

TUESDAY 18 November

Conference Arena 1

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| 9:15 | Opening: Stainless Steel World | |
| 9:20 | Welcome: Sayee Raghunathan, Saudi Aramco, Saudi Arabia | |
| 9:30 | Keynote 1: New applications for stainless steel and corrosion resistant materials in the context of energy transition | |
| 10:00 | Keynote 2: Chinese perspective on stainless steel market | |
| 10:30 | Coffee & Expo Break | |
| | Conference Arena 1 | Conference Arena 2 |
| | Paper Session: Corrosion - Seawater and pitting Session Chair: Markus Kind, Rolf Kind GmbH | Paper Session: Additive manufacturing Session Chair: John Houben, ExxonMobil Research and Engineering |
| 11:00 | Hydrogen induced stress cracking of a 25Cr super duplex subsea umbilical termination assembly with unfavorable grain orientation - Hans Martin Jahren, Equinor | High performance additive manufacturing of 316L components with cooling channels using DED-arc - Pedro Cotrim Maciel, Plasma Additive |
| 11:25 | Duplex stainless steel in the marine environment: the impact of the exposure zone - Saman Hosseinpour, Outokumpu Nirosta GmbH-Krefeld | Cold rolled vs 3E printing stainless steels: a comparative analysis - Muhammad Dr. Muhammad Yasir, FORVIA |
| 11:50 | Corrosion behavior of S32202 (EN 1.4062) lean duplex stainless steel in natural seawater: a comparison with more commonly used grades - Mohammad Hassanzadeh, French Corrosion Institute/KU Leuven University | Revealing the superior corrosion protection of the passive film on selective laser melted 316L SS/ultrapure 316L SS in a phosphate-buffered saline solution - Yong Hua, Zhejiang JIULI Hi-Tech Metals |
| 12:15 | Carbon alloying boosts austenitic stainless steel to achieve high corrosion resistance and low cost application - Zhiyu Wang, Baoshan Iron & Steel | Study of PWHT on weld metal of the newly developed filler metal FM 825 CTP (UNS N08827) - Martin Wolf, VDM Metals International |
| 12:40 | Lunch & Expo Break | |
| | Paper Session: Corrosion - testing Session Chair: Jacko Aerts, dsm-firmenich | Paper Session: Surface/material optimization Session Chair: Saman Hosseinpour, Outokumpu |
| 14:00 | SAF™ 3006: a super duplex stainless steel with enhanced mechanical and corrosion resistance for the chemical and petrochemical industries - Bernardo Siza Vieira, Alleima | A comparative study of heat resisting stainless steels for application up to 1000°C - Pierre-Emmanuel Léger, Aperam Research Center |
| 14:25 | Corrosion screening of stainless steels – exploring the application of inspection & corrosion assessment tags - Dirk Engelberg, The University of Manchester | Waste minimization in the stainless-steel pickling processes - Marco Zavattoni, Condoril Stainless |
| 14:50 | Assessment of pitting and corrosion resistance of passive alloys using accelerated short-term testing - Julien Pellé, Institut de la corrosion | Optimization of pickling procedure in order to achieve maximum corrosion resistance - Václav Šefl, University of Chemistry and Technology in Prague |
| 15:15 | The super austenitic grade Sanicro® 35 (UNS N08935) proving its position as a potential nickel alloy substitute for demanding process industry equipment - Claes Tigerstrand, Outokumpu | Coated stainless steel as a cost-effective and functional alternative for bipolar plates in PEM electrolyzers - Rodríguez Raquel, TUBACEX INNOVACION |
| 15:40 | Networking on the Exhibition Floor | |

Join the Sustainability Day and find...

INSPIRATION FROM SPACE

Discover how aerospace innovation is pushing boundaries in material science and driving change in stainless steel production.

SUSTAINABILITY FROM ORBIT

Hear Dr. Kuipers' personal story and his call to action for sustainable industry—backed by a truly planetary perspective.

INDUSTRY INNOVATION

Learn how space technologies can influence smarter, cleaner and more efficient manufacturing.

ELITE NETWORKING

Connect with global leaders, engineers and decision-makers driving the stainless steel industry forward.

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WEDNESDAY 19 November – Sustainability Day

Conference Arena 1

9:15 **Keynote 3: Opportunities for stainless steel in Carbon Capture and Storage (CCS), Marc Wilms. Shell**

9:45 **Keynote 4: tba**

10:15 **Coffee & Expo Break**

Conference Arena 1

Paper Session: Energy transition solutions
Session Chair: Raymond Cordewener, R. Cordewener Management & Consultancy

10:45 Corrosion design of liquid CO₂ evaporators - Jan-Willem Rensman, Fluor BV

11:10 Development of high strength austenitic stainless steels for lh2 storage applications - Ali Smith, Rina Consulting – Centro Sviluppo Materiali SpA

11:35 Cryelso™201LN: a candidate for hydrogen transport applications - Sarata Cissé, Industeel / ArcelorMittal

12:00 **Lunch & Expo Break**

Conference Arena 2

Paper Session: Aerospace
Session Chair: Sayee Raghunathan, Saudi Aramco

Impact of Delta Process (DP) craft on microstructural and mechanical property of Inconel 718 for aerospace application - Helen Cao, CSM Tech

Sustainable stainless steel in aerospace: strength, precision, and innovation - Hilal Karakaya, Outokumpu Nirosta

Achieving excellence and sustainability in aerospace manufacturing through Nadcap - Justin McCabe, Performance Review Institute

Join the Sustainability Expo Forum – OPEN TO ALL



The Sustainability Expo Forum is an open-access forum hosted by sustainability leaders to inspire and enlighten attendees about innovative sustainability initiatives, best practices, and the critical role that business plays in creating a sustainable future. And also discover how aerospace innovation is pushing boundaries in material science and driving change in stainless steel production.

Paper Session: Ammonia cracking
Session Chair: Jan-Willem Rensman, Fluor

Paper Session: reserved for sponsors
Session Chair: Barinder Ghai, Alleima

13:15 Nitridation resistance of Ni-based alloys in ammonia cracking environment - Norifumi Kochi, NIPPON STEEL

Reserved

13:40 Ammonia nitridation resistance of Ni-based alloy - Yutaro Katsuki, Maruichi Stainless Tube

Reserved

14:05 tba

Reserved

14:30 **Break – Move to Auditorium**

Auditorium

Special Guest - Dr. André Kuipers Keynote

Technology, Innovation, Sustainability, the Future – and Beyond

Dr Andre Kuipers will share powerful insights on innovation in extreme environments and explore how the unique challenges of spaceflight can drive technological innovation, particularly in the energy and materials sectors, and how they can be applied to building a more sustainable industry here on Earth. ESA astronaut Dr Andre Kuipers, the first Dutch astronaut to fly two successful space missions, will deliver a special keynote speech linking space technology with the urgency of sustainability on Earth.

16:30 **Sustainability Networking Reception – with Dr. André Kuipers in the Expo Hall**

18:00 **STAINLESS STEEL WORLD SOCIAL EVENING**

THURSDAY 20 November

Conference Arena 1

10:00 **Keynote 5: The Role of The Welding Institute in ensuring the integrity of welded corrosion resistant alloys: past, present and future - Paul Woollin, TWI**

10:30 **Keynote 6: High-alloys for nuclear fusion application**

11:00 **Coffee & Expo Break**

Conference Arena 1

Paper Session: Fabrication & material selection
Session Chair:

11:30 Tensile properties of TRIP type lean duplex stainless steels - Naoki Hirakawa, NIPPON STEEL

11:55 Lightweight stainless steel tubing for high-pressure fuel systems - Polina Kazarina, CENTRAVIS Production Ukraine

12:20 Machinability analysis of 304L stainless steel hollow bars - Tim Wallbaum, DMV

12:45 Stainless steel material selection for buried valves trim & components - Mohammed W. Tarabzouni, Saudi Aramco

13:10 **Close**

Conference Arena 2

Paper Session: Ferritic stainless steels
Session Chair: Sunday Okoro, GRUNDFOS

Ferritic stainless steel tubes for moisture separator reheaters: process optimisation and non-destructive testing - Julien Burgue, NEOTISS

Therma 4622Nb™: smart niobium (Nb) alloying as an enabler for high temperature performance of a new ferritic stainless steel - Caio Pisano, CBMM / Niobium and Hilal Karakaya, Outokumpu

Microstructural evolution under different hot rolling conditions of Nb-bearing high chromium ferritic stainless steel, Caio Pisano, CBMM

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