

Session Program

30 September 2019 to 2 October 2019

ESSC & DUPLEX 2019

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Duplex stainless steels

Schloss Schönbrunn
Apothekertrakt, Vienna

Tuesday 1 October

09:00

Duplex stainless steels: Duplex stainless steels I

Session | **Location:** Schloss Schönbrunn, Room A - Maria Theresia, Apothekestrakt, Vienna | **Conveners:** Mr Andreas Keplinger, Dr Claes OLSSON

09:00–09:20

TIME-TEMPERATURE-PRECIPITATION AND PROPERTY DIAGRAMS FOR THICK-WALLED DUPLEX STAINLESS STEEL

Speaker

Ms Andrea Putz

09:20–09:40

APPLICATIONS OF X-RAY DIFFRACTOMETRY ON PHASE QUANTIFICATION IN STAINLESS STEELS

Speaker

RODRIGO MAGNABOSCO

09:40–10:00

RELATION BETWEEN PITTING POTENTIAL AND PREN VALUES FOR FERRITE AND AUSTENITE IN DUPLEX STAINLESS STEELS

Speaker

RODRIGO MAGNABOSCO

10:00–10:20

INFLUENCE OF THE PROCESS PARAMETERS ON THE TRANSFORMATION BEHAVIOR OF 2205 DURING LASER BEAM WELDING

Speaker

Stefan Ulrich

10:20

10:50

Duplex stainless steels: Duplex stainless steels II

Session | **Location:** Schloss Schönbrunn, Room A - Maria Theresia, Apothekestrakt, Vienna | **Conveners:** Dr Anthony Nicholas Grundy, Mr Stefan Ulrich

10:50–11:10

INCLUSION OF FORTA FDX 27 (UNS S82031) INTO ASTM A1084

Speaker

James Oliver

11:10–11:30

PARAMETER EXTRACTION FROM DUPLEX STAINLESS STEEL MICROGRAPHS AND THEIR CORRELATION TO MACRO PROPERTIES

Speaker

Claes OLSSON

11:30–11:50

EARLY STAGES OF DELETERIOUS PHASES IN SUPER- AND HYPER DUPLEX STAINLESS STEEL AND THEIR EFFECT ON TOUGHNESS

Speaker

Andreas Keplinger

11:50-12:10

INFLUENCE OF THE ALLOY COMPOSITION OF FILLER METALS ON THE MICROSTRUCTURE OF WIRE AND ARC ADDITIVE MANUFACTURED COMPONENTS MADE OF DUPLEX STAINLESS STEEL

Speaker

Benjamin Wittig

12:10-12:30

THE DUPLEX-STAINLESS-STEEL 1.4462 FOR FLOW LINES

Speaker

Sonja Felber

12:30

14:00

Duplex stainless steels: Duplex stainless steels III

Session | **Location:** Schloss Schönbrunn, Room A - Maria Theresia, Apothekestrakt, Vienna | **Conveners:** Prof. Marcel Somers, Prof. irene calliari

14:00-14:20

INFLUENCE OF THE ANNEALING TREATMENT ON THE TOUGHNESS OF DUPLEX STAINLESS STEEL TYPE EN-1.4462

Speaker

Julia Contreras Fortes

14:20-14:40

COMPUTATIONAL THERMODYNAMICS AND KINETICS TOOLS FOR DEVELOPMENT OF ADVANCED STAINLESS STEELS

Speaker

Anthony Nicholas Grundy

14:40-15:00

DESIGN AGAINST BRITTLE FRACTURE IN DUPLEX STAINLESS STEEL CONSTRUCTIONS BY USING THE EN 1993-1-10 MODEL AND THE INFLUENCE OF PLATE THICKNESS ON THE IMPACT TOUGHNESS

Speaker

Johan Pilhagen

15:00-15:20

ELECTRICALLY ENHANCED PLASTIC DEFORMATION OF DUPLEX STAINLESS STEEL UNS S32750

Speaker

Claudio Gennari

15:20-15:40

PREDICTING FERRITE FRACTIONS IN SINGLE PASS SUPER DUPLEX STAINLESS STEEL WELDS - THERMAL CYCLE ANALYSIS AND PHASE TRANSFORMATION MODELING

Speaker

Vahid A Hosseini

15:40

16:10

Duplex stainless steels: Duplex stainless steels IV**Session** | **Location:** Schloss Schönbrunn, Room A - Maria Theresia, Apothekertrakt, Vienna | **Convener:** Claudio Gennari

16:10-16:30

ON THE USE OF COMPUTATIONAL THERMODYNAMICS FOR PREDICTING THE PRECIPITATION AND GROWTH OF SECONDARY PHASES IN STAINLESS STEELS**Speaker**

Sten Wessman

16:30-16:50

INFLUENCE OF SIGMA PHASE PRECIPITATION IN THE 600 TO 750 °C RANGE ON MECHANICAL PROPERTIES OF SAF2205**Speaker**

Borut Žužek

16:50