Sunday, 14th September 2014
18:00 – 21:00 Ice Breaker Party

Monday, 15th September 2014
09:00 – 10:00 Introducing session
09:00 – 09:10 Welcome addresses
09:10 – 09:35 Actual challenges of electricity supply with increasing portion of fluctuating renewables N. N.
09:35 – 10:00 EU perspective of energy supply and needs for research in this context N. N.
10:00 – 12:00 Perspectives of energy supply on international / national level
10:00 – 10:30 Consequences of increased shale gas use in the context of the need of CO2 emission reduction N. N.
10:30 – 11:00 Perspectives of nuclear power N. N.
11:00 – 11:30 Clean-Coal / CCS technologies N. N.
11:30 – 12:00 Gasification / Chinese GreenGen approach N. N.
12:00 – 14:00 Lunch break
14:00 – 17:30 Innovative processes and load flexibility
14:00 – 14:30 Challenges of fluctuating loads for steam and gas power plants R. Mohrmann (RWE, GER)
14:30 – 15:00 Thermo-mechanical fatigue life prediction of gas turbine components C. Schweizer (Fraunhofer IWM, GER)
15:00 – 15:30 Gas turbine operation under flexible fuel conditions S. Lockyear (UK)
15:50 – 16:00 Coffee break
16:00 – 16:30 Materials challenges in Oxycoal and IGCC power plants J. Oakey (Univ. Cranfield, UK)
16:30 – 17:00 Materials challenges in amine scrubbing N. N.
17:00 – 17:30 Materials for CSP-receivers N. N.
18:00 – 20:00 Reception and poster session

Tuesday, 16th September 2014
09:00 – 12:00 New Materials
09:00 – 09:25 Z-phase nitrides in creep resistant martensitic steels J. Hald (DTU, DK)
09:25 – 09:50 Development of Ferritic Heat-resistant Steels based on a New Materials Design Concept Y. Toda (NIMS, J)
09:50 – 10:15 HiperFer – High Performance Ferritic steels B. Kuhn (FZ Jülich, GER)
10:15 – 10:45 Coffee break
10:45 – 11:10 Power Austenite - A novel ρ-phase hardened and grain boundary strengthened austenitic steel M. Spiegel (SZMF, GER)
11:10 – 11:35 Development of creep-resistant, alumina-forming austenitic stainless steel alloys Y. Yamamoto (ORNL, USA)
11:35 – 12:00 Novel and Superior Creep Resistant Austenitic Steels Strengthened by Intermetallics - Microstructure Design Concept and Strengthening Mechanism M. Takeyama (Tokyo Institute of Technology, J)
12:00 – 14:00 Lunch break
14:00 – 17:00 Steam power plant materials
14:00 – 14:20 Current Materials Challenges for Transitioning U.S. Fossil Power Plant Fleet J. Shingledecker (EPRI, USA)
14:20 – 14:40 Actual developments in 9-12 Cr ferritic-martensitic steels N. N.
14:40 – 15:00 High temperature corrosion issues in Oxyfuel plants J. Quadakkers (FZ Juelich, GER)
15:00 – 15:20 State of the art of welding of high temperature materials for modern power plants M. Schmitz-Niederau (Voestalpine Böhler Weiding, GER)
15:20 – 15:40 Coffee break
15:40 – 16:00 Actual materials developments for nuclear power plants
N. N.
16:00 – 16:20 The European Creep Collaborative Committee (ECCC) – Rebirth and Revival
D. Allen (E.On, UK)
16:20 – 16:40 Macplus – Material based solutions for high efficiency Power Generation
E. Zanin (CSM, I)
16:40 – 17:00 Creep-fatigue interaction in steam power plant materials
S. Holdsworth (EMPA, CH)

17:30 – 19:00 Reception and poster session

20:00 – 24:00 Conference Dinner

Wednesday, 17th September 2014

09:00 – 12:00 Gas turbine materials

09:00 – 09:30 Reliability of TBC systems
H.-P. Bossmann (Alstom, CH)
09:30 – 10:00 Siemens advanced thermal barrier coatings
N. N.
10:00 – 10:30 Corrosion modeling in gas turbines
N. Sims

10:30 – 11:00 Coffee break

11:00 – 11:30 Advances in TBC research in Japan
N. N.
11:30 – 12:00 European hydrogen IGCC project
N. N.

12:00 – 14:00 Lunch break

14:00 – 15:40 Dissemination session of the "NextGen Power"-project

14:00 – 14:20 Overview of the NextGenPower Project
A. Stam (DNV Kema, NL)
14:20 – 14:40 Boiler Corrosion and Oxidation
N. Simms (Cranfield University, UK)
14:40 – 15:00 Boiler Materials Mechanical Properties
S. Linn (TU Darmstadt, GER)
15:00 – 15:20 Castings for Steam Turbines
S. Roberts (Goodwin Steel Castings Ltd., UK)
15:20 – 15:40 Forging and Welding of Steam Turbine Rotors
S. Hreben (Doosan Babcock, CZ)

16:00 – 16:30 Closing session

Abstract submission for all topics is still open!

Please visit: [http://www.fz-juelich.de/conferences/Liege2014/EN/PapersAbstracts/_node.html](http://www.fz-juelich.de/conferences/Liege2014/EN/PapersAbstracts/_node.html)

The submission deadline has been extended to 30th, November 2013.

For up to date information, please visit the conference website: [www.fz-juelich.de/Liege2014](http://www.fz-juelich.de/Liege2014).