexander Brenning
Dean of the Faculty of Chemistry and
Earth Sciences, Friedrich Schiller University
Jena, Jena (DE)

10:00 am PLENARY LECTURE

Radical polymers as an organic charge-
transport and energy-storage material
Prof. Dr. Hiroyuki Nishide
Waseda University, Tokyo (JP)

10:50 am INVITED LECTURE

Innovative sulfur containing polymers for
batteries
Prof. Dr. David Mecerreyes
Polymat, University of the Basque Country
UPV/EHU, San Sebastián (ES)

11:25 am INVITED LECTURE

Cycle-stable, high capacity metal-sulfur
batteries based on sulfur/
poly(acrylonitrile) (SPAN) cathodes
Prof. Dr. Michael Buchmeiser
University of Stuttgart, Stuttgart (DE)

12:00 pm CONTRIBUTED LECTURE

Exploring organically modified sulfur co-
polymer / CNT network cathode for Li-S
batteries
Dr. Soumyadip Choudhury
Technische Universität Chemnitz,
Chemnitz / Leibniz Institute of Polymer
Research Dresden , Dresden (DE)

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12:20 pm LUNCH BREAK

01:20 pm PROJECT PRESENTATION
DFG Priority Programme SPP 2248 -
Polymer-based batteries
Prof. Dr. Ulrich S. Schubert
Friedrich Schiller University Jena, Jena (DE)

01:45 pm INVITED LECTURE
Tailoring dihydroxyterephthalate unit to-
ward organic lithiated positive electrode
materials with high redox potentials
Dr. Franck Dolhem
University of Picardie Jules Verne,
Amiens (FR)

02:20 pm CONTRIBUTED LECTURE
S-tetrazine as a new redox center for high-
performance electrode materials in
rechargeable batteries
Prof. Dr. Ji Eon Kwon
Seoul National University, Seoul (KR)

02:40 pm CONTRIBUTED LECTURE
Natural quinones as sustainable battery
cathodes
Dr. Clemens Liedel
Max Planck Institute of Colloids and
Interfaces, Potsdam (DE)

03:00 pm CONTRIBUTED LECTURE
Poly(catechol) nanoparticles and their
redox activity
Dr. Klemen Pirnat
National Institute of Chemistry, Ljubljana
(Slovenia) / Polymat, University of the Bas-
que Country UPV/EHU, San Sebastián (ES)

03:20 pm SPONSORED LECTURE
The development of a fully printable
energy storage technology
Dr. Andreas Wild
Evonik Creavis GmbH, Marl (DE)

03:55 pm COFFEE BREAK

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04:25 pm **CONTRIBUTED LECTURE**
Crystallographic change behavior of
2,5-dimethoxy-1,4-benzoquinone during
charge and discharge
Dr. Hikaru Sano
*National Institute of Advanced Industrial
Science and Technology (AIST), Osaka (JP)*

04:45 pm **CONTRIBUTED LECTURE**
Cathode performances of porous organic
crystals formed by charge-transfer
interactions
Prof. Dr. Hirofumi Yoshikawa
Kwansei Gakuin University, Nishinomiya (JP)

05:05 pm **CONTRIBUTED LECTURE**
Empowering organic-based negative
electrode material through molecular
design
Dr. Matthieu Becuwe
*University of Picardie Jules Verne / Institut
de Chimie de Picardie (ICP), Amiens (FR)*

05:25 pm **INVITED LECTURE**
Molecular electrode materials from
nature – design of a green battery
Prof. Dr. George John
*The City College of New York,
New York (US)*

06:00 pm **SHORT POSTER PRESENTATIONS**

06:20 pm **POSTER SESSION AND DRINKS**
to
07:50 pm

07:15 pm **SCIENTIFIC ADVISORY BOARD MEETING**

SCIENTIFIC PROGRAMME

Tuesday, 4 June 2019

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- 09:00 am **INVITED LECTURE**
Understanding superlithiation of organic electrode materials by evolutionary algorithm DFT calculations
Prof. Dr. Daniel Brandell
Uppsala University, Uppsala (SE)
- 09:35 am **INVITED LECTURE**
Progress in all-organic rechargeable batteries using THE anionic CELL configuration
Prof. Dr. Philippe Poizot
University of Nantes, Nantes (FR)
- 10:10 am **CONTRIBUTED LECTURE**
Radical polymer/carbon nanotube hybrids for ultra-thin, stretchable, and solid-state batteries
Dr. Kan Hatakeyama-Sato
Waseda University, Tokyo (JP)
- 10:30 am **CONTRIBUTED LECTURE**
Aqueous batteries based on polyimide and prussian blue analogues
Prof. Dr. Anders Bentien
Aarhus University, Aarhus (DK)

-
- 10:50 am **COFFEE BREAK**
- 11:20 am **INVITED LECTURE**
(Hetero)aromatic redox polymers as electrode-active materials for organic batteries
Prof. Dr. Birgit Esser
University of Freiburg, Freiburg (DE)
- 11:55 am **CONTRIBUTED LECTURE**
Full organic-based aqueous battery with millimeter-thick electrodes
Dr. Joel Gaubicher
University of Nantes, Nantes (FR)
- 12:15 pm **CONTRIBUTED LECTURE**
Development of organic electrode materials for anion-ion batteries
Dr. Lionel Dubois
Université Grenoble Alpes, Grenoble (FR)

SCIENTIFIC PROGRAMME

12:35 pm **CONTRIBUTED LECTURE**
Biodegradable single-use organic batteries
for small-sized electronic devices
Dr. Juan Pablo Esquivel
Institute of Microelectronics of Barcelona
(IMB-CNM), Barcelona (ES)

12:55 pm **LUNCH BREAK**

02:00 pm **CONTRIBUTED LECTURE**
Ultra-low temperature battery based on
non-metal design
Prof. Dr. Hui Zhan
Wuhan University, Wuhan (CN)

02:20 pm **INVITED LECTURE**
Consideration on the preparation and
application of carbonyl electrode materials
Prof. Dr. Jun Chen
Nankai University, Tianjin (CN)

02:55 pm **INVITED LECTURE**
Gel electrolytes for organic batteries
Dr. Alexandra Lex-Balducci
Friedrich Schiller University Jena, Jena (DE)

03:30 pm **CONTRIBUTED LECTURE**
The influence of the electrolyte
composition on the electrochemical
performance of organic batteries
Prof. Dr. Andrea Balducci
Friedrich Schiller University Jena, Jena (DE)

03:50 pm **INVITED LECTURE**
Design for long cycle-life quinone-type active
materials by oligomerization
Dr. Masaru Yao
*National Institute of Advanced Industrial
Science and Technology (AIST),
Osaka (JP)*

04:25 pm **COFFEE BREAK**

04:55 pm **INVITED LECTURE**
Metal-free and membrane-free redox flow
batteries by using immiscible electrolytes
based on organic redox molecules
Dr. Rebeca Marcilla García
IMDEA Energy Institute, Madrid (ES)

SCIENTIFIC PROGRAMME

Wednesday, 5 June, 2019 (parallel sessions)

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- 05:30 pm **CONTRIBUTED LECTURE**
Further investigations of the electrode/
electrolyte interface of organic electrode
materials for Li-ion batteries
Dr. Stéven Renault
University of Nantes, Nantes (FR)
- 05:50 pm **CONTRIBUTED LECTURE**
Insight into solid-state electrochemistry of
bi-redox organic battery materials
Alae Eddine Lakraychi
Catholic University of Louvain,
Louvain-la-Neuve (BE)
- 06:10 pm **INVITED LECTURE**
Redox-active polymer based nano-objects
via polymerization induced self-assembly
Prof. Dr. Jean-François Gohy
Catholic University of Louvain,
Louvain-la-Neuve (BE)
- 06:45 pm **FAREWELL AND AWARD OF THE
WINNERS OF THE POSTER PRIZES**

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- 10:00 am **WORKSHOPS**
Introduction in organic batteries:
basic principles of organic batteries

Hands-on workshop I
Electrode preparation and pouch cell
assembly

Hands-on workshop II
Characterization techniques for organic
batteries
- 10:00 am **PROJECT PLANNING**
Preparation meeting for the DFG Priority
Programme SPP 2248 -
Polymer-based batteries
*Short presentations of interested
scientists and groups*
- 01:30 pm **LUNCH BREAK**
- 02:30 pm **END OF CONFERENCE**

SOCIAL PROGRAMME

Monday, 3 June 2019

08:00 pm **CONFERENCE DINNER**
Botanical Garden Jena
Enjoy a memorable evening in the relaxed atmosphere of the "green lung of Jena"!



Tuesday, 4 June 2019

07:00 pm **THURINGIAN BARBECUE**
Center for Energy and Environmental Chemistry Jena (CEEC Jena)
Thuringia is world famous for its "Bratwurst"! Enjoy a typical Thuringian barbecue evening with us - including stimulating conversations with colleagues and friends.



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