

## Scientific lectures Programme - Tuesday 9 September

Opening Ceremony		Auditorium
09:00		Prof. L. Lazzari, Prof. C. Mapelli, Prof. L. Fedrizzi
09:30		EFC Medal Award
		Plenary Lecture
09:45	PL-7839	<b>"Critical" approaches to reveal corrosion mechanisms</b> <u>H. Terry</u> , Vrije Universiteit Brussel/B
10:30		Coffee break
Metallic Coatings		Auditorium
Chairs		W. Fürbeth / M. Olivier
11:00	O-7125	<b>Galvanizability and corrosion properties of Zn-Mg-Al hot-dip coating with shot blasting pre-treatment</b> <u>T.C. Kim</u> , S.H. Kim, S.Y. Kim, M.S. Oh, J.S. Kim, Posco, Pohang/ROK
11:20	O-7369	<b>Corrosion and microstructure study of new ZnAlMg galvanized steel by single dip technology</b> <u>A. Alvarez Pampliega</u> , E. Thomas, METALogic, Heverlee/B; <u>A. Tomandl</u> , HILTI, Schaan/FL; <u>C. Masquelier</u> , J. Balduyck, T. Pinger, Galvapower Group, Hasselt/B; <u>C. Buelens</u> , METALogic, Heverlee/B
11:40	O-7411	<b>Corrosion behaviour of ZnAlMg coatings in tropical and coastal environments</b> <u>A. Tomandl</u> , E. Labrenz, A. Erni, Hilti AG, Schaan/FL
12:00	O-7430	<b>The effect of Mg composition on corrosion protection of steel using PVD Zn-Mg coatings</b> <u>J. Davies</u> , <u>G. Williams</u> , Swansea University/UK
12:20	O-7323	<b>Influence of organic sealants on the corrosion protection of thermally sprayed ZnAl 15 coating</b> <u>R. Feser</u> , <u>A. Mertke</u> , University of Applied Sciences Iserlohn/D
12:40		Lunch
Metallic Coatings		Auditorium
Chairs		W. Fürbeth / M. Olivier
14:00	O-7773	<b>Zinc flake coatings vs. zinc-nickel electroplating: new trends and developments</b> <u>H. Sahrhage</u> , M. Krumm, K. Wojczykowski, Coventya GmbH, Gütersloh/D; <u>A. Hill</u> , Coventya SAS, Paris/F

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14:20	O-7244	<b>XPS investigations of ZnCr coated steel after corrosion load</b> <u>R. Steinberger</u> , J. Duchoslav, M. Arndt, University of Linz/A; T. Steck, voestalpine Stahl GmbH, Linz/A; F. Lengwin, CEST GmbH, Wiener Neustadt/A; J. Faderl, voestalpine Stahl GmbH, Linz/A; D. Stifter, University of Linz/A
14:40	O-7399	<b>Electrocodeposition of Al-Zn alloy by using double counter electrodes system</b> <u>Y. Sato</u> , K. Azumi, Hokkaido University, Sapporo/J
15:00	O-7055	<b>Development of aluminum magnesium alloy coating by new mist air and nitrogen cooled thermal spraying gun</b> <u>Y. Omori</u> , Y. Nishiura, T. Kumai, Yoshikawa Kogyo, Himeji/J; T. Morimoto, Nakayama Amorphous, Osaka/J
15:20	O-7418	<b>Antibacterial and protective properties of Cr/Ag nanocomposite coatings obtained by electrochemical techniques</b> <u>E. García-Lecina</u> , B. García-Blanco, I. García-Urrutia, J.A. Díez, Fundación CIDETEC, Guipúzcoa/E
15:40	Coffee break	
<b>Metallic Coatings</b>		<b>Auditorium</b>
<b>Chairs</b>	<b>A. Mol / R. Feser</b>	
16:10	O-7081	<b>Study of corrosion resistance of electroless duplex NiP/NiB coatings in different media by potentiodynamic polarisation and SEM observation</b> V. Vitry, F. Tosar, <u>F. Delaunois</u> , University of Mons/B
16:30	O-7625	<b>Friction and corrosion properties of electroless nickel nanocomposite coatings codeposited with MoS<sub>2</sub> or WS nanoparticles</b> <u>C. Zanella</u> , M. Righetti, University of Trento/I; A. Gracco, University of Padova/I; F. Deflorian, University of Trento/I
16:50	O-7757	<b>Corrosion resistance of laser clad 304L stainless steel surfaces enriched with ruthenium additions exposed to sulphuric acid media</b> J.W. Van der Merwe, University of the Witwatersrand, Johannesburg/ZA; <u>D. Tharandt</u> , University of the Witwatersrand and Worley Parsons, Johannesburg/ZA; P.C. Masiu, University of the Witwatersrand, Johannesburg/ZA
17:10	O-7166	<b>Anticorrosion composite coatings obtained by of plasma electrolytic oxidation</b> <u>S. Gnedenkov</u> , S. Sinebryukhov, Far Eastern- Branch of Russian Academy of Sciences, Vladivostok/RUS
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>	<b>P. Marcus / J.M.C. Mol</b>	
11:00	KN-7153	<b>Critical factors in corrosion and biocompatibility of biodegradable Mg alloys</b> <u>S. Virtanen</u> , University of Erlangen-Nürnberg/D

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11:40	O-7070	<b>Localised corrosion mechanisms of magnesium in methanol</b> <u>H.N. McMurray</u> , J.E. Board, G. Williams, Swansea University/UK
12:00	O-7246	<b>Effect of Si on formation of Fe-rich particles in pure Mg and its influence on corrosion</b> <u>L. Yang</u> , X. Zhou, The University of Manchester/UK; S. Liang, R. Schid-Fetzer, Clausthal University of Technology/D; T. Hashimoto, H. Liu, X. Zhong, J. Robson, The University of Manchester/UK; Z. Fan, Brunel University, Uxbridge/UK; G. Scamans, Innoval Technology Ltd., Oxon/UK; G.E. Thompson, The University of Manchester/UK
12:20	O-7290	<b>Corrosion of AZ31 Mg alloy in the presence of ammonium ion</b> D. Buggio, <u>M. Trueba</u> , S.P. Trasatti, Università degli Studi di Milano/I
12:40 Lunch		
Corrosion Mechanisms, Methods and Modelling		Fermi Hall
Chairs		S. Virtanen / H.N. McMurray
14:00	O-7545	<b>The dissolution of magnesium investigated with a microelectrochemical flow system</b> <u>L. Rossrucker</u> , Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D; N. Birbilis, Monash University, Melbourne/AUS; G.S. Frankel, Ohio State University, Columbus, OH/USA; K.J.J. Mayrhofer, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D
14:20	O-7310	<b>Corrosion behaviour of magnesium electrodes investigated by real-time hydrogen measurement</b> <u>M. Curioni</u> , University of Manchester/UK
14:40	O-7626	<b>Influence of plastic deformation on the corrosion resistance of TiAl6V4 and TiMo10Zr4 alloys in aqueous solution containing chloride ions</b> <u>H. Krawiec</u> , J. Loch, A. Lukaszczyk, AGH University of Science and Technology, Cracow/PL; V. Vignal, Université de Bourgogne, Dijon/F
15:00	O-7278	<b>Non-uniformity of anodized titanium surface under UV-light irradiation observed by ellipso-microscopy</b> <u>K. Fushimi</u> , K. Kurauchi, T. Nakanishi, Y. Hasegawa, M. Ueda, T. Ohtsuka, Hokkaido University, Sapporo/J
15:20	O-7578	<b>pH at zinc and magnesium surfaces during atmospheric corrosion</b> <u>C. Taxen</u> , Swerea-Kimab AB, Kista/S; D. Thierry, Institute de la Corrosion, Brest/F
15:40 Coffee break		

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Corrosion Mechanisms, Methods and Modelling		Fermi Hall
<b>Chairs</b>		<b>S. Virtanen / H.N. McMurray</b>
<b>16:10</b>	O-7237	<b>The development of a mechanistic model towards the simulation of atmospheric corrosion</b> H. Simillion, O. Dolgikh, P. Maciel, H. Terryn, J. Deconinck, Vrije Universiteit Brussel/B
<b>16:30</b>	O-7417	<b>Role of pH on the L-cysteine action on zinc in 3 w/w % NaCl</b> V. Shkirskiy, P. Volovitch, K. Ogle, CNRS - Chimie ParisTech/F; F. Leroux, T. Stimpfling, Université Blaise Pascal, Clermont-Ferrand/F; P. Keil, H. Hintze-Bruening, BASF Coatings GmbH, Münster/D
<b>16:50</b>	O-7478	<b>In-situ atmospheric corrosion monitoring using resistometry</b> K. Azumi, Hokkaido University, Sapporo/J
<b>17:10</b>	O-7338	<b>Corrosion performances of plasma electrolytic oxidized implant metals and alloys</b> S. Sinebryukhov, S.V. Gnedenkov, O.A. Khrisanfova, A.V. Puz, V.S. Egorkin, A.G. Zavidnaya, Institute of Chemistry FEB RAS, Vladivostok/RUS
<b>17:30</b>	O-7676	<b>Effect of microstructure on the morphology of atmospheric corrosion pits in 304L and 316L Stainless Steel</b> H. B. Mohammed Ali, A.J. Davenport, M.M. Attallah, University of Birmingham/UK
Corrosion in Oil & Gas Production		Pacinotti Hall
<b>Chairs</b>		<b>S. Paterson / S. Shademan</b>
<b>11:00</b>	O-7266	<b>Comparison of martensitic stainless steels threshold properties in stress corrosion cracking phenomena</b> A. Scatena, PontLab S.r.l., Pontedera/I; M. Anselmi, F. Cappuccini, D. Di Pietro, GE Oil & Gas, Firenze/I
<b>11:20</b>	O-7171	<b>Effect of acetic acid on corrosion behaviour of modified martensitic stainless steels in high temperature sour environments</b> T. Sunaba, INPEX Corporation, Tokyo/J; S. Okazaki, D. Ito, Yokohama National University/J; Y. Tomoe, S. Hirano, INPEX Corporation, Tokyo/J
<b>11:40</b>	O-7368	<b>Martensite-based stainless steel OCTG of 15Cr-based and 17Cr-based material for sweet and mild sour condition</b> Y. Ishiguro, T. Suzuki, E. Eguchi, T. Nakahashi, H. Sato, JFE Steel Corporation, Handa/J
<b>12:00</b>	O-7154	<b>Hydrogen stress cracking susceptibility of super duplex stainless steel 2507 in natural sea water</b> F. Vucko, N. Larché, D. Thierry, French Corrosion Institute, Brest/F
<b>12:20</b>	O-7253	<b>Influence of thermal treatments between 650 and 850°C on the pitting corrosion behaviour of 2304 duplex stainless steel</b> F. Zucchi, F. Zanotto, V. Grassi, M. Merlin, A. Balbo, University of Ferrara/I

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12:40		Lunch
Corrosion in Oil & Gas Production		Pacinotti Hall
Chairs	S. Paterson / S. Shademan	
14:00	O-7805	<b>Optimisation of the corrosion resistance of pipe butt welds in superduplex stainless steels</b> G. Byrne, Rolled Alloys, Blackburn/UK; G. Warburton, NeoNickel, Blackburn/UK; R. Francis, RF Materials, Glossop/UK; Z. Schulz, Rolled Alloys, Temperance, MI/USA
14:20	O-7821	<b>Stress corrosion cracking of solution annealed and cold worked UNS S31603 stainless steel in H<sub>2</sub>S containing production environments</b> T. Cassagne, TOTAL S.A., Pau/F; C. Duret, C. Plennevaux, Institut de la Corrosion, Fraisses/F
14:40	O-7576	<b>Assessment of the crevice corrosion oxygen and temperature limits of CRAs for waste water injection wells</b> M.E. Wilms, S. Fletcher, W.D. Grimes, J.P. Smit, Shell Global Solutions International BV, Amsterdam/NL; M. Klein, S. Abolghasemi, Nederlandse Aardolie Maatschappij, Assen/NL
15:00	O-7141	<b>Failure investigation: produced water re-injection tubing and equipment</b> H. Reese, P.I. Nice, Statoil ASA, Stavanger/N; A. Nelemans, Statoil ASA, Trondheim/N
15:20	O-7776	<b>Galvanic effects in drilling equipment - challenges and solutions of corrosion resistance</b> S. Kolesov, Weatherford International, St. Petersburg/RUS; R. Badrak, Weatherford International, Houston, TX/USA; V. Chizhikov, Weatherford International, St. Petersburg/RUS; A. Kharkiov, A. Alkhimenko, Saint-Petersburg State University/RUS
15:40		Coffee break
Automotive Corrosion		Room C
Chairs	F. Hannour / G. Despert	
11:00	KN-7850	<b>Light weight technologies for innovative mobility society</b> A. Dogan, Toyota Motor Europe/B
11:40	O-7315	<b>Effect of welding heat on microstructure and corrosion of ferritic stainless steel 409M</b> S.P. Ambade, Y.M. Puri, A.P. Patil, VNIT, Nagpur/IND
12:00	O-7209	<b>Pickling process for high-strength steels before coating</b> C. Schreiber, S. Friedrich, Institut für Korrosionsschutz Dresden GmbH/D

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12:20	O-7269	<b>Limits of rapid heating for the press-hardening of ultra-high-strength steel from aluminum-silicon-coated blanks</b> T. Todzy, D. Worterg, Daimler AG, Sindelfingen/D; B. Engel, University of Siegen/D; M. Weyrich, University of Stuttgart/D
12:40 Lunch		
Automotive Corrosion		Room C
Chairs	F. Hannour / G. Despert	
14:00	O-7433	<b>Controlling and monitoring the risks of hydrogen induced stress corrosion cracking in automotive body parts</b> R. Scharf, CEST - Kompetenzzentrum für elektrochemische Oberflächentechnologie GmbH, Moosbach/A; A. Muhr, G. Luckeneder, K.-H. Stellnberger, J. Faderl, voestalpine Stahl GmbH, Linz/A; G. Mori, Montanuniversität Leoben/A
14:20	O-7540	<b>Crevice corrosion of hot stamping steels for the automotive industry</b> M. Jönsson, L. Levander, Gestamp Hardtech, Luleå/S
14:40	O-7639	<b>A century with salt spray testing; time for a final phasing-out by a replacement based on newly developed more capable test regimes</b> M. Ström, Volvo Car Corporation, Gotheburg/S
15:00	O-7655	<b>Analysis of perforation corrosion morphology of steel sheets for automobiles using laser displacement meters</b> H. Kajiyama, M. Omoda, M. Kimura, JFE Steel Corporation, Kawasaki/J
15:20	O-7670	<b>Methodology for the definition of failure assessment diagram of AHSS exposed to aggressive environments</b> M. Beghini, L. Bertini, C. Colombo, B. Monelli, R. Valentini, University of Pisa/I
15:40 Coffee break		
Automotive Corrosion		Room C
Chairs	F. Hannour / G. Despert	
16:10	O-7193	<b>Influence of climatic parameters in accelerated test on the corrosion and mechanical properties of automotive joined materials</b> N. Lebozec, O. Clauzeau, D. Thierry, French Corrosion Institute, Brest/F
16:30	O-7349	<b>Concentration effect of salt solution on the corrosion of carbon steels investigated by salt spray test</b> H.S. Park, Y.H. Yoo, Y.K. Song, POSCO, Incheon/ROK
16:50	O-7221	<b>Adequacy between lighter multimaterial vehicle and car body corrosion resistance</b> P. Buttin, P.-Y. Cam, G.-A. Balmont, J. Bovin, Renault SAS, Guyancourt/F

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17:10	O-7161	<b>The influence of Ca<sup>2+</sup> in de-icing salt on the corrosion behavior of AM50 magnesium alloy</b> <u>M.W. Grabowski</u> , AUDI AG, Ingolstadt/D and University of Erlangen-Nürnberg/D; <u>S. Virtanen</u> , University of Erlangen-Nürnberg/D; <u>D.B. Bluecher</u> , <u>M. Korte</u> , AUDI AG, Ingolstadt/D
17:30	O-7526	<b>Study of polymer coating delamination kinetics on zinc modified with zinc oxide of different morphologies</b> <u>D. Iqbal</u> , <u>R. Singh Moirangthem</u> , <u>A. Bashir</u> , <u>A. Erbe</u> , Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D
<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>		<b>G. Schmitt / W. Hater</b>
11:00	O-7114	<b>New corrosion inhibitor for evaporative cooling systems</b> <u>J. Matheis</u> , <u>A. Stratmann</u> , <u>W. Hater</u> , BK Giuliani GmbH, Düsseldorf/D; <u>F. Wolf</u> , <u>R. Lunkenheimer</u> , BK Giuliani GmbH, Ludwigshafen/D; <u>C. Foret</u> , ICL France, Vaas/F
11:20	O-7394	<b>Corrosion inhibition of carbon steel in cooling water systems by means of chemicals used to modify heat transfer</b> <u>O. Conejero</u> , Fundacion ITMA, Aviles/E; <u>M. Cabañas</u> , <u>J. Arancón</u> , <u>D. Carrascal</u> , ArcelorMittal Global R&D, Aviles/E
11:40	O-7169	<b>The impact of copper chrome boron (CCB) wood preservative on the corrosion of St37 steel</b> <u>H. Gerengi</u> , <u>C. Tasçioğlu</u> , <u>C. Akçay</u> , <u>M. Kurtaya</u> , Duzce University/TR
12:00	O-7581	<b>Adsorption of imidazole, triazole, and tetrazole on oxidized copper surface</b> <u>D. Peca</u> , <u>A. Kokalj</u> , Jozef Stefan Institute, Ljubljana/SLO
12:20	O-7299	<b>Corrosion inhibition of a large evaporative cooling system</b> <u>I. Baghni</u> , Engineering Academy Tajoura/LAR
12:40		Lunch
<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>		<b>G. Schmitt / W. Hater</b>
14:00	O-7289	<b>Protection of Cu70Ni30 alloy by fatty acids</b> <u>H. Otmacic Curkovic</u> , <u>Z. Hajdari</u> , <u>K. Marusic</u> , University of Zagreb/HR
14:20	O-7498	<b>Inhibitor for galvanically coupled copper/steel system</b> <u>G. Tansug</u> , <u>T. Tuken</u> , <u>G. Sigircik</u> , <u>E.S. Giray</u> , <u>M. Erbil</u> , Cukurova University, Adana/TR
14:40	O-7352	<b>4,5-Dinitrobenzimidazole and 5-nitrobenzimidazole adsorption on copper surface. Electrochemical and XPS study</b> <u>I. Arkhipushkin</u> , <u>D. Zhilenko</u> , Mendeleev University of Chemical Technology of Russia, Moscow/RUS; <u>L. Kazansky</u> , Institute of Physical Chemistry and Electrochemistry of RAS, Moscow/RUS

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15:00	O-7173	<b>Probing corrosion inhibitor behaviour using micelle detection</b> S. Rankin, E. Perfect, LUX Assure Ltd., Edinburgh/UK; M. Achour, D. Blumer, ConocoPhillips, Bartlesville, OK/USA
15:40 Coffee break		
<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>	<b>G. Schmitt / W. Hater</b>	
16:10	O-7255	<b>Evaluation of environmental-friendly corrosion inhibitors vs traditional corrosion inhibitors in oil and gas industry</b> C. Di Iorio, T. Cheldi, S. Corraera, eni e&p, San Donato M./I; E. Lo Piccolo, G. Mortali, Centro Sviluppo Materiali, Roma/I
16:30	O-7610	<b>Effect of an amine based inhibitor on CO<sub>2</sub> corrosion of carbon steel</b> G. Mori, A. Prethaler, Montanuniversität Leoben/A; E. Rosenberg, M. Rückemann, TU of Vienna/A; W. Havlik, G. Zehethofer, S. Hönig, OMV E&P GmbH, Gänserndorf/A
16:50	O-7737	<b>Investigation of corrosion problems in cooling water pipeline</b> S. Al Subai, A. Bairamov, Saudi Basic Industries Corporation (SABIC), Jubail/SAR
<b>Corrosion of Archaeological and Historical Artefacts</b>		<b>Room E</b>
<b>Chairs</b>	<b>D. Neff</b>	
11:00	O-7139	<b>Corrosion of gold imitations in illuminated manuscripts</b> M. Kouril, E. Jindrova, T. Jamborova, Institute of Chemical Technology, Prague/CZ; J. Dernovskova, National Library of the Czech Republic, Prague/CZ
11:20	O-7190	<b>The bronze panel (paliotto) of San Moise in Venice: materials and causes of deterioration</b> C. Chiavari, C. Martini, S. Montalbani, E. Franzoni, M.C. Bignozzi, University of Bologna/I; C. Passeri, RE.CO. Restauratoriconsorziati, Roma/I
11:40	O-7464	<b>Single- and multiple-layer coatings for bronze statuary: preliminary study and in situ evaluation after five-year outdoor exposure</b> B. Salvadori, E. Cantisani, C.G.R. Tognon, CNR - Institute for the Conservation and Valorization of Cultural Heritage, Florence/I; M. Nesi, Private Restorer, Florence/I; A. Cagnini, M. Galeotti, S. Porcinai, Opificio delle Pietre Dure, Florence/I
12:00	O-7259	<b>In-situ EIS characterization of outdoor corrosion behaviour of bronze and gilded bronze</b> A. Balbo, M. Abbottoni, Ferrara University/I; C. Chiavari, C. Martini, E. Bernardi, Bologna University/I; C. Monticelli, Ferrara University/I



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12:20	O-7197	<b>Staining of bronze sculptures, determining the causes</b> <u>A.R. Moreira</u> , IPT Institute for Technological Research, Sao Paulo/BR; K. Barbosa, MASP Museu de Arte de São Paulo/BR; N.L. Almeida, Z. Panossian, IPT Institute for Technological Research, Sao Paulo/BR
12:40 Lunch		
Corrosion of Archaeological and Historical Artefacts		Room E
Chairs	D. Neff	
14:00	O-7382	<b>The role of microstructure on initial corrosion and metal release of Cu-Zn alloys in a chloride-containing laboratory atmosphere</b> X. Zhang, I. Odnevall Wallinder, <u>C. Leygraf</u> , KTH Royal Institute of Technology, Stockholm/S
14:20	O-7192	<b>Atmospheric corrosion of fire gilded bronze: accelerated ageing in runoff conditions</b> <u>C. Chiavari</u> , C. Martini, E. Bernardi, S. Raffo, University of Bologna/I; A. Balbo, M. Abbottoni, University of Ferrara/I; M.C. Bignozzi, University of Bologna/I; C. Monticelli, University of Ferrara/I
14:40	O-7311	<b>Dating copper-based archaeological materials using the voltammetry of microparticles</b> <u>A. Doménech</u> , University of Valencia, Burjassot/E; S. Capelo, University of Évora/P; T. Doménech, Institute of Restoration of Cultural Heritage, Valencia/E
15:00	O-7425	<b>Prediction of long-term corrosion rate of copper alloy objects</b> <u>K. Kreislova</u> , SVUOM Ltd., Prague/CZ; H. Geiplova, UTAM, Telc/CZ
15:20	O-7787	<b>A multi-technique approach for characterizing patina formed on the surface of brass used for musical instrument of the XIX century</b> F. Cocco, M. Fantauzzi, Università di Cagliari/I; G. Peschke, <u>B. Elsener</u> , ETH Zurich/CH; A. Rossi, Università di Cagliari/I
15:40 Coffee break		
Corrosion of Archaeological and Historical Artefacts		Room E
Chairs	D. Neff	
16:10	O-7186	<b>In situ study of long term atmospheric corrosion of iron by <math>\mu</math>Raman spectroscopy</b> <u>M. Bouchar</u> , D. Neff, CEA, Gif sur Yvette/F; J.P. Gallien, CEA and CNRS, Gif sur Yvette/F; P. Dillmann, CNRS, Gif sur Yvette/F
16:30	O-7474	<b>An integrated EIS-Raman approach to study the corrosion mechanism of iron artefacts</b> <u>S. Grassini</u> , Politecnico di Torino/I; M. Bouchar, CNRS, Gif-sur-Yvette/F; E. Angelini, M. Parvis, Politecnico di Torino/I; D. Neff, P. Dillmann, CNRS, Gif-sur-Yvette/F

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16:50	O-7594	<b>Study of iron sulphides origin in archeological artefacts by determination of sulphur isotopic ratio</b> S. Grousset, F. Mercier, CEA/CNRS, Gif-sur-Yvette/F; A. Dauzeres, IRSN, Fontenay aux Roses/F; D. Crusset, ANDRA, Châtenay-Malabry/F; L. Raimbault, MINES ParisTech, Fontainebleau/F; A. Galtayries, Chimie ParisTech/F; J-P. Gallien, P. Dillmann, D. Neff, CEA/CNRS, Gif-sur-Yvette/F
17:10	O-7136	<b>Study of archaeological ferrous objects in sulfide-containing media</b> J.A. Bourdoiseau, M. Jeannin, R. Sabot, C. Remazeilles, Ph. Refait, University of La Rochelle/F
17:30	O-7651	<b>Study of the role of ammonium ions on the corrosion of copper in sulphate containing media</b> H. de Melo, D.F. Abrahao, Sao Paulo University/BR
<b>Corrosion of Steel in Concrete</b>		<b>Room 4</b>
<b>Chairs</b>	<b>M. Raupach / C. Helm</b>	
11:00	O-7200	<b>Long-term survival of reinforced concrete structures in marine environments</b> R. Melchers, I. Chaves, The University of Newcastle/AUS
11:20	O-7261	<b>Corrosion behaviour of steel in fly-ash geopolymer mortars exposed to chloride solutions</b> C. Monticelli, M. Abbottoni, Ferrara University/I; S. Manzi, C. Chiavari, Bologna University/I; A. Balbo, F. Zanotto, Ferrara University/I; M.E. Natali, M.C. Bignozzi, Bologna University/I
11:40	O-7437	<b>Study of reinforcing bar corrosion in solution simulating bacteria metabolites</b> M. Stefanoni, E. Volpi, S.P. Trasatti, University of Milan/I
12:00	O-7551	<b>Investigations of chloride diffusion for reinforced geopolymer mortar</b> C. Monticelli, M. Abbottoni, University of Ferrara/I; S. Manzi, C. Chiavari, University of Bologna/I; A. Balbo, F. Zanotto, University of Ferrara/I; M.E. Natali, M.C. Bignozzi, University of Bologna/I
12:20	O-7550	<b>Chloride threshold level for steel in concrete - rebar polarisation effects</b> M. Kosalla, M. Raupach, RWTH Aachen/D
12:40	Lunch	
<b>Corrosion of Steel in Concrete</b>		<b>Room 4</b>
<b>Chairs</b>	<b>M. Raupach / C. Helm</b>	
14:00	O-7060	<b>A critical analysis of proposed test methods for measuring the chloride threshold value in reinforced concrete</b> U. Angst, B. Elsener, ETH Zurich/CH

## Scientific lectures Programme - Tuesday 9 September

14:20	O-7260	<b>Chloride threshold for corrosion initiation in reinforced concrete: the applicability of Ag/AgCl sensors revisited</b> F. Pargar, D.A. Koleva, P. Taheri, J.M.C. Mol, E.A.B. Koenders, K. van Breugel, Technology University of Delft/NL
15:00	O-7553	<b>Effect of concrete pore solution composition on the electrochemical behaviour of C15 steel reinforcement</b> S. Chakri, E. Sutter, B. Tribollet, V. Vivier, I. Frateur, Université Pierre et Marie Curie, Paris/F
15:20	O-7624	<b>Potentiostatic evaluation of the critical chloride threshold of 1.4362 stainless steel in concrete with mixed-in chloride</b> M. Gastaldi, F. Lollini, L. Bertolini, Politecnico di Milano/I
15:40 Coffee break		
Corrosion of Steel in Concrete		Room 4
<b>Chairs</b>		<b>M. Raupach / C. Helm</b>
16:10	O-7207	<b>Investigation of chloride-induced pitting corrosion of steel in concrete by a combination of electrochemical methods with X-ray tomography</b> G. Ebell, J. Mietz, A. Burkert, BAM Federal Institute for Materials Research and Testing, Berlin/D
16:30	O-7546	<b>Geo-polymeric and cementitious mortars with the same strength class: corrosion behaviour of steel and galvanized steel reinforcements</b> T. Bellezze, A. Mobili, G. Roventi, F. Tittarelli, Polytechnic University of Marche, Ancona/I
16:50	O-7314	<b>Stress corrosion cracking behaviour of the prestressing steel: influence of steel microstructure</b> I. Pepenar, ICECON GROUP, Bucharest/RO
17:10		<b>WP 11 business meeting</b>
WS: Corrosion Reliability of Electronics Devices		Room 2
<b>Chairs</b>		<b>R. Ambat / H. Schweigart</b>
11:00	O-7822	<b>Perspectives on the climatic reliability issues of electronic devices</b> R. Ambat, TU of Denmark, Kgs. Lyngby/DK
11:20	O-7819	<b>Brief introduction to the mechanism of electrochemical migration</b> H. Schweigart, Zestron Europe, Ingolstadt/D
11:40	O-7818	<b>Influence of the printed circuit board design on electrochemical migration and surface insulation</b> M. Nowotnick, Universität Rostock/D; S. Mattern, Robert Bosch GmbH, Stuttgart/D

## Scientific lectures Programme - Tuesday 9 September

12:00	O-7447	<b>Electrochemical migration in electronics: effect of contamination and bias conditions</b> <u>V. Verdingovas</u> , M.S. Jellesen, O-R. Ambat, TU of Denmark, Lyngby/DK
12:20	O-7082	<b>Contamination profile of printed circuit board assemblies in relation to soldering types and conformal coating</b> <u>H. Conseil</u> , M.S. Jellesen, R. Ambat, Technical University of Denmark, Lyngby/DK
12:40 Lunch		
WS: Corrosion Reliability of Electronics Devices		Room 2
Chairs		R. Ambat / H. Schweigart
14:00	O-7495	<b>Corrosion reliability of electronics: the influence of solder temperature on the decomposition of flux activators</b> <u>K. Piotrowska</u> , H. Conseil, M.S. Jellesen, R. Ambat, TU of Denmark, Lyngby/DK
14:20	O-7227	<b>Cleaning in electronics: understanding Today's needs</b> <u>J. Cetier</u> , P.J. Duchi, Inventec, Yverdon Les Bains/CH; A.M. Laugt, Inventec, Vincennes/F
14:40	O-7225	<b>Solder paste residue corrosivity assessment: Bono test</b> <u>J. Cetier</u> , C. Puechagut, A.M. Laugt, E. Guene, R. Anisko, Inventec, Vincennes/F
15:00	O-7426	<b>Corrosion in electronics: overview of failures and countermeasures</b> <u>M.S. Jellesen</u> , V. Verdingovas, H. Conseil, R. Ambat, TU of Denmark, Lyngby/DK
15:20	O-7521	<b>Salt spray corrosion test methods - an overview</b> A.B. Kentved, <u>K.A. Schmidt</u> , DELTA, Danish Electronics, Light & Acoustics, Hoersholm/DK
15:40 Coffee break		
WS: Corrosion Reliability of Electronics Devices		Room 2
Chairs		R. Ambat / H. Schweigart
16:10	O-7203	<b>An on-site atmospheric-corrosion sensor</b> <u>R. Minamitani</u> , Hitachi Ltd., Ibaraki/J
16:30	O-7824	<b>Environmental stress corrosion of polybutylenterephthalate: a common material for electronic housings</b> G. Klett, M. Fürtsch, A. Hachtel, <u>L. Müller</u> , Robert Bosch GmbH, Reutlingen/D
16:50	O-7236	<b>The effect of a post-electroplating electrochemical oxidation treatment on whisker formation from tin coatings</b> <u>M.A. Ashworth</u> , D. Haspel, L. Wu, G.D. Wilcox, R.J. Mortimer, Loughborough University/UK

## Scientific lectures Programme - Tuesday 9 September

17:10	O-7403	<b>Tin electrodeposits produced using non-aqueous ionic liquid electrolytes: whisker formation</b> <u>C.J. Stuttle</u> , M.A. Ashworth, G.D. Wilcox, R.J. Mortimer, Loughborough University/UK
17:30	O-7823	<b>Basic physics of moisture challenges in electronic packaging - a tutorial overview</b> <u>J. Jacobsen</u> , A. Holm, J.P. Krog, L. Rimestad, A. Riis, Grundfos A/S, Bjerringbro/DK
<b>Microbial Corrosion</b>		<b>Room 5</b>
<b>Chairs</b>		<b>P. Cristiani / R. Basseguy</b>
11:00	KN-7848	<b>Role of green rusts in corrosion and biocorrosion of carbon steel in marine environment</b> <u>P. Refait</u> , R. Sabot, M. Jeannin, UMR 7356 CNRS-University La Rochelle/F; S. Sable, I. Lanneluc, UMR 7266 CNRS-University La Rochelle/F
11:40	O-7623	<b>Microbial corrosion of steel in argillite: complementarity of surface characterization (<math>\mu</math>RamanS and FESEM) and of microbiological approach</b> F. Mercier-Bion, Y. Léon, CNRS, Gif-sur-Yvette/F; D. Neff, CEA, Gif-sur-Yvette/F; C. Wittebroodt, IRSN, Fontenay-aux-Roses/F; L. Urios, University of Pau/F; A. Perez, CNRS, Gif-sur-Yvette/F; F. Marsal, M. Flachet, IRSN, Fontenay-aux-Roses/F; M. Magot, University of Pau/F; J.P. Gallien, CEA, Gif-sur-Yvette/F; Ph. Dillmann, CNRS, Gif-sur-Yvette/F
12:00	O-7794	<b>Evaluation of pH under-deposit using the dual-cell technique in flow conditions - The case of CuNi 70:30 in high bacteria contaminated fresh</b> <u>M. Carvalho</u> , RSE SpA, Milano/I; E. Guerrini, S. Trasatti, Università degli Studi di Milano/I; P. Cristiani, RSE SpA, Milano/I; M. Urquidi-Macdonald, KFUPM, Dhahran/SAR
12:20	O-7353	<b>Electrochemical corrosion behavior of carbon steel exposed to low concentration agar with and without nutrients</b> <u>A. Spark</u> , RMIT University, Melbourne/AUS and CSIRO, Melbourne/AUS; L. Ward, RMIT University, Melbourne/AUS; I. Cole, D. Marney, CSIRO, Melbourne/AUS; D. Law, RMIT University, Melbourne/AUS
12:40		Lunch
<b>Microbial Corrosion</b>		<b>Room 5</b>
<b>Chairs</b>		<b>P. Cristiani / R. Basseguy</b>
14:00	O-7384	<b>Influence of Fe-S clusters of hydrogenase on mild steel corrosion</b> <u>I. Rouvre</u> , INP-ENSIACET, Toulouse/F; C. Gauquelin, I. Meynial-Salles, INSA, Toulouse/F; R. Basseguy, CNRS-ENSIACET, Toulouse/F
14:20	O-7077	<b>Outer membrane associated redox active components in lithotrophic SRB trigger direct electron transfer during anaerobic electrical MIC</b> <u>P. Beese-Vasbender</u> , Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D; J. Garrelfs, Max-Planck-Institut für Marine Mikrobiologie, Bremen/D; S. Nayak, A. Erbe, K.J.J. Mayrhofer, M. Stratmann, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D; F. Widdel, Max-Planck-Institut für Marine Mikrobiologie, Bremen/D

## Scientific lectures Programme - Tuesday 9 September

14:40	O-7703	<b>Biofilm impact on the stainless steel passive film</b> A. Allion, Aperam Isbergues Research Center/F; S. Zanna, A. Seyeux, Chimie ParisTech/F; M.-H. Berger, MINES-ParisTech, Evry/F; P. Marcus, Chimie ParisTech/F
15:00	O-7084	<b>Experimental study of wear and corrosion interaction in steel chains under working conditions</b> A. Lotfollahi Yaghin, R.E. Melchers, University of Newcastle/AUS
15:20	O-7533	<b>A microelectrodes study for anaerobiosis profiles in biofilms</b> E. Guerrini, Università degli Studi di Milano/I; M. Grattieri, Politecnico di Milano/I; P. Cristiani, Ricerca sul Sistema Energetico s.p.a., Milan/I; S.P.M. Trasatti, Università degli Studi di Milano/I
15:40 Coffee break		
Microbial Corrosion		Room 5
Chairs		P. Cristiani / R. Basseguy
16:10	O-7199	<b>Long-term corrosion of steels and steel piling in seawaters with elevated nutrient concentration</b> R. Melchers, R. Jeffrey, The University of Newcastle/AUS
16:30	O-7229	<b>Introducing a corrosion management approach to MIC assessment, control and monitoring in the oil and gas industry</b> T.L. Skovhus, H.E. Berge, DNV GL AS, Bergen/N; R. Eckert, G. Koch, DNV GL AS, Dublin, OH/USA
16:50	O-7613	<b>A numerical model for copper biocorrosion</b> D. Fischer, C. Galarce, M. Walczak, G. Pizarro, I. Vargas, Pontificia Universidad Católica de Chile, Santiago/RCH
17:10	O-7846	<b>Corrosion behaviour of titanium in the presence of Streptococcus Sanguinis</b> Y. Fei, A. Davenport, O. Addison, University of Birmingham/UK
17:30	O-7334	<b>Effect of marine Pseudoalteromonas sp. on the microstructure and corrosion behaviour of 2205 Duplex stainless steel</b> M. Moradi, Z. Song, Ningbo Institute of Materials Technology and Engineering/CHN
17:50	O-7683	<b>Influence of sterilization methods on corrosion behavior of stainless steel in simulated cooling water containing sulfate reducing bacteria</b> H. Ge, X. Wang, M. Zhang, X. Meng, Shanghai University of Electric Power/CHN
18:10		WP 10 business meeting

## Scientific lectures Programme - Tuesday 9 September

		<b>WS: Means of Prevention and Recovery against Decay/ Deterioration of Valuable Building and Urban Decoration</b>	<b>Room 3</b>
<b>Chairs</b>		<b>P.L. Bonora</b>	
<b>11:00</b>	O-7835	<b>Research activity for the restoration and maintenance of the Pisan art objects at the University of Pisa</b> A. Andreotti, I. Bonoduce, V. Castelvetro, Università di Pisa/I; <u>F. Ciardelli</u> , Università di Pisa and SPIN-PET s.r.l., Pontedera/I; M.P. Colombini, Università di Pisa and ICVBC-CNR, Firenze/I	
<b>11:20</b>	O-7828	<b>World War One fortresses and artifacts in Trento area: from historical corrosion to a durable maintenance work</b> <u>F. Meneghelli</u> , Soprintendenza per i Beni architettonici e archeologici della Provincia Autonoma di Trento, Isola della Scala (VR)/I	
<b>11:40</b>	O-7807	<b>Cutting-edge technologies for the renewal of historical buildings the thirty-year experience gained in restoring the painted facades</b> <u>G. Di Tanna</u> , Boero Group spa, Genova/I; G. Bozzo, Aitiva, Genova/I	
<b>12:00</b>	O-7816	<b>Genoa's elevated highway (Soprelevata) : 1964 -1984 -2014 - a successful maintenance project</b> <u>P.L. Bonora</u> , University of Trento/I	
<b>12:20</b>	O-7812	<b>More than 20 years of proven durability of fluorinated architectural coatings onto concrete; 1992/2014 Genoa's Aquarium case</b> <u>A. Locaspi</u> , Innoventions srl, Cinisello Balsamo/I	
<b>12:40 Lunch</b>			
		<b>WS: Means of Prevention and Recovery against Decay/ Deterioration of Valuable Building and Urban Decoration</b>	<b>Room 3</b>
<b>Chairs</b>		<b>P.L. Bonora</b>	
<b>14:00</b>	O-7450	<b>The effect of soiling and oxidation on architectural titanium</b> M.V. Diamanti, <u>M.P. Peddeferri</u> , Politecnico di Milano/I	
<b>14:20</b>	O-7849	<b>Study of protective coatings for outdoor bronzes by means of in situ electrochemical techniques</b> <u>A. Colombo</u> , Università degli Studi di Milano/I; S. Goidanich, E. Guerrini, Politecnico di Milano/I; S. Porcinai, A. Cagnini, M. Galeotti, Laboratorio Scientifico Opificio delle Pietre Dure, Florence/I; B. Salvadori, ICVBC-CNR, Florence/I; A. Vicenzo, Politecnico di Milano/I; L. Brambilla, Haute Ecole Arc Conservation-Restauration, Neuchâtel/CH; L. Rosetti, Politecnico di Milano/I; S. Trasatti, Università degli Studi di Milano/I	
<b>14:40</b>	O-7782	<b>Corrosion resistance of anticorrosive film formed on Mg alloy by steam coating</b> <u>T. Ishizaki</u> , N. Kamiyama, Shibaura Institute of Technology, Tokyo/J	
<b>16:50</b>		<b>WP 22 business meeting</b>	

Scientific lectures Programme - **Wednesday 10 September**

		<b>Plenary Lecture</b>	<b>Auditorium</b>
<b>09:00</b>	PL-7838	<b>From the object scale to the nanometer : issues linked with corrosion of archaeological ferrous artefacts</b> <u>P. Dillmann</u> , Commissariat a L'Energie Atomique (CEA), Gif-sur-Yvette/F	
<b>09:45</b>		Break for Changing Lecture Hall	
		<b>Pretreatments</b>	<b>Auditorium</b>
<b>Chairs</b>		<b>I.V. Aoki / M. Zheludkevich</b>	
<b>10:00</b>	O-7302	<b>Anti-corrosive conversion coating on aluminium alloys using high temperature steam with incorporated chemistries</b> <u>R. Din</u> , M.S. Jellesen, R. Ambat, TU of Denmark (DTU), Kongens Lyngby/DK	
<b>10:20</b>	O-7725	<b>Comparative study between conventional tests and ACET technique for powder coatings used on steel with different phosphate pretreatments</b> J. Molina, J. Suay, University Jaume I, Castellon de la Plana/E; <u>J. Gracenea</u> , MEDCO SL, Castellon de la Plana/E	
<b>10:40</b>	O-7752	<b>The role of surface modification by phosphating in corrosion protection of sintered Nd-Fe-B magnets</b> <u>E. Isotahdon</u> , E. Huttunen-Saarivirta, V.-T. Kuokkala, Tampere University of Technology/FIN	
<b>11:00</b>	O-7262	<b>Investigation of under film corrosion using pH sensitive microcapsules</b> <u>T. Matsuda</u> , K. Kashi, North Dakota State University, Fargo, ND/USA; M. Jensen, Concordia College, Moorhead, MN/USA; V. Gelling, North Dakota State University, Fargo, ND/USA	
<b>11:20</b>	Coffee break		
		<b>Self-healing Coatings</b>	<b>Auditorium</b>
<b>Chairs</b>		<b>I.V. Aoki / M. Zheludkevich</b>	
<b>11:50</b>	O-7287	<b>Highly ordered mesoporous silica loaded with dodecylamine for active anticorrosion coatings</b> J.M. Falcón, T. Sawczen, <u>I.V. Aoki</u> , University of São Paulo/BR	
<b>12:10</b>	O-7187	<b>Self healing organic coatings on aluminium alloy</b> A. Firouzi, A. Bianco, <u>G. Montesperelli</u> , University of Rome Tor Vergata/I	
<b>12:30</b>	O-7522	<b>Assessment of corrosion performances of cerium based silane-zeolite coatings on AA6061 substrate</b> L. Bonaccorsi, <u>L. Calabrese</u> , A. Capri, G. Gulli, E. Proverbio, University of Messina/I	



## Scientific lectures Programme - Wednesday 10 September

12:50	O-7412	<b>Numerical modelling as a tool for the design of self-healing dispersion coatings</b> M. Walczak, Pontificia Universidad Católica de Chile, Santiago/RCH
13:10 Lunch		
Self-healing Coatings		Auditorium
Chairs		L.M. Calle / H. Terryn
14:30	O-7379	<b>L-cysteine intercalated layered double hydroxide as anticorrosive agent for organic coatings</b> T. Stimpfling, Blaise Pascal University, Aubiere/F; H. Hintze-Bruening, P. Keil, H. Theil, BASF Coatings, Münster/D; F. Leroux, Blaise Pascal University, Aubiere/F
14:50	O-7185	<b>Micro-electrochemical study of organic corrosion inhibitors for AA2024</b> F. Andreatta, University of Udine/I; I. Recloux, University of Mons/B; L. Paussa, University of Udine/I; M. Mouanga, M. Olivier, University of Mons/B; L. Fedrizzi, University of Udine/I
15:10	O-7585	<b>Coating self-healing effect by loading microcapsules with two-component epoxy film former</b> F. Cotting, I.V. Aoki, University of São Paulo/BR
15:30	O-7282	<b>Non-destructive in-situ characterization of microcapsules and self-healing coatings using confocal Raman spectroscopy</b> A. Lutz, I. De Graeve, H. Terryn, Vrije Universiteit Brussel/B
15:50	O-7195	<b>Recent developments on microencapsulation for autonomous corrosion protection</b> L.M. Calle, NASA, Kennedy Space Center, FL/USA; W. Li, J.W. Buhrow, L. Fitzpatrick, S.T. Jolley, J.M. Surma, ESC-QNA, Kennedy Space Center, FL/USA; B.P. Pearman, X. Zhang, NASA, Kennedy Space Center, FL/USA
16:10 Coffee break		
Self-healing Coatings		Auditorium
Chairs		L.M. Calle / H. Terryn
16:40	O-7145	<b>Development of self healing polymer coatings on metals</b> A. Lutz, I. De Graeve, H. Terryn, Vrije Universiteit Brussel/B
17:00	O-7228	<b>Design and analysis of multi-layer self-healing coatings tailored for smart corrosion protection</b> T. Tran, A. Vimalanandan, Max-Planck Institut für Eisenforschung GmbH, Düsseldorf/D; J. Fickert, K. Landfester, D. Crespy, Max-Planck Institut für Polymerforschung, Mainz/D; M. Rohwerder, Max-Planck Institut für Eisenforschung GmbH, Düsseldorf/D
17:20		<b>WP 14 business meeting</b>

## Scientific lectures Programme - Wednesday 10 September

<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>		<b>J.M.C. Mol / F. Deflorian</b>
<b>10:00</b>	O-7211	<b>Nanostructure and local properties of oxide layers grown in simulated pressurized water reactor environment</b> <u>V. Maurice</u> , T. Massoud, L.H. Klein, A. Seyeux, P. Marcus, CNRS - Chimie ParisTech/F
<b>10:20</b>	O-7158	<b>About point defects formation in Cr<sub>2</sub>O<sub>3</sub> passive films</b> <u>B. Malki</u> , Simorg System, Grenoble/F; A. Pasturel, B. Baroux, SIMAP, Grenoble/F
<b>10:40</b>	O-7213	<b>Kelvin probe force microscopy and atmospheric corrosion of cold-rolled grade 2205 duplex stainless steel</b> <u>C. Örnek</u> , D. Engelberg, University of Manchester/UK
<b>11:00</b>	O-7275	<b>Relative humidity for onsets of pitting corrosion and repassivation of stainless steels under wet-dry cyclic conditions containing chloride</b> <u>A. Nishikata</u> , H. Nakamura, T. Nam, E. Tada, Tokyo Institute of Technology/J
<b>11:20</b>		Coffee break
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>		<b>J.M.C. Mol / F. Deflorian</b>
<b>11:50</b>	KN-7695	<b>Application of time-of-flight secondary ions mass spectrometry (ToF-SIMS) to corrosion research</b> <u>P. Marcus</u> , A. Seyeux, Chimie ParisTech/F
<b>12:30</b>	O-7572	<b>Electrochemical AFM study of corrosion behavior of a 2507 super duplex stainless steel: influence of precipitated chromium nitrides</b> E. Bettini, U. Kivisäkk, Sandvik Materials Technology/S; C. Leygraf, <u>J. Pan</u> , Royal Institute of Technology, Stockholm/S
<b>12:50</b>	O-7455	<b>Influence of heat treatment on corrosion resistance of martensitic stainless steels 1.4034 and 1.4021</b> P. Rosemann, <u>M. Babutzka</u> , A. Heyn, T. Halle, University of Magdeburg/D
<b>13:10</b>		Lunch
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>		<b>V. Maurice / H. Krawiec</b>
<b>14:30</b>	O-7506	<b>Stress corrosion cracking at room temperature of austenitic stainless steels in marine areas: the case of fixed guards for climbing</b> <u>F. Deflorian</u> , University of Trento/I; M. Dalvit, S. Rossi, C. Zanella, M. Fedel, Università di Trento/I

## Scientific lectures Programme - Wednesday 10 September

14:50	O-7480	<b>Passivity and corrosion behavior of duplex stainless steels after various surface preparations</b> <u>V. Vignal</u> , CNRS, Dijon/F; H. Krawiec, AGH University of Science and Technology, Krakow/PL; S. Le Manchet, Industeel, Le Creusot/F
15:10	O-7499	<b>Stable and metastable pitting corrosion susceptibilities from physical properties of passive films</b> <u>B. Ter-Ovanesian</u> , B. Normand, Université de Lyon, Villeurbanne/F
15:30	O-7217	<b>Chemical composition and nanostructure of passive films formed on FeCrNiMo austenitic stainless steel</b> H. Peng, V. Maurice, L.H. Klein, A. Seyeux, S. Zanna, P. Marcus, CNRS - Chimie ParisTech/F
15:50	O-7138	<b>Polarization behaviour of new aluminium alloys (AA2139 and AA2198) in neutral media</b> <u>A. Balbo</u> , V. Grassi, A. Frignani, F. Zucchi, University of Ferrara/I
<b>16:10</b> Coffee break		
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>	<b>P. Marcus / J.M.C. Mol</b>	
16:40	O-7245	<b>Mechanisms of scale dissolution on non-alloyed and silicon-alloyed steels</b> A. Alaoui Mouayd, <u>E. Sutter</u> , B. Tribollet, University Pierre et Marie Curie, Paris/F; A. Koltsov, ArcelorMittal, Maizieres-les-Metz/F
17:00		<b>WP 6 &amp; 8 business meeting</b>
<b>Corrosion in Oil &amp; Gas Production</b>		<b>Pacinotti Hall</b>
<b>Chairs</b>	<b>S. Paterson / M. Achour</b>	
10:00	O-7226	<b>In-situ surface strain mapping of pitting corrosion in a high strength carbon steel</b> <u>P. Barnes</u> , Intertek, Manchester/UK; S.B. Lyon, D.L. Engelberg, The University of Manchester/UK
10:20	O-7233	<b>Sour corrosion - investigation of iron sulfide layer growth in saturated H<sub>2</sub>S solutions</b> <u>G. Genchev</u> , K. Cox, A. Sarfraz, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D; C. Bosch, M. Spiegel, Salzgitter Mannesmann Forschung GmbH, Duisburg/D; A. Erbe, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D

## Scientific lectures Programme - Wednesday 10 September

10:40	O-7095	<b>Electrochemical noise analysis on modified 13%Cr stainless steels in sour environments under stress</b> <u>M. Sakairi</u> , J. Tatehara, Y. Mizukami, Hokkaido University, Sapporo/J; S. Hashizume, TenarisNKK Tubes, Kawasaki/J
11:00	O-7106	<b>Localised corrosion attack of pipeline steel associated with weldments in CO<sub>2</sub> containing environments</b> <u>A. Abdurrahim</u> , National Oil Corporation, Tripoli/LAR
11:20 Coffee break		
Corrosion in Oil & Gas Production		Pacinotti Hall
Chairs	S. Paterson / M. Achour	
11:50	O-7100	<b>Pipeline pigging and CP specialised electrical surveys: a unique integral strategy for pipeline integrity</b> L. Di Biase, <u>O. Fumei</u> , ISPRONA Services & Consulting, Rome/I; G. Fumei, New York University, NY/USA
12:10	O-7472	<b>Electrochemical properties of iron sulphide in weak acid systems</b> <u>M. Tjelta</u> , J. Kvarekvål, Institute for Energy Technology (IFE), Kjeller/N
12:30	O-7724	<b>Cl-SCC attack in SS 316L branch connection welding</b> <u>M. Al-Hammad</u> , Saudi Aramco, Udailiyah/SAR
12:50	O-7563	<b>Pittings occurrence in coupons of weight loss for corrosion monitoring in pipelines</b> <u>N. Almeida</u> , IPT, São Paulo/BR; L. Tiroel, Petrobras Transportes S. A., São Paulo/BR; V. Ferrari, IPT, São Paulo/BR; R. Moraes, Petrobras Transportes S.A., São Paulo/BR
13:10 Lunch		
Corrosion in Oil & Gas Production		Pacinotti Hall
Chairs	S. Paterson	
14:30		WP 13 business meeting
16:10 Coffee break		
Corrosion in Oil & Gas Production		Pacinotti Hall
Chairs	S. Paterson	
16:40		WP 13 business meeting

## Scientific lectures Programme - Wednesday 10 September

Automotive Corrosion		Room C
<b>Chairs</b>		<b>F. Hannour / G. Despert</b>
<b>10:00</b>	KN-7851	<b>Surface engineering for bipolar plate design dedicated to transportation application</b> <u>B. Normand</u> , Insa, Lyon/F
<b>10:40</b>	O-7224	<b>Investigation on the effect of impurities on the corrosion behaviour of various A356 alloy</b> A. Niklas, R. González-Martínez, A.I. Fernández-Calvo, <u>S. Mendez</u> , IK4-AZTERLAN, Durango/E; A. Conde, J.J. de Arenas, J.J. de Damborenea, CENIM, Madrid/E
<b>11:00</b>	O-7385	<b>Effect of experimental parameters on AA6xxx intergranular corrosion during immersion in acidified NaCl solutions (ISO11846)</b> <u>L. Peguet</u> , E. Chassagnolle, R. Bergeron, A. Afseth, Constellium Research Centre, Voreppe/F
<b>11:20</b>	Coffee break	
Automotive Corrosion		Room C
<b>Chairs</b>		<b>F. Hannour / G. Despert</b>
<b>11:50</b>	O-7511	<b>The effect of surface conditioning on the deposition of Zr-based conversion coatings on aluminium alloys</b> <u>J. Cerezo</u> , P. Taheri, Delft University of Technology/NL; I. Vandendael, Vrije Universiteit Brussel/B; R. Posner, Henkel AG & Co. KGaA, Düsseldorf/D; J.H.W. de Wit, J.M.C. Mol, Delft University of Technology/NL; H. Terryn, Vrije Universiteit Brussel/B
<b>12:10</b>	O-7614	<b>Effect of Sr and Ti addition on the corrosion behavior of Al-7Si-0.3Mg alloy</b> M. Uludag, Selcuk University, Konya/TR; <u>M. Kocabas</u> , Yildiz Technical University, Istanbul/TR; D. Dispinar, Istanbul University/TR; R. Çetin, Selcuk University, Konya/TR; N. Cansever, Yildiz Technical University, Istanbul/TR
<b>12:30</b>	O-7482	<b>Electrochemical profiling of multi-clad aluminium sheets used in automotive heat exchangers</b> <u>K. Bordo</u> , R. Ambat, TU of Denmark, Lyngby/DK; L. Peguet, A. Afseth, Constellium Research Centre, Voreppe/F
<b>12:50</b>	O-7152	<b>Investigation by electrochemical impedance spectroscopy of filiform corrosion of electrocoated steel substrates</b> <u>A.-P. Romano</u> , M.-G. Olivier, University of Mons/B
<b>13:10</b>	Lunch	

## Scientific lectures Programme - Wednesday 10 September

Automotive Corrosion		Room C
<b>Chairs</b>		<b>F. Hannour / G. Despert</b>
<b>14:30</b>	O-7460	<b>Influence of water, chloride, sulphate and acetic acid on corrosion behavior of aluminum materials in ethanol-containing fuels</b> R. Reitz, G. Andersohn, M. Oechsner, <u>O. Golenishcheva</u> , TU Darmstadt/D
<b>14:50</b>	O-7481	<b>Time-dependent corrosion and layer formation reactions of EN AC-AISI10Mg in coolants for combustion engines under various boiling conditions</b> T. Duchardt, G. Andersohn, M. Oechsner, <u>U. Depner-Miller</u> , TU Darmstadt/D
<b>15:10</b>	O-7327	<b>The impact of condensates containing sulphate and chloride on automotive exhaust systems</b> R. Hashimoto, <u>G. Mori</u> , University of Leoben/A; D. Knoll, U. Tröger, H. Wieser, Faurecia Emission Control Technologies, Augsburg/D
<b>15:30</b>	O-7383	<b>High-temperature corrosion of materials for cast exhaust-components</b> <u>M. Ekström</u> , Royal Institute of Technology, Stockholm/S; B. Zhu, Scania CV AB, Södertälje/S; P. Szakalos, S. Jonsson, Royal Institute of Technology, Stockholm/S
<b>15:50</b>	O-7678	<b>Role of corrosion products in corrosion mechanisms of Zn(Mg)(Al) coatings on steel</b> <u>P. Volovitch</u> , Chimie ParisTech/F; M. Salguero Azevedo, Chimie ParisTech/F and Arcelor Mittal Research SA, Maizières lès Metz/F; J.D. Yoo, Chimie ParisTech/F; C. Allely, ArcelorMittal Research SA, Maizières lès Metz/F; C. Ogle, Chimie ParisTech/F
<b>16:10</b>	Coffee break	
Automotive Corrosion		Room C
<b>Chairs</b>		<b>F. Hannour / G. Despert</b>
<b>16:40</b>	O-7497	<b>Influence of corrosion on fatigue behaviour for automotive exhaust systems</b> U. Tröger, <u>D. Knoll</u> , H. Wieser, Faurecia Emission Control Technologies, Augsburg/D; K. Duru, F. Haider, University of Augsburg/D
<b>17:00</b>	O-7854	<b>Investigation on galvanic effect in automotive body corrosion</b> <u>E. Szala</u> , A. Dogan, Toyota Motor Europe, Zaventem/B, F. Hannour, Tata Steel Research and Development, Ijmuiden/NL
<b>17:20</b>		<b>WP 17 business meeting</b>

## Scientific lectures Programme - Wednesday 10 September

<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>	<b>G. Schmitt / B. Bavarian</b>	
<b>10:00</b>	KN-7108	<b>Comparison of the corrosion protection effectiveness of vapor corrosion inhibitor and nitrogen blanketing system</b> B. Bavarian, J. Zhang, K. Lu, L. Reiner, California State University, Northridge, CA/USA
<b>10:40</b>	O-7815	<b>Questioning the use of volatile corrosion inhibitors in polymer foils - a comparative study on corrosion protection capabilities</b> L. Igetoft, C. Mille, S. Arnell, ABB Corporate Research, Västerås/S
<b>11:00</b>	O-7658	<b>On the irreversibility of adsorption of volatile corrosion inhibitors and protection of metals against atmospheric corrosion</b> O.A. Goncharova, Yu.I. Kuznetsov, E.A. Nad'kina, IPCE RAS, Moscow/RUS
<b>11:20</b>	Coffee break	
<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>	<b>G. Schmitt / B. Bavarian</b>	
<b>11:50</b>	O-7587	<b>Inhibition efficiencies to adsorption thermodynamics: discussing the value of such measurements</b> R. Lindsay, C. Ruiz-Camargo, M.S. Walczak, University of Manchester/UK
<b>12:10</b>	O-7736	<b>Mitigation of flow induced localized corrosion with inhibitors</b> G. Schmitt, IFINKOR - Institute for Maintenance and Corrosion protection Technologies n.f.p.Ltd., Iserlohn/D
<b>12:30</b>	O-7303	<b>Experimental and theoretical evaluation of strawberry fruit extract and its active component as corrosion inhibitor for mild steel in HCl</b> S. Umoren, King Fahd University of Petroleum and Minerals, Dhahran/SAR
<b>12:50</b>	O-7307	<b>Methodology of laboratory assessment of the efficiency of carbon dioxide corrosion inhibitors in oilfield pipelines</b> N. Andreev, I.S. Sivokon, S.S. Vesely, A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Moscow/RUS
<b>13:10</b>	Lunch	
<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>	<b>G. Schmitt / B. Bavarian</b>	
<b>14:30</b>	O-7438	<b>Evaluation of two imidazole derivatives as possible green corrosion inhibitors for mild steel: comparison of simulation with experiment</b> I. Obot, King Fahd University of Petroleum and Minerals, Dhahran/SAR

## Scientific lectures Programme - Wednesday 10 September

14:50	O-7778	<b>Corrosion mechanism and electrochemical performance of TiO<sub>2</sub> nanostructures synthesized in organic electrolytes at high voltage</b> N. Rayon, Universidad Autónoma del Estado de Morelos/MEX; M. Vera, C. Cuevas, Universidad Autónoma del Estado de Morelos/MEX
15:10	O-7234	<b>Electrochemical and XPS studies of the corrosion inhibition of carbon steel in phosphoric acid pickling solutions by purpald</b> M. Traisnel, C. Jama, ENSCL, Villeneuve d'Ascq/F; F. Bentiss, Doukkali University, El Jadida/MA; B. Hammouti, Université Mohammed 1er, Oujda/MA
15:30	O-7280	<b>Inhibition of mild steel corrosion in acidic medium by vanillin cationic surfactants</b> I. Aiad, M. El-Sukkary, M. Samy, Egyptian Petroleum Research Institute, Cairo/ET; S. Sayied, Ain Shams University, Cairo/ET; Y. Moshira, Egyptian Petroleum Research Institute, Cairo/ET
15:50	O-7674	<b>Assessment of the corrosion inhibitors effectiveness and their influence on the concrete physical properties</b> F.M.A. Moreira, C. Resende, A.F. Diniz, H.F Gorgulho, A.H.S. Bueno, P.B. Martelli, Federal University of São João Del Rei/BR
16:10	Coffee break	
<b>Corrosion and Scale Inhibition</b>		<b>Room D</b>
<b>Chairs</b>	<b>G. Schmitt / B. Bavarian</b>	
16:40	O-7774	<b>Electrochemical studies of the inhibition effect of 2-dimethylamine on the corrosion of austenitic stainless steel type 304 in dilute HCl</b> R.T. Loto, C.A. Loto, Covenant University, Ota/NGR
17:00	O-7056	<b>Inhibition efficiency by an aqueous extract of flower petals of <i>Cassia auriculata</i> on corrosive carbon steel</b> S. Rajendran, Anna University, Dindigul/IND; M. Sangeetha, J. Sathiyabama, Madurai Kamaraj University, Dindigul/IND
17:20	O-7069	<b>Sodium potassium tartrate (SPT) as a corrosion inhibitor for aluminium</b> M. Hakeem, Hajee Karutha Rowther Howdia College, Uthamapalayam/IND; S. Rajendran, RVS College of Engineering and Technology, Dindigul/IND; P. Peter Pascal Regis, St. Joseph's College, Trichy/IND
17:40		<b>WP 1 business meeting</b>
<b>Corrosion of Archaeological and Historical Artefacts</b>		<b>Room E</b>
<b>Chairs</b>	<b>D. Neff</b>	
10:00	O-7496	<b>Mill scale on historic wrought iron: impact on corrosion and coating performance</b> N. Emmerson, E. Nordgren, D. Watkinson, Cardiff University/UK



## Scientific lectures Programme - Wednesday 10 September

10:20	O-7555	<b>Protective coatings for historic wrought iron: epoxy resins versus oil-based systems</b> <u>N.J. Emmerson</u> , D.E. Watkinson, Cardiff University/UK
10:40	O-7589	<b>Pre-corroded electrical resistance sensors to mimic, monitor and guide the conservation of heritage iron</b> <u>J. Dracott</u> , S. Lyon, University of Manchester/UK; D. Watkinson, M. Rimmer, Cardiff University/UK
11:00	O-7390	<b>Corrosion products transformations during sub-critical stabilization of archaeological iron artefacts</b> <u>M. Bayle</u> , D. Neff, Laboratoire Archéomatériaux et Prévision de l'Altération, Gif-sur-Yvette/F; Ph. de Viviés, J-B. Memet, A-CORROS Expertise, Arles/F; Ph. Dillmann, Laboratoire Archéomatériaux et Prévision de l'Altération, Gif-sur-Yvette/F
11:20	Coffee break	
<b>Corrosion of Archaeological and Historical Artefacts</b>		<b>Room E</b>
<b>Chairs</b>	<b>D. Neff</b>	
11:50	O-7258	<b>Predicting corrosion: chloride form and the response of archaeological iron to humidity</b> <u>D. Watkinson</u> , M. Rimmer, Cardiff University/UK
12:10	O-7734	<b>Testing the durability of modified corrosion protection systems for iron monuments conservation</b> <u>M. Raedel</u> , M. Buecker, BAM Federal Institute for Materials Research and Testing, Berlin/D
12:30	O-7671	<b>Evaluation of the conservation state of metallic artefacts from the villa dei quintili in Rome</b> <u>E. Angelini</u> , S. Grassini, Politecnico di Torino/I; G. Galli, Soprintendenza Speciale per i Beni Archeologici, Roma/I; M.F. La Russa, S.A. Ruffolo, Università della Calabria, Arcavacata di Rende/I
12:50	O-7459	<b>Atmospheric corrosion effects of air pollution on materials and cultural property in Kathmandu, Nepal</b> <u>J. Tidblad</u> , Swerea KIMAB, Kista/S; K. Hicks, J. Kuylenstierna, Stockholm Environment Institute, York/UK; B.B. Pradhan, P. Dangol, ICIMOD, Kathmandu/NEP; I. Mylvakanam, UNEP, Bangkok/T
13:10	Lunch	

## Scientific lectures Programme - Wednesday 10 September

Corrosion of Archaeological and Historical Artefacts		Room E
<b>Chairs</b>		<b>D. Neff</b>
<b>14:30</b>	O-7562	<p><b>Innovative biological approaches for metal conservation</b>  E. Joseph, Neuchâtel University/CH; P. Letardi, CNR, Genoa/I;  M. Albini, L. Comensoli, W. Kooli, L. Mathys, Neuchâtel University/CH;  E. Doman Beuret, Archaeological Park and Museum Latenium, Neuchâtel/CH;  L. Brambilla, Haute Ecole Arc Conservation-Restoration, Neuchâtel/CH;  C. Cevey, Archaeological Park and Museum Latenium, Neuchâtel/CH;  R. Bertholon, Haute Ecole Arc Conservation-Restoration, Neuchâtel/CH;  P. Junier, D. Job, Neuchâtel University/CH</p>
<b>14:50</b>	O-7272	<p><b>Insoluble decanoate salts as anticorrosion additives in acrylate varnish</b>  <u>J. Stoullil</u>, V. Nikendey, Institute of Chemical Technology, Prague/CZ</p>
<b>15:10</b>	O-7628	<p><b>Protection of patinas on various bronzes by different types of inhibitors</b>  T. Kosec, Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO; K. Marusic, University of Zagreb/HR; P. Ropret, Institute for the Protection of the Cultural Heritage of Slovenia, Ljubljana/SLO; H. Otmacic Curkovic, University of Zagreb/HR</p>
<b>15:30</b>	O-7519	<p><b>Plasma deposited DLC coatings for the conservation of bronze artefacts</b>  E. Angelini, Politecnico di Torino/I; D. Caschera, CNR, Roma/I;  F. Faraldi, <u>S. Grassini</u>, Politecnico di Torino/I; G.M. Ingo, CNR, Roma/I</p>
<b>15:50</b>	O-7319	<p><b>Self-assembling monolayers of organic acids for protection of bronze from polluted urban atmospheres</b>  <u>K. Marusic</u>, N. Devetak, S. Spoljaric, H. Otmacic Curkovic, University of Zagreb/HR</p>
<b>16:10</b>	Coffee break	
Corrosion of Archaeological and Historical Artefacts		Room E
<b>Chairs</b>		<b>D. Neff</b>
<b>16:40</b>	O-7727	<p><b>Soil-induced corrosion of ancient roman brass: a case study</b>  O. Papadopoulou, P. Vassiliou, National Technical University of Athens/GR;  V. Gouda, National Research Center, Cairo/ET; F. Faraldi, S. Grassini, <u>E. Angelini</u>, DISAT Politecnico di Torino/I</p>
<b>17:00</b>	O-7843	<p><b>Corrosion of sheet piling in the soil: results of a literature review and practical research</b>  P. Kraaijenbrink, G.A.M. van Meurs, <u>S. Jansen</u>, Deltares, Delft/NL; H. Senhorst, Rijkswaterstaat, Lelystad/NL</p>

## Scientific lectures Programme - Wednesday 10 September

17:20	O-7376	<b>Effects of <i>Juniperus communis</i> leaves extracts on tin bronze corrosion</b> R. Ben Channouf, N. Souissi, Tunis El Manar University/TN; S. Zanna, H. Ardelean, Chimie ParisTech/F; N. Bellakhal, Carthage University, Tunis/TN; P. Marcus, Chimie ParisTech/F
17:40		<b>WP21 business meeting</b>
<b>Corrosion of Steel in Concrete</b>		<b>Room 4</b>
<b>Chairs</b>		<b>M. Raupach / C. Helm</b>
10:00	O-7051	<b>Simple concrete life extension</b> A. Borderon, Valbruna Spa., Vicenza/I
10:20	O-7265	<b>Smart controlled release corrosion inhibitors for steel reinforced concrete</b> D. Bastidas, I. Aguirre, S. Fajardo, I. Llorente, CENIM-CSIC, Madrid/E; E. Medina, UPM, Madrid/E; V. La Iglesia, CENIM-CSIC, Madrid/E; V. González, UPM, Madrid/E; J. Rodríguez, University of Granada/E; N. Birbilis, Monash University, Clayton/AUS; C. Monticelli, A. Balbo, University of Ferrara/I; V.J. Gelling, North Dakota State University, Fargo, ND/USA
10:40	O-7354	<b>Investigation of sodium molybdate's effect on the passive film of steel rebars in different simulated concrete pore solution environments</b> Y.T. Tan, National University of Singapore/SGP; S.L. Wijesinghe, SIMTech, Singapore/SGP; D.J. Blackwood, National University of Singapore/SGP
11:00	O-7088	<b>Application of gamma-ray radiography and gravimetric measurements after accelerated corrosion tests of steel embedded in mortar</b> G. Duffó, Comisión Nacional de Energía Atómica, Buenos Aires/RA; N. Gaillard, CNEA-UNSAM, Buenos Aires/RA; M. Mariscotti, M. Ruffolo, THASA, Buenos Aires/RA
11:20		Coffee break
<b>Corrosion of Steel in Concrete</b>		<b>Room 4</b>
<b>Chairs</b>		<b>M. Raupach / C. Helm</b>
11:50	O-7107	<b>Long term performance of migrating corrosion inhibitors to protect reinforced concrete structures in aggressive environments</b> B. Bavarian, L. Reiner, California State University, Northridge, CA/USA
12:10	O-7656	<b>The use of corrosion resistant steel reinforcement in chlorides contaminated concrete</b> N. Gartner, T. Kosec, A. Legat, Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO

## Scientific lectures Programme - Wednesday 10 September

12:30	O-7701	<b>The synergetic effect of molybdenum and nitrogen alloying elements on austenitic stainless steels pitting resistance</b> V. Roche, Université Joseph Fourier, Saint Martin d'Hères/F; I.N. Viçosa, <a href="#">C. Loable</a> , R.P. Nogueira, Grenoble-INP, Saint Martin d'Hères/F; E. Chauveau, M. Mantel, T.J. Mesquita, CRU Ugitech, Ugine/F
12:50	O-7842	<b>Influence of the type of reinforcement on load bearing capacity of corroded reinforced concrete structures</b> <a href="#">A. Bossio</a> , G.P. Lignola, T. Monetta, A. Prota, F. Bellucci, E. Cosenza, G. Manfredi, Università degli Studi di Napoli Federico II/I
13:10 Lunch		
Corrosion of Steel in Concrete		Room 4
Chairs		M. Raupach / C. Helm
14:30	O-7393	<b>Design, installation and performance of cathodic protection systems on Langeland Bridge, Denmark</b> <a href="#">R. Sorensen</a> , J. Kok, COWI A/S, Kongens Lyngby/DK; K. Riis, Danish Road Directorate, Copenhagen/DK; F. Villumsen, Krüger Aquacare A/S, Glostrup/DK
14:50	O-7116	<b>Altered cement hydration and subsequently modified porosity, permeability and compressive strength of mortar specimens due to electrical</b> <a href="#">A. Susanto</a> , D.A. Koleva, K. van Breugel, TU Delft/NL
15:10	O-7241	<b>Monitoring steel corrosion in reinforced concrete beams with variable crack widths under sustained load</b> <a href="#">A. Blagojevic</a> , D.A. Koleva, J.C. Walraven, Delft University of Technology/NL
15:30	O-7741	<b>Active corrosion time affecting visual corrosion damage in carbonated concrete facades</b> A. Köliö, <a href="#">J. Lahdensivu</a> , Tampere University of Technology/FIN
15:50	O-7557	<b>Cross-border research for corrosion control in civil structures: recent research lines and novel approaches, employing electrochemistry, concrete materials science and nano-technology</b> <a href="#">D.A. Koleva</a> , Delft University of Technology/NL
16:10 Coffee break		
Corrosion of Steel in Concrete		Room 4
Chairs		M. Raupach / C. Helm
16:40	O-7583	<b>Performance of conductive coatings used for cathodic protection of reinforced concrete structures under consideration of durability issues</b> C. Helm, <a href="#">M. Raupach</a> , RWTH Aachen/D

## Scientific lectures Programme - Wednesday 10 September

17:00	O-7662	<b>The use of cathodic protection for life enhancement of immersed reinforced concrete structures</b> <u>P. Chess</u> , FORCE Technology, Colchester/UK; O. Klinghoffer, FORCE Technology, Brøndby/DK; F. Grønvold, P.V. Nygaard, FORCE Technology, Vallensbæk/DK
<b>JS: Cathodic Protection in Marine Environments</b>		<b>Room 2</b>
<b>Chairs</b>		<b>U. Kivisaak / J. Crouzillac</b>
10:00	O-7222	<b>Heavy metal inputs from anodic dissolution of Al-Zn-In galvanic anodes to the marine environment: TALINE project</b> S. Pineau, J. Deborde, ACCOAST, Arradon/F; <u>A.M. Grolleau</u> , DCNS, Cherbourg/F; P. Refait, Université La Rochelle/F; C. Caplat, Université de Caen, Cherbourg/F; O. Basuyaux, SMEL, Blainville-sur-Mer/F; M.L. Mahaut, Cnam/Intechmer, Cherbourg/F; S. Le Glatin, LDA, Saint-Lô/F; P. Bustamante, Université La Rochelle, La Rochelle/F; J.L. Gonzalez, Ifremer, Seyne-sur-Mer/F; C. Brach-Papa, Ifremer, Nantes/F; P. Honoré, CCI-CO Port de Calais/F
10:20	O-7729	<b>Design of cathodic protection retrofitting of subsea pipelines assisted by FEM modeling</b> <u>P. Marcassoli</u> , M. Ginocchio, B. Bazzoni, Cescor srl, Milan/I; A. Msallem, A. Ibrahim, Mellitah Oil and Gas/LAR
10:40	O-7306	<b>Volume synthesis of a calcareous deposit on steel under cathodic protection by impressed current</b> <u>A. Zanibellato</u> , R. Sabot, P. Refait, M. Jeannin, La Rochelle University/F
<b>11:20</b>		Coffee break
<b>WS: Marine Corrosion in Renewable Energy</b>		<b>Room 2</b>
<b>Chairs</b>		<b>P. Dent / L. Hilpert</b>
11:50	O-7792	<b>Coating deterioration and corrosion on offshore wind power structures: A review of inspection results</b> <u>A. Momber</u> , Muehlhan AG, Hamburg/D
12:10	O-7230	<b>Durability of coating repair systems for offshore service</b> <u>A.R. Black</u> , P.K. Nielsen, Force Technology, Brøndby/DK
12:30	O-7365	<b>Corrosive environment inside offshore monopile structures and challenges in monitoring</b> <u>B. Jensen</u> , DONG Energy, Gentofte/DK; F. Grønvold, Force Institute, Vallensbæk/DK
12:50	O-7375	<b>Cathodic protection for marine structures: 3 case studies</b> <u>S. Ayyar</u> , J. Jansson, COWI A/S, Lyngby/DK
<b>13:10</b>		Lunch

## Scientific lectures Programme - Wednesday 10 September

Marine Corrosion		Room 2
<b>Chairs</b>	<b>U. Kivisaak</b>	
<b>14:30</b>	O-7370	<b>Potential ennoblement of stainless steel in tropical seawaters</b> <u>D. Thierry</u> , N. Larche, French Corrosion Institute, Brest/F; S. Wijesingue, SIMTECH, Singapore/SGP; S. Teo, NUS, Singapore/SGP
<b>14:50</b>	O-7735	<b>Effect of residual chlorine on the spontaneous potential of stainless steels in seawater</b> <u>H. Yakuwa</u> , M. Miyasaka, Ebara Corporation, Fujisawa/J; N. Shinoda, Y. Kuriki, JFE Techno-Research Corporation, Yokohama/J; J. Sakai, Waseda University, Tokyo/J
<b>15:10</b>	O-7458	<b>Electrochemical monitoring of thermally sprayed aluminium coatings on steel in a simulated marine immersion environment</b> <u>S. Paul</u> , C. Gomez Gomez, M.D.F. Harvey, TWI, Cambridge/UK
<b>15:30</b>	O-7129	<b>Corrosion and cathodic protection of carbon steel in the tidal zone: Products, mechanisms and kinetics</b> <u>P. Refait</u> , R. Sabot, M. Jeannin, La Rochelle University/F; H. Antony, Corrodys, Cherbourg/F; S. Pineau, Accoast S.A.S., Arradon/F
<b>15:50</b>	O-7144	<b>SEM/EDX-investigation of rust scales formed on an aluminium-steel friction weld under marine atmosphere</b> <u>M. Schneider</u> , Fraunhofer IKTS, Dresden/D; U. Langklotz, TU Dresden/D; U. Gierth, Fraunhofer IKTS, Dresden/D
<b>16:10</b>	Coffee break	
Marine Corrosion		Room 2
<b>Chairs</b>	<b>U. Kivisaak</b>	
<b>16:40</b>	O-7627	<b>Use of nanostructured materials in marine corrosion protection: an integrated approach</b> <u>J. Tedim</u> , F. Maia, A. Kuznetsova, A.P. Silva, R. Martins, A. Cunha, A. Almeida, S. Loureiro, R. Freitas, A.M.V.M. Soares, M.L. Zheludkevich, M.G.S. Ferreira, University of Aveiro/P
<b>17:00</b>	O-7790	<b>The use of composite patches to repair ship structures: an electrochemical approach</b> A. Collazo, X.R. Nóvoa, <u>C. Pérez</u> , University of Vigo/E
<b>17:20</b>	O-7808	<b>The hydrogen permeation characteristics of high strength steel during splash zone corrosion process</b> <u>Y.L. Huang</u> , W.J. Qu, X.M. Yu, Chinese Academy of Sciences, Qingdao/CHN

## Scientific lectures Programme - Wednesday 10 September

17:40	O-7606	<b>Marine corrosion of SS 316L in Persian Gulf and protective coating</b> <u>M. Najmi</u> , D. Masouri, POGC, Tehran/IR
<b>Microbial Corrosion</b>		<b>Room 5</b>
<b>Chairs</b>		<b>P. Cristiani / R. Basseguy</b>
10:00	O-7791	<b>Concrete deterioration by bacteriogenically induced sulfuric acid attack</b> <u>C. Grengg</u> , A. Baldermann, M. Dietzel, F. Mittermayr, Graz University of Technology/A; <u>M. Böttcher</u> , Leibniz Institute for Baltic Sea Research, Warnemünde/D; <u>A. Leis</u> , Joanneum Research, Graz/A
10:20	O-7377	<b>Microbiologically induced corrosion on tin bronze samples simulating uncommon archaeological corrosion</b> <u>G. Ghiara</u> , P. Piccardo, M. Stauder, C. Pruzzo, University of Genova/I
10:40	O-7802	<b>MIC on bridge-building carbon steel in a tropical/Amazonian environment</b> <u>M. Vastra</u> , P. Salvin, C. Roos, Université des Antilles et de la Guyane, Cayenne/FGY
11:00	O-7797	<b>Meromictic lakes as field laboratory for corrosion studies in aerobic and anaerobic conditions</b> E. Guerrini, Università degli Studi di Milano/I; <u>P. Cristiani</u> , RSE SpA, Milan/I; S.P.M. Trasatti, Università degli Studi di Milano/I; M.L. Carvalho, G. Storni, RSE SpA, Milan/I
11:20		Coffee break
<b>Microbial Corrosion</b>		<b>Room 5</b>
<b>Chairs</b>		<b>P. Cristiani / R. Basseguy</b>
11:50	O-7322	<b>Corrosion in biogas plants</b> <u>R. Feser</u> , A. Krebs, University of Applied Sciences Iserlohn/D
12:10	O-7357	<b>Failure investigation of heat exchanger tubes in closed loop cooling water system</b> <u>S. Almaaesab</u> , H. Al-Mahamedh, SABIC, Jubail Industrial City/SAR
12:30	O-7301	<b>Electrochemical behavior of low-carbon steel within MIC-induced corrosion and cathodic protection</b> <u>E. Leon</u> , D.A. Koleva, H.M. Jonkers, J.M.C. Mol, K. Van Breugel, TU Delft/NL
12:50	O-7075	<b>Accelerated souring test of crude oil under the anaerobic condition</b> <u>Y. Tanji</u> , R. Hasegawa, K. Tohyama, K. Miyanaga, Tokyo Institute of Technology, Yokohama/J

## Scientific lectures Programme - Wednesday 10 September

13:10		Lunch
		<b>Corrosion and Corrosion Protection of Drinking Water Systems</b> <span style="float: right;"><b>Room 5</b></span>
<b>Chairs</b>		<b>W. Erning</b>
<b>14:30</b>	O-7388	<b>Modeling water quality by water treatment for corrosion control in water distribution networks</b> <u>A. Becker</u> , IWW Water Centre, Mülheim an der Ruhr/D
<b>14:50</b>	O-7466	<b>Observations on the graphitic corrosion of cast iron trunk main: mechanisms and implications</b> <u>R. Logan</u> , M. Mulheron, D. Jesson, P. Smith, University of Surrey, Guildford/UK; T. Evans, N. Clay-Michael, Thames Water Utilities Ltd., Reading/UK; J. Whiter, Formerly Thames Water Utilities Ltd., Reading/UK
<b>15:10</b>	O-7753	<b>Corrosion failure analysis of galvanized steel pipes in a closed water cooling system</b> <u>A. Colombo</u> , L. Oldani, S.P. Trasatti, Università degli Studi di Milano/I
<b>15:30</b>	O-7548	<b>Material durability and biofilm development in drinking water network - comparison of stainless steel grades with commonly used materials</b> <u>A. Allion</u> , Aperam Isbergues Research Center/F; S. Jacques, J. Peultier, P. Boillot, ArcelorMittal, Le Creusot/F; J.-M. Damasse, Aperam Isbergues Research Center/F; M.-C. Bonnet, EPI, Fraisses/F
<b>15:50</b>	O-7424	<b>Long term corrosion test of stainless steel for water heater applications</b> <u>E. Johansson</u> , S. Hägg Mameng, Outokumpu Stainless AB, Avesta/S
16:10		Coffee break
		<b>Corrosion and Corrosion Protection of Drinking Water Systems</b> <span style="float: right;"><b>Room 5</b></span>
<b>Chairs</b>		<b>W. Erning</b>
<b>16:40</b>	O-7380	<b>Fatigue behavior of high quality steels in water</b> <u>M. Borchert</u> , M. Panzenboeck, Montanuniversitaet Leoben/A
<b>17:00</b>	O-7358	<b>Influence of disinfection chemicals on corrosion of various metals for drinking water supply systems</b> <u>M. Bajt Leban</u> , T. Kosec, Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO
<b>17:20</b>	O-7410	<b>Limiting conditions of pitting corrosion for lean duplex stainless steel as a substitute for standard austenitic grades</b> <u>S. Hägg Mameng</u> , Outokumpu Stainless Steel AB, Avesta/S; R. Petterson, The Swedish Steel Producers' Association Stockholm/S



## Scientific lectures Programme - Wednesday 10 September

17:40	O-7852	<b>Effectiveness of induction annealing process for the ferritic stainless steel AISI 444</b> A. Acquesta, C. Bitondo, A. Bossio, A. Carangelo, University of Naples "Federico II"/I; M. Curioni, The University of Manchester/UK; F. Belluccia, University of Naples "Federico II"/I
<b>Corrosion in the Refinery Industry</b>		<b>Room 3</b>
<b>Chairs</b>	<b>F. Ropital</b>	
10:00	O-7726	<b>Risk based inspection. The most rapid way in order to reduce maintenance and inspection costs</b> A. Pette, Bureau Veritas Italia SpA, Milano/I
10:20	O-7740	<b>Integrity assurance of process facilities at Adriatic LNG terminal through risk based inspection</b> F. Belloni, Adriatic LNG, Milan/I; V. Colombo, G. Benassi, Cescor srl, Milan/I
10:40	O-7579	<b>Towards a first global assessment of corrosion issues in advanced biorefineries as preliminary learnings from ECORBIO</b> G. Marlair, H.-L. Ngo, W. Benaissa, INERIS, Verneuil-en-Halatte/F; M. Nonus, C. Len, E. Hondjuila-Miokono, UTC, Compiègne/F; N. Thiébault, ESCOM, Compiègne/F; J. Garcia, CETIM, Senlis/F; B. Narcy, LEREM, Montataire/F; C. Sarazin, I. Gosselin, UPJV, Amiens/F; C. Triquenaux, A. Darraspen, MAGUIN SAS, Charmes/F
11:00	O-7699	<b>Corrosion behaviour of AISI 1006 steel in aqueous extracts of biodiesel and petrodiesel</b> L.F.P. Dick, M.D. Oliveira, Universidade Federal do Rio Grande do Sul, Porto Alegre/BR
11:20	Coffee break	
<b>Corrosion in the Refinery Industry</b>		<b>Room 3</b>
<b>Chairs</b>	<b>F. Ropital</b>	
11:50	O-7061	<b>Corrosion in systems for storage and transportation of petroleum products and biofuels</b> A. Groyzman, Israeli Society of Chemical Engineers & Chemists, Tel Aviv/IL
12:10	O-7408	<b>Laboratory test method for corrosion under thermal insulation</b> O. Knudsen, SINTEF, Trondheim/N; J. Aaneby, Jotun, Sandefjord/N
12:30	O-7841	<b>Corrosion mitigation in sulfur trains auxiliary burner</b> K. Al-Hajri, Saudi Aramco, Abqiaq/SAR
12:50	O-7127	<b>Chemical treatment of untreated close water cooling system</b> F. Omer, Ras Lanuf Oil & Gas Processing Co./LAR

## Scientific lectures Programme - Wednesday 10 September

13:10		Lunch
Corrosion in the Refinery Industry		Room 3
Chairs	F. Ropital	
14:50	O-7817	<b>3D TRASAR cooling water technology combined to refined knowledge system will help to optimize total cost of operation, to improve reliability at any time even during process leaks and to minimize the impact of process leaks on asset management</b> <u>V. Bour Beucler</u> , NALCO, Wasquehal/F
15:10	O-7500	<b>Precipitation and dissolution of critical phases in alloy 625</b> <u>R. Lackner</u> , G. Mori, Montanuniversität Leoben/A; <u>R. Egger</u> , F. Winter, voestalpine Grobblech, Linz/A; <u>W. Grogger</u> , M. Albu, FELMI-ZFE, Graz/A
15:30	O-7554	<b>Laboratory examination of two olefin cracking radiant tube materials</b> <u>J. Zhang</u> , L. Allcock, SABIC, Redcar/UK; A. Al-Meshari, E.M. Murillo, M. Diab, S. Ahmad, SABIC, Jubail/SAR
15:50	O-7120	<b>Effective parameters on bottom plates corrosion phenomenon of storage tanks during construction time interval: A case study, investigations and solutions</b> <u>H. Aldaghi</u> , Pars Oil and Gas Company, Mashhad/IR; S. Easapour, Y. Haghighat, Pars Oil and Gas Company, Assaluyeh/IR
16:10		Coffee break
JS: High Temperature Corrosion in the Refinery, Petrochemical & Chemical Industries		Room 3
Chairs	M. Schütze / F. Ropital	
16:40	O-7400	<b>Influence of single surface ash layer on dual corrosion</b> <u>M. Mosquera Feijoo</u> , A. Kranzmann, BAM - Federal Institute for Materials Research and Testing, Berlin/D; A. Baselga Zapater, Institut Quimic de Sarrià, Barcelona/E
17:00	O-7240	<b>Acoustic emission analysis coupled with thermogravimetric experiments dedicated to high temperature corrosion studies on metallic alloys</b> <u>V. Peres</u> , O. Al Haj, E. Serris, M. Cournil, Ecole Nationale Supérieure des Mines de Saint Etienne/F; F. Grosjean, J. Kittel, F. Ropital, IFPEN, Solaize/F
17:20	O-7135	<b>Integrated risk management program to allow safe profitable processing of opportunity naphthenic acid crudes</b> <u>P. Thornthwaite</u> , Nalco Champion, Northwich/UK; K. Clarke, J. Davies, Permasense, Horsham/UK

## Scientific lectures Programme - Thursday 11 September

Plenary Lecture		Auditorium
09:00	PL-7840	<b>Theory and practice of cathodic protection and cathodic prevention</b> <u>L. Lazzari</u> , Politecnico di Milano/I
09:45		Break for Changing Lecture Hall
<b>Inorganic Coatings</b>		<b>Auditorium</b>
<b>Chairs</b>	<b>L. Fedrizzi / A. Simoes</b>	
10:00	O-7775	<b>Development of a bilayer superhydrophobic electrophoretic sol-gel coating on stainless steel</b> <u>A.M. Simoes</u> , M.M. Lourenço, J.C. Fernandes, University of Lisbon/P
10:20	O-7362	<b>Sol-gel derived protective coatings to prevent microbial induced corrosion</b> <u>S. Pfeifer</u> , TU Bergakademie Freiberg/D; <u>A. Gutierrez</u> , Van Loon Chemical Innovation, Amsterdam/NL; <u>E. Kroke</u> , TU Bergakademie Freiberg/D
10:40	O-7232	<b>Novel nanoparticle-based coatings for the oxidation protection of steel compounds during press-hardening</b> <u>B. Tigges</u> , <u>S. Benfer</u> , Dechema Forschungsinstitut, Frankfurt am Main/D; <u>A. Tenié</u> , <u>C. Klesen</u> , Department of Ferrous Metallurgy, Aachen/D; <u>M. Yekehtaz</u> , Dechema Forschungsinstitut, Frankfurt am Main/D; <u>W. Bleck</u> , Department of Ferrous Metallurgy, Aachen/D; <u>W. Fürbeth</u> , Dechema Forschungsinstitut, Frankfurt am Main/D
11:20	Coffee break	
<b>Inorganic Coatings</b>		<b>Auditorium</b>
<b>Chairs</b>	<b>L. Fedrizzi / A. Simoes</b>	
11:50	O-7666	<b>Behavior of alloying elements during anodizing of magnesium alloys</b> <u>A. Nimrova</u> , <u>P. Skeldon</u> , <u>G.E. Thompson</u> , University of Manchester/UK; <u>C. Olivero</u> , <u>P. Chapon</u> , Horiba Jobin-Yvon SAS, Longjumeau/F
12:10	O-7593	<b>Chemistry of Zr/Cr based solutions: application to sealing of anodized aluminium alloys</b> <u>N. Chahboun</u> , Université de Lorraine, Vandoeuvre-Les Nancy/F and Messier-Bugatti-Dowty, Molsheim/F; <u>E. Rocca</u> , <u>D. Veys-Renau</u> , Université de Lorraine, Vandoeuvre-Les Nancy/F; <u>M. Augros</u> , Messier-Bugatti Dowty, Molsheim/F; <u>M. Boutoba</u> , Eurocopter, Marignane/F; <u>N. Caldeira</u> , Snecma, Paris/F

## Scientific lectures Programme - Thursday 11 September

12:30	O-7239	<b>Corrosion properties of PEO coatings obtained on Mg alloys with an electrolyte containing different concentrations of molybdate</b> <u>L. Pezzato</u> , K. Brunelli, M. Magrini, M. Dabalà, University of Padua/I
12:50	O-7242	<b>Electrochemical and surface analysis of corrosion properties of nanometre-thick alumina coatings prepared by ALD on copper</b> <u>S. Mirhashemihaghighi</u> , J. Swiatowska, V. Maurice, A. Seyeux, L.H. Klein, CNRS - Chimie ParisTech/F; E. Härkönen, M. Ritala, University of Helsinki/FIN; P. Marcus, CNRS - Chimie ParisTech/F
13:10	O-7428	<b>Experimental evaluation of the corrosion protection ability of PVD-coatings</b> <u>U. Depner-Miller</u> , G. Andersohn, M. Oechsner, TU Darmstadt/D; K. Bobzin, N. Bagcivan, T. Brögelmann, R. Weiss, RWTH Aachen/D
<b>13:30</b> Lunch		
<b>Inorganic Coatings</b>		<b>Auditorium</b>
<b>Chairs</b>		<b>M.G.S. Ferreira / P. Keil</b>
14:50	O-7584	<b>Environmentally friendly CeCC for AA6060 aluminum alloy</b> <u>A. De Nicolo</u> , L. Paussa, F. Andreatta, A. Gobessi, University of Udine/I; C. Cepek, Istituto Officina dei Materiali - CNR, Trieste/I; L. Fedrizzi, University of Udine/I
15:10	O-7597	<b>Aluminium alloys anodizing: effect of the composition and the microstructure</b> <u>N. Chahboun</u> , E. Rocca, D. Veys-Renaux, Université de Lorraine, Vandoeuvre Les Nancy/F; M. Augros, Messier-Bugatti Dowty, Molshiem/F; M. Boutoba, Eurocopter, Marseille/F; N. Caldeira, Snecma, Paris/F
15:30	O-7473	<b>Investigation on defect morphology and corrosion behaviour of TiMgN hard coatings on steel substrate</b> <u>T. Mueller</u> , A. Heyn, BAM Federal Institute of Materials Research and Testing, Berlin/D; M. Fenker, M. Balzer, fem Research Institute, Schwäbisch Gmünd/D
15:50	O-7638	<b>Performance and failure mode of diamond-like carbon coatings in simulated oil and gas conditions</b> <u>A. Broughton</u> , S.B. Lyon, The University of Manchester/UK
16:10	O-7113	<b>Synthesis and behavior of nano hard anodized layers</b> <u>Z. Abdel Hamid</u> , Central Metallurgical R&D Institute (CMRDI), Helwan/ET
<b>16:30</b> Coffee break		
<b>Organic Coatings</b>		<b>Auditorium</b>
<b>Chairs</b>		<b>M.G.S. Ferreira / P. Keil</b>
17:00	O-7485	<b>A new way for corrosion research in an artificially produced micro-climate between alloys and organic coatings</b> <u>S. Walkner</u> , A.W. Hassel, University of Linz/A

## Scientific lectures Programme - Thursday 11 September

17:20	O-7493	<b>Delamination kinetics of chemisorbed polymer coatings on nano-structured metal surfaces</b> <u>A. Bashir</u> , D. Iqbal, A. Erbe, M. Rohwerder, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D
17:40	O-7635	<b>Strain induced defect formation in ultra-thin protective films on TWIP steels</b> <u>C. Liu</u> , O. Ozcan, T. Niendorf, F. Brenne, G. Grundmeier, University of Paderborn/D
18:00	O-7560	<b>Effect of structure and stress-state interactions on water diffusion processes in epoxy coatings</b> <u>G. Bouvet</u> , S. Cohendoz, X. Feaugas, S. Mallarino, S. Touzain, University of La Rochelle/F
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>	<b>P. Marcus / V. Vignal</b>	
10:00	KN-7708	<b>Multiscale corrosion modelling</b> <u>J. Deconinck</u> , O. Dolgikh, P. Maciel, A. Demeter, H. Simillion, N. Van den Steen, Vrije Universiteit Brussel/B
10:40	O-7313	<b>Critical aspects of electrochemical noise-based corrosion monitoring</b> <u>A.M. Homborg</u> , Royal Netherlands Navy, Den Helder/NL; T. Tinga, Netherlands Defence Academy, Den Helder/NL; X. Zhang, Endures BV, Den Helder/NL; E.P.M. van Westing, Tata Steel Research & Development, Velsen Noord/NL; G.M. Ferrari, Endures BV, Den Helder/NL; J.H.W. de Wit, J.M.C. Mol, Delft University of Technology/NL
11:00	O-7697	<b>A review on electrochemical noise measurement as a tool for evaluation of organic coatings and recent developments</b> <u>D. Mills</u> , S.S. Jamali, University of Northampton/UK
<b>11:20</b> Coffee break		
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>	<b>P. Marcus / V. Vignal</b>	
11:50	O-7373	<b>Study of the relation between microstructure and corrosion properties of polycrystalline copper</b> E. Martinez Lombardia, Vrije Universiteit Brussel/B; L. Lapeire, Ghent University/B; V. Maurice, Chimie ParisTech/F; I. De Graeve, Vrije Universiteit Brussel/B; L. Klein, P. Marcus, Chimie ParisTech/F; K. Verbeken, L. Kestens, Ghent University/B; <u>H. Terry</u> , Vrije Universiteit Brussel/B
12:10	O-7484	<b>3D printed (flow) cells - a new approach in hydrogen embrittlement studies</b> <u>G. Schimo</u> , A.W. Hassel, University of Linz/A

## Scientific lectures Programme - Thursday 11 September

12:30	O-7137	<b>Corrosion of iron and steel: occurrence of iron(II) hydroxysalts</b> <u>C. Remazeilles</u> , I. Azoulay, M. Jeannin, R. Sabot, Ph. Refait, University of La Rochelle/F
12:50	O-7204	<b>Electrochemical characterization of corrosion behaviour of different metals in hot molten salt for solar thermal power plants</b> <u>D. Rückle</u> , S. Kaesche, H. Garrecht, Universität Stuttgart/D; S. Virtanen, Universität Erlangen-Nürnberg/D
13:10	O-7570	<b>Effect of HNO<sub>3</sub> and Cl<sup>-</sup> on corrosion behaviour of AISI 304 and Cr-Mn austenitic stainless steels</b> <u>N. Khobragade</u> , Department of Metallurgical Engineering, Amravati/IND; A. Patil, Visvesvaraya National Institute of Technology, Nagpur/IND
13:30	Lunch	
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>	<b>K. Fushimi / J. Pan</b>	
14:50	O-7167	<b>Grain-dependency of passive oxide film formed on iron in sulphuric acid</b> <u>Y. Takabatake</u> , K. Fushimi, T. Nakanishi, Y. Hasegawa, Hokkaido University, Sapporo/J
15:10	O-7264	<b>Predictive modelling of the corrosion rate of carbon steel focusing on the effect of the precipitation of corrosion products</b> A. Marion, <u>B. Vuillemin</u> , R. Oltra, Université de Bourgogne, Dijon/F; D. Crusset, ANDRA, Chatenay Malabry/F
15:30	O-7364	<b>Development of a liquid-phase sulfide ion gun for localized sulfidation of metal surfaces</b> <u>J.-S. Lee</u> , K. Fushimi, T. Nakanishi, Y. Hasegawa, Hokkaido University, Sapporo/J
15:50	O-7618	<b>Development of a sensor for interfacial pH measurements during pitting corrosion in situ observed by temporal series of micrographs</b> <u>A. Mendes Zimer</u> , M. Medina Da Silva, L. Helena Mascaro, E. Chaves Pereira, Federal University of São Carlos/BR
16:10	O-7513	<b>Markov chain model to predict localised corrosion of stainless steels</b> <u>A. Brenna</u> , M. Ormellese, L. Lazzari, Politecnico di Milano/I
16:30	Coffee break	
<b>Corrosion Mechanisms, Methods and Modelling</b>		<b>Fermi Hall</b>
<b>Chairs</b>	<b>K. Fushimi / J. Pan</b>	
17:00	O-7783	<b>Mechanistic study of degradation of coil coated steel</b> <u>Y. Liu</u> , X. Zhou, G.E. Thompson, S.B. Lyon, T. Hashimoto, The University of Manchester/UK; G. Smith, S. Gibbon, D. Francis, AkzoNobel, Newcastle/UK; A. Gholinia, X. Zhong, The University of Manchester/UK

## Scientific lectures Programme - Thursday 11 September

17:20	O-7641	<b>Finely distributed anodic and cathodic centers underneath organic coatings - characterization and effects on the delamination mechanism</b> <u>M. Pichler</u> , CEST, Wiener Neustadt/A; M. Fleischanderl, voestalpine Stahl GmbH, Linz/A; M. Wolpers, Henkel AG & Co. KGaA, Düsseldorf/D; G. Faflek, Vienna University of Technology/A
		<b>Corrosion in Oil &amp; Gas Production</b>
		<b>Pacinotti Hall</b>
<b>Chairs</b>		<b>S. Paterson / J. Kittel</b>
10:00	O-7510	<b>Effects of high flow rate on corrosion of carbon steel in high pressure CO<sub>2</sub> environment by means of linear polarization resistance</b> <u>F. Todesco</u> , M.E. Gennaro, S. Sgorlon, Venezia Technologie s.p.a., Venezia/I; L. Torri, eni E&P, S. Donato Milanese/I
10:20	O-7571	<b>Translating oilfield material exposures into laboratory tests</b> <u>W. Grimes</u> , M. Wilms, Shell Global Solutions International B.V., Amsterdam/NL
10:40	O-7491	<b>Corrosion fatigue of aluminium drilling pipes: case study</b> <u>L. Alleva</u> , Centro Sviluppo Materiali S.p.A, Rome/I; R. Porta, Centro Sviluppo Materiali S.p.A., Rome/I; G. Hoxha, ENI, Milan/I
11:00	O-7439	<b>An innovative design for top-of line corrosion assessment in laboratory</b> H. Mahmoud, Wood Group Kenny (WGIM), London/UK and University of Leeds/UK; A. Neville, University of Leeds/UK; A. Barnett, <u>E. Mavredaki</u> , Wood Group Kenny (WGIM), London/UK
11:20		Coffee break
		<b>Corrosion in Oil &amp; Gas Production</b>
		<b>Pacinotti Hall</b>
<b>Chairs</b>		<b>S. Paterson / J. Kittel</b>
11:50	O-7508	<b>Effect of plastic deformation on hydrogen permeation of API 5L X65 steel pipeline</b> <u>E. Fallahmohammadi</u> , F. Bolzoni, G. Gumagalli, G. Re, L. Lazzari, Politecnico di Milano/I
12:10	O-7407	<b>Effective assessment of crude oil sourness for the material selection of refinery feeder pipeline</b> <u>J. Khosravi</u> , NIORDC-NIOEC, Tehran/IR
12:30	O-7448	<b>Assessment of ionic liquids corrosivity: preliminary results</b> <u>M.V. Diamanti</u> , U. Velardi, A. Mele, MP. Pedferri, M. Ormellesse, Politecnico di Milano/I
12:50	O-7684	<b>An alternative to H<sub>2</sub>S in NACE corrosion test for sulphide and hydrogen-induced cracking risk assessment</b> C. Colombo, S. Corsinovi, G. Lovicu, <u>R. Valentini</u> , University of Pisa/I

## Scientific lectures Programme - Thursday 11 September

13:10	O-7395	<b>Examination of line pipe strength and toughness in arctic environments combined with severe sour service</b> <u>A. Smith</u> , G. Mortali, G. Melis, Centro Sviluppo Materiali, Rome/I; O. Albores, E. Garcia, TenarisTamsa, Veracruz/MEX
13:30 Lunch		
Corrosion in Oil & Gas Production		Pacinotti Hall
Chairs	S. Paterson / M. Wilms	
14:50	O-7238	<b>Reducing sour corrosion using new, thermally stable hydrogen sulfide scavengers</b> <u>S. Lehrer</u> , V. Jovancicevic, S. Ramachandran, Baker Hughes, Sugar Land, TX/USA
15:10	O-7465	<b>Methanesulfonic acid (MSA) as an acid used in the well stimulation procedure and corrosion of <sup>22</sup>Cr</b> J. Jackson, BASF SE, Ludwigshafen/D; <u>M. Finsgar</u> , University of Maribor/SLO
15:30	O-7541	<b>About the correspondence of test conditions with field conditions in materials selection</b> <u>G. Gabetta</u> , S. Corra, eni e&p Division, San Donato Milanese/I; S. Sgorlon, VeneziaTecnologie/I; S. Trasatti, Milano University/I
15:50	O-7093	<b>The effect of deposit types on under-deposit corrosion behavior of carbon steel in sour environments</b> <u>N. Alanazi</u> , A. Sherik, A. Rasheed, S. Amar, M. Alneemi, Saudi Aramco, Dhahran/SAR
16:10	O-7058	<b>Improving oil and gas production infrastructure and equipment durability with active thermal sprayed coatings</b> <u>F. van Rodijnen</u> , Oerlikon Metco, Kelsterbach/D
16:30 Coffee break		
Corrosion in Oil & Gas Production		Pacinotti Hall
Chairs	S. Paterson / M. Wilms	
17:00	O-7488	<b>Failure of corrosion barriers in integrity management of subsea production systems - a statistical overview</b> <u>B. Graver</u> , F. Saint-Victor, K. Lønvik, B. Leinum, DNV GL, Høvik/N
17:20	O-7205	<b>Protective effect of molybdenum added to nickel based alloy in H<sub>2</sub>S-Cl<sup>-</sup> environment</b> A. Tomio, <u>M. Sagara</u> , T. Doi, Nippon Steel & Sumitomo Metal Corporation, Amagasaki/J; H. Amaya, Nippon Steel & Sumitomo Metal Corporation, Wakayama/J; N. Otsuka, Nippon Steel & Sumitomo Metal Corporation, Amagasaki/J; T. Kudo, Amagasaki/J



## Scientific lectures Programme - Thursday 11 September

17:40	O-7619	<b>Wireline failures in oil &amp; gas wells - case studies</b> D. Masouri, <u>M. Askari</u> , S. Afroukhteh, Pars Oil and Gas Company (POGC), Tehran/IR
<b>Nuclear Corrosion</b>		<b>Room C</b>
<b>Chairs</b>		<b>D. Féron / S. Ritter</b>
10:00	KN-7691	<b>Flow accelerated corrosion management using brt-cicero™: performances and future updates</b> <u>S. Trévin</u> , M-P. Moutrille, P. Caylar, D. Delacoux, E. Gipon, EDF DTG, Grenoble/F
10:40	O-7104	<b>Evaluation of the effects of pH and oxygen on mitigation of wall thinning of carbon steel due to flow-accelerated corrosion</b> <u>S. Uchida</u> , M. Naitoh, H. Okada, Institute of Applied Energy, Tokyo/J
11:00	O-7133	<b>Intergranular oxidation of alloy 600 exposed to simulated PWR primary water</b> <u>J. Caballero Hinostrroza</u> , EDF R&D, Moret sur Loing/F and Mines ParisTech University, Melun/F; <u>J. Crépin</u> , Mines ParisTech University, Evry/F; <u>T. Couvant</u> , EDF R&D, Moret sur Loing/F; <u>C. Duhamel</u> , Mines ParisTech University, Evry/F
11:20	Coffee break	
<b>Nuclear Corrosion</b>		<b>Room C</b>
<b>Chairs</b>		<b>Th. Couvant / M. Vankeerbergen</b>
11:50	O-7149	<b>Effect of alloying elements and surface preparation on the oxidation behaviour of nickel base alloys in superheated steam</b> <u>F. Hamdani</u> , Tohoku University, Sendai/J and INSA-Lyon, Villeurbanne/F; <u>H. Abe</u> , Tohoku University, Sendai/J; <u>B. Ter-Ovanesian</u> , B. Normand, INSA-Lyon, Villeurbanne/F; <u>Y. Watanabe</u> , Tohoku University, Sendai/J
12:10	O-7436	<b>Image-based cohesive element modelling of low temperature crack propagation in alloy 82 weld metal</b> <u>G. Klimayts</u> , A.P. Jivkov, D.L. Engelberg, University of Manchester/UK
12:30	O-7636	<b>Detection and characterization of stress-corrosion cracking of stainless steel in simulated BWR environment</b> <u>B. Zajec</u> , M. Bajt Leban, A. Legat, Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO
12:50	O-7661	<b>Characterization of Ni/NiO layers formed on alloy 182 weld metal in PWR water</b> <u>C. de Araujo Figueiredo</u> , CDTN/CNEN, Belo Horizonte/BR; <u>R. Mendonça</u> , CAPES, Brasilia/BR; <u>M. Vankeerberghen</u> , R-W. Bosch, SCK CEN, Mol/B

## Scientific lectures Programme - Thursday 11 September

13:30		Lunch
Nuclear Corrosion		Room C
Chairs	A. Legat / D. Gomez Briceno	
14:50	O-7542	<b>Experimental and numerical study of the iodine-induced stress corrosion cracking of zircaloy-4 nuclear fuel cladding tubes</b> <u>T. Jezequel</u> , Q. Auzoux, D. Le Boulch, CEA Saclay, Gif-sur-Yvette/F; E. Andrieu, C. Blanc, CIRIMAT/INPT, Toulouse/F; C. Delafoy, AREVA NP, Lyon/F; N. Barnel, EDF R&D, Moret-sur-Loing/F; C. Dal Bianco, EDF SEPTEN, Lyon/F
15:10	O-7130	<b>The influence of lithium ions on corrosion of zirconium alloys</b> <u>A. Krausová</u> , J. Macák, P. Sajdl, Institute of Chemical Technology, Prague/CZ; V. Renciuková, V. Vrtílková, UJP Prague/CZ
15:30	O-7283	<b>Effect of superheated steam on the corrosion behavior of advanced steels proposed as accident tolerant fuel cladding</b> <u>R. Rebak</u> , E. Dolley, GE Global Research, Schenectady, NY/USA
15:50	O-7096	<b>Study on the effect of phosphorous concentration on intergranular corrosion of stainless steel in boiling nitric acid solution</b> <u>F. Ueno</u> , A. Komatsu, T. Igarashi, M. Yamamoto, Japan Atomic Energy Agency, Ibaraki/J
16:10	O-7176	<b>Evaluation of the corrosion behavior of candidate materials for overpack applications under buried conditions</b> <u>G. Nakayama</u> , Y. Sakakibara, IHI Corporation, Yokohama/J
16:30		Coffee break
Nuclear Corrosion		Room C
Chairs	J. Macak / S. Uchida	
17:00	O-7503	<b>The corrosion of carbon steel embedded in bentonite under anoxic conditions</b> N.R. Smart, A.P. Rance, B. Reddy, Amec, Harwell Oxford/UK; <u>N. Diomidis</u> , Nagra, Wettingen/CH
17:20	O-7429	<b>Challenges related with the development of the closure plan for DNDR Baita Bihor România - corrosion monitoring</b> <u>R. Fako</u> , RATEN - CITON, Magurele/RO; F. Dragolici, IFIN - HH, Magurele/RO; Gh. Barariu, F. Sociu, RATEN - CITON, Magurele/RO; E. Neacsu, IFIN - HH, Magurele/RO

## Scientific lectures Programme - Thursday 11 September

17:40	O-7631	<b>Corrosion of carbon steel in the Callovo-Oxfordian claystone in the context of the French nuclear waste repository (in project) 1. Experimental set up and corrosion behaviour</b> <u>S. Necib</u> , ANDRA, Bure/F; D. Crusset, N. Michau, ANDRA, Chatenay/F; F. Foct, EDF, Moret-sur-Loing/F; M. Schlegel, CEA, Saclay/F; S. Daumas, CFG Services, Marseille/F; S. Dewonck, ANDRA, Bure/F
18:00	O-7501	<b>Iron corrosion products (CP) impact on the long term alteration of fractured nuclear glass: effects of transport and CP stability</b> <u>L. Gentaz</u> , Commissariat à l'énergie atomique, Gif-sur-Yvette/F; D. Rebiscoul, Commissariat à l'énergie atomique, Bagnols-sur-Cèze/F; D. Neff, P. Dillmann, Commissariat à l'énergie atomique, Gif-sur-Yvette/F; S. Gin, Commissariat à l'énergie atomique, Bagnols-sur-Cèze/F
<b>Corrosion by Hot Gases and Combustion Products</b>		<b>Room D</b>
<b>Chairs</b>	<b>M. Schütze</b>	
10:00	O-7756	<b>Thermodynamic modelling of North Dakota lignite ash in air- and oxy-fuel fired boiler and comparison to collected ash from a 15MW boiler</b> <u>B. Bordenet</u> , Alstom (Switzerland) Ltd., Baden/CH; R. Ganta, A. Levasseur, Alstom Power Inc., Windsor, CT/USA
10:20	O-7598	<b>Corrosion of welded coal boiler steels in oxyfuel flue gas</b> A. Kranzmann, <u>M. Mosquera</u> , G. Oder, Bundesanstalt für Materialforschung und -prüfung, Berlin/D; P. Zimmer, Vattenfall Europe Generation AG, Cottbus/D; S. Rehfeldt, Hitachi Power Europe GmbH, Duisburg/D; F. Kluger, ALSTOM Boiler Deutschland GmbH, Stuttgart/D
10:40	O-7544	<b>Hot corrosion in the next generation of industrial gas turbines</b> <u>A. Potter</u> , J. Sumner, N.J. Simms, J.E. Oakey, Cranfield University, Bedfordshire/UK
11:00	O-7059	<b>Thermodynamic and kinetic modeling for predicting the microstructural evolution in MCrAlY coatings</b> <u>R. Pillai</u> , A. Chyrkin, V. Shemet, L. Singheiser, W.J. Quadackers, Forschungszentrum Jülich, Juelich/D; W.G. Sloof, Delft University of Technology, Delft/NL
11:20	Coffee break	
<b>Corrosion by Hot Gases and Combustion Products</b>		<b>Room D</b>
<b>Chairs</b>	<b>M. Schütze</b>	
11:50	O-7781	<b>Corrosion of materials in nitrate melts for molten salt solar receivers</b> <u>M. Spiegel</u> , A. Kilic, Salzgitter Mannesmann Forschung GmbH, Duisburg/D
12:10	O-7604	<b>High-temperature corrosion under conditions simulating biomass firing: depth-resolved phase identification</b> <u>S.C. Okoro</u> , TU of Denmark, Lyngby/DK; M. Montgomery, COWI A/S and TU of Denmark, Lyngby/DK; F.J. Frandsen, K. Pantleon, TU of Denmark, Lyngby/DK

## Scientific lectures Programme - Thursday 11 September

12:30	O-7539	<b>The development of nickel alloys for high temperature applications in the process and energy sectors</b> <u>S.A. McCoy</u> , Special Metals Corporation, Hereford/UK; B.A. Baker, G.D. Smith, L.E. Shoemaker, Special Metals Corporation, Huntington, WV/USA
12:50		<b>WP 3 business meeting</b>
13:30	Lunch	
<b>Corrosion by Hot Gases and Combustion Products</b>		<b>Room D</b>
<b>Chairs</b>	<b>M. Schütze</b>	
14:50	O-7109	<b>Laser Raman microscopy study of the transition from high temperature alloy passivation to breakaway oxidation</b> <u>D. Young</u> , T. Gheno, University of New South Wales, Sydney/AUS; <u>D. Monceau</u> , ENSIACET, Toulouse/F
15:10	O-7140	<b>Oxidation mechanisms of alloy 602 CA in different gas atmospheres relevant to gas separation membranes</b> <u>M. Schiek</u> , L. Niewolak, R. Vaßen, W.J. Quadackers, Forschungszentrum Jülich GmbH/D
15:30	O-7529	<b>Grain boundary sulphidation of nickel-based alloys applied in high-efficient coal-power plants</b> <u>M.M. Lange</u> , S. Borodin, F.U. Renner, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D; <u>M. Spiegel</u> , Salzgitter Mannesmann Forschung GmbH, Duisburg/D
15:50	O-7531	<b>Effect of sulfur content on adhesion of thermal oxide scales grown on austenitic stainless steels</b> <u>C. Pascal</u> , University of Grenoble/F; E. Fedorova, Siberian Federal University, Krasnoyarsk/RUS; V. Parry, M. Braccini, University of Grenoble/F; M. Mantel, Ugitech SA, Ugine/F; D. Oquab, University of Toulouse/F; Y. Wouters, University of Grenoble/F; D. Monceau, University of Toulouse/F
16:10	O-7147	<b>The effect of SO<sub>4</sub><sup>2-</sup> ions on the corrosion of 15CrMo steels during shutting down and their oxide scale formation</b> Y. Meng, L. Zhang, <u>D.Q. Zhang</u> , L.X. Gao, Shanghai University of Electric Power/CHN
16:30	Coffee break	
<b>Corrosion by Hot Gases and Combustion Products</b>		<b>Room D</b>
<b>Chairs</b>	<b>M. Schütze</b>	
17:00	O-7561	<b>Behaviour of 25wt.%Cr-containing Fe-based alloys strengthened by hafnium carbides in oxidation between 1000 and 1200°C</b> <u>P. Berthod</u> , E. Conrath, University of Lorraine, Vandoeuvre-lès-Nancy/F

## Scientific lectures Programme - Thursday 11 September

17:20	O-7252	<b>Effect of minor strengthening additions in Ni-base superalloys on oxide scale formation in high pO<sub>2</sub> environments</b> <u>W. Nowak</u> , A. Jalowicka, D. Naumenko, L. Singheiser, W.J. Quadackers, Forschungszentrum Jülich GmbH/D
17:40	O-7568	<b>Influence of water vapour in air and of TaC carbides in alloy on the high temperature oxidation of cobalt-based refractory alloys</b> L. Aranda, Th. Schweitzer, <u>P. Berthod</u> , University of Lorraine, Vandoeuvre-lès-Nancy/F; A. Navet, A. Leroy, Lycée Henri Loritz, Nancy/F
<b>Corrosion in Aerospace</b>		<b>Room E</b>
<b>Chairs</b>		<b>T. Hack</b>
10:00	O-7421	<b>Investigation into the impact of lithium additions on the corrosion response of Al-Cu alloys for aerospace applications</b> <u>D. Carrick</u> , S. Hogg, G. Wilcox, Loughborough University/UK
10:20	O-7622	<b>Effect of microstructure on the corrosion resistance of AA2524-T3 and AA2198 T-851 aluminum alloys used in the aeronautic industry</b> A.F.S. Santos, S. Zaccarelli, IPEN/CNEN, São Paulo/BR; S.R. Araujo, CNPEM/LNLS, Campinas/BR; M. Terada, <u>I. Costa</u> , IPEN/CNEN, São Paulo/BR
10:40	O-7536	<b>Corrosion resistance of direct metal laser sintering (DMLS) AlSiMg alloys</b> <u>M. Cabrini</u> , S. Lorenzi, T. Pastore, Università di Bergamo, Dalmine/I; D. Manfredi, Center for Space Human Robotics @Polito, Torino/I; S. Biamino, Politecnico di Torino/I; P. Fino, C. Badini, Politecnico di Torino, Torino/I
11:00	O-7196	<b>Effect of deicing compounds on aircraft materials</b> <u>A. Bjørgum</u> , A.-K. Kvernbråten, A. Støre, SINTEF, Trondheim/N; T.A. Gustavsen, P.I. Lohne, G.W. Karlsen, Royal Norwegian Air Force, Kjeller/N
11:20	Coffee break	
<b>Corrosion in Aerospace</b>		<b>Room E</b>
<b>Chairs</b>		<b>T. Hack</b>
11:50	O-7785	<b>Surface treatments in space environment</b> <u>A. Zapata</u> , Airbus Defence & Space, Toulouse/F

## Scientific lectures Programme - Thursday 11 September

12:10	O-7180	<p><b>Complex oxide morphologies by potentiodynamic anodizing of aluminium</b></p> <p>M. van Put, Delft University of Technology/NL; O. Elisseeva, <u>J. de Kok</u>, Fokker Aerostructures, Papendrecht/NL; S.T. Abrahami, Materials Innovation Institute, Delft/NL; J.M.C. Mol, Delft Technical University/NL; H. Terryn, Vrije Universiteit Brussel/B</p>
12:30	O-7784	<p><b>Application of surface wetness sensors for the evaluation of corrosivity of the atmosphere to aerospace aluminium alloys</b></p> <p>O.V. Startsev, <u>I.M. Medvedev</u>, All-Russian Scientific-Research Institute of Aviation Materials, Gelendzhik/RUS</p>
12:50	O-7577	<p><b>Choosing a corrosion prevention compound surface science helping to preserve aeronautical equipment</b></p> <p><u>C. Bilke-Krause</u>, Kruess GmbH, Hamburg/D; Chr. Rulison, Augustin Scientific, Newbury, OH/USA</p>
13:10	O-7803	<p><b>The prevention of corrosion and stress-corrosion cracking on European space programme</b></p> <p><u>T. Ghidini</u>, A. Tesch, A. Graham, European Space Agency, Noordwijk/NL</p>
13:30	Lunch	
<b>Corrosion in Aerospace</b>		<b>Room E</b>
<b>Chairs</b>		<b>T. Hack</b>
14:50	O-7179	<p><b>The role of anodic oxide chemistry in the interfacial bonding of aluminium in the aerospace industry</b></p> <p><u>S.T. Abrahami</u>, Materials Innovation Institute, Delft/NL and Delft Technical University/NL; J. de Kok, Fokker Aerostructures, Papendrecht/NL; J.M.C. Mol, Delft Technical University/NL; H. Terryn, Vrije Universiteit Brussel/B</p>
15:10	O-7208	<p><b>Plasma electrolytic oxidation processes for aeronautic applications and their technical application</b></p> <p><u>N. Godja</u>, M. Pölzer, A. Schindel, J. Wosik, A. Gavrilovic, Ch. Kleber, CEST GmbH, Wiener Neustadt/A</p>
15:30	O-7367	<p><b>Tartaric/sulphuric acid anodizing of aluminium-copper-lithium alloy AA2198</b></p> <p><u>A. Schindel</u>, N. Godja, T. Vanka, J. Wosik, Ch. Kleber, CEST - Competence Centre for Electrochemical Surface Technology, Wiener Neustadt/A</p>
15:50	O-7616	<p><b>Characterization and performance of passive layers generated from lithium based inhibitors for corrosion protection of AA 2024-T3</b></p> <p><u>P. Visser</u>, J.M.C. Mol, H. Terryn, Delft University of Technology/NL</p>

## Scientific lectures Programme - Thursday 11 September

16:10	O-7263	<b>Experimental study of the effect of mass transfer on the efficiency of inhibitors released from an inhibited-primer</b> F. Peltier, <u>R. Oltra</u> , Université de Bourgogne, Dijon/F; G. Zalamansky, Dassault Aviation, Saint Cloud/F
16:30 Coffee break		
<b>Corrosion in Aerospace</b>		<b>Room E</b>
<b>Chairs</b>	<b>T. Hack</b>	
17:00	O-7700	<b>Advanced protective coatings for AA2024 alloys with combination of pH- sensitive active containers filed with corrosion inhibitors</b> <u>D. Snihirova</u> , S.V. Lamaka, M.F. Montemor, University of Lisboa/P; P. Taheri, J.M.C. Mol, Delft University of Technology/NL
17:20	O-7749	<b>Self-healing anticorrosive hybrid sol-gel coatings based on loaded nanocontainers for 2XXX serie aluminium alloys</b> <u>R. Noiville</u> , M. Gressier, M-J. Menu, J-P. Bonino, S. Duluard, University Paul Sabatier, Toulouse/F; B. Fori, C. Gazeau, P. Bares, Mecaprotec Industries, Muret/F
17:40	O-7131	<b>Silica mesoporous thin films hosting benzotriazole for protection of 2024 aluminum alloy - Study of healing mechanism</b> <u>I. Recloux</u> , M. Mouanga, F. Khelifa, M-G. Olivier, University of Mons/B
18:00	O-7292	<b>Eco-friendly primer treatments for corrosion protection of Al 2024</b> <u>I. Bertoli</u> , M. Trueba, S.P. Trasatti, Università degli Studi di Milano/I
<b>Cathodic Protection</b>		<b>Room 4</b>
<b>Chairs</b>	<b>J. Cruzillac</b>	
10:00	O-7489	<b>Electrochemical investigation of carbon-based conductive coatings for application as anodes in ICCP system of reinforced concrete structures</b> <u>G. Ebell</u> , M. Poltavtseva, J. Mietz, BAM Federal Institute for Materials Research and Testing, Berlin/D
10:20	O-7853	<b>Examples of C.P. remote monitoring installations carried out by a european gas transmission company</b> C. Aknouche, GRT GAZ, Compiègne Cedex/F; <u>C. Calvi</u> , TECNOSYSTEM GROUP, San Genesio ed Uniti/I
10:40	O-7413	<b>Corrosion of cathodically polarized TSA in subsea mud at high temperature</b> <u>O. Knudsen</u> , SINTEF, Trondheim/N; G. Clapp, G. Duncan, Woodside Energy Ltd., Perth/AUS; J. van Bokhorst, Shell Global Solutions International B.V., Amsterdam/NL
11:00	O-7833	<b>Cased-pipeline: presentation and experience of annular space wax filling</b> <u>P. de Bonnafos</u> , Trenton Europe, Paris/F

## Scientific lectures Programme - Thursday 11 September

11:20			Coffee break
Cathodic Protection			Room 4
Chairs	J. Crouzillac		
11:50	O-7080	<b>The a.c. corrosion rate: A discussion of the influencing factors and the consequences on the durability of cathodically protected pipelines</b> <u>M. Büchler</u> , SGK, Zürich/CH	
12:10	O-7148	<b>Electrochemical phenomenon of a.c. corrosion likelihood of cathodically protected steel pipelines</b> <u>F. Kajiyama</u> , Tokyo Gas Co., Ltd./J	
12:30	O-7333	<b>Evaluation of ICCP system over API X52 steel tested in two types soils in the state of Campeche, Mexico</b> <u>C. Lazárraga</u> , Universidad Autónoma de Campeche/MEX; <u>L. Quej-Aké</u> , <u>A. Contreras</u> , Instituto Mexicano del Petróleo, Distrito Federal/MEX; <u>V. Moo-Yam</u> , <u>T. Pérez</u> , Universidad Autónoma de Campeche/MEX	
12:50	O-7543	<b>CORTracer TM, an innovative monitoring instrumentation for the ac corrosion risk assessment of cathodically protected buried pipelines</b> <u>E. Fleury</u> , <u>D. Caron</u> , <u>M. Meyer</u> , GDF SUEZ, Saint Denis La Plaine/F; <u>S. Fontaine</u> , GRTgaz, Compiègne/F	
13:10	O-7518	<b>Effects of anodic interference on carbon steel under cathodic protection condition</b> <u>M. Ormellese</u> , <u>A. Brenna</u> , <u>L. Lazzari</u> , Politecnico di Milano/I; <u>F. Brugnetti</u> , APCE - Associazione per la Protezione dalle Corrosioni Elettrolitiche, Milano/I	
13:30			Lunch
Cathodic Protection			Room 4
Chairs	J. Crouzillac		
14:50	O-7834	<b>Proposed method to define the maximal accepted error made in the metrology line of measurements</b> <u>S. Fontaine</u> , GRTgaz, Compiègne Cedex/F	
15:10	O-7747	<b>CP design of internal components</b> <u>H. Osvoll</u> , J.C. Werenskiold, Force Technology Norway AS, Trondheim/N	
15:30	O-7694	<b>Cathodic protection of extended sheet piling in soil. A practical case</b> <u>U. Marinelli</u> , E. Barbaresi, F.M. Engineering Srl, Ancona/I	
15:50	O-7754	<b>Cathodic protection assessment of oil storage tank farm</b> <u>M. Diminich</u> , <u>F. Mari</u> , TAL SpA, Trieste/I; <u>B. Bazzoni</u> , <u>G. Lecardi</u> , <u>T. Caglioni</u> , <u>F. Duranti</u> , Cescor srl, Milan/I	



## Scientific lectures Programme - Thursday 11 September

16:10	O-7746	<b>New tool for CP inspection</b> H. Osvoll, <u>J.C. Werenskiold</u> , Force Technology Norway AS, Trondheim/N
16:30 Coffee break		
<b>Cathodic Protection</b>		<b>Room 4</b>
<b>Chairs</b>	<b>J. Crouzillac</b>	
17:00	O-7634	<b>Soil side corrosion of storage tank bottom plate, failure causes and mitigation provisions</b> <u>S. Afroukhteh</u> , M. Askari, D. Masouri, Pars Oil and Gas Company, Tehran/IR
17:20	O-7146	<b>Sacrificial anode key design parameters for the internal surfaces of vessel, tank and structures</b> <u>H. Sabri</u> , S. Al-Sulaima, Kuwait Oil Company, Ahmadi/KWT
<b>Environment Sensitive Fracture</b>		<b>Room 2</b>
<b>Chairs</b>	<b>K. Wolski</b>	
10:00	O-7490	<b>Evaluating the pit-crack transition in an offshore pipeline steel</b> <u>C. Evans</u> , R. Akid, University of Manchester/UK
10:20	O-7512	<b>Critical analysis of the role of ferrite content in the environment- sensitive cracking of duplex stainless steels</b> <u>R. Pettersson</u> , Jernkontoret- The Swedish Steel Producers' Association, Stockholm/S; S. Wessman, Swerea KIMAB, Kista/S
10:40	O-7210	<b>Influence of nitrate ions concentration, pH and applied potential on the susceptibility to corrosion and stress corrosion cracking of <math>\alpha</math>-<math>\beta</math> brass in <math>\text{NaNO}_3</math> solutions</b> <u>C. Berne</u> , CETIM / CIRIMAT, Nantes/F; E. Andrieu, Université de Toulouse - CIRIMAT, Toulouse/F; J. Reby, CETIM, Nantes/F; J.-M. Sobrino, CETIM, Senlis/F; C. Blanc, Université de Toulouse - CIRIMAT, Toulouse/F
11:00	O-7074	<b>Mechanistic investigation of stress corrosion cracking of pipeline steel in near-neutral pH environment</b> <u>R. Bogdanov</u> , A. Marshakov, V. Ignatenko, Russian Academy of Sciences, Moscow/RUS

## Scientific lectures Programme - Thursday 11 September

11:20			Coffee break		
Environment Sensitive Fracture			Room 2		
Chairs		C. Evans			
11:50	O-7271	<b>The relationships between microstructure and sulfide stress cracking resistance of high strength, low alloy OCTG steels</b> W. Huang, ExxonMobil Development Company, Houston, TX/USA; F. Cao, ExxonMobil Research and Engineering Company, Clinton, NJ/USA; A. Aylor, W. Sun, ExxonMobil Development Company, Houston, TX/USA			
12:10	O-7806	<b>Cathodic charging during hydrogen embrittlement testing</b> Q. Liu, <u>A. Atrens</u> , The University of Queensland, Brisbane/AUS			
12:30	O-7391	<b>The Kelvin probe: towards rapid, in-situ evaluation of HISC susceptibility and undercoating corrosion</b> <u>E.F. Turcu</u> , Christian Michelsen Research AS, Bergen/N; M. Rohwerder, Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf/D			
12:50	O-7446	<b>Hydrogen induced stress cracking tests for offshore wind farm monopile foundations</b> <u>D. Bangsgaard</u> , T. Mathiesen, C. Christensen, FORCE Technology, Brøndby/DK			
13:10	O-7586	<b>Investigation on Nickel base superalloy stem turbine bolts, fractured at high temperatures, a case history</b> G. Lovicu, R. Ishak, Pisa University/I; L. Rolla, <u>C. Dellabiancia</u> , CTS Srl, Ceparana/I			
13:30			Lunch		
Environment Sensitive Fracture			Room 2		
Chairs		A. Visser / C. Blanc			
14:50	O-7523	<b>Analyses on coupled electrochemical noise and acoustic emission data applied on chloride stress corrosion cracking</b> L. Calabrese, University of Messina/I; F. Cappuccini, <u>D. Di Pietro</u> , GE Oil & Gas, Florence/I; M. Galeano, E. Proverbio, University of Messina/I			
15:10	O-7688	<b>Liquid metal embrittlement of the T91 steel in lead bismuth eutectic: effect of the loading rate and the oxygen content</b> <u>I. Proriot Serre</u> , C. Ye, J-B. Vogt, Université Lille, Villeneuve d'Ascq/F			
15:30	O-7235	<b>The effects of sulfide and flow rate on corrosion behavior of duplex steel 1.4462 in the artificial molasse basin fluid</b> <u>J. Sobetzki</u> , R. Bäßler, BAM Federal Institute for Materials Research and Testing, Berlin/D; A. Boduch, FU Berlin/D			

## Scientific lectures Programme - Thursday 11 September

15:50	O-7605	<p><b>Influence of testing parameters on type of damage under cyclic loading</b>  <u>A. Visser</u>, G. Mori, Montanuniversität Leoben/A; H. Leitner, M. Kapp, R. Fluch, Böhler Edelstahl GmbH &amp; Co. KG, Kapfenberg/A; B. Holper, Schoeller Bleckmann Oilfield Technology GmbH, Ternitz/A; M. Panzenböck, Montanuniversität Leoben/A</p>
16:10	O-7829	<p><b>CS-AFM study on the localized corrosion of 2507 duplex stainless steel</b>  <u>L. Qiao</u>, M. Lin, L. Guo, University of Science and Technology Beijing/CHN</p>
16:30	Coffee break	
<b>Environment Sensitive Fracture</b>		<b>Room 2</b>
<b>Chairs</b>	<b>K. Wolski</b>	
17:00	O-7151	<p><b>The transition between sulfide stress cracking and stress corrosion cracking of the 2304 DSS as a function of T and pH in H<sub>2</sub>S environment</b>  F. Ruel, S. Saedlou, Aperam R&amp;D, Isbergues/F; S. Le Manchet, C. Lojewski, Industeel, Le Creusot/F; <u>K. Wolski</u>, Ecole des Mines de Saint Etienne/F</p>
17:20		<b>WP 5 business meeting</b>
<b>Corrosion of Polymer Materials</b>		<b>Room 5</b>
<b>Chairs</b>	<b>J. Heinemann</b>	
10:00	O-7660	<p><b>Application relevant polymer testing - impact of media on the viscoelastic behaviour of engineering polymers</b>  <u>P. Guttman</u>, D. Oelzant, G. Pilz, Montanuniversität Leoben/A</p>
10:20	O-7072	<p><b>Compatibility of sealing materials with biofuels, biodiesel-heating oil blends and premium grade fuel at different temperatures</b>  <u>M. Weltschev</u>, J. Werner, F. Heming, F. Jochems, Federal Institute for Materials Research and Testing (BAM), Berlin/D</p>
10:40	O-7248	<p><b>Monitoring the process of polymer degradation by imaging techniques</b>  <u>T. Schuster</u>, S. Damodaran, K. Rode, R. Brüll, Fraunhofer Institute for Structural Durability and System Reliability LBF, Darmstadt/D; B. Gerets, M. Wenzel, M. Bastian, SKZ - German Plastics Center, Würzburg/D</p>
11:00	O-7820	<p><b>Lifetime analysis for plastic pipes by statistical evaluation of creep rupture data</b>  <u>J. Heinemann</u>, H. Haupt, A. Bockenheimer, M. Oechsner, TU Darmstadt/D</p>

## Scientific lectures Programme - Thursday 11 September

11:20		Coffee break
<b>Corrosion of Polymer Materials</b>		<b>Room 5</b>
<b>Chairs</b>	<b>J. Heinemann</b>	
11:50	O-7250	<b>Fluoropolymers in corrosion resistance - long term experience opens a broad spectrum of applications</b> <u>B. Neubauer</u> , Solvay Specialty Polymers, Brussels/B; <u>G. Maggi</u> , Solvay Specialty Polymers, Bollate/I
12:10	O-7188	<b>Fluorothermoplastic-lined steel and FRP equipment for highly corrosive environments - an overview</b> <u>M. Lotz</u> , Quadrant EPP AG, Lenzburg/CH
12:30	O-7251	<b>Fluoropolymers in corrosion resistance - protective organic coatings based on ECTFE</b> <u>B. Neubauer</u> , Solvay Specialty Polymers, Brussels/B; <u>G. Maggi</u> , Solvay Specialty Polymers, Bollate/I
12:50	O-7183	<b>Corrosion of copper alloy fittings in a combined plastic/metal installation for hot drinking water</b> <u>W. Erning</u> , BAM Federal Institute of Material Research and Testing, Berlin/D
13:10	O-7831	<b>Innovative high corrosion resistant systems for chrome plating on plastics</b> <u>L. Thiery</u> , COVENTYA Holding SAS, Villeneuve-la-Garenne/F; <u>H. Sahrhage</u> , COVENTYA GmbH, Gütersloh/D; <u>D. Dal Zilio</u> , G.L. Schiavon, COVENTYA S.p.A., Villorba/I
13:30		Lunch
<b>Corrosion of Polymer Materials</b>		<b>Room 5</b>
<b>Chairs</b>	<b>J. Heinemann / J.W. Erning</b>	
15:30		<b>WP 19 &amp; WP 20 business meeting</b>

## Scientific lectures Programme - Friday 12 September

<b>Plenary Session</b>		
<b>9:15</b>		<b>Cavallaro Medal Award and lecture (O-7860) Development of inhibitor-containing zeolites for protection coatings</b> M.G.S. Ferreira, University of Aveiro, Aveiro/P
<b>9:45</b>		Break for Changing Lecture Hall
<b>Organic Coatings</b>		<b>Auditorium</b>
<b>Chairs F. Montemor / I. De Graeve</b>		
<b>10:00</b>	O-7608	<b>Anticorrosion atmospheric plasma coatings for metal protection</b> I. De Graeve, A. Kakaroglou, G. Scheltjens, Vrije Universiteit Brussel/B; B. Nisol, Université Libre de Bruxelles/B; G. Van Assche, B. Van Mele, Vrije Universiteit Brussel/B; F. Reniers, Université Libre de Bruxelles/B; H. Terry, Vrije Universiteit Brussel/B
<b>10:20</b>	O-7223	<b>Electrochemical properties of graphene/epoxy coating</b> T. Monetta, A. Acquesta, F. Bellucci, University of Naples/I
<b>10:40</b>	O-7669	<b>Advanced functional ormosil coatings modified with conductive fillers for corrosion protection of Mg alloys</b> F. Montemor, D. Snihirova, B. Martins, A. Zomorodian, Y. Morozov, Instituto Superior Técnico, Lisboa/P; S. Piçarra, Instituto Politécnico de Setúbal/P
<b>11:00</b>	O-7810	<b>A new composite coating for corrosion protection of AZ31 and RZ5 magnesium alloys</b> M.C. Ferreira, A. Zomorodian, M.F. Montemor, J.C.S. Fernandes, Instituto Superior Técnico, Lisbon/P
<b>11:20</b> Coffee break		
<b>Organic Coatings</b>		<b>Auditorium</b>
<b>Chairs F. Montemor / I. De Graeve</b>		
<b>11:50</b>	O-7452	<b>Elaboration of bisphenol A polybenzoxazine coatings for barrier protection applications on aluminum substrate</b> J. Escobar, M. Poorteman, University of Mons/B; L. Dumas, L. Bonnaud, P. Dubois, Materia Nova Research Center, Mons/B; M.G. Olivier, University of Mons/B
<b>12:10</b>	O-7547	<b>Poly(3,4-ethylenedioxythiophene)-poly(styrene sulfonate) as a primer coating for the inhibition of corrosion driven cathodic delamination and filiform corrosion on iron</b> C. Glover, G. Williams, Swansea University/UK and SPECIFIC, Port Talbot/UK
<b>12:30</b>	O-7751	<b>Structure property relationships in highly structured composite layers as corrosion protection coatings on mild steel</b> C. Becker-Willinger, S. Schmitz-Stoewe, M. Opsoelder, M. Jochum, S. Albayrak, E. Perre, INM - Leibniz Institute for New Materials gGmbH, Saarbrücken/D

## Scientific lectures Programme - Friday 12 September

12:50	O-7177	<b>Possibilities of ex situ IR and in situ Raman spectroscopies for investigation of sol-gel anticorrosion coatings during anodic polarisation</b> <u>A. Surca Vuk</u> , M. Rodosek, A. Rauter, L. Slemenik Perse, National Institute of Chemistry, Ljubljana/SLO; D. Kek Merl, Institute Jozef Stefan, Ljubljana/SLO
13:10	O-7366	<b>Inorganic-organic hybrid(TiO<sub>2</sub>-MAPTS) coating on carbon steels for corrosion inhibition</b> <u>W. Maeng</u> , G. Song, M. Kim, Korea Atomic Energy Research Institute, Daejeon/ROK; J. Noh, Korea University of Technology and Education, Cheonan/ROK; M. You, Chungnam University, Daejeon/ROK
13:30		Break for Changing Lecture Hall
13:40		<b>Closing Remarks: prof. L. Lazzari, prof. L. Fedrizzi</b> Auditorium
13:50		End of Scientific Programme
		<b>Corrosion Mechanisms, Methods and Modelling</b> Fermi Hall
<b>Chairs</b>		<b>J. Deconinck / G. Mori</b>
10:00	O-7602	<b>Investigation of passive layers on SiC-based ceramics by electrochemical impedance spectroscopy</b> <u>M. Schneider</u> , K. Kremmer, K. Sempf, M. Herrmann, Fraunhofer IKTS, Dresden/D
10:20	O-7142	<b>Corrosion layer growth on magnesium galvanic coupled to aluminium simulated by FEM</b> <u>D. Höche</u> , Helmholtz-Zentrum Geesthacht/D
10:40	O-7243	<b>Nanosopic view on the initial stages of corrosion of hot dip galvanized Zn-Mg-Al coatings</b> <u>J. Duchoslav</u> , M. Arndt, University of Linz/A; T. Keppert, G. Luckeneder, K.H. Stellnberger, J. Hagler, C.K. Riener, G. Angeli, voestalpine Stahl GmbH, Linz/A; D. Stifter, University of Linz/A
11:00	O-7549	<b>The effects of oxygen concentration and pH on the galvanic protection of tin</b> <u>S. Geary</u> , H.N. McMurray, Swansea University/UK; A.C.A. de Vooy, TATA Steel, Ijmuiden/NL; N. Wint, Swansea University/UK
11:20	Coffee break	
		<b>Corrosion Mechanisms, Methods and Modelling</b> Fermi Hall
<b>Chairs</b>		<b>J. Deconinck / G. Mori</b>
11:50	O-7132	<b>Mechanism of corrosion protection of zinc-magnesium coatings on steel studied by electrochemical depth profiling</b> <u>J. Rodriguez</u> , M. Mouanga, University of Mons/B; A. Lanzutti, F. Andreatta, L. Fedrizzi, University of Udine/I; M.-G. Olivier, University of Mons/B

## Scientific lectures Programme - Friday 12 September

12:10	O-7202	<b>Corrosion features of the PEO-coated magnesium alloys</b> <u>A. Gnedenkov</u> , S. Sinebryukhov, D. Mashtalyar, S. Gnedenkov, Far Eastern Branch of Russian Academy of Sciences, Vladivostok/RUS
12:30	O-7477	<b>A novel method to study corrosion resistance of galvanised steel against corrosive dropping electrolytes</b> <u>S. Ziebermayr</u> , Center of Electrochemical Surface Technology, Wiener Neustadt/A; M. Fleischanderl, G. Haslehner, K.H. Stellnberger, voestalpine Stahl GmbH, Linz/A; A.W. Hassel, University of Linz/A
12:50	O-7434	<b>Hydrogen diffusion mechanism in nickel base alloy 718</b> <u>O. Golenishcheva</u> , G. Andersohn, M. Oechsner, TU Darmstadt/D; J. Kloewer, A. Aghajani, Outokumpu VDM, Altena/D
<b>WS: CO<sub>2</sub>-Corrosion in Industrial Applications</b>		<b>Pacinotti Hall</b>
<b>Chairs</b>		<b>R. Bäßler / A. Dugstad</b>
10:00	O-7811	<b>Mitigating corrosion in sweet gas units: a comparison between laboratory data and field survey</b> <u>J. Kittel</u> , IFP Energies nouvelles, Solaize/F; M. Bonis, Total, Pau/F; G. Perdu, Prosernat, Paris La Défense/F
10:20	O-7743	<b>Corrosive and protective behaviour of MEA in dense phase CO<sub>2</sub></b> <u>A. Dugstad</u> , M. Halseid, B. Morland, Institute for Energy Technology, Kjeller/N
10:40	O-7456	<b>Thermally sprayed corrosion resistant alloy coatings on carbon steel for use in CCS</b> <u>S. Paul</u> , TWI, Cambridge/UK
11:00	O-7524	<b>Effect of microstructure on scale protectiveness and corrosion rate of carbon steel in CCTS environments</b> M. Cabrini, <u>S. Lorenzi</u> , T. Pastore, Università di Bergamo, Dalmine/I
11:20	Coffee break	
<b>WS: CO<sub>2</sub>-Corrosion in Industrial Applications</b>		<b>Pacinotti Hall</b>
<b>Chairs</b>		<b>R. Bäßler / A. Dugstad</b>
11:50	O-7744	<b>Safe transport of dense phase CO<sub>2</sub> - how much flue gas impurities can be accepted?</b> A. Dugstad, M. Halseid, <u>B. Morland</u> , Institute for Energy Technology, Kjeller/N
12:10	O-7157	<b>Corrosion susceptibility of steels under transport and injection exploitation conditions possible in CCS process chain</b> <u>O. Yevtushenko</u> , R. Bäßler, D. Bettge, BAM Federal Institute for Materials Research and Testing, Berlin/D
12:30		<b>EFC Task Force: CO<sub>2</sub> corrosion in CCS-Applications business meeting</b>

## Scientific lectures Programme - Friday 12 September

Nuclear Corrosion		Room C
<b>Chairs</b>		<b>P. Rebak / S. Lyon</b>
<b>10:00</b>	O-7156	<b>Galvanic corrosion of carbon steel under argillite layers in carbonated media</b> A. Romaine, R. Sabot, M. Jeannin, Ph. Refait, La Rochelle University/F
<b>10:20</b>	O-7603	<b>Surface analytical and electrochemical measurements on Cu-coated steel specimens</b> R. Partovi-Nia, D.W. Shoesmith, Western University, London/CDN; R. Jacklin, Surface Science Western, London/CDN; J. Chen, D. Zagidulin, Western University, London/CDN; S. Ramamurthy, Surface Science Western, London/CDN; P.G. Keech, Nuclear Waste Management, Toronto/CDN
<b>10:40</b>	O-7381	<b>Corrosion behaviour of Mg alloys cladding from nuclear reactors fuel in alkaline solutions</b> J. Agullo, B. Muzeau, C. Bataillon, V. L'Hostis, CEA Saclay, Gif-sur-Yvette/F
<b>11:00</b>	O-7505	<b>Advanced Al<sub>2</sub>O<sub>3</sub> coatings under extreme conditions</b> F. García Ferré, Istituto Italiano di Tecnologia, Milano/I; M. Ormellese, M. Beghi, Politecnico di Milano/I; F. Di Fonzo, Istituto Italiano di Tecnologia, Milano/I
<b>11:20</b> Coffee break		
Nuclear Corrosion		Room C
<b>Chairs</b>		<b>D. Féron / Th. Couvant</b>
<b>11:50</b>	O-7659	<b>Oxidation of 316L(N) stainless steel in liquid sodium at high temperature</b> M. Rivollier, J.L. Courouau, CEA Saclay, Gif-sur-Yvette/F; M.L. Giorgi, ECP, Chatenay-Malabry/F
<b>12:10</b>	O-7486	<b>Corrosion of carbon steel in the Callovo-Oxfordian claystone in the context of the French nuclear waste repository (in project). 2. structural organization of corrosion products</b> M.L. Schlegel, CEA, Gif-sur-Yvette/F; S. Necib, ANDRA, Bure/F; S. Dumas, CFG Services, Marseille/F; C. Blanc, E. Foy, CEA, Gif-sur-Yvette/F; D. Crusset, N. Michau, ANDRA, Châteny-Malabry/F
<b>12:30</b>	O-7665	<b>Corrosion behaviour of structural steels exposed in supercritical water</b> J. Macák, P. Sajdl, A. Krausová, V. Bystrianský, L. Tuma, ICT, Praha/CZ; E. Krečanová, M. Zychová, CVR s.r.o., Rez u Prahy/CZ
<b>12:50</b>		<b>WP 4 Poster Prize</b>
Coatings for High Temperatures		Room D
<b>Chairs</b>		<b>M. Galetz</b>
<b>10:00</b>	O-7168	<b>Metal dusting protection by a novel coating, providing a classical oxide barrier as well as catalytic inhibition</b> S. Madloch, M.C. Galetz, M. Schütze, DECHEMA-Forschungsinstitut, Frankfurt am Main/D



## Scientific lectures Programme - Friday 12 September

10:20	O-7414	<b>Combination of CVD coatings and halogen effect to prevent high-temperature embrittlement in titanium aluminides</b> <u>J. Grüters</u> , M.C. Galetz, M. Schütze, DECHEMA-Forschungsinstitut, Frankfurt am Main/D
10:40	O-7115	<b>Surface modification of thermal barrier coatings by diffused and laser and phosphate treatments</b> <u>M. Shoeib</u> , CMRDI, Cairo/ET; K. Ahmed, Arab Institute for Advanced Technology, Cairo/ET
11:00	O-7316	<b>Improvement of turbine blade by using protective ceramic coating</b> <u>S. Sohrobi</u> , Azad University of Najaf Abad, Isfahan/IR; A. Saatchi, Isfahan University of Technology, Isfahan/IR; R. Ebrahimi, Azad University of Najaf Abad, Isfahan/IR
11:20 Coffee break		
<b>WS: Multimaterials in Hybrid Structures for Automotive and Aerospace Applications Corrosion Prevention</b>		<b>Room E</b>
<b>Chairs</b>		<b>F. Hannour / T. Hack</b>
10:00	O-7170	<b>Corrosion investigations of ultrasound supported friction stir welded Al/Mg-hybrid joints</b> <u>S. Benfer</u> , DECHEMA-Forschungsinstitut, Frankfurt am Main/D; B. Straß, G. Wagner, TU Kaiserslautern/D; W. Fürbeth, DECHEMA-Forschungsinstitut, Frankfurt am Main/D
10:20	O-7643	<b>Study of the corrosion behaviour of friction stir welded AA 2024-T3 using global and local electrochemical techniques</b> <u>C. Molena de Assis</u> , I.V. Aoki, Sao Paulo University/BR; V. Vivier, University Pierre et Marie Curie, Paris/F
10:40	O-7257	<b>Active self-healing coating for galvanically coupled multi-material assemblies</b> M. Serdechnova, S. Kallip, D. Vieira, L.F.S. Barbosa, M.G.S. Ferreira, <u>M.L. Zheludkevich</u> , University of Aveiro/P
11:00	O-7789	<b>A controlled experimental approach of the effect of confinement on the damage inside an aluminium alloy lap joint</b> T.M.L. Le, <u>R. Oltra</u> , A. Zimmer, Université de Bourgogne, Dijon/F
11:20 Coffee break		
<b>WS: Multimaterials in Hybrid Structures for Automotive and Aerospace Applications Corrosion Prevention</b>		<b>Room E</b>
<b>Chairs</b>		<b>F. Hannour / T. Hack</b>
11:50	O-7786	<b>Corrosion behaviour of titanium in lightweight construction</b> <u>S. Wibihal</u> , CEST, Wiener Neustadt/A; G. Faflek, Vienna University of Technology/A; T. Hack, Airbus Group Innovations, Munich/D; M. Beneke, Airbus Operations, Bremen/D

## Scientific lectures Programme - Friday 12 September

12:10	O-7640	<b>Inhibitor-enriched composite protective coating for WE43 magnesium alloy</b> S. Lamaka, M. Lourenço, Instituto Superior Tecnico, Lisbon/P; D. Ivanou, M. Zheludkevich, M. Ferreira, University of Aveiro/P; T. Hack, EADS Innovation Works, Munich/D
12:30	O-7415	<b>The influence of hot forming on the microstructure and corrosion behaviour of magnesium alloy</b> J. Alias, X. Zhou, G.E. Thompson, University of Manchester/UK
12:50	O-7198	<b>In-situ Al/TiC nanocomposites: the effect of sintering temperature on the corrosion behavior</b> B. Dikici, Yuzuncu Yil University, Van/TR; M. Gavgali, Ataturk University, Erzurum/TR; F. Bedir, Suleyman Demirel University, Isparta/TR; T. Kiyak, Gazi University, Ankara/TR

**JS: Interplay of Mechanics and Corrosion in Surface and Bulk Degradation****Room 4****Chairs****M. Keddam / P. Ponthiaux**

10:00	O-7528	<b>Kinetic of passivation of two stainless steel microstructures under tribocorrosion solicitations</b> V. Dalbert, N. Mary, B. Normand, C. Verdu, INSA-Lyon, Villeurbanne/F; S. Saedlou, APERAM Research Center, Isbergues/F
10:20	O-7532	<b>Tribocorrosion behaviour of stainless steel under cathodic potential</b> N. Mary, V. Dalbert, N. Normand, B. Ter-Ovanessian, T. Borgna, L. Lefebvre, INSA-Lyon, Villeurbanne/F; S. Saedlou, APERAM Research Center, Isbergues/F
10:40	O-7630	<b>The effect of surface condition on the friction coefficient of different dental archwires</b> T. Kosec, P. Mocnik, Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO; U. Mezeg, J. Primožic, University of Ljubljana/SLO; A. Legat, Slovenian National Building and Civil Engineering Institute, Ljubljana/SLO
11:00	O-7798	<b>New advances and perspectives in the electrochemical study of tribocorrosion</b> M. Keddam, Université Pierre et Marie Curie, Paris/F; P. Ponthiaux, Ecole Centrale, Châtenay/F; V. Vivier, Université Pierre et Marie Curie, Paris/F

**11:20**

Coffee break

## Scientific lectures Programme - Friday 12 September

<b>JS: Interplay of Mechanics and Corrosion in Surface and Bulk Degradation</b>		<b>Room 4</b>
<b>Chairs</b>		<b>M. Keddam / P. Ponthiaux</b>
<b>11:50</b>	O-7687	<b>Sensitivity to liquid metal embrittlement of the T91 steel by the liquid sodium : influence of the pre-immersion in liquid sodium</b> I. Proriol Serre, O. Hamdane, J-B. Vogt, Université Lille 1, Villeneuve d'Ascq/F; J.-L. Courouau, CEA-Saclay/F
<b>12:10</b>	O-7772	<b>Tribocorrosion effects on offshore mooring chain steel</b> A. Lopez, F. Pagano, R. Bayon, A. Igartua, IK4-Tekniker, Eibar/E
<b>Corrosion Education</b>		<b>Room 2</b>
<b>Chairs</b>		<b>A. Heyn / S. Trasatti</b>
<b>10:00</b>	KN-7830	<b>Corrosion awareness education a key for a better environment</b> A. Eliezer, G. Hays, E.H. Han, E. Leining, W. Burns, World Corrosion Organization, New York, NY/USA
<b>10:40</b>	O-7062	<b>Corrosion education: present and future</b> A. Groysman, Israeli Society of Chemical Engineers & Chemists, Tel Aviv/IL
<b>11:00</b>	O-7713	<b>Corrosion education in the framework of knowledge management</b> G. Gabetta, Eni E&P Division, San Donato Milanese/I
<b>11:20</b>	Coffee break	
<b>Corrosion Education</b>		<b>Room 2</b>
<b>Chairs</b>		<b>A. Heyn / S. Trasatti</b>
<b>11:50</b>	O-7709	<b>The way to teaching corrosion based on visual inspection: student's opinions</b> M.V. Biezma, University of Cantabria, Santander/E; S. Braunstein Faldini, Universidade Presbiteriana Mackenzie, São Paulo/BR
<b>12:10</b>	O-7206	<b>Corrosion test rig for the amelioration of the service life of industrial components</b> M. Franchi, Tetra Pak Packaging Solutions, Modena/I; R. Cigna, O. Fumei, Isproma, Roma/I; P. Pranovi, Ecor Research, Schio/I
<b>12:30</b>		<b>WP 7 business meeting</b>