

Program of BFI colloquium presentations

April 29th, 2026

09:00 – 15:30

Registration

08:30

Welcome and opening

Dipl.-Ing. Michael Hensmann / Dr. Matthias Kozariszczuk

09:00 – 09:15

CO₂ reduction and energy efficiency (part 1)

09:15 – 10:00

- **Use of ammonia for process heat generation**
Dr. Wolfgang Adler
- **Development and evaluation of location-specific decarbonisation measures**
Dr. Andreas Queck
- **Practical experience with a hybrid radiant heating tube**
Dr. Andreas Queck and Dipl.-Ing. Michael Keller, Team Technical Process Performance, thyssenkrupp Steel Europe AG (guest speaker)
- **Use of hydrogen for heat treatment**
Dipl.-Ing. Sebastian Bialek
- **Why the blast furnace may have a future**
Dr. Thorsten Hauck

Coffee break and discussion

10:00 – 10:15

CO₂ reduction and energy efficiency (part 2)

10:15 – 11:00

- **DR-pilot plant and DRI-smelter**
Dipl.-Ing. Roland Pietruck / M.Eng. Daniel Adolphy and Dr. Daniel Schubert, Sustainable Steel Produktion – Head of testing facilities, thyssenkrupp Steel Europe AG (guest speaker)
- **Analysis methods for determining the porosity of iron oxide pellets**
B.Eng. Alexa Kala
- **Decarbonisation and generational change – the dual challenge faced by the steel industry**
M.Sc. Jonas van Bracht
- **Separation of CO₂ based on a combination process of gas hydrate formation and process water treatment**
B.Eng. Susanna Wan

Coffee break and discussion

11:00 – 11:15

Circular economy

11:15 – 12:00

- **Prediction of slag composition for optimised slag valorisation**
Dr. Birgit Palm
- **Selective separation of fluoride from process water**
Dr. Matthias Werner
- **Heat transfer and utilisation from gas scrubbing water**
Dr. Pavel Ivashechkin
- **De-oiling of scale and fine sludge for recycling**
Dipl.-Ing. Martin Hubrich

Coffee break and discussion

12:00 – 12:15

Digitisation and process measurement

12:15 – 13:00

- **Use of AI in surface inspection**
Dr. Jens Brandenburger
- **Automation of production planning in rolling mills**
Dr. Christoph Nölle
- **Sustainable process control of the EAF process based on hybrid models**
Dr. Bernd Kleimt / M.Eng. Akhilesh Chandgude
- **Acoustic multifunctional measurement for optimising EAF operation**
Dipl.-Ing. (FH) Emanuel Kashi Thienpont and Dr. Martin Brodeck, Managing director, BON-NENBERG & DRESCHER GMBH (guest speaker)

Coffee break and discussion

13:00 – 13:15

Process optimisation

13:15 – 14:00

- **Distributed optimization of coupled industrial plants**
Dr. Sandra Rothe
- **Development of a floating continuous annealing system**
Dipl.-Ing. Kersten Marx
- **Opportunities and risks associated with the use of hydrogen as fuel gas**
M.Sc. Martin Wunde
- **Product properties after hydrogen fired reheating processes**
Dr. Delphine Rèche
- **Influence of hydrogen on fracture toughness of steels**
Dipl.-Ing. Tuncer Ümit

Lunch snack / Visitation of the BFI technical centre

14:00 – 15:30