



September 29th 2011: 1100 -1300 HRS, Main Hall : Plenary Talks

Plenary Talk : Dr. Oliver Moghissi, DNV Columbus, Ohio, USA

Plenary Talk : Pipeline Safety and R&D - Cliff Johnson, PRCI, VA, USA

September 29th 2011: 1400 -1530 HRS, Hall – A : Symposium - Paint Coating & Lining -1

Keynote Talk : Designing Protective Coating and Lining Systems for Today's Nuclear Power Electrical Generating Stations - Jon R. Cavallo, Enercon Services, Inc., USA

PC11 Application of Coating to Hot Steel Surfaces of Operating Equipment, M McLampy & Peter Bock, Hi-Temp Coatings Technology, Inc, USA.

PC12 Choosing the best Tank Lining for You - Miles Buckhurst, Jotun AS, Norway

PC13 Lining Crude Oil Storage Tanks - Warren Graves, W G Coating Consultant Inc., Canada

September 29th 2011: 1400 -1530 HRS, Hall – B : Symposium - Materials & Composites -1

Keynote Talk : Role of Micro-/Nanocrystalline Structure in Oxidation - Prof. Raman Singh, Monash University, Australia

MC11 High Temperature Corrosion Behavior of Different Grain Size Specimens of 2.25 Cr-1 Mo steel in SO₂+O₂ Environment- D Ghosh¹ & S K Mitra², CMERI, Durgapur & NIT, Durgapur

MC12 Corrosion behaviour of Laser and TIG welded Alloy 800 - G J Abraham, V. Kain, G.K. Dey , BARC & V S Raja, IIT Bombay, Mumbai .

MC13 Cyclic oxidation behavior of Mo-Si-B ultrafine composites - J Das, Khushboo, R Mitra & S K Roy, IIT, Kharagpur

September 29th 2011: 1400 -1530 HRS, Hall – C : Symposium – MIC & Inhibitors – 1

Keynote Talk : The Role of Oxygen in Anaerobic Microbiologically Influenced Marine Corrosion, Dr. Brenda J Little, Naval Research Laboratory , USA

- MI11** Corrosion and microbiological studies on integrity of passive films of Titanium condenser material under in vitro heterogeneous biofilm formation - B Anandkumar, R P George & U K Mudali, IGCAR, Kalpakkam
- MI12** Corrosion Protection of Copper by Self- Assembly - M Yadav, U Sharma & S Kumar, ISM Dhanbad
- MI13** Studies On Microbial Corrosion In Refinery Sea Water Condenser Systems - Plausible Solutions, Jaya Rawat, A Khandelwal & P VC Rao, BPCL, Greater Noida
- MI14** Control of microbiologically influenced corrosion (MIC) of mild steel exposed to Desulfuovibrio desulfuricans by using some fluoroquinolones - R S Dubey & K U Singh, R J College, Mumbai

September 29th 2011: 1400 -1530 HRS, Hall – D : Special Session: NACE International TCC Activities

September 29th 2011: 1600 -1730 HRS, Hall – A : Symposium - Paint Coating & Lining -2

Invited Talk : Solvent Free Rapid Cure Polyurethane Resins - Arthur A Webb, Naval Research Laboratory, USA

- PC21** Influencing Blasting Factors with regard to Surface Preparation for Coating Application, Gerhard Eder, Eder Strahltechnik GesmbH, Austria
- PC22** Understanding Corrosion Under Insulation (CUI) The Simple Approach - Miles Buckhurst, Jotun AS, Norway
- PC23** A new application process that assures good adhesion of fusion bonded epoxy coatings exposed to very severe conditions- G Gaillard, J Bouliez & P Collet, B S Coatings, France
- PC24** Corrosion under insulation (CUI): New generation high temperature corrosion resistance coating - Rajes Bardia, Akzo Nobel Coating India Pvt. Ltd, Bangalore

September 29th 2011: 1600 -1730 HRS, Hall – B :Symposium - Materials & Composites -2

Invited Talk : Non-destructive and stochastic assessment of pitting - Indranil Chatteraj, NML, Jamshedpur

- MC21** Environmentally Assisted Cracking Behaviour of Peak Aged Al-Zn-Mg-Cu-Cr Alloy Adhesively Bonded with Carbon Fibre Reinforced Plastic (CFRP) laminates - S S Kale & V S Raja, IIT Bombay & A K Bakare, CMAC, Nasik.
- MC22** Micro Arc Oxidation of Al-Cu Aluminum AA2219 Alloy Welds, N.Sreedhar, DRDL, Hyderabad & K Prasad Rao, IIT Madras, Chennai
- MC23** Comparative Evaluation of low nickel and nickel free lean duplex stainless steels with 316L in a variety of corrosive media - L K Singhal, A Kumar & P Poojary, JSL Stainless Ltd, Hissar
- MC24** Development of high nitrogen steels with superior corrosion resistance for structural applications - S Srikanth, P Saravanan, G Sahoo & K Ravi, SAIL, Ranchi

September 29th 2011: 1600 -1730 HRS, Hall – C : Symposium - Electric Power Plants & Utilities-1

Keynote: Control of environmental degradation of materials in nuclear power plants - current status and future directions – Prof. Tetsuo Shoji, Tohoku University, Tohoku

- EP11** The effect of surface working on the high temperature oxidation behavior of 304L stainless steel - Swati Ghosh, M K Kumar & Vivekanand Kain, BARC, Mumbai
- EP12** High temperature and pressure oxidation behaviour of Zr-2.5Nb - Effect of cold work and surface finishing operations - M Kiran Kumar, A Gupta & Vivekanand Kain, BARC, Mumbai
- EP13** Corrosion behaviour of hyper duplex stainless steel in various metallurgical conditions for sea water cooled condensers - U Pratap Singh, Vivekanand Kain & K Chandra, BARC, Mumbai

September 29th 2011: 1600 -1730 HRS, Hall – D : Special Session: Corrosion in Defense & Marine

September 30th 2011: 0900 -1030 HRS, Hall – A : Symposium - Paint Coating & Lining - 3

Invited Talk : Passivity: The Reason Why We Can Use Reactive Metals to Build Machines - Digby D. Macdonald, Pennsylvania State University, PA

- PC31** Advancements In Anti-Corrosive Liquid Polyurethane Coatings - Rainer Kuprion & M Hornig, TIB Chemicals AG, Germany
- PC32** Product Stewardship Issues-in High Performance Coating - BadriNarayan K V, Akzo Nobel Coatings India Pvt. Ltd, Bangalore
- PC33** Novel Field-Joint Coating Technology for Steel Pipelines - C Dasgupta, Borouge India (Pvt) Ltd, Mumbai & Norbert Jansen, Borealis Polymere GmbH, Germany
- PC34** A review of epoxy powder coatings used as internal linings for the oil and gas industry - Dr. J D Rogozinski,

September 30th 2011: 0900 -1030 HRS, Hall – B : Symposium - Failure Analysis -1

Keynote: K V Seshadri, BPCL, Mumbai

- FA11** Fingerprinting of corrosion mechanism for forensic analysis through surface features & corrosion product chemistry – case studies of Indian oilfields - Subrahmanya Bhat & S K Sahota, ONGC, Navi Mumbai
- FA12** The establishment of erosion-corrosion prediction system for REAC through analyzing the application limitation of API 932-B - Guofu Ou, H Jin, H Xie, J Zhan, Z Zheng & Jing Cao, Zhejiang Sci-Tech University, P R China
- FA13** Micro Laser Raman analysis of failed components in nuclear industry - G J Abraham, S Kumar B & Vivekanand Kain, BARC, Mumbai
- FA14** Fractography a forensic tool for analysis of fatigue failures - Case studies from petroleum industry - M K Talukdar & M V Katarki, ONGC, Navi Mumbai

September 30th 2011: 0900 -1030 HRS, Hall – C : Symposium - RCC & Infrastructure -1

Keynote: Repair and Rehabilitation of Corrosion Affected Steel Structures, A R Santhakumar, Former Emeritus Professor, IIT(Madras),Chennai.

- RI11** Corrosion resistance and bond strength of fusion bonded epoxy coated bars – K Pandurangan, P E College, Puducherry, & A R Santhakumar, IIT Madras, Chennai
- RI12** Advanced corrosion prevention technology for new reinforced concrete structures - M N Ramesh & S Kaiwar, Savcor India Private Ltd, Bangalore
- RI13** Cathodic Protection of Reinforced Concrete Structures in Aggressive Environments - S E Hussain, Dr. H A Al-Ghamdi, CTC & Engr. M Shameem, Dr. M Maslehuddin, UPM, Saudi Arabia

September 30th 2011: 0900 -1030 HRS, Hall – D : Special Session: Corrosion Monitoring

September 30th 2011: 1100 -1300 HRS, Hall – A : Symposium - Cathodic Protection -1

Keynote: Protecting Aquifers from Deep Well Groundbed Installations, Michael Ames, SAE, Inc., USA

- CP11** Implementation of Cathodic Protection System in Jamnagar Refinery for Plant Piping- Rajiv Mandal, Reliance Industries Limited.
- CP12** Cathodic Protection Of Underground Plant Piping, K B Singh, Berry Plastics (Pvt.) Ltd, New Delhi
- CP13** Several Advanced Techniques in Modern Cathodic Protection of Buried Pipeline - Minxu Lu, Yanxia Du, L Dong & Z Jiang, UST Beijing, China

September 30th 2011: 1100 -1300 HRS, Hall – B: Symposium - Failure Analysis -2

- FA21** Corrosion Study Of Snapped Winch Wire Rope Of Oil Well Logging Unit - Bipin Kumar, S Bhat & S K Sahota, ONGC, Navi Mumbai
- FA22** A Case Presentation on Failure of Underground Cross Country Crude Oil Pipeline at HPCL, Visakh Refinery - Y Sriramulu & M V N S S Sastry, HPCL, Visakh
- FA23** Erosion – Corrosion in Overhead System of Crude Distillation Unit – A Case Study – M Y Bhavé & S Ghoshal, IOCL, Mathura
- FA24** Naphthenic acid corrosion and its mitigation through appropriate material selection in the refinery - Roy Arijit, C P Vijaya, Ghosal Surajit, EIL, New Delhi
- FA25** Stress Corrosion cracking at stiffening rings of MEG vacuum column - Anjul Jain & V P Sastry RPTL, Navi Mumbai and Rajendra Gupta, RIL, Nagothane
- FA26** Root Cause Failure Analysis of Hydrogen Reformer Outlet Pigtail Weldolet - V S Desai, M Pal, M Banjare, S Guria & H Vardhan, IOCL, Guwahati
- FA27** Corrosion damage in dia 52” Off-gas line connected to Off-gas Scrubber column in Petrochemical plant at Panipat Refinery - Bilat Sarkar & T Singh, IOCL, Panipat
- FA28** Root Cause Analysis Of Failure Of Thermal Reactor Shell - Debashis Mitra, HPCL, Visakh

September 30th 2011: 1100 -1300 HRS, Hall – C : Symposium - Electric Power Plants & Utilities-2

Invited Talk : Corrosion Problems in Captive Power Plants and Steam Generating Package Boilers - Dr. K Elaya Perumal, CMC, Navi Mumbai

- EP21** Steam side Oxidation scale growth studies on T11 and T22 service exposed boiler tubes in sub critical thermal power plants - K S N Vikrant, Pavan A H V, Somnath Nandi, Kulvir Singh, BHEL, Hyderabad & P Nagamanickam, BHEL, Tirucirapalli
- EP22** Root Cause Analysis of Boiler Tubes Rupture in a Captive Power Plant - C Sriraman, D V Srinivasan &

- M Suresh, Larsen & Toubro Ltd., Mumbai
- EP23** Failure of Boiler Feed Water Deaerator - Ashutosh Dubey & N D Raut, BPCL, Mumbai
- EP24** Investigation on CCU CO Boiler Economizer Tube Failures - Ashutosh Dubey, P V Shankar & N D Raut, BPCL, Mumbai
- EP25** Flow accelerated corrosion in syn gas line downstream of the BFW injection point: A case study - Y Kiran Kumar, IOCL Paradip & A Saha & M Singh, IOCL, Vadodara
- EP26** Flow Analysis in Different Geometries under FAC conditions – H P Rani & T Divya, NIT Warangal.

September 30th 2011: 1100 -1300 HRS, Hall – D : Symposium - RCC & Infrastructure - 2

Keynote: S B Tamsekar , Chief Engineer Mumbai Region, Public Works Department, Mumbai

- RI21** Probabilistic Analysis of Corrosion Initiation Time in RC Structures - Kapilesh Bhargava & A K Ghosh, BARC, Mumbai & Yasuhiro Mori, Nagoya University, Japan
- RI22** Detailed Microbiological Investigations on Biodeterioration of Modified Concretes in Seawater Environments – R P George, V Vishwakarma*, Ramachandran, and U Kamachi Mudali, IGCAR, Kalpakkam & *Satyabama University, Chennai
- RI23** Corrosion & its control of RCC Structures at Coastal power plants- A K Sinha, NTPC , Gr Noida

September 30th 2011: 1400 -1530 HRS, Hall – A : Symposium - Cathodic Protection -2

Invited Talk : Compendium of Errors in Cathodic Protection Application – V T Purohit, Mumbai

- CP21** Cased Crossings : Different practices in India; discussion from corrosion Protection & CP prospective - Sandeep H Vyas, RGTIL, Navi Mumbai
- CP22** Efforts to remove the casing-carrier shorting in larger diameter gas pipelines - G Chakraborty & P Jain, GAIL (India) Limited, Guna
- CP23** High Voltage Alternating Current Interference on Buried Pipelines - Jaydeb Manna, IOCL, Howrah
- CP24** Effect Of HvdC Earth Electrode On Cathodically Protected Pipeline And Mitigation Measure - S S Varadkar & N Manohar Rao, MMBPL, BPCL, Mumbai
- CP25** Important Point for Effective CP System from Design to Operation - Rajendra Kumar, IOCL, Raipur
- CP26** Solar Powered CP System in Cross Country Pipelines – GAIL Experience - Gopalakrishnan J, GAIL(I) Limited, Ujjain & Dr. G Agnihotri, MANIT, Bhopal

September 30th 2011: 1400 -1530 HRS, Hall – B : Symposium - Inspecting & Testing - 1

Keynote Talk : Improving Integrity Management By Implementation Of RBI Best Practice, Ron Selva, PP Simtech, UK

- IT11** Direct Assessment (Da) – The 3rd Integrity Assessment Technique - Ashish Khera & Bidyut Bikash Baniah, Allied Engineers, New Delhi
- IT12** Paperless Quality Assurance For Coating Inspection Processes- CI Woolhouse & JF Fletcher, Elcometer Limited, UK
- IT13** Offshore Real-Time Corrosion Monitoring Strategies Getting it Right the First Time - P J Teevens, T Avann Broadsword Corrosion Engineering Ltd, Canada & A Khera, Allied Engineers, New Delhi

September 30th 2011: 1400 -1530 HRS, Hall – C : Symposium – MIC & Inhibitors – 2

Invited Talk : Phenomenology of Corrosion Inhibitors, M A Quraishi, Banaras Hindu University, Varanasi

- MI21** Corrosion control challenges during naphthenic acid crude processing and mitigation by a synergistic corrosion inhibitor that provides robust performance - Venkatesan Mani & Nimeshkumar Patel, GE Water & Process Technologies, Bangalore
- MI22** Adverse Impact of Oxygen Entry Into Water Injection System On Water Injection Corrosion Inhibitor Performance at Process Platform : A case study - D. N. Keskar, D. Parvatalu & S S Modak, ONGC, Panvel
- MI23** Synergistic inhibition effect of Zinc ion and Sodium 1- Octane Sulphonate on the corrosion of carbon steel in aqueous Solution - C M Anbarasi, College for Women, Periyakulam & S Rajendran, GTN Arts College, Dindigul
- MI24** Detection of Crevice Corrosion in AISI Type 316LN Stainless Steel in Presence of Pseudomonas Bacteria using Electrochemical Noise Technique – M G Pujar, R P George, S Ramya & U Kamachi Mudali, IGCAR, Kalpakkam
- MI25** Effect of CO₂ and H₂ S Mol Fraction on the Inhibitor Injection rate in Natural gas Multiphase Flow Pipelines - Z Mansoori, B Dabir, M Soleimani, Energy Research Center & A S Mohamadi, M Feizmandian, Petro Pars Company, Tehran, Iran
- MI26** Microbial Corrosion in Petroleum Product Transporting Pipeline - S Maruthamuthu, B D Kumar, S Ramachandran, B Anandkumara S Palanichamyb, M Chandrasekaran , P Subramanian & N Palaniswamy, ^aCECRI, Karaikudi & ^bCECRI, Tuticorin

September 30th 2011: 1400 -1530 HRS, Hall – D : Special Session: Industrial Water Treatment

September 30th 2011: 1600 -1730 HRS, Hall – A : Symposium - Paint Coating & Lining -4

- PC41** Polyurethane Application for Coating Rehabilitation: Case Study - S B Korangi & Irfan Ali, IOCL, Orissa
- PC42** Role of Corrosion Inhibitors in Rust Converter for Coating Applications - M Natesan, M Selvaraj and S Ramu, CSIR- CECRI, Karaikudi
- PC43** Performance evaluation of a commercial polyurethane coating in marine environment - M Mobin, Aligarh Muslim University, Aligarh & A U Malik, F Al-Muaili, M Al-Hajri, SWCC, Saudi Arabia
- PC44** Effect of Curing and Inter-coat Adhesion on Coating Performance -A Case Study- D D Nage, D V Srinivasan, S D Rege & M Suresh, Larsen & Toubro, Mumbai
- PC45** Calcium sulfonate based thin-film rust preventatives: performance and mechanism - S Sarode, Lubrizol India Pvt Ltd, Mumbai & B A Minch, G Moran, B Faber, F Kroto, The Lubrizol Corporation, OH
- PC46** Electrochemical Studies of Anodized Titanium in Biological Media - K Indira, Anna University Chennai & S Ningshen, N Rajendran and U Kamachi Mudali, IGCAR, Chennai

September 30th 2011: 1600 -1730 HRS, Hall – B : Symposium - Inspecting & Testing – 2

Keynote Talk : Managing Processes through Corrosion Monitoring and Control- B J Saldanha, E I du Pont de Nemours and Company, USA

- IT21** Pipeline External Corrosion Analysis Using a 3D Laser Scanner – P H Allard & C Mony Creaform , Canada
- IT22** High Resolution Ultrasonic In-line Inspection: Special Configurations and the Added Value They Offer - A Barbian, M Beller, S R Hoerst, U Schneider, NDT Systems & Services AG, Germany
- IT23** Title of paper: Inspection of bottom plate of Storage tank having bottom CP by Floor scanning - An innovative tool - A J Chakraborty & D Das, IOCL

September 30th 2011: 1600 -1730 HRS, Hall – C : Symposium – Student Session

- SS11** Effects of H₂S/CO₂ content ratio on corrosion and hydrogen permeation of pipeline steel - Dapeng Li, Lei Zhang, Minxu Lu, R Ding, UST Beijing, P R China
- SS12** Determination of threshold stress intensity factor (KQSCC) of a rare earth containing Mg-Mn hot rolled alloy using compact tension specimen - B S Padekar, V S Raja, IIT Bombay, Mumbai & R K Singh Raman, Monash University, Australia
- SS13** Nano-TiO₂ incorporated Al-Zn alloy as an efficient sacrificial anode for the cathodic protection of steel substrate – Sebeelamol J N, Sajith S, Anilkumar K & S M A Shibli, University of Kerala, Kerala.
- SS14** High Performance Anti-Corrosive Epoxy Based Coating System for Marine Application - Rashmi David, V S Raja, IIT Bombay, Mumbai & S K Singh, NMRL, Ambernath

- SS15** Electrochemical study of corrosion behavior of biomedical alloy 316LVM stainless steels for surgical implants in Ringer's solution - Mohd Talha , O PSinha, C.K. Behera & Banaras Hindu University, Varanasi
- SS16** Effect of Surface Roughness on the Passivity of Nickel and Manganese free high Nitrogen Stainless Steel – S B Arya, V S Raja, A N Tiwari & IIT Bombay, Mumbai

September 30th 2011: 1600 -1730 HRS, Hall – D : Symposium – Refinery Corrosion

October 1st 2011: 0900 -1030 HRS, Hall – A : Symposium - Paint Coating & Lining -5

Invited Talk : Joseph Wells

- PC51** Handling Chemical Exposure through Protective Coating and Lining, Dharendra Singh, Akzo Nobel Coating India Pvt. Ltd, Bangalore
- PC52** Selection of Suitable coating system on Galvanised Substrate - Akshya Kumar Guin , M Bhadu, V Singh, Tata Steel Ltd, Jamshedpur
- PC53** Influence of Design Variables on Cathodic Disbondment Resistance of 2K High-Build Epoxy Coatings - Balaji Rajendran, K Gadhave, S Shreepathi, V Akilan & B P Mallik, Asian Paints Limited, Navi Mumbai
- PC54** Coating Management System – Need Of The Industry - H R Trifaley, Coatsman Offshore Services Pvt. Ltd., Mumbai

October 1st 2011: 0900 -1030 HRS, Hall – B : Symposium - Materials & Composites -3

- MC31** Hydrogen Sulphide Resistance of high strength line pipe steels in hydrogenated and sour gas media - P Saravanan, S Srikanth & K Ravi, SAIL, Ranchi
- MC32** Microstructure-corrosion property relationship of TRIP steels - Animesh Talapatra, MCKVIE & Jayati Datta, N R Bandhyopadhyay, BESU, Howrah,
- MC33** Applications for duplex grades with high PRE in Refineries – M Venkat Ramesh, Sandvik Asia Private Limited, Pune
- MC34** Synthesized processable polyaniline for anticorrosion application on 316LN SS- R C Rathod, V K Didolkar, S S Umare, A P Patil, VNIT, Nagpur
- MC35** Polyelectrolyte – Cerium Nanocontainers In Sol-Gel Matrix As Anti-Corrosion Coatings On Aa2024-T3 Aluminum Alloy - Amitha Rani , A Srinivasan, G Yoganandan & B B J Basu, NAL Bangalore & N Rajendran, Anna University, Chennai.

MC36 Performance of Epoxy Vinyl Ester Resin in Dilute Solvents, Synergistic effect with HCl - Guy Schneider, Ashland Performance Materials, Europe

October 1st 2011: 0900 -1030 HRS, Hall – C : Symposium – Symposia & Other Topics

OT12 Performance Automation in Steam Generation System (Real Time Monitoring and Control) - G Ramachandran, Nalco, Mumbai

OT22 Bulging of Coke Drums in Delayed Coker Unit of Petroleum Refinery – A Review - Pinaki Deshmukh, IOCL.

OT23 Analysis and corrective action taken for increased corrosion rate of copper based components connected to Gas Turbine (GT) Cooling Tower at Haldia Refinery-A Case Study - S K Bagchi, K Boral & R Kushwaha, IOCL, Haldia

October 1st 2011: 0900 -1030 HRS, Hall – D : Symposium – Pipeline CP – Specific Issues