Wednesday 12 February

11:30 Lunch and registration

12:45 Welcome address

Session 1: Oxidation mechanisms, properties, morphology and control
Chair: Barbara Shollock

13:00 Keynote: Quantitative characterisation of the mechanical properties of oxide scales
M Schütze, DECHEMA-Forschungsinstitut, Germany

13:30 On the effects of different combustion gases on the kinetics of scaling, decarburisation and subsurface degradation of a heat-treatable steel
Robert Orosz, VDEh-Betriebsforschungsinstitut (BFI), Germany

13:55 Effect of thermally-induced surface oxidation on the mechanical properties and corrosion resistance of Zr60Cu25Al10Fe5 bulk metallic glass
Sergio Gonzalez, Autonomous University of Barcelona, Spain

14:20 Comparison of short terms oxidation behavior of ferritic 441 and austenitic 316L stainless steels at 1100°C under water vapor
Valentin Badin, MINES ParisTech, CEMEF, France

14:45 Refreshments/Exhibition

Session 2: Oxide removal and conditioning (1)
Chair: Marcel Graf

15:25 Keynote: Advancement in understanding of descalability during high pressure descaling
D. Farrugia, Tata Steel, UK

15:55 Development and evaluation of descaling nozzles with high performance
tsuyoshi Chimoto, Kyoritsu Gokin Co., Ltd. / EVERLOY, Japan

16:20 Enhanced accuracy of descaling nozzle arrangements with new, complementary measurement methods
Jürgen Frick, Lechler GmbH, Germany

16:45 Scale Formation during Reheat and Descaler Practices
John Hinton, Siemens plc Industry Sector Metals Technologies, UK

17:10 Potential of energy savings in descaling
Gregor Przybylla, SGGT Hydraulik GmbH, Germany

17:35 Influence of the oxide scale features on their descaling behaviour using an electrochemical approach: application to stripping of turbine components
Yves Le Guevel, Université of La Rochelle, France

18:00 Drink reception

Thursday 13 February

Session 2: Oxide removal and conditioning (2)
Chair: Marcel Graf
09:00 Prevention of scale formation and influence of scale properties in steel re-heating by use of diffusion inhibiting coatings
Miriam Sartor, VDEh-Betriebsforschungsinstitut GmbH, Germany

09:25 Innovative water free descaling at high temperature
Diana Espinosa, CRM - Center for Research in Metallurgy, Belgium

09:50 Refreshments/Exhibition

Session 3: Oxide scale behaviour and modelling
Chair: John Niska

10:20 Keynote: Oxide fracture mechanisms in descaling and hot rolling of steel strips
Pierre Montmitonnet, MINES ParisTech - CEMEF, France

10:50 Finite Element Modeling of Zirconium-based Alloys Oxidation
Guillaume Zumpicchiat, CEA Saclay DEN/DANS/DMN/SEMI/LM2E, France

11:15 Modelling diffusion during oxidation of hot rolled steels using implicit finite difference method
Y. Lan, Tata Steel, UK

11:40 Water Temperature Effect on Cooling Intensity for High Pressure Descaling Nozzles
M. Raudenský, Brno University of Technology, Czech Republic

12:05 Lunch/Exhibition

Session 4: Oxide scale detection & characterisation
Chair: John Hinton

13:05 Keynote: Opportunities and pitfalls in the characterisation of oxide scale microstructure and mechanical properties
M. Rainforth, University of Sheffield, UK

13:35 In situ determination of oxides forming in steels containing Mn and Si at simulated finishing hot rolling conditions
Wanda Melfo, Tata Steel, Netherlands

14:00 Oxidation behavior of Twin Roll Cast (TRC) AZ31 magnesium
Haitham Saleh, Institute of Metal Forming, TU Bergakademie Freiberg, Germany
Barbara Shollock, Imperial College, UK

14:50 Detect, Classify and Track Scale throughout all Steel producing processes.  
Surface Quality Control from Hot Rolling up to Finishing with Cognex SmartView  
Marco Saitta, COGNEX Surface Vision, Germany

15:15 Roundtable/panel discussion

15:45 Close