

1. Corrosion and Scale Inhibition

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| W 1.02 | Study of alkylphenol-formaldehyde oligomers modified with amines containing imidazoline fragments as corrosion inhibitors in the composition of preservation fluids <u>N. Abdullayeva</u> ¹ ¹ , Baku, Azerbaijan/AZ |
| W 1.03 | Aluminium alloy corrosion inhibition by eco-friendly composition of natural polysaccharide and potassium sorbate <u>I. Zin</u> ¹ ; <u>O. Khlopyk</u> ¹ ; <u>M. Tymus</u> ¹ ; <u>N. Sobodosh</u> ¹ ; <u>S. Korniy</u> ¹ ¹ Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Lviv/UA |

2. Corrosion by Hot Gases

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| W 2.01 | Volatile corrosion inhibitor study in a thin film electrolyte and standard electrochemical cell <u>A. Pelesk</u> ¹ ; <u>H. Otmačić Čurković</u> ² ¹ JANAF Plc., Zagreb/HR; ² University of Zagreb, Zagreb/HR |
| W 2.02 | Electrochemical evaluation of AFA alloys in carbonate molten salt as TES material applied to CSP plants <u>M. Alberro</u> ¹ ; <u>J. Labidi</u> ¹ ; <u>A. Fernández</u> ¹ ¹ University of the Basque country (UPV/EHU), San Sebastián-Donostia/E |

3. Nuclear Corrosion

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| W 3.01 | Effects of Temperature and Relative Humidity on Chloride-induced Stress Corrosion Cracking Behavior in Austenitic SS Welds <u>S. Kim</u> ¹ ; <u>G. Kim</u> ¹ ; <u>S. Song</u> ¹ ¹ Korea Institute of Materials Science, Changwon-si/ROK |
| W 3.03 | Monitoring the galvanic corrosion of copper-steel coupling in bentonite slurry – early exposure period <u>K. Prijateli</u> ¹ ; <u>M. Hren</u> ² ; <u>A. Legat</u> ² ; <u>T. Kosec</u> ¹ ¹ ZAG – Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO; ² ZAG – Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO |
| W 3.04 | Corrosion of steel in contact with bentonite under conditions relevant for nuclear waste disposal <u>A. Singh</u> ¹ ; <u>N. Finck</u> ² ; <u>D. Schild</u> ² ; <u>P. Geckeis</u> ³ ¹ Karlsruher Institut für Technologie (KIT), Karlsruhe/D; ² Karlsruher Institut für Technologie (KIT), Karlsruhe/D; ³ Karlsruher Institut für Technologie (KIT), Karlsruhe /D |
| W 3.06 | Assessing the role of surface conditions in SCC susceptibility of Alloy 182 in simulated LWR environments <u>A. Das</u> ¹ ; <u>H. Seifert</u> ¹ ; <u>S. Ritter</u> ¹ ¹ Paul Scherrer Institut, Villigen PSI/CH |

4. Environment Sensitive Fracture

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| W 4.02 | Understanding hydrogen-material interactions in additively manufactured Inconel 718 |
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| | A. Zafra ¹ ; C. Santos Maldonado ¹ ; E. Martínez-Pañeda ¹ ; M. Pham ¹ ¹ Imperial College London, London/UK |
| W 4.04 | Study of deuterium evolution reaction and absorption into low alloy steel <u>L. Cupertino-Malheiros</u> ¹ ; R. Chai ¹ ; H. Zhang ¹ ; E. Martínez-Pañeda ¹ ¹ Imperial College London, London/UK |

5. Corrosion Mechanisms, Methods & Modelling

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| W 5.01 | The mechano-electrochemical effect of X100 buried pipelines with pre-existing corrosion defect <u>G. Mubarak</u> ¹ ; I. Gadala ² ; I. Barsoum ¹ ; A. Al Fantazi ¹ ¹ Khalifa University , Abu Dhabi/UAE; ² Nova Chemicals, Calgary /CDN |
| W 5.03 | Investigation of Corrosion Behaviour of Plastic Mould Steels Under Oxygen Free and Oxygen Saturated Conditions <u>M. Sorg</u> ¹ ; E. Andresen ² ; N. Hör ² ; L. Bošković ² ; A. Braun ³ ¹ Institute for Materials System Technology Thurgau, Tägerwilen/CH; ² HTWG Konstanz – University of Applied Sciences, Konstanz/D; ³ E. Braun GmbH, Kammerstein/D |
| W 5.07 | Comparison of chromium-free aluminium desquamation methods <u>C. BRUSSIEUX</u> ¹ ; P. BRISSET ¹ ; D. BA ² ; T. PINAUD ² ¹ Orano, BEAUMONT HAGUE/F; ² Orano, EQUEURDREVILLE/F |
| W 5.08 | Influence of calcium on the thermal oxidation of CoO and cobalt <u>Z. HALEM</u> ¹ ; N. HALEM ² ; O. HALEM ² ; M. ABRUDEANU ³ ; G. PETOT-ERVAS ⁴ ¹ University of Bouira, Bouira/DZ; ² Université de Tizi-Ouzou, Tizi-Ouzou/DZ; ³ University Pitesti, Pitesti/RO; ⁴ Centralesupélec CNRS, Gif-sur-Yvette Paris/F |
| W 5.09 | A New Method for Deriving Metastable Pourbaix Diagrams of Stainless Steels Using Density Functional Theory Calculations <u>B. MALKI</u> ¹ ; I. GUILLOTTE ² ; B. BAROUX ³ ¹ SIMORG Computing, 38600/F; ² APERAM Isbergues, Isbergues 62330/F; ³ Grenoble Alpes university, Saint Martin d'Hères, 38402/F |
| W 5.10 | Modelling of Anodic Delamination of Coated Stainless Steels Using Finite Elements <u>B. MALKI</u> ¹ ; I. GUILLOTTE ² ; B. BAROUX ³ ¹ SIMORG Computing, 38600/F; ² APERAM Isbergues, Isbergues 62330/F; ³ Grenoble Alpes university, Saint Martin d'Hères, 38402/F |
| W 5.11 | The influence of LPSO structures on corrosion of Mg in acidic solutions <u>A. Zielińska</u> ¹ ; D. Martinez Guerrero ¹ ; A. Dobkowska ¹ ; W. Święzkowski ¹ ¹ Warsaw University of Technology, Warsaw/PL |
| W 5.14 | An experimental study of corrosion during latent heat storage <u>A. Červenková</u> ¹ ; V. Danielík ¹ ¹ Slovak University of Technology, Bratislava/SK |
| W 5.15 | Structures and dynamics of corrosion inhibitors near electrified interfaces <u>S. Jeschke</u> ¹ ; <u>I. Cole</u> ¹ ; P. Eiden ² ; R. Mishra ² ; P. Deglmann ² ; J. Gorges ² ; C. Rein ² ; P. Keil ³ ¹ RMIT University, Melbourne/AUS; ² BASF SE, Ludwigshafen am Rhein/D; ³ BASF Coatings GmbH, Munster/D |
| W 5.17 | Influence of rainfall on corrosion behavior of carbon steel under atmospheric environment <u>H. Katayama</u> ¹ ; K. Kiyoizumi ² ; I. Shitanda ² ; M. Itagaki ² ¹ National Institute for Materials Science, Tsukuba/J; ² Tokyo University of Science, Noda/J |

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| W 5.19 | Optimizing design and fabrication of anodized tunneling surface for aluminium foils <u>C. Dong</u> ¹ ¹ University of Science & Technology Beijing, Beijing/CN |
| W 5.20 | Evaluating the effect of tin additions on the corrosion performance of Fe-Cr alloys in different environments <u>I. Toor</u> ¹ ¹ King Fahd University of Petroleum and Minerals, Dhahran/SAR |
| W 5.21 | Modelling of the Physical and Electronic Properties of Hematite (α- Fe_2O_3) with Density Functional Theory <u>F. Gao</u> ¹ ; <u>P. Keil</u> ² ; <u>N. Harrison</u> ¹ ¹ Imperial College London, London/UK; ² BASF Coatings GmbH, Muenster/D |
| W 5.25 | Evaluation of local corrosion in AlZn10Si8Mg aluminum cast alloy <u>c. LE PEN</u> ¹ ¹ CRM Group, liege/B |
| W 5.27 | Correlation between pitting susceptibility and surface acidity, point of zero charge of passive film on aluminum <u>D. Chen</u> ¹ ; <u>C. Dong</u> ¹ ; <u>M. Li</u> ¹ ; <u>Y. Ji</u> ¹ ¹ University of Science and Technology Beijing, Beijing/CN |
| W 5.28 | Characterization of aluminum alloys for its application as end plate material in fuel cells <u>D. Chhaniyara</u> ¹ ; <u>M. Mandel</u> ¹ ; <u>L. Krüger</u> ¹ ¹ TU Bergakademie Freiberg, Freiberg/D |
| W 5.29 | Electrochemical noise analysis using statistical analysis, frequency domain analysis and frequency-time domain analysis <u>M. Odenthal</u> ¹ ; <u>A. Weltin</u> ¹ ; <u>S. Rupitsch</u> ¹ ; <u>J. Kieninger</u> ¹ ¹ University of Freiburg — IMTEK, Freiburg/D |
| W 5.30 | Novel Approaches to Corrosion Analysis through Data-Driven Computer Vision and Reflective Microscopy <u>A. Makogon</u> ¹ ; <u>L. Coelho</u> ² ; <u>J. Ustarroz</u> ³ ; <u>F. Kanoufi</u> ¹ ; <u>V. Shkirskiy</u> ¹ ¹ Université Paris Cité, Paris/F; ² Université libre de Bruxelles (ULB), Brussels/B; ³ Université libre de Bruxelles (ULB), Brussels/B |
| W 5.31 | Revisiting the effect of nickel on the corrosion resistance of Fe-Cr alloys <u>Y. Wang</u> ¹ ; <u>D. Blackwood</u> ¹ ¹ National University of Singapore, Singapore/SGP |
| W 5.32 | Application of cryo-atom probe tomography to study early-stage corrosion mechanism at liquid-solid interfaces at near atomic scale <u>T. Schwarz</u> ¹ ; <u>E. Woods</u> ¹ ; <u>L. Aota</u> ¹ ; <u>X. Zhou</u> ¹ ; <u>I. McCarroll</u> ¹ ; <u>B. Gault</u> ¹ ¹ Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D |
| W 5.33 | New developments in the determination of the rate of electrochemical corrosion <u>Z. Lukacs</u> ¹ ; <u>G. Gubicza</u> ² ; <u>Z. Barabási</u> ³ ; <u>T. Kristóf</u> ¹ ¹ University of Pannonia, Veszprém/H; ² Arbot Mechatronics Ltd., Veszprém/H; ³ ECOOL Ltd., Budapest/H |

7. Marine Corrosion

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| W 7.01 | Effect of dissolved O₂/CO₂ mixture on SCC of API 5L X70 pipeline steel in simulated environments <u>S. Abubakar</u> ¹ ; <u>S. Mori</u> ² ; <u>J. Sumner</u> ² ¹ Cranfield University, Cranfield, Bedfordshire/UK; ² Cranfield University, Bedford/UK |
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| W 7.03 | Estimating a century of corrosion: the toxic ammunition at the Paardenmarkt K. Verhasselt ¹ ; W. Witteveen ¹ ; J. Horvath ¹ ; G. Potters ¹ ; S. Lenaerts ² ; K. De Baere ¹ ¹ Antwerp Maritime Academy, Antwerp/B; ² University Of Antwerp, Antwerp/B |
| W 7.04 | Effect of microstructure on the electrochemical behaviour of 42CrMo4 QT steel M. Zanocco ¹ ; F. Andreatta ¹ ; S. Virgilio ² ; P. Machetta ² ; A. Silvonen ³ ; A. Lanzutti ¹ ; L. Fedrizzi ¹ ¹ University of Udine, Udine/I; ² Wärtsilä Italia S.p.A., Trieste/I; ³ Wärtsilä Finland Oy, Vaasa/FIN |
| W 7.06 | Silicon Effect on Corrosion Behavior of Al-Mg Alloys in Marine Environment J. Santos ¹ ; T. Vida ¹ ; N. Cheung ² ; A. Garcia ² ; C. Cardoso de Brito ¹ ¹ São Paulo State University, São João da Boa Vista/BR; ² University of Campinas, Campinas/BR |
| W 7.07 | Development of environmentally friendly anti-fouling corrosion protection systems for marine application E. Tubaro ¹ ; F. Andreatta ¹ ; M. Pesle ² ; A. Bomtempi ² ; L. Fedrizzi ¹ ¹ Università degli Studi di Udine, Udine/I; ² MARLIN srl, Trieste/I |
| W 7.08 | Effect of microstructure partitioning on intergranular corrosion of duplex stainless steel Q. Hu ¹ ; F. Huang ¹ ; J. Liu ¹ ¹ Wuhan University of Science and technology, Wuhan/CN |
| W 7.09 | The Mechanism of Passivation Breakdown of Multi Principal Element Alloys in Aqueous NaCl Electrolytes at Different pH A. Wetzel ¹ ; D. Morell ² ; O. Ozcan ² ; J. Witt ² ¹ Bundesanstalt für Materialforschung und -prüfung, Berlin/D; ² Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin/D |

8. Microbial Corrosion

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| W 8.01 | Single-cell level investigation of microbiologically induced degradation of passive film of stainless steel combining multi-mode AFM H. Qian ¹ ; T. Cui ² ; W. Chang ² ; L. Lu ² ; D. Zhang ² ; X. Li ² ¹ , Beijing/CN; ² University of Science and Technology Beijing, Beijing/CN |
| W 8.03 | New multiparametric probe to monitor microbial corrosion in soil P. Cristiani ¹ ; L. Murachelli ² ¹ RSE-Ricerca sul Sistema Energetico S.p.A, Milano/I; ² AMEL, Milano/I |
| W 8.04 | Taxonomic and proteomic characterization of corrosive biofilms on steel under differential metabolic conditions in freshwater media L. Raghunatha Reddy ¹ ; C. Egerter ² ; J. Meier ² ; A. Fiskal ¹ ; T. Ternes ¹ ; A. Wick ¹ ¹ German Federal W 16.01 Institute of Hydrology, Koblenz/D; ² University of Koblenz, Koblenz/D |
| W 8.06 | Novel Metal Bionanohybrids against MIC Consortia M. Salta ¹ ; N. Noel-Hermes ¹ ; C. Ortega Nieto ² ; J. Palomo ² ¹ Endures B.V., Den Helder/NL; ² Institute of Catalysis (CSIC), Madrid/E |
| W 8.07 | Corrosion of Container Material for High-Level Nuclear Waste in the Presence of Bentonite or the SRB Desulfosporosinus burensis K. Kirsch ¹ ; N. Matschiavelli ² ; T. Stumpf ² ; A. Koerdt ¹ ¹ Federal Institute for Materials Research and Testing (BAM), Berlin/D; ² Helmholtz-Zentrum Dresden-Rossendorf, Dresden/D |
| W 8.08 | Antifouling nano-designed composite as a mitigation strategy E. R. Silva ¹ ; F. Olga ¹ ; G. Mafalda ¹ ; L. Noelia ¹ ; N. Noël-Hermes ² ; M. Salta ² ¹ Faculdade de Ciências da Universidade de Lisboa, Lisboa/P; ² Endures B.V., Den Helder/NL |

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| W 8.10 | Microbially induced corrosion and the environmental parameters influencing local microbial communities in waterways and estuaries K. Folens ¹ ; K. De Baere ² ; J. Horvath ² ; G. Potters ² ; N. Boon ¹ ¹ Ghent University, Gent/B; ² Antwerp Maritime Academy, Antwerp/B |
| W 8.11 | Towards Finite Element Modelling of Microbiologically Influenced Corrosion D. Blackwood ¹ ; M. Saeedikhani ¹ ¹ National University of Singapore, Singapore/SGP |
| W 8.13 | Effect of 5 Methyl-1H-benzotriazole as corrosion inhibitor on microbiologically influenced corrosion on mild steel in red sea water N. Patel ¹ ¹ , Thuwal/SAR |
| W 8.14 | Conductive nanowires accelerated corrosion of C1020 carbon steel by Desulfovibrio vulgaris F. Alrammaha ¹ , Farah Alrammaha ¹ , Lingjun Xu ³ , Niketan Patel ² , Nicholas Kontis ² , Alexandre Rosado ² , Tingyue Gu ³ ¹ Imam Abdulrhman Bin Faisal University, Dammam/SA; ² King Abdullah University of Science and Technology, Thuwal/SA; ³ Ohio University, Ohio/US |

9. Corrosion of Steel in Concrete

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| W 9.02 | The effect of copper tailings addition on the mechanical and electrochemical properties of mortars C. Sepúlveda ¹ ; L. Muñoz ² ; C. Guerra ¹ ; N. Carrasco ¹ ; M. Sancy ¹ ¹ Pontificia Universidad Católica de Chile, Santiago/RCH; ² Pontificia Universidad Católica de Valparaíso, Santiago/RCH |
| W 9.03 | Numerical Insights into the Ability of Indirect Galvanostatic Pulse in Wenner Configuration to Locate Corroding Areas in Macrocell Corrosion of Steel in Concrete R. Rodrigues ¹ ; S. Gaboreau ¹ ; J. Gance ² ; I. Ignatiadis ¹ ; S. Betelu ¹ ¹ BRGM, Orléans/F; ² Iris Instruments, Orléans/F |
| W 9.04 | Effect of current passage on the protective properties of concrete M. Kouril ¹ ; M. Reiser ² ¹ University of Chemistry and Technology, Prague/CZ; ² University of Chemistry and Technology, Prague, Czech Republic/CZ |
| W 9.05 | Permanent corrosion monitoring of steel in concrete – Long-term performance E. Eustáquio ¹ ; M. Correia ¹ ; R. Fontinha ¹ ¹ Laboratório Nacional de Engenharia Civil, Lisbon/P |

10. Corrosion in Oil & Gas Production

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| W 10.01 | Parametric Study of Top of Line Corrosion in Highly Sour Environments L. AlSharif ¹ ; M. Shahrani ¹ ¹ Saudi Aramco, Dhahran/SAR |
| W 10.02 | Effect of micro-alloying on corrosion behaviors of steels in CO₂ saturated brine solutions with different pH D. Yun ¹ ; H. Bang ¹ ; J. Park ¹ ; S. Jin ¹ ; Y. Kim ¹ ; W. Kim ² ; S. Kim ¹ ¹ Sunchon National University, Suncheon/ROK; ² POSCO, Gwangyang/ROK |
| W 10.04 | Synergistic effect of oleic acid imidazoline and CeCl₃ on carbon steel corrosion in CO₂ saturated chloride-carbonate solution G. Bilić ¹ ; T. Borko ² ; K. Žbulj ¹ |

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| | ¹ University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering, Zagreb/HR; ² INA d.d., Zagreb/HR |
| W 10.05 | Tribocorrosion Behavior of Ti-4Al-2.5V-1.2Fe alloy drill pipe after anodic oxidation treatment for oil &gas application K. TONG ¹ ; J. ZHANG ² ; G. LI ³ ; Y. WU ² ; X. MA ³ ; H. YIN ¹ ; Y. ZHANG ¹ ; G. ZHU ¹ ; J. ZHANG ¹ ; Q. LIU ¹ ¹ State Key Laboratory for Performance and Structural Safety of Petroleum Tubular Goods and Equipment Materials, Xi'an/CN; ² Downhole service company, CNPC Chuanqing Drilling Engineering Company Ltd.(CCDC), Chengdu/CN; ³ Shanxi North Fenglei Industrial Group Co., Ltd., Houma/CN |
| W 10.07 | Simulation of localized corrosion propagation in inhibited media via potentiostatic test B. Santos ¹ ; M. Serenario ¹ ; X. Wang ¹ ; D. Young ¹ ; M. Singer ¹ ; M. Mohamed-Said ² ; A. Bueno ³ ¹ Ohio University, Athens/USA; ² TotalEnergies, Pau/F; ³ Universidade Federal de São João del Rei, São João del Rei/BR |
| W 10.08 | Influence Of Oxygen Diffusion Coefficients and Soil Moisture Content on the Corrosion Behavior of Carbon Steel L. AlSharif ¹ ; M. Alshahrani ¹ ; H. Attar ¹ ¹ Saudi Aramco Oil Company, Dhahran/SAR |
| W 10.10 | Internal Corrosion Rupture of a 6-in Gas Line Pipe F. Jewilli ¹ ¹ University of Manchester, LIBYA/LAR |

12. Metallic Coatings

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| W 12.01 | A comparison of borides formed on 30NiCrMo16 and X10CrNiTi18- 09 steels A. CHILALI ¹ ; H. SALHI ² ¹ National Preparatory School for Engineering Studies, Rouiba/DZ; ² Unit of Research & Development-Aeronautical mechanics , Algiers/DZ |
| W 12.02 | Characterization of Nano-structured graded multi-layered coating N. Rasheed ¹ ; S. Mutairi ² ¹ Research Center, Dhahran/SAR; ² Research Center,, Eastren/SAR |
| W 12.03 | Design of Experiment for Advanced Nanostructured Coating: Dry Solid Particle Erosion Tests S. Motairi ¹ ; N. Al-Rasheedi ² ¹ R&DC, Eastern/SAR; ² DHR&DC , Khobar/SAR |
| W 12.05 | Synthesis and properties of the Ni-Mo-B electrochemical composite anticorrosion coatings S. Halaichak ¹ ; M. Khoma ¹ ; V. Pokhmurskii ¹ ; R. Mardarevych ¹ ; V. Vynar ¹ ¹ Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Lviv/UA |
| W 12.06 | An Investigation of Phase Impact on Corrosion Properties of Electrodeposited Zn-Ni Coatings L. Yi ¹ ; S. Wang ¹ ¹ University of Southampton, Southampton/UK |
| W 12.07 | Corrosion performance of cold spray coated stainless steel in nitric acid environment M. LEONARDI ¹ ¹ Université Paris-Saclay, CEA, elancourt/F |
| W 12.08 | Corrosion resistance of Galvanised Zn-Al Steel Sheets Produced in a Hot Dip Process Simulator (HDPS) L. Suarez ¹ ; M. Prado ² ; M. Panera ² ; A. Montes ² ; O. Conejero ² ; J. Garcia-Revuelta ² ¹ Fundación IDONIAL, Avilés/E; ² Fundación IDONIAL, Aviles/E |

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| W 12.09 | <p>Corrosion control of ruthenium oxy-hydroxide coating for the development of robust pH sensors: observation and monitoring of the near field of a nuclear waste disposal site.</p> <p>D. AOUBIDA¹; I. IGNATIADIS²; S. BETELU²; J. BERTRAND³; R. RODRIGUES²; q. PHAM⁴</p> <p>¹ BRGM, Orléans/F; ² BRGM, Orleans/F; ³ Andra, Châtenay-Malabry/F; ⁴ ICCMO Paris Saclay , Orsay/F</p> |
| W 12.10 | <p>Advancing Geothermal Heat Exchanger Efficiency: Investigating Coating Solutions for Enhanced Heat Transfer and Reduced Corrosion in Heat Exchangers</p> <p>S. Paul¹; M. Wu²; G. Schneider³; D. Martelo³; N. Kale³; A. Bhuvanendran Nair Jayakumari²; A. Castro-Vargas²; C. Penot²; A. Loukodimou²</p> <p>¹ TWI Ltd /University of Leicester, Cambridge/UK; ² University of Leicester, Leicester/UK; ³ TWI Ltd, Cambridge/UK</p> |
| W 12.11 | <p>Effect of heat treatment on the corrosion and mechanical properties of Nickel Tungsten alloy electrodeposits</p> <p>G. Guilbert¹</p> <p>¹ Materianova, MONS/B</p> |
| W 12.13 | <p>Characterization of the corrosion behavior of Zn-Al-Mg coated steel under São Paulo acidic rain by Scanning Vibrate Electrode Technique</p> <p>M. Bolsanello¹; A. Abreu²; M. P. Guedes¹; I. Costa¹; J. Izquierdo²; J. Rossi¹</p> <p>¹ Nuclear and Energy Research Institute, IPEN–CNEN/SP, São Paulo/BR; ² Universidad de La Laguna, La Laguna/E</p> |
| W 12.14 | <p>Corrosion behavior of anodic titanium oxide modified in-situ by vanadium incorporation</p> <p>M. Michalska-Domańska¹; M. Lazińska²; K. Prabucka³; M. Czerwiński⁴; T. Durejko²</p> <p>¹ Military University of Technology, Warszawa/PL; ² Military University of Technology/Institute of Materials Science, Warschau/PL; ³ Military University of Technology/Institute of Optoelectronics, Warschau/PL; ⁴ Military University of Technology of Optoelectronics, Warschau/PL</p> |

13. Inorganic Coatings

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| W 13.02 | <p>Corrosion resistance of micro-arc oxidation coating on AZ91-Ti MMC</p> <p>J. Jiao¹; J. Zhang¹; Y. Lian¹; J. Gao¹</p> <p>¹ University of Science and Technology Beijing, Beijing/CN</p> |
| W 13.04 | <p>Corrosion and anodizing behavior of dissimilar AA2050-T84 and AA7050-T451 alloys joined by Friction Stir Welding</p> <p>R. Klumpp¹; S. Akbarzadeh²; F. Delaunois²; I. Costa³; M. Olivier¹</p> <p>¹ UMONS, Mons/B; ² Umons, Mons/B; ³ Instituto de Pesquisas Energéticas e Nucleares, São Paulo/BR</p> |
| W 13.05 | <p>Plasma electrolytic oxidation pre-treatments as a way to affect the properties of oxide coatings grown on aluminum and magnesium alloys</p> <p>A. Olesiński¹; M. Wala¹; M. Stec¹; M. Bik²; P. Jeleń²; P. Chulkin¹; W. Simka¹; M. Sowa¹</p> <p>¹ Silesian University of Technology, Gliwice/PL; ² AGH University of Technology, Kraków/PL</p> |
| W 13.06 | <p>Microstructure, mechanical properties and oxidation resistance of Zr-Hf-N coatings by magnetron co-sputtering</p> <p>Z. Wang¹</p> <p>¹ Xiamen University, Xiamen/CN</p> |

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| W 13.07 | <p>Performance of novel Polymer Derived Ceramic (PDC) coatings developed for refinery piping systems and in-situ corrosion monitoring by EIS-based sensor</p> <p><u>S. Vry</u>¹; L. Freire²; I. Ezpeleta²</p> <p>¹ Université Grenoble Alpes, CEA, LITEN, F-38054 Grenoble (France), Grenoble/F; ² AIMEN Technology Center, O Porriño/E</p> |
| W 13.10 | <p>Influence of the composition of the electrolyte and parameters of the synthesis of the plasma-electrolyte oxidized layer on alloy 1160 on its corrosion resistance in 3% NaCl solution</p> <p>H. Pokhmurska¹; H. Veselivska²; M. Student²; V. Posuvailo², K. Zadorozhna²</p> <p>¹ Technische Universität Chemnitz, Chemnitz/D; ² Karpenko Physico-Mechanical Institute of the National Academy of Sciences of Ukraine, Lviv/UKR</p> |

14. Organic Coatings

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| W 14.01 | <p>Multifunctional nanocomposites epoxy coating with enhanced mechanical, anticorrosion and bactericidal properties</p> <p><u>M. Samardžija</u>¹; M. Kurtela²; V. Alar²; I. Stojanović²; B. Runje²</p> <p>¹ Faculty of Mining, Geology and Petroleum Engineering, University of Zagreb, Zagreb/HR; ² Faculty of Mechanical Engineering and Naval Architecture/University of Zagreb, Zagreb/HR</p> |
| W 14.02 | <p>Corrosion Properties and Thermal Stability of Polyurethane Coatings</p> <p><u>M. Logar</u>¹; <u>I. Fatović</u>¹; I. Stojanović¹; M. Kurtela¹; V. Alar¹; I. Juraga¹</p> <p>¹ Faculty of Mechanical Engineering and Naval Architecture/University of Zagreb, Zagreb/HR</p> |
| W 14.03 | <p>High temperature resistant coatings for wood stoves</p> <p><u>M. Kurtela</u>¹; I. Stojanović¹; V. Alar¹; F. Kapor²; B. Škrlec³</p> <p>¹ Faculty of Mechanical Engineering and Naval Architecture/University of Zagreb, Zagreb/HR; ² Faculty of Mining, Geology and Petroleum Engineering, University of Zagreb, Zagreb/HR; ³ University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Zagreb/HR</p> |
| W 14.05 | <p>Application of Biochar Nanoparticles in Zinc Epoxy Coatings</p> <p><u>Z. Li</u>¹; H. Bi¹; C. Weinell¹; K. Dam-Johansen¹</p> <p>¹ Technical University of Denmark (DTU), Kgs. Lyngby/DK</p> |
| W 14.06 | <p>The Effect of Carbon-Based Surfaces on the Development and Structure of Marine Cyanobacterial Biofilms</p> <p>M. Romeu¹; <u>M. Lima</u>¹; L. Gomes¹; E. de Jong²; J. Morais³; V. Vasconcelos⁴; M. Pereira¹; O. Soares¹; J. Sjollema²; F. Mergulhão¹</p> <p>¹ Faculty of Engineering of University of Porto, Porto/P; ² University Medical Center Groningen, Groningen/NL; ³ CIIMAR – Interdisciplinary Centre of Marine and Environmental Research, University of Porto, Porto/P; ⁴ Faculty of Sciences of University of Porto, Porto/P</p> |
| W 14.07 | <p>ANTICORROSION PERFORMANCE OF AN EPOXY COATING APPLIED ON THE CARBON STEEL PRE-TREATED WITH SILANES CONTAINING A NATURAL CORROSION INHIBITOR</p> <p>M. Pessoa¹; J. Braga¹; <u>B. Pereira da Silva</u>¹; B. Freitas¹; S. Santos²; V. Capelossi²; F. Cotting¹</p> <p>¹ Federal University of Minas Gerais , Belo Horizonte/BR; ² State University of Santa Cruz, Ilhéus/BR</p> |
| W 14.08 | <p>Evaluation of adhesion properties of coating film on Zn-Mg-Al alloy-coated steel sheets</p> <p><u>S. OH</u>¹</p> <p>¹ Pohang Institute of Metal Industry Advancement, 201/ROK</p> |

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| W 14.09 | A novel strategy to enhance the anti-corrosion of epoxy coating based on fluorinated graphene coupled with MOFs <u>B. Dou</u> ¹ ; S. Duan ¹ ; X. Gao ² ; Y. Zhang ¹ ; X. Lin ¹ ; Z. Fang ² ¹ Sichuan University of Science & Engineering, Zigong/CN; ² Zhongshan Photoelectric Materials Co., Zibo/CN |
| W 14.10 | Possibilities of Robotic Application of High-Temperature Coatings for Protection of Fireplaces <u>I. Stojanović</u> ¹ ; <u>B. Škrlec</u> ¹ ; V. Alar ¹ ; M. Kurtela ¹ ¹ University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Zagreb/HR |
| W 14.11 | A durable and photothermal superhydrophobic coating with entwinned CNTs-SiO₂ hybrids for anti-icing applications F. Zhang ¹ ; <u>D. Xu</u> ² ; D. Zhang ³ ; L. Ma ³ ; J. Wang ³ ; Y. Huang ³ ; M. Chen ⁴ ; H. Qian ³ ; X. Li ³ ¹ Wuhan Research Institute of Materials Protection, WuHan/CN; ² University of Science and Technology Beijing, Haidian District /CN; ³ University of Science and Technology Beijing, Beijing/CN; ⁴ Sinopec Research Institute of cSafety Engineering, Qingdao/CN |
| W 14.12 | Tuning the colour of topcoats <u>U. Paszek</u> ¹ ; I. Gajecka ¹ ; S. Piłat ¹ ; L. Komorowski ² ; A. Królikowska ² ; I. Kunce ² ; D. Wojda ² ; K. Zacharuk ² ; E. Langer ³ ; M. Zubielewicz ³ ¹ Polish Corrosion Society, Gdańsk/PL; ² Road and Bridge Research Institute, Warsaw/PL; ³ The Łukasiewicz Research Network - Institute for Engineering of Polymer Materials and Dyes, Gliwice/PL |
| W 14.13 | Waterbased zinc primers with reduced zinc content <u>U. Paszek</u> ¹ ; I. Gajecka ¹ ; S. Piłat ¹ ; L. Komorowski ² ; A. Królikowska ² ; I. Kunce ² ; D. Wojda ² ; K. Zacharuk ² ; E. Langer ³ ; M. Zubielewicz ³ ¹ Polish Corrosion Society, Gdańsk/PL; ² Road and Bridge Research Institute, Warsaw/PL; ³ The Łukasiewicz Research Network - Institute for Engineering of Polymer Materials and Dyes, Gliwice/PL |

15. Pretreatments

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| W 15.01 | The phosphonic acid inhibition of corrosion under the waterborne coating investigated by EIS <u>A. Kapitanović</u> ¹ ; H. Otmačić Ćurković ¹ ¹ Faculty of Chemical Engineering and Technology, University of Zagreb, Zagreb/HR |
| W 15.02 | Influence of pre-treatment on the corrosion and adhesion properties of Al-anode coatings <u>T. Naacke</u> ¹ ; M. Silva Campos ¹ ; C. Blawert ¹ ; M. Störmer ¹ ; M. Zheludkevich ¹ ¹ Helmholtz-Zentrum Hereon, Geesthacht/D |
| W 15.03 | One step pre-treatment that ensures corrosion protection, paint adhesion and cleaning properties (combining the worlds of chemical and mechanical pre-treatment) <u>R. van Meer</u> ¹ ¹ AD Chemicals B.V., Heijningen/NL |
| W 15.04 | The effect of increasing the concentration of Zr-based conversion coating on the topography of the steel surface <u>A. Poropat</u> ¹ ; A. Razumić ¹ ; I. Stojanović ¹ ¹ University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Zagreb/HR |

16. Self-healing and Smart Coatings

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| W 16.03 | In-situ incorporation of nanocontainers during Plasma Electrolytic Oxidation S. Al Abri ¹ ; A. Rogov ² ; A. Mathews ² ; B. Mingo ² ; A. Yerokhin ² ¹ University of Manchester, Manchester/UK; ² The University of Manchester, Manchester/UK |
| W 16.04 | LDH conversion coatings for active corrosion protection of LPSO Mg alloys J. Gómez-Granados ¹ ; E. Matykina ¹ ; R. Arrabal ¹ ; G. Garcés ² ; <u>M. Mohedano</u> ¹ ¹ Universidad Complutense de Madrid, Madrid/E; ² CENIM-CSIC, Madrid/E |
| W 16.06 | Self- healing analysis of corrosion on Mg alloy with microcapsules PU/Pua/ IPDI M. OSTAPIUK ¹ ; J. Bieniaś ¹ ; A. Marques ² ¹ Lublin University of Technology, LUBLIN/PL; ² Instituto Superior Técnico, Lisboa/P |
| W 16.07 | In situ LDH growth on bare and PEO coated magnesium alloys in the presence of chelating agents T. Shulha ¹ ; M. Serdechnova ¹ ; S. Lamaka ¹ ; X. Lu ² ; C. Feiler ¹ ; C. Blawert ¹ ; M. Zheludkevich ¹ ¹ Helmholtz-Zentrum hereon GmbH, Geesthacht/D; ² Northeastern University, Shenyang/CN |
| W 16.08 | Development of novel coating with self-healing properties under immersion in NaCl solution M. Aramayo ¹ ; I. Aoki ¹ ¹ University of São Paulo, São Paulo/BR |

17. Corrosion in the Refinery and Petrochemistry Industry

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| W 17.01 | A Case Study on the Damage Types of Duplex SS by Various Corrosion Environments in Refinery <u>D. Lee</u> ¹ ¹ SK energy, Ulsan/ROK |
| W 17.03 | Predicting Acid Gas Dew-Point Corrosion At Sulfur Recovery Units Through Proactive Corrosion Management A. Alratoee ¹ ; I. Albrahim ² ¹ Saudi Aramco, Khobar Saudi Arabia/SAR; ² Saudi Aramco, Dhahran/SAR |
| W 17.04 | Failure Analysis of Crack on Subang CO2 Removal Absorber Column and Repair Methods R. Kurniawan ¹ ; M. Kunardianto ² ¹ PT. Pertamina EP, Cirebon, West Java/RI; ² PT. Pertamina EP, Jakarta/RI |

19. Automotive Corrosion

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| W 19.01 | The Investigation of Correlation between Corrosion and Lap shear Strength on Steels and Al Joint S. Hong ¹ ; Y. Yoo ¹ ¹ POSCO, Incheon/ROK |
| W 19.02 | Corrosion and tribocorrosion characterization of a novel cast quasicrystal aluminum alloy B. Zajec ¹ ; M. Bajt Leban ² ; T. Kosec ² ; B. Leskovar ³ ; B. Markoli ³ ¹ Slovenian National Building and Engineering Institute, Ljubljana/SLO; ² Slovenian |

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| | National Building and Civil Engineering Institute, 11etroleum/SLO; ³ University of Ljubljana, Ljubljana/SLO |
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20. Tribocorrosion

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| W 20.01 | The Investigation of Tungsten Carbide-Cobalt Coatings Behaviour Subjected to Mechanical Forces and Stresses N. Al-Rasheedi ¹ ; S. Al-Mutairi, ¹ ¹ Saudi Aramco Oil Company, Dhahran/SAR |
| W 20.02 | Evaluation of a new multi-component aluminium alloy applied as a low-density thermal barrier for corrosion, wear and hydrogen applications E. Villanueva Viteri ¹ ; I. Vicario Gómez ¹ ; J. Albizuri Goikoetxea ² ; I. Hurtado Hurtado ³ ; T. Guraya Diez ² ; N. Burgos García ⁴ ¹ TECNALIA, Basque Research and Technology Alliance (BRTA), Derio/E; ² University of the Basque country (UPV/EHU), Bilbao/E; ³ Mondragon University, Mondragón/E; ⁴ Ceit-IK4, Donostia-San Sebastián/E |

21. Polymers and Advanced Materials

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| W 21.02 | Anti-corrosive composite coatings based on PVB/ZnO:Co and PVB/HAP:Co K. Aleksic ¹ ; D. Bajic ² ; Z. Stojanovic ¹ ; L. Latinovic ³ ; V. Tomasevic ³ ; I. Stojkovic Simatovic ⁴ ; S. Markovic ¹ ¹ Institute of Technical Sciences of SASA, Belgrade/SRB; ² Military Technical Institute, Belgrade/SRB; ³ School of Engineering Management, University Union – “Nikola Tesla”, Belgrade/SRB; ⁴ Faculty of Physical Chemistry – University of Belgrade, Belgrade/SRB |
| W 21.03 | Towards Sustainable Waste Management: Enhancing Recycling of Multi-material Waste using ‘Green’ Solvents A. Loukodimou ¹ ; C. Lovell ² ; K. Maniam ³ ; A. Antelava ² ; T. Gouveia ⁴ ; P. Rullière ⁴ ; G. Theodosopoulos ³ ; N. Kale ³ ; S. Paul ⁵ ¹ University of Leicester, Leicester/UK; ² TWI, Middlesbrough/UK; ³ TWI, Cambridge/UK; ⁴ Solvionic, Toulouse/F; ⁵ TWI & University of Leicester, Cambridge/UK |

22. Corrosion & Corrosion Protection of Drinking Water Systems

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| W 22.01 | Study on the Corrosion Potential of Cast Iron: Effects of Sample Thickness and Type of Surface Exposure H. Sala ¹ ; M. Mulheron ² ¹ University of Surrey, Surrey/UK; ² University of Surrey, Guildford/UK |
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23. Corrosion of Archaeological and Historical Artefacts

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| W 23.01 | Environment-friendly treatment of rusted steel for the conservation of historical heritage E. Mielgo ¹ ; O. Conejero ¹ ; A. Barberena ² ; M. Prado ¹ ¹ IDONIAL Technology Centre, Avilés/E; ² ESAPA, Avilés/E |
| W 23.02 | Musical instruments in Museums – a challenge in metal conservation V. de Bruyn-Ouboter ¹ ; A. Erbe ² ; E. Flø Gustad ³ ¹ Ringve Music Museum – Rockheim (Museums in South Trøndelag) / Norwegian |

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| | University of Science and Technology (NTNU), Trondheim/N; ² Norwegian University of Science and Technology (NTNU), Trondheim/N; ³ Norwegian University of Science and Technology (NTNU) , Trondheim/N |
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24. Corrosion Control in Aerospace

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| W 24.01 | Assessment of Pitting Corrosion in Anodized 2xxx Aluminum Alloys J. Araujo ¹ ; I. Costa ¹ ; J. Chen ² ; X. Zhou ² ¹ University of São Paulo, São Paulo /BR; ² The University of Manchester, Manchester/UK |
| W 24.02 | Corrosion development in hybrid joins in C5 environment using advanced FEM modeling K. Potopalska ¹ ; D. Höche ¹ ; M. Zheludkevich ¹ ¹ Helmholtz-Zentrum Hereon, Geesthacht/D |
| W 24.03 | Effect of diatomite surface modification on the loading and release of organic corrosion inhibitors from anti-corrosive coatings J. Zhao ¹ ; D. Na ¹ ; S. Garcia ¹ ¹ Delft University of Technology , Delft/NL |
| W 24.04 | Influence of Surface Roughness and Post-Processing on the Corrosion Properties of additive manufacturing AlSi7Mg Alloys Produced by LPBF S. Mercier ¹ ¹ ONERA, the French Aerospace Lab, Chatillon/F |
| W 24.05 | Effect of Be addition on the microstructure morphology and corrosion behavior of an Al-Cu aeronautical alloy M. Oliveira ¹ ; T. Vida ¹ ; N. Cheung ² ; A. Garcia ² ; <u>C. Cardoso de Brito</u> ¹ ¹ São Paulo State University, São João da Boa Vista/BR; ² University of Campinas, Campinas/BR |
| W 24.06 | Environmental assisted cracking of friction stir welded UNS S32750 super duplex stainless steel in chloride media A. ESSAMPALLY ¹ ; R. V.S ² ¹ Indian Institute of Technology Bombay, MUMBAI/IND; ² Indian Institute of Technology Bombay, Mumbai/IND |

26. CO₂-Corrosion in Industrial Applications

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| W 26.01 | Corrosion behavior of pipeline materials under the supercritical condition of CO₂ with the addition of H₂O M. Seo ¹ ¹ Hyundai-steel, Dangjin-si/ROK |
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27. Atmospheric Corrosion

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| W 27.02 | Stainless steel selection in specific environments T. Córdoba ¹ ; V. Matres ¹ ¹ Acerinox Europa S.A.U., Palmones (Los Barrios)/E |
| W 27.03 | Prediction of corrosion product thickness by stochastic method M. Vacek ¹ ; V. Krivy ¹ ; P. Konecny ¹ ; M. Kubzova ¹ ¹ Faculty of Civil Engineering, VSB – Technical University of Ostrava, Ostrava – Poruba/CZ |

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| W 27.04 | Study of cerium oxidation mechanisms C. Thomas ¹ ; I. Popa ² ; B. Ravat ³ ; L. Jolly ³ ; B. Oudot ³ ¹ CEA Valduc/University of Bourgogne, Dijon/F; ² University of Bourgogne, Dijon/F; ³ CEA Valduc, Is sur Tille/F |
| W 27.05 | Electrochemical characterization of patinated bronzes exposed to outdoor atmosphere D. Mikic ¹ ; A. Kapitanović ¹ ; H. Otmačić Čurković ¹ ¹ Faculty of Chemical Engineering and Technology, University of Zagreb, Zagreb/HR |
| W 27.06 | Effect of artificial patination on Atmospheric Corrosion of Weathering Steel and Bronze I. Bera ¹ ¹ University of Zagreb, Faculty of Chemical Engineering and Technology, Zagreb/HR |
| W 27.07 | Identification of Critical Details of Weathering Steel Bridges K. Kreislova ¹ ; M. Vlachova ¹ ; J. McCooh ² ; M. Sykora ² ; M. Vacek ³ ¹ SVUOM Ltd., Prague/CZ; ² CVUT in Prague, Prague/CZ; ³ VSB-TU, Ostrava/CZ |
| W 27.08 | Influence of phosphonic acid monolayers on atmospheric corrosion of Al2024-T3 under outdoor conditions T. Prüßner ¹ ; G. Grundmeier ¹ ; P. Vieth ¹ ; L. Ruhm ¹ ; J. Löseke ¹ ; Y. He ¹ ¹ Paderborn University, Paderborn/D |
| W 27.09 | Challenges in assessing atmospheric corrosion performance of anticorrosive coatings with accelerated cyclic corrosion tests M. Saeedikhani ¹ ; A. Somers ² ¹ Deakin University, Melbourne/AUS; ² Deakin University, Melbourne/AUS |

28. Corrosion in Green & Low Carbon Energy Technologies (TF)

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| W 28.01 | Wet CO-CO₂ Stress Corrosion Cracking in CCS Pipelines M. Gonuguntla Suryanarayana ¹ ¹ , Bangalore/IND |
| W 28.02 | Effect of pure ammonia gas on surface behavior of stainless steel and Ni base alloys above 500 degC S. Lee ¹ ; J. Shin ² ; K. Koo ² ; Y. Park ² ; U. Jung ² ¹ Samsung Engineering Co. LTD, Kyoungido/ROK; ² Korea Institute of Energy Research(KIER), Daejeon/ROK |
| W 28.03 | Influence of laser beam welding related to corrosion of 316L stainless steel O. Thimm ¹ ; I. Alebiosu ¹ ; S. Brimaud ¹ ¹ Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW), Ulm/D |

29. Corrosion of medical implants and devices (TF)

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| W 29.01 | Degradation of 13etroleum13ized zinc biomaterials in advanced in vivo models D. Mil-Homens ¹ ; C. Santos ² ; M. Montemor ¹ ; M. Alves ¹ ¹ Instituto Superior Técnico, Lisbon/P; ² Instituto Politécnico de Setúbal, Setúbal/P |
| W 29.02 | ELECTROCHEMICAL BIODEGRADABLE BEHAVIOUR AND SURFACE TREATMENT OF MAGNESIUM ALLOY ZK60 |

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| | V. Obertova ¹ ; V. Knap ¹ ; M. Štrbák ¹ ; D. Kajánek ¹ ; B. Hadzima ¹ ¹ University of Žilina, Žilina/SK |
| W 29.03 | Characterization of the microstructure and corrosion behavior of electrodeposited FeMn films for bioabsorbable implants applications A. Davila Gabbardo ¹ ; J. Zoppas Ferreira ² ; I. Costa ¹ ¹ IPEN, São Paulo/BR; ² UFRGS, Porto Alegre/BR |
| W 29.05 | Effect of patient factors on the corrosion properties of biomedical implants S. Nikpour ¹ ¹ Western University, London/CDN |

1. Joint Session: Corrosion and Corrosion Protection of Additive Manufactured Metals

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| J 1.01 | Corrosion resistance of additively manufactured high strength aluminum alloys J. Lindén ¹ ; C. Linder ² ; B. Mehta ³ ; K. Andersson ¹ ; L. Nyborg ³ ¹ RISE Research Institutes of Sweden, Borås/S; ² RISE Research Institutes of Sweden, Kista/S; ³ Chalmers University of Technology, Gothenburg/S |
| J 1.02 | Effect of build orientation on the corrosion behavior of additively manufactured 316L stainless steel M. Yousif ¹ ; K. Al-Athel ² ; A. Adesina ² ¹ KFUPM, Dhahran/SAR; ² King Fahd University of Petroleum & Minerals, Dhahran/SAR |

2. Joint Session: Corrosion and Corrosion protection of additive Manufactured Metals for biomedical applications

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| J 2.01 | 3D Printed Stainless Steel Biomedical Implant Corrosion Resistance Study O. Alabdulgader ¹ ¹ Saudi Aramco, Dhahran /SAR |
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3. Joint Session: Corrosion in the Chemical Process Industry

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| J 3.01 | Corrosion of LD Converter Gas Pipe in Condensate Environment J. PARK ¹ ; S. Jung ¹ ; J. Rhee ¹ ¹ Hyundai Steel, Dangjin-si, Chungcheongnam-do/ROK |
| J 3.02 | The impact of fluoride ion on the local corrosion of stainless steel in a phosphoric medium: An electrochemical investigation H. HAJJAQUI ¹ ; Y. KERROUM ¹ ; A. GUENBOUR ¹ ; A. BELLAOUCHOU ¹ ; A. ZARROUK ¹ ; R. BOULIF ² ¹ Mohammed V University, Rabat/MA; ² OCP, El Jadida/MA |

4. Joint Session: Coatings for High Temperatures

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| J 4.01 | Hot corrosion behaviors of Inconel 718 superalloy and its aluminide coating under environments containing solid NaCl and water vapor S. Geng ¹ ; Q. Hu ¹ ; F. Wang ¹ ¹ Northeastern University, Shenyang/CN |
| J 4.02 | Comparative study on high temperature oxidation behavior of deformable austempered ductile iron with and without protective Al rich coatings |

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| | O. Tsurtsimia ¹ ; T. Kukava ² ; L. Nadaraia ² ; E. Kutelia ² ; L. Khundadze ² ¹ Georgian Technical University, Tblisi/GE; ² Georgian Technical University, Tbilisi/GE |
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6. JS: Hydrogen and metallic materials

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| J 6.01 | Effect of Pearlite on HAC Behavior of Pipeline Steel at Different Strain Rates <u>J. Liu</u> ¹ ; F. Huang ¹ ¹ Wuhan University of Science and technology, WUHAN/CN |
| J 6.02 | High-Performance Copper-Base Alloys for a Safe Operation in Hydrogen Containing Environments <u>W. Budweiser</u> ¹ ; A. Frehn ¹ ; W. Budweiser ¹ ¹ Materion Brush GmbH, Stuttgart/D |
| J 6.03 | Sensitization of Nickel-base Alloy 690 and the Role of Hydrogen during Oxidation by Water – An Experiment-guided First-principles Study <u>A. Meier de Andrade</u> ¹ ; C. Geers ¹ ; J. Chen ² ; I. Panas ¹ ¹ Chalmers University of Technology, Gothenburg/S; ² Chalmers University of Technology, Studsvik Nuclear AB, Gothenburg, Nyköping/S |
| J 6.05 | Hydrogen permeation testing parameter exploration for high-entropy alloys <u>Y. Bilbao</u> ¹ ; E. Mardaras ² ; O. Gordo-Burgoa ³ ; I. Vicario ⁴ ; T. Guraya ¹ ¹ University of the Basque Country (UPV/EHU), Bilbao/E; ² Azterlan, Basque Research and Technology Alliance (BRTA), Durango/E; ³ Mondragon University, Arrasate-Mondragón/E; ⁴ Tecnalía, Basque Research and Technology Alliance (BRTA), Derio/E |
| J 6.06 | Microstructural and corrosion characterization of different types of High Entropy Alloys <u>L. Castrillejo Robles</u> ¹ ; Y. Bilbao ¹ ; L. Armendariz ² ; I. Vicario ³ ; O. Gordo-Burgoa ⁴ ; E. Mardaras ⁵ ; T. Guraya ¹ ¹ University of the Basque country (UPV/EHU), Bilbao/E; ² University of the Basque Country (UPV/EHU, Bilbao/E; ³ TECNALIA, Basque Research and Technology Alliance (BRTA), Derio/E; ⁴ Mondragon University, Arrasate-Mondragón/E; ⁵ Azterlan, Basque Research and Technology Alliance (BRTA), Durango/E |
| J 6.07 | Evaluation of hydrogen embrittlement of X65 pipeline steel in high pressure hydrogen gas using tubular samples <u>S. Rahimi</u> ¹ ; E. piperopoulos ¹ ; P. Bruzzaniti ¹ ; E. Proverbio ¹ ¹ University of Messina, Messina/I |

7. Joint Session: Corrosion Sensoring, Monitoring and Prediction

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| J 7.01 | Tackling corrosion under insulation by retrofitting pipelines with fiber optic sensors <u>t. van hoestenberghe</u> ¹ ; R. Guldentops ² ; N. De Vleeschouwer ¹ ; T. Lanckriet ¹ ¹ Fluves NV, Ghent/B; ² BASF, Antwerp/B |
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8. Joint Session: Microbial Corrosion in Marine Environments

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| J 8.01 | (Microbial) Corrosion and cathodic protection of steel sheet pilings in a harbor in The Netherlands <u>N. Noël-Hermes</u> ¹ ; M. Salta ¹ ¹ Endures B.V., Den Helder/NL |
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10. Joint Session: Polymers in Organic Coatings

J 10.01

Insight into the interaction between chemical groups in polymer matrices and organic inhibitors

T. Darikwa¹; S. Garcia¹; S. Picken¹

¹ Delft University of Technology (TU Delft), Delft/NL

(Programme subject to change)