



Final Program

(as performed)

2018 IERE - RWE TI Munich Workshop

- Joint Event co-organized by IERE and VIEW and

Power Generation in Transition



Frauenkirche Munich in front of Alpine panorama

September 11 - 14, 2018

Munich, Germany

Organized by IERE and RWE Technology International GmbH





VGB CONGRESS

VGB

Power Generation

in Transition with technical exhibition

Power Generation in Transition

About the theme

Remember when you got your first mobile phone? It was not smart yet, but still it disrupted your live as you could suddenly make phone calls from almost any place your provider covered. One of the early challenges was that remembering to recharge your phone was a routine disruption that soon became a new routine. The rise of renewables, mobile and digital technologies in the energy industry worldwide requires similar adjustments. Over the past decade, the disparity between utilities is growing fast, with those owners gaining a competitive advantage, who are willing to modernize their business models while others who work against or delay change will lose ground. The majority of global installed capacity is still conventional generation, with coal holding the lead. As those units age – especially when they find themselves in changing markets or regions requiring more challenging operating profiles – they will need modernization and flexibilization in line with new business models.

About the Joint Event



The Joint Event is the collaboration of IERE Workshop and VGB Congress titled as the common theme of "Power Generation in Transition" to be held between September 11 and 14 in Munich, Germany.

12 and 13 September 2018

All participants have the opportunity to join the lectures of both events without limitation and to exchange information together in the common break areas and the exhibition areas as well as the joint Get-Together in the exhibition, the Joint Evening Event and the Joint Technical visit.

Who should attend?

The Workshop is intended for experts actively involved in the selected themes, from IERE members, non-members and academia, as well as all those interested in the evolution of the electrical power industry and the technology development and business development opportunities associated to this evolution. IERE will invite prominent speakers for keynote speeches.





Outline Schedule:

Schedule may be subject to change according to the registration of speakers.

September 11, 2018: Joint Get-together co-organized by VGB

September 12, 2018: 2018 IERE-RWE TI Munich Workshop (Day 1),

Joint Evening Event at Hofbräuhaus co-organized by VGB

September 13, 2018: 2018 IERE-RWE TI Munich Workshop (Day 2)

September 14, 2018: Joint Technical Visit co-organized by VGB

Session Themes:

Session structure may be subject to change according to the registration of speakers. There is a possibility we ask you to change from Oral Session to Poster Session in accordance with the number of submission of abstracts.

Session 1 - Penetration of Renewable Energies

The unpredictability of renewable assets that operate only when the wind blows and the sun shines require changes to operational models. More frequent cycling, start/stops, and ramping of assets cause faster equipment wear. In addition, a cleaner, greener and integrated grid requires the solid foundation of a modernized, upgraded and expanded transmission system. This session will focus on the development and integration of various technologies and systems to adapt to changes in strategy and operational models.

Potential topics include:

- Flexible generation solutions technology and operational advancements
- HRSG design to meet next generation cycling and efficiency requirements
- Transmission as enabler current challenges and innovations in grid technologies
- Case studies of utility transitions





Session 2 - The Greener Side of Generation

There is a growing trend in the power industry to shift away from coal-fuelled generation toward clean power. However the crux of the clean energy debate is that it comes at a price, both fiscal and social. There is a cost to eliminate smog and greenhouse gases by transforming plants to clean coal technologies. This session will focus on technology options, technology selection and grid access issues related to clean power applications and research findings.

Potential topics include:

- Biomass-to-energy conversion project examples
- Biomass conversion technical options and challenges
- Carbon capture, storage and utilization (CCUS) project examples and assessment Studies

Session 3 - Showcasing Innovations for Power Generation

This session will focus on cases studies, application experiences and research findings within the electricity supply industry in deploying new technologies such as digital solutions, big data applications, internet of things (IoT), artificial intelligence and robotics.

Potential topics include:

- Energy and Battery Storage applications in future generation
- Asset Management case studies of digital innovations in plant operation and maintenance
- Big Data intelligence software and advanced analysis
- Cyber security safety check 4.0
- Smart grid technologies

Session 4 - Generating More Efficiently

Market forces and policies are driving the energy industry to reduce carbon emissions implementing advanced reduction technologies. This session will focus on the latest technology trends and options aiming to reduce emissions, improve efficiency and lower generation costs.

Potential topics include:

- Technical, operational and IT aspects of boosting energy efficiency
- Energy efficiency case studies

Poster Session

There is no poster session in this Workshop





Program:

Session structure, speakers and timetable are subject to change.

Welcome Reception

Joint Get-together in the VGB Congress exhibition area in the evening

Tuesday, September 11, 2018

INFINITY Hotel & Conference Resort Munich, Auditorium

17:30 – Registration

18:00 – 21:00 Joint Get-together in the VGB Congress exhibition area

2018 IERE-RWE TI Munich Workshop

- Workshop Day 1 -

Wednesday, September 12, 2018

INFINITY Hotel & Conference Resort Munich, Ground Floor, Room Alpsee

08:30 – 09:10 Registration

Opening Session

09:10 – 09:20 O-1 Opening Address

Dr. Sung Hwan Bae

(Vice Chair of IERE, President of KEPCO Research Institute, Korea)

09:15 – 09:30 O-2 Welcome Address

Mr. Ingo Birnkraut

(CEO & Managing Director, RWE Technology International GmbH,

Germany)

Keynote Addresses

09:30-10:00 K-1 'Oxyfuel combustion of solid fuels - groundbreaking scientific

results from detailed research'

Prof. Dr. Reinhold Kneer

(Head of Chair, Institute of Heat and Mass Transfer, RWTH Aachen

University, Germany)





Session 1 : Penetration of Renewable Energies

Chair person: Dr.-Ing. Christoph Pellinger (FfE, Germany)

10:00 – 10:30 S1-1	'Fuel Flexibility and Fuel Change in Coal Power Plants' Mr. Axel Meschgbiz (Senior Thermal Engineer, TOE-M / Mechanical Engineering, RWE Technology International GmbH, Germany)
10:30 – 11:00 S1-2	'Technologies to use carbon free ammonia in power plant' Dr. Toshiyuki Suda (Manager, Business Development Dept., Resources, Energy & Environment Business Area, IHI Corporation, Japan)
11:00 – 11:30 S1-3	'VIBRO-piling A cost-efficient, environmentally friendly method to install offshore wind turbine foundations' Dr. Felix Cebulla (Corporate Technology, innogy SE, Germany)
11:30 – 12:00 S1-4	'Development of Hybrid Geothermal Power Plants in Japan' Dr. Yoshinobu Nakao (Senior Research Engineer, Energy Engineering Research Laboratory, Central Research Institute of Electric Power Industry, Japan)
12:00 – 12:30 S1-5	'An assessment of the flexibility of combined heat and power plants in power systems with high shares of intermittent power sources' Ms. Johanna Beiron (PhD student, Energy Technology, Chalmers University of Technology, Sweden)
12:30 – 14:00	Break in the exhibition





Session 2: The Greener Side of Generation

Chair person: Mr. Kyoungil Park (KEPCO Research Institute, Korea)

14:00 – 14:30 S2-1	'Eemshaven Biomass co-combustion' Mr. Michael Schütz (Manager, Mechanical Engineering Department, RWE Technology International GmbH, Germany)
14:30 – 15:00 S2-2	'Technology status of biomass power generation in Korea' Mr. Kyoungil Park (Principal Researcher, Clean Power Generation Laboratory, KEPCO Research Institute, Korea)
15:00 – 15:30 S2-3	'Utilization of CO2 from Waste Incineration Plants for Power-to-Fuel Technology' Prof. Dr. Emmanouil Kakaras (Senior Vice President Energy Solution, Mitsubishi Hitachi Power Systems Europe GmbH, Germany)
15:30 – 16:00 S2-4	'Progress of Osaki CoolGen Oxygen-blown IGCC and CO2 Capture Demonstration' Mr. Kyohei Nakamura (Manager, Engineering Dept., Carbon Capture Group, Osaki CoolGen Corporation, Japan)
16:00 – 16:30	Break in the exhibition
16:30 – 17:00 S2-5	'Advanced KM CDR Process Using New Solvent' Mr. Takashi Nojo (Senior Research Engineer, R&D Center, The Kansai Electric Power Co., Inc., Japan)
17:00 – 17:30 S2-6	'Study of the occurrence of mercury in coal from Boyacá, Colombia' Ms. Sonia Guerra Lemoine (Dirección de Laboratorios, Grupo de Caracterización y Procesamiento de Minerales y Carbones, Servicio Geológico Colombiano, Colombia) [Presentation is cancelled but presentation file is available on IERE website]





Joint Evening Event (optional)

"Welcome Evening" with VGB -Dinner at Hofbräuhaus in Munich-

18:30	Departure at Infinity Hotel
19:15	Arrival at Munich old town
	Ensuing guided walk to the Hofbräuhaus approx. 10 minutes
19:30	Start
23:00	End

- The number of participants is limited.
- IERE members are requested to make registration and finish payment by July 31.
- For non-IERE members (include Academia), please register by June 31 with Workshop registration.
- A shuttle service will be available as of 22:00.
- A detailed schedule will be available later.

THE MUNICH HOFBRÄUHAUS: WHERE THE WHOLE WORLD MEETS UP

Munich, beer and the Hofbräuhaus – they've all belonged together for the past 400 years. Since the early 19th century, the famous beer cellar at the heart of the city has been a magnet for the people of Munich and travelers from every corner of the globe. Its delicious beer, traditional specialities, legendary "Gemütlichkeit" and fascinating history have made the Hofbräuhaus into the most famous beer cellar in the world.

On September 27, 1589, Duke Wilhelm V founded a brewery on the site of the Munich royal residence of that time. This first Hofbräuhaus lasted till the year 1808 and was only a few steps away from today's one. Maximilian I built his ducal Weissbier brewery in 1607, thus laying the historical foundations of today's Hofbräuhaus.

Half the daily visitors are regulars. And one of them is actually an angel – if the old legend about the "Münchner im Himmel" is to be believed: Alois Hingerl, the main figure in the story, was a regular at the Hofbräuhaus all his life. When he died and arrived in heaven he irritated a lot of people there by being so homesick for Munich. He moaned so much that eventually God decided to have mercy on him, and sent him back to his old home on a mission for the Bavarian government. But the moment angel Aloisius smelt the air of Munich again, he forgot all about his divine mission and flew straight off to the Hofbräuhaus. There he finally found peace of mind, and has been enjoying one beer after the other ever since. And to this day, so ends the tale, the Bavarian government has been waiting in vain for divine inspiration.







2018 IERE-RWE TI Munich Workshop

- Workshop Day 2 -

Thursday, September 13, 2018

INFINITY Hotel & Conference Resort Munich, Ground Floor, Room Alpsee

08:30 – 09:00 Registration

Keynote Addresses

09:00 – 09:30 K-2 'Make or buy – foster innovation and the role of Venture Capital'

Dr. Max Voss

(Manager of Innovation, Business Development & New Technologies, RWE Generation SE, Germany)

Session 3 : Showcasing Innovations for Power Generation

Chair person: Dr. Max Voss, (RWE Generation SE, Germany)

09:30 – 10:00 S3-1 'RWE's former, current and possible future energy storage applications'

Mr. Jan Josef Bernholz

(Project Engineer, TOE Engineering, RWE Technology International GmbH, Germany)

10:00 – 10:30 S3-2 'Battery Energy Storage Solution - Enhancing the operational flexibility of flexible combined cycle industrial gas turbines' *Mr. Uwe Fuchs*

(Energy Management Division, Medium Voltage & Systems, Projects & Applications, Siemens AG, Germany)

10:30 – 11:15 Break in the exhibition

11:15 – 11:45 S3-3 'Recent trends in the installation of batteries in power generation systems in countries hoping to reduce carbon emissions'

Dr. Joji Kawano

(Senior Research Associate, Research Department, Japan Electric

Power Information Center, Japan)





11:45 – 12:15 S3-4 'Digital solutions for optimization of asset operation and maintenance: MHPS TOMONITM for power plants and MHI ENERGY CLOUDTM Service for large energy users'

Dr. Christian Bergins

(Product Manager, Lead Engineering, Mitsubishi Hitachi Power Systems

Europe GmbH, Germany)

12:15 – 12:45 S3-5 'The Application of Artificial Intelligence in The Field of Power

System Dispatching and Control'

Mr. Xin Shan

(Department Manager, R & D Section, NARI Group Corporation,

China)

12:45 – 14:00 <u>Break in the exhibition</u>

Session 4 : Generating More Efficiently

Chair person: Dr. Fumihiko Yoshiba (CRIEPI, Japan)

14:00 – 14:30 S4-1 'Efficiency and Energy Transition'

Dr. Martin Heinen

(Senior Process Engineer, TOE Engineering, RWE Technology

International GmbH, Germany)

14:30 – 15:00 S4-2 'The Future of Thermal Power Plants Under the Expansion of

Renewable Energy in Japan'

Mr. Kojiro Hemmi

(Research Associate, Research Department, Japan Electric Power

Information Center, Japan)

15:00 – 15:45 <u>Break in the exhibition</u>

15:45 – 16:15 S4-3 'Evaluation of a Contribution of Thermal Power Plant's Flexibility

on a Stability of Power System'

Dr. Fumihiko Yoshiba

(Senior Research Scientist, Energy Engineering Research

Laboratory, Central Research Institute of Electric Power Industry,

Japan)





16:15 – 16:45 S4-4 'Improving Performance and Flexibility of Thermal Power Plants

Combined with Advanced Digital Technologies'

Dr. Christian Bergins

(Product Manager, Lead Engineering, Mitsubishi Hitachi Power

Systems Europe GmbH, Germany)

16:45 – 17:15 S4-5 'Development on The Optimal Operational Power-Plant's

Supporting-System'

Dr. Hideyuki Ishigami

(General Manager, Thermal Power Business Department, CHUBU

Electric Power Co., Inc., Japan)

17:15 – 17:45 S4-6 'Development of Abnormality Detection System for Power Plant

Facility'

Dr. Jong-Duk Son

(Clean Power Generation Laboratory, KEPCO Research Institute,

Korea)

Closing Remarks

17:45 – 17:55 *Mr. Ingo Birnkraut*

(CEO & Managing Director, RWE Technology International GmbH,

Germany)

17:55 – 18:00 *Dr. Takao Watanabe*

(Secretary General, IERE Central Office)





Joint Technical Visit (Optional) - Workshop Day 3 -

Friday, September 14, 2018

Visiting Sauerlach Geothermal Plant – Stadtwerke München

(For participants who have booked the optional Technical Tour)

09:00	Meeting point Infinity Hotel
	Bus transfer, 1 h
10:00	Start technical visit
	Sauerlach Geothermal Plant, Energiestraße
	Duration: about 2 h
12:00	Return
13:00	Arrival Infinity Hotel

- <u>Participants: 40 maximum.</u> Please register as early as possible.
- IERE members are requested to make registration and finish payment by July 31.
- For non-IERE members (include Academia), please register by June 31 with Workshop registration.

Sauerlach Geothermal Plant - Stadtwerke München

A geothermal energy source is hot thermal water drawn out of easily permeable limestone layers in what is known as the Malm aquifer, a geological stratum found in wide parts of the region. Munich is located right on top of a huge reservoir of natural energy source: hot-water accumulations with temperatures ranging from 80 °C to 100 °C are located below the surface of the earth at a depth of 2,000 metres (northern city limits) to 3,000 metres (southern city limits). The heat from these geothermal sources is ideally suited for use in heating . This involves pumping the hot water to the surface and channelling it through heat exchangers where its energy is extracted. The cooled water is then fed back into the deep -lying reservoir. The geothermal power cycle thus does not impact on the ecosystem.

In Sauerlach, the thermal water temperature is much higher than in Munich – more than 140 °C at a depth of about 4,200 metres. As a result, the thermal water can also be used for electricity generation, not just for heating purposes. The Sauerlach geothermal combined-heat-and-power plant delivers electricity to 16,000 households while simultaneously providing heating for Sauerlach households.





Technical data of the Sauerlach plant

Well depth (borehole depth):

Thermal water temperature: approx. Thermal water flow rate: approx.

Electricity output:

Annual electricity output:

Maximum heat extraction for supply to Sauerlach:

Th1: 4,757 m Th2: 5,060 m

Th3: 5,567 m

140 °C

110 litres/second approx. 5 megawatts approx. 40 million kWh

4 megawatts

4 million kWh per annum







ONE TOPIC: POWER GENERATION IN TRANSITION

ONE VENUE: MUNICH UNTERSCHLEISSHEIM

TWO EVENTS: VGB CONGRESS & IERE WORKSHOP



VGB CONGRESS



The Joint Event is the collaboration of the annual VGB Congress and IERE Workshop titled with the common theme "Power Generation in Transition". The international IERE workshop is supported by RWE Technology International GmbH, Essen as local host company. All participants have the opportunity to join the lectures of both events without limitation and to exchange information together in the common break areas and the exhibition areas as well as the joint Get-Together in the exhibition, the Joint Evening Event and the Joint Technical visit.

Tuesday	Wednesday			Thursday				
	09:00	Visit of the Exhibition		09:00 09:30	A1 A2	C1 C2	E1 to E3*	ion
	09:30	Opening Ceremony Welcome Address	tion	10:00	A3	C3		xhibit
	Honours		xhibi	10:30	Break in the Exhibition			<u>iii</u>
	PLENA 11:00	RY SESSION P1	bition Exhibition	11:15 11:45	A4 A5	C4 C4	E4 to E6	ibitio
	11:30 12:00	P2 Plenary Discussion	=	12:15	A6	C6		Exh
	12:30	Break in the Exhibition	EX	12:45	Break	in the	Exhibition	oition
	14:00 14:20	V1 V2	hibition	14:00 14:30	B1 B2	D1 D2	E 7 to E 9	Exhit
	14:40 15:00	V2 V3 Panel Discussion	Exhi	15:00	Break	in the	Exhibition	tion
	16:00	Break in the Exhibition	ition	15:45	В3	D3		Exhibi
	16:30 -		Exhit	16:15	B4	D4		
	18:00	Visit of the Exhibition		16:45	End			Exhibition
uo			Exhibition					Ш×
18:00 to Get-Together	19:00	Welcome-Evening	û			Friday		
18:00 to Get-Together 21:00 in the Exhibition				10:00- 12:00	Techn	ical Vi	sits	

^{* =} Short presentations of 10 minutes and ensuing discussio of 60 minutes.





Conference languages: German and English - simultaneous translation provided

Tuesday, 11 September 2018

Get-together in the exhibition

starting 18:00 until 21:00

The VGB PowerTech and the exhibitors invite all participants to a get-together. Catering will be arranged.

Use the opportunity to intensify your contacts and to have interesting conversations.

Wednesday, 12 September 2018

Opening of the congress

Plenary session

Theme: The European Development Towards CO₂ Neutrality

Chair: Sonja van Renssen, ep energy post, Belgium

Thursday, 13 September 2018

Technical Sessions

Section A

Sector coupling and power plant optimisation

Section C

Storage - experiences & potentials

Section B

Progress through digitalisation - productivity/economy

Section D

Gas to power technology and Combined heat & power

Section E

Short Presentation with Discussion

For more information, visit VGB CONGRESS website shown below and download program.

URL: https://www.vgb.org/en/kongress_2018.html





Call for Papers (closed)

<< Abstract Submission: No later than <u>June 6, 2018</u> >>

You are kindly requested to submit abstracts of the Oral Session or Poster Session for the 2018 IERE - RWE TI Munich Workshop by email by <u>June 6, 2018.</u>

Working language is English.

to: register (at) iere.jp [Please substitute "(at)" with "@"]

IERE Central Office

2-11-1 Iwado Kita, Komae-shi, Tokyo 201-8511, Japan

Phone: +81-3-5438-1717 Fax: +81-3-3488-5100

As for the **format of the abstract**, please refer to the IERE website as follows.

https://www.iere.jp/events/workshop/2018-munich/index.html

<< Presentation files Submission: No later than August 20, 2018 >>

You are kindly requested to submit presentation files (Powerpoint) of the Oral Session and Poster Session for the 2018 IERE - RWE TI Munich Workshop by email by **August 20, 2018.**

Abstract and presentation file will be uploaded IERE website and opened to all participants before the Workshop and to the participants of the Workshop/VGB Congress and IERE members after the Workshop.

Working language is English.





Submission Items & Deadlines

For Participants [including speakers]

Items	Format No.	Deadline	To:
Registration Form (Page 22)	1	July 31, 2018 September 3, 2018	register(at)iere.jp [Please substitute (at) with @]
VISA Form (If necessary, Page 24)	5	July 31, 2018 (It takes a few weeks to issue)	Ditto
Registration Fee	_	July 31, 2018 September 3, 2018	Please refer to Page 17
Joint Evening Event Fee [optional]	_	July 31, 2018 September 3, 2018	Ditto
Joint Technical Visits Fee [optional]	_	July 31, 2018	[Subscription was closed on August 27 as it reached capacity]

For Speakers

Items	Format No.	Deadline	То:
Abstract	2	June 6, 2018	
Speaker's Information	3	July 31, 2018	register(at)iere.jp
Copyright Permission	4	July 31, 2018	[Please substitute (at) with @.]
Presentation Slides (PowerPoint file)	_	August 20, 2018	

The formats (No.1 to 5) can be downloaded from

URL: https://www.iere.jp/events/workshop/2018-munich/register.html

Speakers are kindly requested to submit their Speaker's Information and Copyright Permission by July 31, 2018 and their Presentation Slides (PowerPoint file) by August 20, 2018.





Registration Fee

The Registration fee will be announced in the coming 1st announcement.

If you have any questions on registration fee, please kindly ask to IERE Central Office <u>register</u> (at) iere.jp [Please substitute "(at)" with "@"].

IERE members: EUR 450

(Optional events)

- Joint Evening Event : EUR 120- Joint Technical Visit : EUR 30

Non-members: EUR 1,950 (inclusive of optional events)

Academic participants: EUR 600 (inclusive of optional events)

Joint Get-together for an

Accompanying person(spouse/partner): EUR 60

Registration fee will cover the attendance of the Joint Events as follows.

·	- Welcome reception(Joint Get-together with VGB) on September 11, 2018				
IERE Workshop	- Workshop Day 1 including break and Lunch on September 12, 2018				
	- Workshop Day 2 including break and Lunch on September 13, 2018				

	- Joint Get-together with IERE on September 11, 2018
VGB Congress	- Congress Day 1 including break and Lunch on September 12, 2018
	- Congress Day 2 including break and Lunch on September 13, 2018

Recommended optional events

- Joint Evening Event

Joint dinner at Hofbräuhaus in Munich on September 12

- Joint Technical Visit

Visiting Sauerlach Geothermal Plant - Stadtwerke München on September 14 Tour starts/finishes at Infinity Hotel from 9:00 to 13:00 without lunch.

Both offers are on a first-come-first-served basis.





Registration

As mentioned earlier at "About the Joint Event" on Page 1, 2018 IERE-RWE TI Munich Workshop is a part of the Joint Event co-organized IERE and VGB. You are kindly requested to register according to your membership of IERE or VGB. When you have memberships both IERE and VGB, please kindly ask to IERE Central Office register (at) iere.jp [Please substitute "(at)" with "@"] in advance.

IERE Central Office kindly ask for Credit Card Payment, Bank Transfer is available only for participants with IERE membership.

Deadline: July 31, 2018 September 3, 2018

(a) On-line Registration

URL: https://www.iere.jp/cgi-bin/event_form/18WS/event_form_entry.cgi

or

(b) Please submit a registration form (Format 1, Page 24) to IERE Central Office by e-mail.

Deadline: July 31, 2018 September 3, 2018

Payment

Please make payment for the above mentioned fee by <u>July 31, 2018</u> September 3, 2018.

IERE Central Office kindly ask participants for Credit Card Payment, Bank Transfer is available only for participants with IERE membership. Central Office will issue and send the ticket for on-site reception to each participant via email after the payment.

Participants should show the tickets to the reception staff when checking in the venue.

(a) On-line Credit Card Payment

Please access to the URL: https://www.iere.jp/Payment/paypal_18WS.html

(b) Bank Transfer * (available only for IERE members)

Name of the Bank: MUFG Bank, Ltd.

Name of the Branch: Seijo branch

Name of the account: IERE
Account Number: 0091344

Bank address: 15-1 Seijo 6-chome, Setagaya-ku, Tokyo, 157-0066 JAPAN SWIFT code: B O T K J P J T

^{*} Remittance charge, Lifting charge, Correspondent charge and other charges should be paid by participants.





Visa (Please do not forget!)

For participants from some countries needing a VISA to enter Germany, please consult with travel agent in your country for the details.

If you need an Invitation Letter*, please refer to 'Submission Form for Visa Application Documents' on Page 24.

* RWE Technology International GmbH may be able to issue an invitation letter for participants who need to apply for Visa. It may take a few weeks to complete the procedures in RWE Technology International, so please submit the form as soon as possible.

Disclaimer: RWE Technology International reserves the right to fulfill or decline, at RWE Technology International's discretion, requests for letters of invitation for visa application support purpose.





Conference Venue & Accommodations

Conference Venue

INFINITY HOTEL & CONFERENCE RESORT MUNICH, Munich

Location: Andreas-Danzer-Weg 1 85716, Unterschleißheim, Deutschland

Website: https://www.infinity-munich.de/en.html





Map URL: https://goo.gl/4Vh6tG

Directions URL: https://www.infinity-munich.de/en/directions.html





Accommodations

INFINITY HOTEL & CONFERENCE RESORT MUNICH, Munich

Location: Andreas-Danzer-Weg 1 85716, Unterschleißheim, Deutschland

INFINITY HOTEL gives special rates for conference participants as indicated below.

Website: https://aws.passkey.com/event/49547839/owner/1468684/home?lang=en_US
(valid until July 16, 2018)







REGISTRATION FORM

Format 1

Power Generation in Transition

2018 IERE - RWE TI Munich Workshop September 11-14, 2018, Munich, Germany

Please type

at appropriate boxes, then send this form by July 31, 2018-September 3, 2018 via email to:

IERE Central Office: register(at)iere.jp [Please substitute (at) with @] / Fax: +81-3-3488-5100

-	7				
	□ Prof. □ Dr. □ Mr. □ Ms. □ Other, Please specify:				
1. Name	First Name Family Name				
2. Position, Department	<u> </u>				
3. Company/Organization					
4. Address	Zip Code Country/Region				
	E-mail				
5. Contact Information	Phone Number				
	Fax Number				
6. I will contribute to a	☐ Yes ☐ No				
presentation	Title:				
7. Registration Fee [September 11-14]	Registration Fee [Participants including speakers should pay registration fees.] EUR 450 : IERE Member EUR 1,950 : Non-IERE Member (inclusive of optional events of 8 & 9) EUR 600 : Academia (inclusive of optional events of 8 & 9) Note: When participation is canceled irrespective of the reason after August 20, 2018,				
	Registration Fee might be charged or not be reimbursed.				
8. Joint Evening Event (Optional for only Members) [September 12]	EUR 120 per person : Dinner at Hofbräuhaus in Munich ☐ Yes : Number of participants (including accompanying persons) ☐ No * The offer is on a first-come-first-served basis.				
[CLOSED] 9. Joint Technical Visit (Optional for only Members) [September 14]	EUR 30 per person: Visiting Sauerlach Geothermal Plant - Stadtwerke München [Subscription was closed as it reached capacity] * The maximum number of participants is up to 40. ** Admission will be allotted in order of application.				
10. Joint Get-together	Registration Fee covers the Joint Get-together as well as lunch on September 12 & 13.				
attendance not mandatory	For reservations, please let us know your attendance. □ Joint Get Together on September 11				
11. Accompanying Person	If your spouse or partner accompanies you on Joint Get Together, please write her or his name, title and the number of the persons (Mr./Ms./ person(s)) □ EUR 60 per person: Joint Get Together on September 11				
12. Payment Amount	Total: EUR				
13. Payment Method [to be completed by July 31 September 3]	☐ Credit Card: URL for On-line Credit Card Payment (in EUR): https://www.iere.jp/Payment/paypal_18WS.html ☐ Bank Transfer (available only for IERE members) * IERE Central Office will send you the invoice.				
14. Invitation Letter for VISA	RWE TI may be able to issue an invitation letter for participants who need to apply for Visa. Disclaimer: RWE TI reserves the right to fulfill or decline, at RWE TI's discretion, requests for letters of invitation for visa application support purposes. □ I need an invitation letter for Visa application. Name(s)/Country on passport(s):				
15. Information	Do you agree with receiving e-mail notice on future activities/IERE E-mail Magazine				
from IERE from IERE Central Office? Yes No					
· ·	'Participants list' in the conference bag to facilitate communication among				
	ntain '1. Name', '2. Position, Department', '3. Company/ Organization etc.', and '6. Country/Region' of this format. If you DON'T want to open these				
	'at appropriate boxes shown below.				
☐ 2. Position, Department	☐ 4. e-mail address				
, <u>*</u>					





Data protection information

1. General

We at International Electric Research Exchange ("IERE") take the protection of your personal data very seriously. Your privacy is important to us. We process your personal data in accordance with the applicable legal data protection requirements for the purposes listed below. Personal data in the sense of this data protection information is all information that is related to your person. In the present case these are in particular your contact data as well as the data for communication with you ("personal data").

2. Controller and contact

Responsible for the processing of your personal data is IERE Central Office, 2-11-1 Iwado-Kita, Komae-shi, Tokyo 201-8511 Japan, TEL +81-3-5438-1717, FAX +81-3-3438-5100.

3. Purposes for which your data are collected and processed and their legal basis

3.1 Participant list for 2018 IERE-RWE TI Munich Workshop

IERE processes your personal data for the purpose of promoting communication among the participants of the 2018 IERE-RWE TI Munich Workshop by distributing the participants list to each participant at the venue.

The legal basis for the processing and provision of your personal data is therefore Art. 6 GDPR, Lawfulness of processing, subparagraph (1), point f) ("legitimate interests) https://gdpr-info.eu/art-6-gdpr/.

4. Recipient of your personal data

Your personal data will also be used by other companies that work on behalf of IERE ("contract processors") or in the context of IERE's business partnerships ("third parties"). These can be external companies and partners ("IERE Partners").

4.1 Data storage and deletion

The data will be kept for the duration of the 2018 IERE-RWE TI Munich Workshop (Sep 11-14, 2018) and for up to 3months. After 3 months at the latest after the Workshop, all data collected will be deleted without exception.

5. Your rights

5.1 Information, correction, deletion etc.

We will be happy to tell you whether and to whom we have stored your personal data and, if applicable, to whom we have passed them on. In accordance with the legal provisions, you may assert the following additional rights: Correction, deletion, restriction of processing (blocking for certain purposes) and data transmission.

5.2 Right of withdrawal

If you have given us a separate **consent** for the processing of your personal data, you can **revoke** this at any time. The legality of the processing of your data until revocation remains unaffected by a revocation.

5.3 Questions or complaints

If you have any questions or complaints, you have the right to contact the responsible supervisory authority, the North Rhine-Westphalia State Office for Information Security and Data Protection www.lda.bayern.de/en

6. Contact

If you have any questions or comments on the privacy policy of IERE (for example, on the disclosure and updating of your personal data), please contact us at office@iere.jp.

Tokyo, Japan, April 27, 2018

Takao Watanabe Secretary General IERE Central Office

Central Office takes responsibility for processing participants' personal data based on "Data protection information".

☐ I agree the policy for processing my personal data with IERE Central Office.





Format 5

Submission Form for Visa Application Documents

If participants need Visa application documents (include invitation letter), please type and fill out the form and send to: IERE Central Office at Email: register(at)iere.jp [Please substitute (at) with @]. Be sure to submit it by July 31, 2018.

RWE TI Munich Worl * RWE TI may be able to issue	kshop. Visa application documents (incl		pation of the 2018 IERE - nts who need to apply for Visa. It as possible.			
Disclaimer: RWE TI reserves th application support		VE TI's discretion, requests for le	tters of invitation for Visa			
Name on passport	First Name:	Middle Name:	Family Name:			
Gender	☐ Male ☐ Fe	emale				
Date of birth						
Passport No.						
Nationality						
Occupation						
Company/ Organization etc.						
Expected date of entry						
Flight information of entry						
Expected date of departure						
Flight information of departure						
Accommodation/ Hotel						
Contact information (Mobile phone number)						
	☐ September 11, Joint Get-Together					
Colloquium Participation	☐ September 12, 2018 IERE - RWE TI Munich Workshop (Day 1)					
	☐ September 13, 2018 IERE - RWE TI Munich Workshop (Day 2)					
	☐ September 14, Joint Technical Visit					

[Privacy Policy]

The Receiving Party agrees not to use any Private Information of the Disclosing Party for any purpose except for the procedure of VISA application among the relevant parties.

The Receiving Party agrees not to disclose any Private Information of the Disclosing Party to any third parties.





IERE Members List (as of August 1, 2018)

Australia CS Energy Ltd. CSIRO

Canada Powertech Labs Inc.

China CEPRI GPG NARI

France Enedis ENGIE

Germany EnBW innogy SE RWE TI

Hong Kong SAR CLPRI Indonesia PLN Iran NRI

Japan Chubu EPCO Chugoku EPCO CRIEPI

FEPC Fuji Electric Co., Ltd. Hitachi Hokkaido EPCO Hokuriku EPCO IHI

J-POWER JAPC Kansai EPCO

Kyushu EPCOMHPSMitsubishi ElectricNGKSumitomo ElectricShikoku EPCOTohoku EPCOTEPCOTOSHIBA

Korea KEPCO KEPCO E&C KERI

Malaysia TNB

MexicoINEELProlec GEPhilippinesAPCMERALCO

Singapore SPPG

South Africa Eskom PIESA Spain Gas Natural Fenosa REE

Taiwan TPC

Thailand EGAT EURC* U.S.A. EPRI SwRI

*: Academia





About RWE Technology International GmbH

Although the engineering consulting company RWE Technology International (RWE TI) was established as recently as 2015, it has many historic roots that date back to the end of the 19th century, right when Germany became a world leader in industrialization.

The RWE Group has a great depth of operations and engineering knowledge and practical experience as an asset developer, owner and operator. This experience means RWE TI not only provide theoretical solutions to mining and power plant issues, but also the practical implementation services clients need to transform expert advice into tangible benefits.

RWE TI's expertise spans the full range of mining methods and electricity generation technologies, including hard coal, lignite, oil, gas and nuclear. With clients in more than 70 countries around the world, RWE TI offers engineering support, specialist operations services and consultancy advice to clients operating in different market conditions worldwide.



About IERE

IERE is an organization for exchanging electricity and energy related cutting-edge technologies and R&D information among its members from the electricity & energy supply industry, equipment provider businesses, academic research, government, etc. This unique platform is of great help for executives, senior managers, engineers, and researchers who are responsible for R&D and solutions. It is a worldwide, non-profit organization, established as "International Electric Research Exchange" in 1968.





IERE Central Office 2-11-1 Iwado Kita, Komae-shi Tokyo 201-8511 JAPAN

Phone: +81-3-5438-1717 Fax: +81-3-3488-5100

https://www.iere.jp

1st issue: September 14, 2018