

AMPP Annual Conference + Expo 2026

Houston, Texas, USA
15-19 March 2026

Volume 1 of 5

ISBN: 979-8-3313-3646-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2026) by Association for Materials Protection and Performance (AMPP)
All rights reserved.

Printed with permission by Curran Associates, Inc. (2026)

For permission requests, please contact Association for Materials Protection and Performance (AMPP)
at the address below.

Association for Materials Protection and Performance (AMPP)
15835 Park Ten Place
Houston, Texas 77084
USA

Phone: +1-800-797-6223
Fax: +1-281-228-6300

customersupport@ampp.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

VOLUME 1

SUSPECT HTHA DAMAGE BASED ON TIME-BASED CURVES.....	1
<i>F. Gilbert, M. Lebel</i>	
METALLURGICAL BEHAVIOR OF UNIFORM HIGH TUBE SKIN TEMPERATURE FOR LOW CARBON STEEL TUBES IN CRUDE DISTILLATION FURNACE	20
<i>M. Bajwa</i>	
FAILURE OF ALLOY 625 MIXING POINT TEE CONNECTION AFTER IN SERVICE FOR 2 MONTHS IN LOW TEMPERATURE LPG SERVICE.....	36
<i>M. Bajwa</i>	
MATERIAL QUALIFICATION AND LABORATORY ASSESSMENT FOR PIPELINE AND WELL TUBING IN CO ₂ -RICH CCS ENVIRONMENTS.....	51
<i>P. Kijkla, W. Toempromaraj, M. Thammachart, N. Nopsiri, P. Konganuntragul</i>	
EDC CRACKING FURNACE TUBES FAILURE: EXTERNAL CLSCC CRACKING IN ALLOY 800H TUBES.....	63
<i>J. Rafey, U. Tariq, K. Ullah, Z. Ali</i>	
USE OF ELECTROCHEMICAL QUARTZ CRYSTAL MICROBALANCE IN THE STUDY OF FECO ₃ SOLUBILITY	75
<i>K. Turganova, K. Singla, B. Brown, D. Young, S. Nesic</i>	
PROTECTION OF CONCRETE STRUCTURES EXPOSED TO INTERMITTENT AND CONTINUOUS CHEMICAL IMMERSION.....	86
<i>S. Streich</i>	
FAILURE ANALYSIS OF 316 STAINLESS STEEL TUBESHEET	93
<i>S. Mahajanam, V. Zaman, T. Scherbarth, F. Wade</i>	
REVISITING PRECIPITATION-HARDENED MARTENSITIC STAINLESS STEELS FOR WIRELINE SERVICE IN HIGHLY SOUR RESERVOIRS WITH ELEMENTAL SULFUR	108
<i>M. Marya</i>	
ARTIFICIAL INTELLIGENCE FOR CIPS DATA INTERPRETATION: FROM FUNDAMENTAL INSIGHTS INTO SOIL POTENTIAL TO AUTOMATED MACHINE LEARNING APPLICATIONS.....	122
<i>H. Ding</i>	
MODELING SURF-GENERATED SEA SPRAY AEROSOL PLUME TO ASSESS NEARSHORE MATERIALS CORROSION RISK.....	134
<i>M. Brinckerhoff, A. Johnson, R. Santucci</i>	
INNOVATIVE LASER CLADDING SYSTEM FOR INTERNAL AND EXTERNAL NI COATING OF OCTG AS A COST-EFFECTIVE ALTERNATIVE TO SOLID NI ALLOYS	147
<i>L. Zhao, Y. Zhao, Y. Xia, J. Ren, T. Liu, P. Cheng, P. Fu, Z. Yang</i>	
ULTRA-THICK PLATING TECHNOLOGY: A COST-EFFICIENT ALTERNATIVE TO CLADDING AND CRA FOR INTERNAL COATING APPLICATIONS IN OCTG	158
<i>L. Zhao, J. Ren, Y. Tian, P. Cheng</i>	

EFFECT OF DIFFERENT H ₂ S AND CO ₂ CONCENTRATIONS ON CORROSION OF MILD STEEL AT ELEVATED TEMPERATURES (120-160 °C).....	169
<i>Z. Zhigulina, B. Brown, D. Young, M. Singer, S. Nesic</i>	
AI AND MACHINE LEARNING FRAMEWORK DEVELOPMENT FOR FUTURE AC INTERFERENCE INDUCED CORROSION MONITORING AND PREDICTION	189
<i>C. Botha</i>	
ON THE RELATIVE FITNESS-FOR-SERVICE OF ALLOY 925 COMPARED TO STAINLESS STEELS 22CR AND 25CR IN CCUS WELL COMPLETIONS.....	201
<i>M. Marya</i>	
CHEMISTRY THEORY AND THRESHOLD DEFINITION FOR REACTIONS AND PRECIPITATION IN IMPURE CO ₂ TRANSPORT.....	216
<i>J. Sonke, B. Morland, G. Svenningsen</i>	
ENHANCING IRON CARBONATE PROPERTIES AS A SUSTAINABLE PATHWAY FOR MITIGATING MATERIAL DEGRADATION	231
<i>M. Zheng, D. Shaikhah, F. Pessu, W. Taleb</i>	
STRAIN HARDENED UNS N08935 BAR FOR SUBSEA BOLTS, HYDROGEN EMBRITTLEMENT AND LOCALIZED CORROSION TESTING	248
<i>U. Kivisakk, V. Strid, G. Leijon</i>	
DESIGN AND APPLICATION OF INTELLIGENT CORROSION MANAGEMENT INFORMATION SYSTEM PLATFORM	256
<i>C. Yu, X. Xu</i>	
OXIDATION OF NITROGEN MONOXIDE IN CO ₂ STREAMS	266
<i>G. Svenningsen, B. Morland</i>	
EXPLORING THE EFFECT OF SUPERCRITICAL CARBON DIOXIDE ON ORGANIC LININGS.....	277
<i>S. Gilligan</i>	
FACTORS AFFECTING LINING SELECTION FOR THE STORAGE OF BIOFUEL FEEDSTOCKS AND PRODUCTS.....	284
<i>S. Gilligan</i>	
COMPARATIVE PERFORMANCE OF VARIOUS LINING TECHNOLOGIES IN SOUR OIL & GAS ENVIRONMENTS.....	294
<i>S. Gilligan</i>	
A CASE STUDY ON SEVERE CORROSION AND DEGRADATION OF GALVANIZED C-PILE SUPPORTS IN PV SOLAR PLANT	304
<i>P. Naha, N. Sait, M. Salim, V. Sait</i>	
A CASE STUDY OF PRODUCED WATER CORROSION CHALLENGES IN CRUDE OIL PROCESSING FACILITIES.....	321
<i>J. Rafey, U. Tariq</i>	
INFLUENCE OF TEMPERATURE AND RELATIVE HUMIDITY ON THE PERFORMANCE OF SPLASH ZONE PROTECTIVE COATINGS.....	335
<i>J. Jin, M. Bashir, J. Manvik</i>	

ON MATERIAL CHALLENGES IN CUSTOMIZING CURRENT OILFIELD SUBMERSIBLE PUMPS FOR METAL AND MINERAL IN-SITU LEACHING/RECOVERY	350
<i>M. Marya</i>	
CORROSION TESTING OF WELL CASING MATERIALS AT 450°C IN SIMULATED SUPERHOT GEOTHERMAL WELL ENVIRONMENT	363
<i>S. Karlsdottir, E. Straume, G. Boakye</i>	
EFFECTS OF CONSTRUCTION VEHICLES CROSSING UNDERGROUND COATED PIPELINES	373
<i>J. Pikas, B. Jerome</i>	
INVESTIGATION OF UNUSUAL BLACK FILM FORMED ON STAINLESS STEEL SURFACES IN DILUTED SULFURIC ACID SERVICE	382
<i>F. Cui, D. Donati, G. Mashack, D. Kolesar, P. McSharar</i>	
CASE STUDY – OPTIMIZING AN AC MITIGATION SYSTEM.....	395
<i>S. Segall, D. Fingas, E. Gudino</i>	
MITIGATING EROSION-CORROSION IN CO ₂ ENVIRONMENTS USING CORROSION RESISTANCE ALLOYS.....	410
<i>A. Nassef, M. Keller, S. Karimi, S. Shirazi</i>	
EFFECTS OF RUST PREVENTIVE COATING APPLIED TO FLANGE SURFACES ON SEALING PERFORMANCE AND FLUID CONTAMINATION.....	420
<i>T. Tsuda, S. Kataoka, K. Takahashi</i>	
BEHAVIOR OF ZINC SACRIFICIAL ANODES IN PRODUCED WATER ENVIRONMENTS CONTAINING CO ₂ AND H ₂ S.....	429
<i>T. Tsuda, K. Iseki, D. Ito, S. Okazaki</i>	
SAFE HYDROGEN STORAGE: MULTI-PARAMETER CRITERIA FOR FATIGUE LIFE AND MATERIAL SELECTION	440
<i>S. Kemgang, S. Pillot, F. Thebault</i>	
OPTIMIZED CORROSION INHIBITORS FOR WEAR MITIGATION IN ROD LIFT SYSTEMS.....	452
<i>C. Menendez, M. Oney</i>	
PROPER CONSIDERATIONS FOR CONCRETE REPAIR AND COATINGS/LININGS APPLICATION	463
<i>K. Morris, T. Fitzgerald</i>	
CLASSIFICATION OF POLYMERIC COATINGS FOR PROTECTION OF EXTERNAL SURFACES OF BURIED AND SUBMERGED PIPELINES	487
<i>S. Papavinasam</i>	
FIELD VALIDATED, DURABLE STEEL PROTECTION IN SEVERE CORROSION ENVIRONMENTS.....	502
<i>A. Yague, J. Fernandes</i>	
A CUSTOMIZED MILLI-FLUIDIC FLOW CELL TECHNIQUE FOR SIMULTANEOUS ASSESSMENT OF CORROSION AND SILICA SCALING	512
<i>R. Barker, J. Owen, R. Woollam, J. Thevakumar, E. Barmatov</i>	
ZNS AND PBS SCALE FORMATION IN H ₂ S-CONTAINING ENVIRONMENTS AND THEIR INFLUENCE ON FLUID CHEMISTRY AND CORROSIVENESS	527
<i>E. Saleem, O. Frank, W. Taleb, D. Habottle, F. Pessu</i>	

DEVELOPMENT OF A MILLI-FLUIDIC FLOW CELL PLATFORM FOR CONSISTENT AND QUANTITATIVE ANALYSIS OF INHIBITOR PERSISTENCY.....	540
<i>R. Barker, J. Owen, J. Tookey, R. Woollam, M. Castillo, A. Kirkpatrick, G. Hughes, P. Wilkie, E. Xu</i>	
AN IN-DEPTH LOOK AT AMPP 21532 TO SELECT RUBBER SEAL MATERIAL IN CCS DOWNHOLE ENVIRONMENT.....	559
<i>S. Meng, L. Yang, J. Wang, B. Edwards, J. Ren, W. Li</i>	
CASE STUDY: CONDITION ASSESSMENT OF 48-INCH LCP (L-301) WATER TRANSMISSION MAIN USING REMOTE FIELD-TESTING TECHNOLOGY	572
<i>N/A</i>	
BEYOND CSP: WHAT YOU'RE MISSING IN CONCRETE SURFACE PREPARATION	583
<i>J. Sukola</i>	
EFFECTIVENESS OF WATER SPRAY TEST ON THERMAL SPRAY ALUMINIUM COATING.....	591
<i>J. Narayanan, K. Mizushima</i>	
ALUMINIUM ALLOY PROTECTIVE COATING FOR STRUCTURAL STEELS IN ERYTHRITOL-BASED THERMAL ENERGY STORAGE SYSTEM.....	603
<i>S. Paul, D. Sharma, M. Dinker</i>	
APPLICATION OF OVER-THE-LINE SURVEYS FOR INDIRECT CONDITION ASSESSMENT OF BURIED WATER/WASTEWATER PIPELINE.....	614
<i>M. Akhoondan, J. Giddings, L. Jaramillo</i>	
PERFORMANCE OF THERMAL SPRAY COATINGS IN SUPERCRITICAL CO ₂	627
<i>S. Paul</i>	
COST-EFFECTIVE PACK NITRIDING FOR PREVENTING GASEOUS HYDROGEN EMBRITTLEMENT IN ADDITIVELY MANUFACTURED STAINLESS STEEL 316L	640
<i>G. Gamboa, A. Babakr, M. Young, S. Nasrazadani</i>	
FRACTURE TOUGHNESS AND FATIGUE BEHAVIOR OF CARBON AND STAINLESS STEEL IN HIGH PRESSURE HYDROGEN	654
<i>Y. Kamo, H. Okano, K. Eguchi, T. Sakimoto, H. Takai, T. Yoneyama, A. Nozaki, R. Tachi</i>	
EFFECT OF H ₂ S ON THE OCCURRENCE OF HYDROGEN INDUCED CRACKING IN SAWL PIPES DESIGNATED FOR CO ₂ TRANSPORT WITHIN CCUS PROJECTS.....	665
<i>T. Haase, C. Bosch, R. Ruter</i>	
ON THE INFLUENCE OF ACETATE-BASED BUFFERS ON THE RELIABILITY OF SSC QUALIFICATION TESTS.....	679
<i>C. Mendibide</i>	
IMPACT OF H ₂ S CONTAMINATION AND MOISTURE ON THE FRACTURE TOUGHNESS OF CARBON STEEL UNDER HYDROGEN.....	694
<i>L. Moli-Sanchez, G. Joshi, C. Mendibide, E. Trella-Baudot</i>	
REMAINING USEFUL LIFE ASSESSMENT OF BURIED IRON WATER MAINS: CASE STUDIES USING INTEGRATED DIAGNOSTIC METHODS	709
<i>A. Chikkam, A. Ulmer, E. Larkin, T. Wockenfuss, M. Zamanzadeh</i>	
EXPECTED SERVICE LIFE AND COST CONSIDERATIONS FOR METALLIC ZINC AND DUPLEX ZINC COATINGS	724
<i>M. Gagne</i>	

ACCELERATED CORROSION TESTING OF METALLIC ZINC COATINGS.....	735
<i>M. Gagne</i>	
EXPECTED SERVICE LIFE AND COST CONSIDERATIONS FOR MAINTENANCE AND NEW CONSTRUCTION PROTECTIVE COATINGS	743
<i>J. Helsel, R. Lanterman, J. Prah</i>	
PREDICTING THE EFFECT OF REACTIVE IMPURITIES ON THE CORROSION RATES OF CARBON STEEL IN CCTUS.....	758
<i>A. Eslamimanesh, M. Hariri, R. Springer, M. Lencka, A. Anderko</i>	
CHEMICAL AND RADIATION EFFECTS FROM HANFORD TANK WASTE ON LONG- TERM PERFORMANCE OF AG/AGCL REFERENCE ELECTRODES FOR IN-TANK CORROSION POTENTIAL MONITORING.....	771
<i>S. Feng, J. Peterson, M. Fagundes, J. Page</i>	
QCM-D ANALYSIS OF SURFACTANT ADSORPTION-DESORPTION KINETICS ON GOLD SENSORS IN CO ₂ -SATURATED ENVIRONMENTS	786
<i>R. Abou-Shakra, J. Owen, R. Woollam, R. Barker, W. Durnie</i>	

VOLUME 2

WIRELINE CABLE: PERFORMANCE EVALUATION OF GREASES FOR CORROSION PROTECTION OF GALVANIZED ARMOR WIRES.....	801
<i>E. Barmatov, S. Putra, A. Molnic, A. Hendrawinata, Z. Qian</i>	
INNOVATIVE NON-METALLIC MATERIALS FOR SUSTAINABLE CORROSION MANAGEMENT IN DESALINATION SYSTEMS	812
<i>M. Mubashir, N. Asrar, F. AlRadhi, M. AlHazmi, A. AlSahary</i>	
EVALUATION OF THE EFFECT OF ENVIRONMENTAL PARAMETERS AND PRODUCTION ROUTE ON THE RESISTANCE OF AN AUSTENITIC STAINLESS STEEL AT CRYOGENIC TEMPERATURES.....	820
<i>C. Mendibide, L. Moli-Sanchez, D. Mouhamed, J. Adem</i>	
EFFECT OF TEMPERATURE AND HUMIDITY ON CORROSION IN NH ₄ CL ENVIRONMENTS.....	835
<i>M. Regniere, A. Meroufel, C. Mendibide</i>	
USING DESIGN OF EXPERIMENTS TO ADVANCE CORROSION INHIBITOR TECHNOLOGY IN OIL AND GAS SYSTEMS	845
<i>P. Hillen, F. El Yaakobi, N. Miller</i>	
PRE-OXIDATION HEAT-TREATMENT ON NI-BASE ALUMINA-FORMING ALLOYS TO ENHANCE THEIR HIGH-TEMPERATURE CORROSION RESISTANCE	855
<i>B. Li, L. Pike, R. Krishnamurthy</i>	
ASSESSMENT OF THE CORROSION PROTECTION OF SEVEN WIRE STEEL STRAND PROVIDED BY FLEXIBLE FILLERS	870
<i>F. Presuel-Moreno, A. Armudi</i>	
CHARACTERIZATION OF VARIOUS CORROSION RESISTANT REBARS EMBEDDED IN CONCRETE AFTER 20 YEARS OF EXPOSURE	885
<i>F. Presuel-Moreno, S. Mavrak</i>	

DC INTERFERENCE FROM COMMUNICATION LINES: TWO PIPELINE CASE STUDIES.....	899
<i>A. Porter, T. Strauss, T. Talbott, S. Wenzel</i>	
IDENTIFYING AND MANAGING WET REFLUX IN REFINERY DISTILLATION OVERHEAD SYSTEMS	909
<i>J. Lack, B. Harrell</i>	
NOVEL FURNACE MATERIAL INVESTIGATION.....	919
<i>M. Dahl, M. Fang, B. Weed, I. Yarinovsky</i>	
LOCALIZED CORROSION OF 2205 DUPLEX STAINLESS STEEL WITH SIGMA PHASE IN THE PRESENCE OF PSEUDOMONAS AERUGINOSA UNDER ALTERNATE IMMERSION	930
<i>L. Zhu, G. Liu, T. Li, Y. Wang, L. Zan</i>	
EXPLORATORY ANALYSIS INTO THE EFFECT OF CONTROLLING MECHANISMS WITHIN MECHANISTIC CO ₂ CORROSION MODELS	945
<i>M. Jones, G. de Boer, R. Woollam, J. Owen, R. Barker</i>	
FABRICATION ISSUES ASSOCIATED WITH BUTT-WELDED BRANCH CONNECTIONS IN THICK-WALLED SUPERDUPLEX STAINLESS STEEL PIPING	959
<i>A. Barnes, B. Holmes, K. Sotoudeh, E. Foakes, M. Roy</i>	
KNOW YOUR ENEMY: A TRUE REFLECTION ON TESTING IN RENEWABLE FEEDSTOCKS.....	974
<i>M. Harrison</i>	
WIND TURBINE CATHODIC POLARISATION RESULTS; A CASE STUDY	986
<i>A. Jyothi, A. Delwiche, M. Taylor</i>	
CREVICE CORROSION EVALUATION FOR CRA OCTG MATERIALS IN A SIMULATED CCS ENVIRONMENT	1001
<i>W. He, S. Divi, J. Lindkvist, J. Andersson</i>	
MECHANISTIC CORROSION MODELING: APPLICATION OF THE MSE CORROSION FRAMEWORK TO CORROSION RESISTANT ALLOYS.....	1016
<i>A. Mohamed, D. Ballal, A. Eslamimanesh, M. Lencka, A. Anderko</i>	
MICROBIALY INFLUENCED CORROSION (MIC) IN THE OIL AND GAS INDUSTRY: INSIGHTS FROM BIOMARKER-BASED DETECTION ACROSS TEMPERATURE AND SALINITY GRADIENTS	1031
<i>J. Mantilla-Aguas, M. Chatterjee, S. Lahme</i>	
AN ENHANCED UNS S44400/K44M FERRITIC STAINLESS STEEL GRADE FOR CH ₄ -H ₂ BURNER APPLICATION	1040
<i>P.-O. Santacreu, A. Allion, J. Cairon</i>	
IMPURITIES ASSOCIATED WITH UNDERGROUND HYDROGEN STORAGE (UHS) - MATERIAL INTEGRITY CONCERNS AND MITIGATION PROCESSES	1052
<i>S. Nava, J. Sonke, S. Finneran</i>	
COMPARATIVE PERFORMANCE ASSESSMENT OF INSULATIVE COATING SYSTEMS FOR CORROSION PROTECTION AND THERMAL INSULATION.....	1060
<i>D. Kuang, C. McManus</i>	
ASSESSING THE ROLE OF IMPURITY INJECTION PROTOCOLS IN CO ₂ STORAGE MATERIAL QUALIFICATION	1071
<i>V. Scheiber, G. Neel, C. Millet</i>	

FROM LAB TO MODEL: TACKLING CORROSION CHALLENGES IN CARBON CAPTURE AND STORAGE (CCS).....	1086
<i>L. Galliot, C. Durieux, H. Marchebois, S. Raurich</i>	
OPTIMIZING AC FAULT MITIGATION AT PIPELINE FACILITIES BY APPLYING PROBABILISTIC RISK ASSESSMENT	1100
<i>H. Bahgat, D. Fujinaga, A. Svitich, D. Bolch</i>	
THE GIANT PROJECT: AI-DRIVEN OPTIMIZATION OF CATHODIC PROTECTION IN GAS NETWORKS.....	1112
<i>I. Magnifico, T. Russo</i>	
COUPON INSTALLATION BEST PRACTICES: FROM STANDARDS TO FIELD EXPERIENCE.....	1121
<i>I. Magnifico</i>	
FRACTURE TOUGHNESS STUDY ON BUTT-WELDS OF GRADE X52 PIPELINE STEEL IN HYDROGEN GAS AT 65 BAR.....	1131
<i>M. Palombo, V. Kain, J. McMahon, A. Wood</i>	
CORROSION RESISTANCE OF UNS S31740 IN HIGH-TEMPERATURE BIO OIL ENVIRONMENT.....	1143
<i>S. Aota, N. Otaki, S. Kurihara, M. Ueyama, K. Tanaka, N. Sutton</i>	
A COMPARISON OF AUTOCLAVE AND FULL RING PIPE TESTING FOR CARBON CAPTURE GATHERING NETWORKS	1154
<i>P. Wood, J. Cross, G. Dicken, R. Morana, C. Vie</i>	
EFFECT OF THE TEMPERATURE ON SSC/SCC RESISTANCE OF OCTG 13CR	1168
<i>K. Khabri, C. Millet, H. Marchebois, C. Landier</i>	
OPTIMIZATION OF MULTI-COMPONENT SURFACTANT MIXTURES FOR CORROSION INHIBITION IN CO ₂ -CONTAINING AQUEOUS ENVIRONMENTS	1182
<i>M. Sarabchi, J. Owen, R. Woollam, Y. Alhilali, R. Barker</i>	
CALCULATING CORROSION INHIBITOR ADSORPTION AND DESORPTION RATES USING GRADIENT-BASED AND DATA-ADDITION METHODOLOGIES	1198
<i>Y. Alhilali, R. Barker, R. Woollam, H. Thompson, M. Sarabchi</i>	
SUPPLEMENTARY PERFORMANCE ASSESSMENT OF ADDITIVELY MANUFACTURED ALLOY 718 AFTER HEAT TREATMENT OPTIMIZED FOR OIL AND GAS APPLICATIONS	1213
<i>M. Yunovich</i>	
DEVELOPMENT OF HIGH STRENGTH 718-150K ADDITIVE MANUFACTURED ALLOY FOR CRITICAL APPLICATIONS IN H ₂ S ENVIRONMENTS	1226
<i>R. Barreto, R. Badrak, W. Howie</i>	
A COLLABORATIVE EFFORT FOR COMPILING A NATIONWIDE SOIL CORROSIVITY GEOGRAPHICAL DATABASE.....	1241
<i>T. Algorri, M. Akhoondan, B. Clark</i>	
ON THE RIGHT TRACK: THE BENEFITS OF TRANSITIONING FROM CONVENTIONAL ACID-RESISTANT BAKED PHENOLIC TECHNOLOGY WITHIN THE RAIL MARKET.....	1255
<i>J. Mamuji, A. Cochrane, M. O'Donoghue</i>	

A HISTORICAL REVIEW OF DUCTILE IRON PIPE EXTERNAL CORROSION MONITORING	1271
<i>H. Blansett</i>	
INTERACTIONS OF ACTIVE SULFUR COMPOUNDS AND IMPACT ON SULFIDIC CORROSION IN CRUDE OIL DISTILLATION ENVIRONMENTS.....	1278
<i>H. Li, Y. Yoon, R. Kane</i>	
NON-STICK BEHAVIOR OF DIAMOND-LIKE CARBON AND POLYMER-BASED COATINGS AGAINST ASPHALTENE AND PETROLEUM WAX DEPOSITS	1293
<i>V. Singh, A. Zolfaghari, M. Marya, V. Shinde</i>	
MAXIMIZING ASSET INTEGRITY THROUGH EXTENDING LIFE CYCLE PERFORMANCE	1306
<i>M. Heywood</i>	
STATIONARY DATA LOGGERS: DON'T LEAVE HOME WITHOUT THEM.....	1315
<i>K. Wheeler, S. Wenzel, C. Lundgren, R. Floria</i>	
ADDITION OF WATER IMPURITY FOR DENSE PHASE CO ₂ CORROSION EXPERIMENTS	1326
<i>K. Singla, X. Wang, Z. Ghelichkhah, P. Adapala, Y.-S. Choi</i>	
REVISITING POLYURETHANES COATINGS: ESTABLISHING DESIGN LIFE FOR POTABLE WATER MAINS	1335
<i>B. Cheshire, M. Moreno</i>	
A NOVEL APPLICATION OF MOLECULAR MICROBIOLOGICAL METHODS (MMM) FOR IMPROVED MICROBIOLOGICALLY INFLUENCED CORROSION (MIC) MANAGEMENT	1349
<i>J. van Haaren, M. Tiegel, C. Lively</i>	
CALIBRATION OF COATING AREA RESISTANCE ASSUMPTIONS IN AC INTERFERENCE STUDIES USING REAL-TIME FIELD DATA.....	1365
<i>B. O'Hagan, S. Wenzel</i>	
CORROSION PERFORMANCE EVALUATION OF 316L STAINLESS STEEL MATERIAL VIA JET IMPINGEMENT AND ELECTROCHEMISTRY FOR SULFURIC ACID APPLICATIONS	1371
<i>S. Divi</i>	
CASE STUDIES OF DRILL PIPE METALLURGICAL ANALYSIS	1380
<i>S. Divi</i>	
SULFIDATION OF ALLOY C-276 LEVEL TRANSMITTER DIAPHRAGM IN SAGD HIGH PRESSURE STEAM.....	1395
<i>H. Guo, C. Lew, S. Yuen, D. Serate</i>	
BRIDGING THE GAP BETWEEN LAB TESTING AND FIELD RELIABILITY IN CUI COATING SYSTEMS.....	1408
<i>A. Al-Borno, H. Pedraza, E. Charter</i>	
NON-METALLIC MATERIALS SUITABILITY IN SUPERCRITICAL CO ₂ AND H ₂ S	1421
<i>A. Zolfaghari, J. Yun, M. Marya</i>	
INFLUENCE OF HARDNESS ON FATIGUE LIFE OF VINTAGE X42 PIPELINE STEEL IN GASEOUS HYDROGEN	1432
<i>Q. Yurek, C. Marchi, J. Ronevich</i>	

FATIGUE AND FRACTURE PERFORMANCE OF VINTAGE PIPELINE WELDS IN GASEOUS HYDROGEN ENVIRONMENTS	1442
<i>M. Kent, M. Agnani, J. Ronevich, C. Marchi</i>	
MATERIAL SELECTION INVESTIGATION OF CORROSION RESISTANT ALLOYS FOR CCS APPLICATIONS.....	1456
<i>K. Kanki, H. Amaya, A. Soma</i>	
ASSESSING BIFUNCTIONAL BENZYLDODECYLDIMETHYLAMMONIUM BROMIDE IN MITIGATING ABIOTIC AND BIOTIC CORROSION USING A NEW TEST KIT	1466
<i>L. Xu, G. Jenneman, A. Khan, T. Gu</i>	
DECIPHERING HYDROGEN UPTAKE BEHAVIOR AND ITS EFFECT ON HYDROGEN EMBRITTLEMENT OF ADDITIVE MANUFACTURED ALLOY 718.....	1479
<i>Q. Liu, Y. Yan, Y. Tong, A. Barnoush, B. Aissa</i>	
EVOLUTION OF INTERNAL CORROSION MONITORING PROGRAM: TWO DECADES OF STRATEGIC LESSONS AND TRANSFORMATION FROM INITIAL PLANNING TO OPTIMIZED EXECUTION.....	1493
<i>S. Barzan, Y. Khuraibut, A. Rashed, F. Al-Tabbakh</i>	
DEW POINT CORROSION IN INCINERATOR STACK SHELL.....	1514
<i>M. Mitra, N. Bouftain</i>	
EFFECT OF SAMPLING DATASET SIZE AND DISTRIBUTION ON MACHINE LEARNING-BASED SURROGATE MODELLING OF CO ₂ CORROSION	1523
<i>J. Willson, H. Thompson, R. Woollam, R. Barker</i>	
PIPELINE AUDIT-READY: 5 TOOLS TO ACCELERATE CP COMPLIANCE.....	1532
<i>C. Lederer</i>	
INVESTIGATION OF STEAM LEAK DUE TO MATERIAL FAILURE OF PRIMARY REFORMER HIGH PRESSURE STEAM COIL MANIFOLD	1537
<i>M. Iftikhar, A. Rana, Y. Irshad, N. Imran, I. Rohela</i>	
EVOLVING CP SYSTEM MANAGEMENT: CREATION OF AN AUTOMATED SCREENING FRAMEWORK FOR RMU ANALYSIS	1546
<i>Y. Shen, R. Phillips, P. Fallis, P. Murray</i>	
INHIBITION OF X65 CARBON STEEL CORROSION BY DESULFOVIBRIO FERROPHILUS IS5 USING PLANT-BASED ANTHRAQUINONE	1560
<i>A. Khan, G. Jenneman, L. Xu, E. Burger, T. Gu</i>	
TOWARDS DEVELOPMENT OF PIPELINES EXTERNAL COATING SELECTION, MONITORING, INSPECTION, MAINTENANCE AND REPAIR GUIDELINES CONSIDERING CATHODIC PROTECTION && SOIL DATA.....	1573
<i>N. Dakwar, S. Papavinasam, M. Alamodi, A. Hammoud</i>	
THERMAL AGEING OF ENAMELED WIRES FOR ELECTRICAL MACHINES	1588
<i>L. Chevalier, A. Gilson, A. Pastore, C. Dufresnes, F. Grosjean, A. Applagnat-Tartet, J. Kittel</i>	
CORROSION ASSESSMENT IN A KUWAITI HIGH-PRESSURE GAS PIPELINES USING WG-ICDA: A CASE STUDY ON RATE PREDICTION, WALL LOSS, AND INHIBITOR PERFORMANCE	1598
<i>A. Jarragh, P. Teevens, K. Yusuff, S. Srinivasan, A. Khera</i>	

VOLUME 3

DEVELOPMENT AND IMPLEMENTATION OF AN EFFECTIVE CORROSION MANAGEMENT STRATEGY AT CRUDE PROCESSING FACILITIES	1613
<i>A. Irshad, U. Tariq, J. Rafey, S. Raza, F. Ansari</i>	
H2S RESISTANT SEAMLESS X65 GIRTH WELDS FOR DENSE CO2 TRANSPORT	1628
<i>F. Thebault, H. Tryla, G. Neel, S. Leconte, L. Lamps</i>	
STRATEGIC CORROSION MANAGEMENT FOR COST-EFFECTIVE SEAWATER USE IN COPPER MINING OPERATIONS.....	1640
<i>Y. Salib</i>	
RESEARCH ON THE DURABILITY EVALUATION AND FAILURE MECHANISM OF MODIFIED POLYURETHANE COATING FOR THE ROOF OF CRUDE OIL STORAGE TANKS	1644
<i>R. Jiang, F. Luo, H. Yan, S. Zhang, J. Li, H. Liu, B. Gong, T. Cui</i>	
EFFECTS OF HEAT TREATMENT ON ZIRCONIUM CORROSION BEHAVIOR.....	1662
<i>E. Mostaed, S. Divi, S. Chimbli</i>	
MECHANISTIC CO2 CORROSION MODEL OPTIMIZATION SUPPORTED BY MACHINE LEARNING.....	1672
<i>J. Sa, B. Aissa, K. Mroue, R. Woollam, R. Barker, M. Jones</i>	
APPLICATION OF MAGNESIUM ANODE FOR CATHODIC PROTECTION OF BURIED THERMALLY INSULATED METALLIC PIPELINE	1683
<i>D. Tang, Q. Song, W. Zhang, X. Zhao, Y. Yuan, D. Guo, C. Long, L. Dong</i>	
MATERIALS AND CORROSION EXPERIENCE IN QUEST CARBON CAPTURE AND STORAGE WELLS	1693
<i>B. Chambers, Y. Zheng, N. Smith, C. Rowe</i>	
OUTLINE OF UPDATES TO NACE MR0175 / ISO15156 H2S TESTING: VERIFICATION, QUALIFICATION, AND BALLOTING	1706
<i>B. Chambers, W. Kovacs, S. Bond</i>	
IMPACT OF CO2 IMPURITIES ON PIPELINE CORROSION. EXPERIMENTAL EVALUATION OF REACTION KINETICS.....	1713
<i>J. Vera, A. Huggins-Gonzalez, S. Hassani, R. Morana, W. Durnie</i>	
COMPARISON OF TWO WATER-BASED FLUID FIELD BACTERIA DETECTION METHODS USED IN OIL AND GAS	1728
<i>D. Gutierrez, A. Confer, J. Fajt, K. McLeroy</i>	
CUI TESTING COMPARISON OF ASTM G189 AND TM 21549 ON MINERAL WOOL WITH CORROSION INHIBITORS	1737
<i>F. Qadir, R. Seto</i>	
BEHAVIOR OF NONMETALLIC MATERIALS IN HIGH-PRESSURE HYDROGEN ENVIRONMENT: CHEMICAL COMPATIBILITY AND RAPID GAS DECOMPRESSION	1752
<i>J. Yun, H. Tu, A. Zolfaghari, M. Doherty, Y. Hua, J. Geleijns</i>	
A NEW OXYGEN TOLERANT CORROSION INHIBITOR FOR BOTH CONTINUOUS AND BATCH TREATMENT CORROSION CONTROL.....	1767
<i>S. Gao, L. Huang, J. Brooks, T. Jackson, S. Ramachandran</i>	

STRESS CORROSION CRACKING ON CARBON STEEL PIPELINES: A LOOK INTO TESTING METHODS	1779
<i>R. Seto, F. Qadir</i>	
EFFECTIVENESS OF VAPOR-PHASE INHIBITOR TO MITIGATE CORROSION OF HIGHWAY BRIDGE STEEL ELEMENTS EXPOSED TO AGGRESSIVE ENVIRONMENTS	1798
<i>S. Perme, R. Armas, K. Lau</i>	
CORROSION BEHAVIOR OF CARBON STEEL UNDER H ₂ SO ₄ DROPLETS AND DENSE PHASE CO ₂	1811
<i>M. Hehemeku, Z. Ghelichkhah, M. Singer, Y.-S. Choi</i>	
DURABILITY AND CORROSION OF REINFORCED CONCRETE DUE TO SULFATES	1819
<i>C. Reid, K. Lau</i>	
EFFECTS OF CHLORIDE AND DISSOLVED OXYGEN ON PITTING CORROSION OF CR-MN AUSTENITIC STAINLESS STEELS IN DRILLING ENVIRONMENTS	1829
<i>S. Ren, K. Panda</i>	
LONG-TERM CORROSION BEHAVIOR OF CR ALLOYED STEELS IN AQUEOUS CO ₂ ENVIRONMENTS CONTAINING CHLORIDES.....	1843
<i>L. Paolinelli, E. Kiosidou, Y.-S. Choi, S. Axelsen, P. Nice, L. Scoppio</i>	
EVALUATION OF STRUCTURAL INTEGRITY FOLLOWING MULTIPLE WELD REPAIRS IN AUSTENITIC STAINLESS STEEL JOINTS FOR CRYOGENIC SERVICE	1856
<i>S. Soltaninia, E. Damis, M. Bahrami, R. Beheshty</i>	
HOLIDAY TESTING ON AGED COATINGS: RISKY BUSINESS OR RELIABLE PRACTICE?	1866
<i>C. McManus, D. Kuang, A. Al-Borno, H. Pedraza</i>	
INFLUENCE OF FLOW CONDITIONS ON WATER WETTING IN DENSE-PHASE CO ₂ STREAMS FOR CORROSION RISK ASSESSMENT.....	1876
<i>F. Bawa, M. Majji, Y.-S. Choi, S. Nestic</i>	
EVALUATION OF NETL'S SELF-HEALING METALLIC COATING FOR INTERNAL CORROSION PROTECTION OF NATURAL GAS PIPELINES: FIELD TEST.....	1888
<i>Z. Belarbi, D. Brennan, O. Dogan, Q. Dean, D. Alman, S. Lundgren, A. Nardi, J. Kopp</i>	
CREVICE CORROSION RISK EVALUATION OF UNS S31603 AND UNS S32205 ALLOYS FOR LOW-PH FLOCCULANTS IN OFFSHORE WATER INJECTION SYSTEMS.....	1902
<i>L. Chen, N. Obeyesekere, K. Mutch</i>	
USE OF NOVEL, RAPID ENZYME BASED ASSAYS TO DETECT THE PRESENCE OF SULFATE-REDUCING BACTERIA IN OIL AND GAS PRODUCED WATER	1915
<i>A. Confer, K. Ramirez, J. Fajt, K. McLeroy</i>	
PIPELINE COATING CONDUCTANCE MEASUREMENT THROUGH CP RECTIFIER INFLUENCE: VALIDATION AND IMPROVEMENTS	1923
<i>S. McKelvey, D. Fingas, R. Phillips</i>	
TESTING OF OCTG MATERIALS IN SIMULATED CCS ENVIRONMENTS: COMPARING DIFFERENT APPROACHES FOR IMPURITY CONCENTRATIONS DEFINITION	1938
<i>P. Adapala, X. Wang, Y.-S. Choi, J. Poliseo, M. Cancio, M. Valdez</i>	
WATERBORNE SILICONE BINDER FOR FIRE AND TEMPERATURE RESISTANT COATINGS	1952
<i>D. Kondos, Y. Tiwary, H. Chen</i>	

TEMPERATURE INFLUENCE ON HIGH TAN CORROSION – A VGO CASE STUDY.....	1966
<i>G. Bota, P. Baranwal</i>	
IN SITU EVALUATION OF THE CARBON STEEL CORROSION RATE UNDER LOW CATHODIC POLARIZATION IN INTERMEDIARY AND DEEP SEA, IN SOUTH ATLANTIC OCEAN.	1977
<i>E. Diler, N. Larche, E. Kassab, J. Alencar, J. de Oliveira, M. da Rocha, T. Hofman, J. Gomes</i>	
EVALUATING RECENT CASES OF CRACKING IN SOLID AND CLAD 300 SERIES STAINLESS STEEL	1992
<i>F. Sapienza, A. Thigpen, G. Buchheim</i>	
MODELING OF THE EFFECT OF CONDENSED WATER FILM HYDRODYNAMICS ON TOP-OF-THE-LINE CORROSION.....	1999
<i>L. Paolinelli, T. Brown</i>	
EFFECT OF CORROSION INHIBITORS ON MULTIPHASE FLUID FLOW CONTAINING HEAVY CRUDE OIL.....	2013
<i>W. Zhang, L. Padula, A. Vidoto, D. Orta, A. Jenkins</i>	
VALIDATING UNS S30416 (1.4682, 316A) AS A HIGH-PERFORMANCE ALTERNATIVE TO UNS S31603 AUSTENITIC STAINLESS STEEL	2030
<i>A. Allion-Maurer, Bertrand Petit, A. Gaugain, X. Boyat</i>	
EFFECTS OF MAGNETITE-SEAWATER SLURRY ELECTROLYTE ON SACRIFICIAL ANODE PERFORMANCE, ACIDIFICATION, AND CORROSION RATE.....	2045
<i>M. Taylor</i>	
TOWARD A DIGITAL TWIN: A SPATIOTEMPORAL DATA INTEGRATION FRAMEWORK FOR PIPELINE RISK ASSESSMENT	2056
<i>S. Sreeharan, H. Wang, K. Madhusudhan, Y. Yang, L. Wang, S. George, H. Castaneda, J. Shah, H. Wang</i>	
CCUS TECHNOLOGY GAP: REVIEW OF EXISTING METHODS FOR CHEMICAL CONTROL	2070
<i>T. Hughes, S. Ramachandran</i>	
PHYSICS-INFORMED BAYESIAN MODELING FOR INTEGRITY ASSESSMENT OF UNDERGROUND PIPELINE COATINGS	2093
<i>S. Sreeharan, H. Wang, Y. Jiang, R. Goldsberry, H. Castaneda</i>	
MODELLING CATHODIC PROTECTION PERFORMANCE OF STEEL PIPELINE UNDER DYNAMIC SOIL MOISTURE ENVIRONMENT	2102
<i>X. Yang, H. Wang</i>	
A CASE STUDY ON UNIQUE CHALLENGES RELATED TO CURED-IN-PLACE PIPE (CIPP) REPAIR METHODS	2112
<i>C. Gupta, J. Moll, R. Bennett-Kennett, S. Santos</i>	
UNS N08034 – A HIGH-PERFORMANCE SOLUTION FOR CORROSIVE, HIGH-STRESS CONDITIONS.....	2121
<i>P. Hubner, J. Botinha, M. Dodge, D. Martelo, H. Alves</i>	
CP LIFE EXTENSION PROJECT FOR SPAR STRUCTURE IN THE GULF OF AMERICA	2133
<i>C. Peratta, B. Chong, A. Peratta</i>	

GAS INHIBITION AS TECHNOLOGY TO MITIGATE HYDROGEN EMBRITTLEMENT EFFECTS IN PIPELINE STEELS.....	2144
<i>A. Izquierdo-Sanchez, R. Best, N. Gallon, G. Smith, K. Hamadi, S. Slater</i>	
PRACTICAL STRATEGIES TO DEVELOP FIT-FOR-PURPOSE AC MITIGATION USING ITERATIVE ASSESSMENT	2160
<i>W. Fieltsch, H. More, C. Baete</i>	
INTERNAL CORROSION THREAT MANAGEMENT IN LEGACY GAS STORAGE POOLS: A RISK-BASED ICDA FRAMEWORK	2173
<i>S. Srinivasan, P. Teevens, V. Luthra, S. Arumugam</i>	
CORROSION UNDER INSULATION IN MARINE PIPELINES: A LITERATURE REVIEW ON COATING PERFORMANCE AND QUALIFICATION STANDARDS.....	2186
<i>A. Al-Borno, H. Pedraza, M. Islam, E. Ahmed</i>	
REVIEW OF INTERNAL CORROSION MECHANISMS IN AN ONSHORE PRODUCTION PIPELINE: A CASE STUDY FROM THE EAGLE FORD BASIN.....	2194
<i>M. Fernandez, C. Jeske, V. Ortiz, C. Salazar</i>	
APPLICATION OF MACHINE LEARNING TOOLS TO ENHANCE CORROSION INHIBITOR MIXTURE OPTIMIZATION EXPERIMENTATION	2211
<i>R. Woollam, H. Thompson, Y. Alhilali, M. Sarabchi, R. Barker</i>	
MODELING OF THERMAL CYCLING ON WATER ACCUMULATION FOR CORROSION UNDER INSULATION.....	2231
<i>Z. Zhu</i>	
ESTIMATING INITIAL VALUES FOR EIS ANALYSIS BY COMPLEX NONLINEAR LEAST SQUARES FITTING	2246
<i>R. Woollam, J. Owen, A. Sykes, D. Burkle, R. Jacklin, R. Barker</i>	
ELECTROCHEMICAL PERFORMANCE ASSESSMENT OF NOVEL ENVIRONMENTALLY IMPROVED CORROSION INHIBITORS FOR HIGH SHEAR AND HIGH TEMPERATURE APPLICATIONS	2261
<i>Y. De-Abreu, S. Zhou, G. Garcia, G. Schamerhorn, H. Wilson, A. Ferrer</i>	
THE EFFECT OF METHANOL IN ACID PRODUCING CO ₂ SPECIFICATION.....	2278
<i>B. Morland, N. Voudouris, G. Svenningsen, A. Tazedakis, E. Dourdounis</i>	
THE ROLE OF CORROSION RESISTANCE IN THE TECHNICAL FEASIBILITY OF CO ₂ INJECTION WELLS FROM BECCS.....	2290
<i>J. Carvalho, F. Galbiati, T. Almeida, R. Moreira, M. Bandeira</i>	
CRACKING THE CODE OF CORROSION, GLASS FLAKES IN HIGH-PERFORMANCE EPOXY SYSTEMS	2306
<i>A. Frederiksen, A. Prieto</i>	
CHARACTERIZATION OF COATING FAILURES USING ION BEAM MILLING AND HIGH RESOLUTION ENERGY DISPERSIVE X-RAY SPECTROSCOPY	2318
<i>V. Saarimaa, M. Virtanen, K. Laurila</i>	
MITIGATING SULPHUR-INDUCED CORROSION IN RCC STRUCTURES: A CASE STUDY OF SULPHUR PIT REHABILITATION	2329
<i>R. Lanjewar, S. Sadhukhan</i>	

UNDERSTANDING CORROSION IN SUPERCRITICAL CO ₂ ENVIRONMENTS: THE IMPACT OF IMPURITIES ON STEEL PERFORMANCE	2343
<i>M. Liu, Y. Zeng</i>	
CORROSION MECHANISMS OF STAINLESS STEELS IN SCWG OF BIOMASS: INFLUENCE OF FEEDSTOCK CHEMISTRY AND CATALYSTS	2350
<i>M. Liu, H. Li, Y. Zeng</i>	
IMPLEMENTING A RISK-BASED INTEGRITY MANAGEMENT SYSTEM (CIMS) IN UPSTREAM OIL & GAS OPERATIONS	2357
<i>N. Piet, C. Salazar, R. Alen, B. Manning, A. Armstrong, E. Cunill</i>	
FLEET MANAGEMENT OPTIMIZATION USING ADVANCED ANALYTICS	2364
<i>M. Barrett, T. da Costa, S. Lawrence, W. Maize</i>	
STRAY CURRENT FAILURES AND THE REAL COST OF INACTION: A REVIEW OF TRANSIT INFRASTRUCTURE CASES	2374
<i>M. Fatakdawala</i>	
NOVEL CORROSION INHIBITOR CHEMISTRIES FOR OXYGEN CORROSION MITIGATION	2381
<i>S. Deshmukh, C. Dickey, N. Obeyesekere</i>	
ADVANCEMENTS IN DEVELOPING SUSTAINABLE OIL FIELD CORROSION INHIBITOR AND SULFIDING AGENT CHEMISTRIES	2396
<i>S. Deshmukh, C. Dickey, N. Obeyesekere, K. Mutch</i>	

VOLUME 4

IRON OXIDES AND THEIR ROLE IN OXYGEN-INFLUENCED INTERNAL PIPELINE CORROSION IN THE OIL AND GAS INDUSTRY	2409
<i>S. Deshmukh, B. Brown, D. Young</i>	
STUDY OF PRE-PARTITIONED FLUIDS UNDER HIGH TEMPERATURE/HIGH PRESSURE CONDITIONS.....	2419
<i>T. Jayanethi, N. Obeyesekere, K. Mutch, C. Fernandez, M. Bartos</i>	
EFFECT OF HYDROGEN ON EXPERIMENTAL PIPELINE STEELS	2434
<i>L. Teeter, K. Rozman, R. Oleksak, Z. Belarbi, D. Alman</i>	
CASE OF EXTERNAL SCC OF TYPE 304 STAINLESS STEEL UNDER INSULATION IN NATURAL GAS PLANT.....	2444
<i>T. Sunaba, A. Yasui, Y. Yanase, Y. Shimizu</i>	
METHODOLOGIES FOR CO ₂ STRESS CORROSION CRACKING TESTING OF CARBON STEEL ARMOR WIRES FOR FLEXIBLE PIPES.....	2450
<i>A. Mandevu, S. Haratian, M. Kone, P. Nielsen, V. Gudla, J. Gudme</i>	
STRESS CORROSION CRACKING OF ALLOY 718 BOLTS IN MARINE ATMOSPHERE	2464
<i>R. Johnsen, J. Naerland, R. Rizzo, M. Helsem</i>	
UNINTENDED CURRENT FLOW ON WATER TOWERS WITH 5G ANTENNAS: RISKS, DETECTION, AND MITIGATION.....	2477
<i>A. Chikkam, M. Zamanzadeh, M. Carone, A. Ulmer</i>	

3013 CONTAINER INNER SURFACE CHANGES AFTER EXPOSURE IN BOILING MAGNESIUM CHLORIDE SOLUTION	2484
<i>R. Fuentes, E. Perez, M. Alderman</i>	
UPDATE TO NACE MR0175/ISO15156: MATERIAL & PROCESS REQUIREMENTS AND ENVIRONMENT ASSESSMENT & MATERIALS SELECTION.....	2493
<i>R. Badrak, L. Smith</i>	
COMPARATIVE CORROSION BEHAVIOR OF ELECTROLESS NICKEL COATINGS ON BEARING STEEL IN ACIDIC AND ALKALINE ENVIRONMENTS	2508
<i>L. Sanchez, V. Bedekar, H. Allen, T. Fremon</i>	
NI-BASED CORROSION RESISTANT ALLOYS (CRA) PERFORMANCE IN ACIDIC HIGH CONCENTRATED BRINE SOLUTIONS	2521
<i>L. Chen, A. Mishra, J. Guerrero, V. Deodeshmukh</i>	
ELECTROCHEMICAL PERFORMANCE OF ELECTRODEPOSITED SN-BASED CATALYST FOR REDUCTION OF CO ₂ TO FORMIC ACID.....	2538
<i>A. Vargas, S. Paul, K. Maniam</i>	
AN INVESTIGATION OF CUI BEHAVIORS OF CARBON STEEL VIA EXPERIMENTAL TESTING AND RBI METHODOLOGY	2546
<i>A. Rana, G. Brigham, I. Rohela, J. Chapman</i>	
ASSESSMENT OF SAFE OPERATING CONDITIONS FOR CORROSION-RESISTANT ALLOYS IN WATER INJECTION SYSTEMS.....	2554
<i>C. Leballeur, J. Pelle, E. Diler, N. Larche, R. Johnsen, J. Naerland</i>	
CASE STUDIES ON CORROSION PROTECTION AND MATERIAL INTEGRITY IN NUCLEAR ENGINEERING	2569
<i>M. Follett-Figueroa, M. Saenz, C. Young, R. Janysek, M. Fang</i>	
THE UNSEEN THREAT: STEADY-STATE AC INTERFERENCE FROM WIND ENERGY BURIED HVAC CABLES	2584
<i>C. Heinrich, B. Little, M. Rodriguez, B. Wong</i>	
ENHANCING NACE VIA TM 0208-2024 THROUGH MIMICKED APPLICATION CONDITIONS AND QUANTITATIVE RESULTS.....	2594
<i>C. Metzger, C. Gardner</i>	
CORROSION DATA INTEGRATION AND INSIGHTS FOR PIPELINE SUSTAINABILITY.....	2603
<i>V. Romero, P. Tandon</i>	
DECODING THE CORROSION RISKS OF GALVANIZED STEEL COATINGS IN T&D STRUCTURES BASED ON KNOWLEDGE-BASED INSPECTION, SENSORS, AND GIS- BASED CORROSION FORECASTING.....	2610
<i>M. Zamanzadeh, A. Chikkam, F. Zolfaghari, P. Taheri, A. Gilpin-Jackson</i>	
SYSTEM-WIDE CATHODIC PROTECTION FOR ELECTRIC UTILITY GALVANIZED TRANSMISSION STRUCTURES: DESIGN, IMPLEMENTATION, AND FIELD PERFORMANCE AT UTILITIES	2617
<i>M. Zamanzadeh, P. Taheri, A. Chikkam, K. Gailey, J. Rettig, D. Singh, A. Gilpin-Jackson</i>	
EFFECT OF EXPANSION, MOISTURE ON FRACTURE TOUGHNESS IN HIGH PRESSURE HYDROGEN ENVIRONMENT	2630
<i>K. Krishnan</i>	

HIGH-TEMPERATURE HIGH-PRESSURE TESTING OF CORROSION INHIBITORS WITH HIGH LIQUID VOLUME-TO-SAMPLE SURFACE AREA RATIO	2645
<i>P. Jin, C. Menendez, T. Jackson</i>	
J-R CURVE TESTING OF OCTG MATERIALS IN UNDERGROUND STORAGE ENVIRONMENTS.....	2660
<i>S. Cravero, O. Albores, M. Valdez, A. Izquierdo, P. Olivo</i>	
CIRCULAR ECONOMY CORROSION INHIBITING PAPER AND BARRIER PAPER.....	2671
<i>M. Shen, B. Miksic</i>	
EFFECT OF TEMPERATURE AND ORIENTATION ON THE CORROSION OF WIRE-ARC ADDITIVELY MANUFACTURED 316LSI STAINLESS STEEL IN SIMULATED SEAWATER.....	2680
<i>A. Martinez, K. Renteria, S. Divi, A. Rowe</i>	
SIMULATION-GUIDED CATHODIC PROTECTION DESIGN UNDER SOIL AND COATING UNCERTAINTY: TOWARD AN EDUCATIONAL AND ADAPTIVE TOOL.....	2695
<i>Y. Jiang, H. Wang, S. Sreeharan, H. Castaneda</i>	
NO CONTACT, NO PROBLEM: VALIDATING CONTACTLESS MAGNETIC INSPECTION FOR EXTERNAL CORROSION DETECTION ON BURIED GAS PIPELINES	2707
<i>C. Onuoha, D. Nnamdi, M. Karen, L. de Guzman, D. Rennie, J. Vafaei</i>	
REVOLUTIONIZING UNPIGGABLE PIPELINE ASSESSMENT: THE POWER OF HOLISTIC INSPECTION.....	2722
<i>C. Onuoha, D. Nnamdi, M. Panganiban, R. Buksa, M. Blouin, D. Rennie</i>	
DEVELOPING PRODUCTS FOR PERFORMANCE AND SUSTAINABILITY	2738
<i>K. Blankenship, J. Valdez</i>	
EFFECT OF TiO ₂ PRETREATMENT ON THE CORROSION PROPERTIES OF INCONEL 625 OVERLAY-WELDED LOW-ALLOY STEEL	2745
<i>S. Patil</i>	
EVALUATION OF EXPERIMENTAL AND COMMERCIAL MARINE ANTIFOULING PAINTS AFTER LABORATORY TESTS AND STANDARDIZED PERFORMANCE PROTOCOLS	2759
<i>E. Kiosidou, A. Karantonis</i>	
HYDROGEN MEASUREMENT AND FAILURE PREDICTION	2771
<i>M. McGuire, M. Zamanzadeh, F. Zolfaghari, N. Pace, A. Chikkam</i>	
STRAY CURRENTS AND SOIL CORROSIVITY: DUAL DRIVERS OF PREMATURE WATER MAIN FAILURES.....	2783
<i>A. Chikkam, A. Ulmer, E. Larkin, M. Carone, M. Zamanzadeh</i>	
METALLURGICAL CONDITION A KEY FACTOR IN ZIRCONIUM TUBE INTEGRITY.....	2798
<i>E. Mostaed, S. Chimbli</i>	
EXPERIMENTAL SIMULATION OF SWEET TLC FOR AGED INTERNALLY COATED PIPELINES	2805
<i>N. Bawarith, H. Attar, R. Filfilan, A. Alabdullatif, N. Abdulmohsin, C. Maya</i>	
FLUCTUATION CHARACTERISTICS OF PIPE-TO-SOIL POTENTIAL UNDER TIDAL INTERFERENCE	2820
<i>W. Lan, C. Xu, C. Cong, W. Bi, X. Zhang, H. Wang</i>	

PHASING OPTIMIZATION AS A MITIGATION STRATEGY FOR AC INTERFERENCE ON COLLOCATED PIPELINES	2835
<i>H. Bahgat, S. McLean</i>	
QUALIFICATION OF 6% MO STAINLESS STEEL: ALIGNMENT WITH ISO 15156	2845
<i>R. Al Raqmi, M. Al Hubaishi, M. Al Hosni, A. Khayari, R. Mihajlov</i>	
EVALUATION OF DAMAGE TOLERANCE FOR TSA-COATED STEEL IN A SIMULATED MARINE ENVIRONMENT	2855
<i>A. Vargas, S. Paul</i>	
A CASE STUDY OF RAILWAY TRACKS' GRADIENT CONTROL WIRE CORROSION ASSESSMENT - PHASE 1	2865
<i>A. Giri, H. Hernandez</i>	
REDEFINING SATURATED SURFACE DRY (SSD) IN CONCRETE: LITERATURE INSIGHTS AND INNOVATIVE TESTING FOR PRACTICAL FIELD APPLICATION - PART I	2876
<i>V. O'Dea, N. Miller, R. Briand, M. Heywood</i>	
INFLUENCE OF THE CHEMICAL COMPOSITION ON THE PITTING CORROSION BEHAVIOR OF STRAIN HARDENED UNS S20910	2886
<i>J. Ditmann, H. Klapper</i>	
EVALUATION OF HYDROGEN EMBRITTLEMENT SUSCEPTIBILITY IN PIPELINE STEEL WELDS	2895
<i>B. Alexandrov, F. Consuegra</i>	
CFD ANALYSIS OF EROSION IN PLUGGED TEES SERIES: EFFECT OF PIPE DIAMETER, PARTICLE SIZE AND FLUID DENSITY	2908
<i>H. Ahmad, J. Zhang, S. Shirazi, S. Karimi</i>	
THERMAL SPRAY AS A COST-EFFECTIVE & RELIABLE ALTERNATIVE TO WELD REPAIR	2923
<i>Z. Ahmad, C. Ikeagu</i>	
BALANCING PIPELINE PROFITABILITY AND FAILURE IN HYDROGEN PIPELINES USING MACHINE LEARNING-DERIVED OPERATIONAL RULES	2929
<i>T. Stewart, F. Ayello, A. Mosleh, N. Sridhar</i>	
ANALYSIS OF CORROSION FAILURES IN SALTWATER DISPOSAL SYSTEM COMPONENTS DUE TO DEGRADATION OF INTERNAL COATING	2941
<i>S. Chimbli, H. Mansoori</i>	
A MATERIAL DATABASE FOR HYDROGEN PIPELINE LIFE PREDICTION	2980
<i>F. Ayello, N. Sridhar, T. Ramgopal, T. Stewart, J. Ronevich, A. Salilkumar, C. Marchi, A. Mosleh</i>	
POTENTIAL DISTRIBUTION IN PIPELINE NETWORK USING A NUMERICAL IMPEDANCE-BASED MODEL AND ARTIFICIAL INTELLIGENCE	2995
<i>H. Castaneda, R. Goldsberry, H. Wang, S. Sreeharan</i>	
LEVERAGING AI AND PHYSICS-BASED MODELING TO PREDICT INTERNAL CORROSION HOTSPOTS IN CRUDE-OIL EXPORT PIPELINES	3008
<i>S. Arumugam, P. Teevens, S. Srinivasan, B. Hemachandran</i>	

SUSTAINABLE CORROSION INHIBITOR FORMULATION FOR INDUSTRIAL ACID CLEANING OF FERROUS- AND COPPER-BASED ALLOYS	3020
<i>A. Sorour, F. Alradhi, I. Obot, N. Asrar, N. Ankah, A. Alshary</i>	
STUDY ON TIME DEPENDENCE OF TRENCHES ON SSC INITIATION LIMITS FOR LOW- ALLOY CARBON STEELS	3034
<i>T. Fujishiro, T. Hara, T. Muraki, E. Tada, D. Izumi, K. Fushimi, N. Ishikawa, M. Kimura</i>	
FAILURE ANALYSIS OF THE UNDER-DEPOSIT CORROSION ON SHALE GAS FIELD PIPELINE.....	3044
<i>C. Yanjun, H. Weilei, L. Dong, Q. Songzhu, S. Jie, H. Tengjiao, G. Jian</i>	
THE ROLE OF MICROSTRUCTURE IN THE ANODIZABILITY OF ALSI ALLOYS: A SHORT REVIEW	3059
<i>V. Mataloni, M. Abello, L. Mezzomo, A. Bonfanti, F. Bertasi</i>	
EFFECT OF ALTERNATIVE CATHODIC PROTECTION POTENTIALS ON CARBON STEEL CORROSION IN BRAZILIAN OFFSHORE CONDITION	3073
<i>T. Hofman, J. Vera, A. Kowalski, J. Gomes, E. Kassab, E. Alencar, M. da Rocha, J. Oliveira, E. Diler, N. Larche</i>	
HIGH TEMPERATURE COMBINATIONAL FOAMER-CORROSION INHIBITOR PRODUCT FOR MATURED GAS WELLS.....	3083
<i>S. Ramachandran, D. Fakunle, K. Szecsy, T. Jackson, Q. Wang, A. Al Mohammed, J. Leal</i>	
SYNERGISTIC EFFECTS BETWEEN 2-MERCAPTOETHANOL AND 2-METHYL- IMIDAZOLINE AS CORROSION INHIBITORS IN CO ₂ -SATURATED NA ₂ CO ₃ SOLUTION: DFT AND EXPERIMENTS.....	3094
<i>D. Kumar, V. Muralidhar, V. Jain, J. Moloney</i>	
COMPUTATIONAL MODELING OF CP PENETRATION AND CORROSION RISK IN SUBSEA CREVICE GEOMETRIES.....	3106
<i>A. Peratta, C. Peratta</i>	
A CRITICAL ASSESSMENT OF TEST METHODS FOR STEEL–CEMENT SYSTEM DEGRADATION IN GEOLOGICAL CO ₂ STORAGE ENVIRONMENTS.....	3121
<i>R. Rajesh, R.-F. Mazumder, Y. Dhandapani, S. Bernal, J. Owen, R. Barker</i>	
CO ₂ INJECTION WELLS: CORROSION OF CRAS	3138
<i>M. Tjelta, S. Gupta, G. Svenningsen</i>	
MOLECULAR MODELING OF SO _x IN SUPERCRITICAL CO ₂ ENVIRONMENTS.....	3150
<i>H. Attar, M. Jumaah, F. Abbas, X. Rozanska, R. Costa, C. Maya</i>	
EVALUATING HEAT TREATMENT EFFECTS ON 316 STAINLESS STEEL FABRICATED VIA POWDER BED FUSION (PBF) TECHNIQUE.....	3165
<i>L. Altahini, L. Almuhaish, M. Muaisub, A. Aseel, H. Alhashmy, H. Attar</i>	
ACCELERATED DEGRADATION TESTING FOR LONG-TERM STRENGTH PREDICTION OF NONMETALLIC PIPES IN DOWNHOLE APPLICATIONS	3181
<i>L. Altahini, N. Buwarith, A. Hijles, H. Alhashmy</i>	
THE BERMUDA TRIANGLE OF CP: COORDINATED INTERFERENCE TESTING AND CURRENT PATH DISCOVERY	3196
<i>C. Lundgren, R. Floria, C. Truitt</i>	

VOLUME 5

FATIGUE AND FRACTURE BEHAVIOR OF LOW-ALLOY WROUGHT AND CAST STEELS IN GASEOUS HYDROGEN	3204
<i>J. Ronevich, C. Marchi</i>	
PREDICTIVE CUI MANAGEMENT WITH REMOTE MONITORING – RECENT USE CASE	3214
<i>P. Sharma, F. Talbot</i>	
DISCOLORATION FAILURE OF TOPCOATED INTUMESCENT-COATED STEEL	3222
<i>K. Steiner, M. Starczewski, L. Phelps</i>	
SHEAR STRESS PROFILE USING A ROTATING CAGE FOR CORROSION TESTING.....	3234
<i>S. Ramachandran, T. Jackson, H. Fang, P. Ramachandran</i>	
TESTING FOR REAL WORLD FAILURES: EFFECTS OF HOLIDAY SIZE, SHAPE AND LOCATION ON RUST CREEPAGE	3245
<i>J. Ellor, D. Pope, A. Florimbio, L. Barker</i>	
PRECISION IN PERCEPTION: REVISITING COATING COLOR EVALUATIONS BY COMPARING ΔE_{76} AND ΔE_{00} RESULTS	3260
<i>A. Florimbio, K. Hershman</i>	
ROBUST INTEGRITY MANAGEMENT PLANNING OF ANTHROPOGENIC DENSE CO ₂ PIPELINES - LEVERAGING MFL DATA FUSION	3275
<i>D. Sandana, A. Patterson, K. Siggers, H. Rahmah</i>	
SMART RESTORATION: HOW CONTRACTORS DELIVER SAFE, COST-SAVING RESULTS WITH HIGH-PERFORMANCE SYSTEMS	3287
<i>J. Bossier</i>	
CRITICALITY OF CORROSION INHIBITOR SELECTION IN THE PRESENCE OF LDHI FOR MEG REGENERATION ELIMINATION	3295
<i>D. Shaikhah, A. Sey, D. Donaldson, B. Bennett</i>	
BIOBASED COATING FOR IMPROVED ENVIRONMENTAL AND USER SAFETY	3310
<i>J. Hemberger</i>	
CHLORIDE PENETRATION AND CORROSION ABOVE THE SPLASH ZONE IN OLD COASTAL FLORIDA REINFORCED CONCRETE BRIDGES	3319
<i>I. Barragan, F. Presuel-Moreno</i>	
SOLID PARTICLE EROSION IN PIPELINE EXPANSIONS: CFD FLOW VALIDATION, MESH SENSITIVITY, AND EXPERIMENTAL VISUALIZATION	3334
<i>A. Bakytov, J. Zhang, F. Darihaki, S. Karimi, S. Shirazi</i>	
EVALUATION OF STEEL UNS S32750 LOCALIZED CORROSION AND SCC RESISTANCE UNDER SIMULATED FIELD CONDITIONS	3351
<i>G. Brandolin, J. Zhang, R. Lazaro, A. Altenhofen, L. Antonini</i>	
DIGITALIZED ON-STREAM INSPECTION OF RAISED FACE FLANGES.....	3366
<i>M. Alotaibi</i>	
CORROSION OF VARIOUS X-SERIES PIPELINE STEELS IN WATER-SATURATED SUPERCRITICAL CO ₂	3373
<i>H. Sun, G. Lehnhoff, A. Gross, J. Liu, M. Rashid</i>	

COMBINED EFFECTS TESTING FOR ALUMINUM ALLOY ENVIRONMENT ASSISTED CRACKING	3383
<i>F. Friedersdorf, C. Cocke, L. Askew, D. Christy</i>	
EFFECT OF SAND PARTICLE SIZE ON SOIL-SIDE CORROSION BEHAVIOR OF ABOVEGROUND STORAGE TANKS	3400
<i>T. Fatima, P. Shukla</i>	
QUALIFICATION OF SUPER 13CR UNS S41426 ACCORDING TO NORSOK M-650	3410
<i>C. Herrera, A. Doga, M. Seifer</i>	
DISSOLVABLE RUBBER AND DISSOLVABLE RUBBER SEALING ELEMENT TESTING METHODS AND EVALUATION CRITERIA	3420
<i>J. Ren, B. Edwards, Y. Liu, K. Roberts, H. Liu, D. Nettles, P. Cheng, Z. Yang, J. Yue</i>	
CONTINUED INVESTIGATION INTO INSULATION DRIVEN STRESS CORROSION CRACKING - PART 2	3431
<i>M. Krantz, Y. Li, L. Sopkow</i>	
CORROSION MITIGATION OF STEEL BY AL-ZN THERMAL SPRAY COATINGS: REAL- TIME MONITORING WITH OPTICAL FIBER SENSORS	3446
<i>K. Quenette, L. Xu, Y. Huang, R. Wilson</i>	
GALVANIZED COATING PERFORMANCE IN FIRE EVENTS: FIELD CASE STUDIES AND THE ROLE OF REMOTE SENSING.....	3454
<i>A. Chikkam, A. Ulmer, M. Carone, M. Zamanzadeh, K. Niles, J. Villaba, M. Gardner</i>	
STUDY OF H ₂ S EXPOSURE ON BIOCIDES: IMPACTS ON EFFICACY	3468
<i>S. Harris, M. Lozoya, K. Kondiparty, J. Bartels</i>	
THERMAL INSULATION NANO-PAINT	3483
<i>F. Raeisi</i>	
SHIELDING EFFECTS OF COATINGS IN CATHODIC PROTECTION SYSTEMS: EXPERIMENTAL TECHNIQUES, OBSERVATIONS, AND CASE HISTORIES	3491
<i>M. Zamanzadeh, A. Chikkam, G. Bayer, P. Taheri, A. Kuechle, K. Yap, H. Rehman</i>	
DETERMINING THE EFFICIENCY OF NITROGEN BLANKETING TO MITIGATE CORROSION IN HANFORD'S TRANSFER LINE SYSTEM	3504
<i>K. Sykes, P. Shukla, B. Barkai, R. Fuentes, B. Wiersma, J. Page, M. Fagundes</i>	
ELECTRICAL SAFETY AND FACILITY INTEGRITY: EVALUATION OF AC POWER & GROUNDING ISSUES.....	3517
<i>C. Chapman, S. Williams</i>	
BAYESIAN NETWORK MODELING OF INDUSTRIAL SYSTEMS.....	3532
<i>N. Sridhar</i>	
FRACTURE TOUGHNESS AND FATIGUE CRACK GROWTH RATE OF PIPELINE STEEL IN INDUSTRIAL HYDROGEN ENVIRONMENT	3547
<i>F. Gui, L. Hollis, M. Robinson, A. Huggins-Gonzalez</i>	
DEVELOPMENT OF TRIPLE-FUNCTION CHEMICAL FORMULATIONS FOR SIMULTANEOUS MITIGATION OF SCALE, CORROSION, AND HYDROGEN SULFIDE IN OIL AND GAS PRODUCTION SYSTEMS.....	3565
<i>S. De, J. Salcido, M. Lozoya, D. Baeza</i>	

CATHODIC PROTECTION MEASUREMENTS FOR BURIED MIXED-METAL STRUCTURE SYSTEMS.....	3585
<i>S. Williams</i>	
CASE STUDY OF A 316L STAINLESS STEEL FLANGE CRACK FROM A HYDRAULIC OIL PUMP SKID.....	3602
<i>M. PanDavila, C. Robinson, S. Chimbli, K. Renteria</i>	
CORROSION COUPON STRENGTH EFFECTS ON CORROSION SUSCEPTIBILITY IN DIFFERENT ENVIRONMENTS	3615
<i>J. Jackson, A. Carreno, A. Koochelzadeh, W. Ritter</i>	
USING ELECTROCHEMICAL TECHNIQUES TO CHARACTERIZE IMPACT OF SURFACE ROUGHNESS ON MICROBIAL COLONIZATION AND EXPANSION IN THE ABSENCE OR PRESENCE OF BIOCIDES.....	3625
<i>M. Saldana, Y. De-Abreu, K. Kondiparty, S. Harris, J. Golden-Plaskett</i>	
THE DANGER OF RELYING ON PRE-PARTITIONED CONDITIONS TO SELECT A CORROSION INHIBITOR FOR A MULTIPHASE SYSTEM	3641
<i>Y. De-Abreu, D. Fouchard, R. Jia</i>	
MOBILE CORROSION ASSESSMENT AND RELIABILITY INTEGRATION IN UNDERGROUND GOLD MINING	3657
<i>N. Diaz, M. Morissette</i>	
ENHANCING PIPELINE INTEGRITY WITH PROBABILISTIC DIGITAL TWINS AND BAYESIAN MACHINE LEARNING	3668
<i>F. Ayello, G. Liu, E. Faust, T. Addis, C. Kagarise, A. Brust, F. Al-Mutahhar, L. Teh, M. Al Jumaah, A. Alabdullatif</i>	
DETERMINING DRYING CONDITIONS TO MITIGATE HANFORD DOUBLE SHELL STORAGE TANK UNDERSIDE CORROSION - PHASE 1.....	3686
<i>B. Barkai, K. Sykes, P. Shukla, T. Fatima, R. Fuentes, B. Wiersma, C. Girardot, J. Page, S. Campbell</i>	
AEROSPACE CORROSION SIMULATION: PRISTINE TO PITTED AND BEYOND.....	3697
<i>T. Curtin, R. Adey, S. Mellings, A. Peratta</i>	
DETERMINING VAPOR CORROSION INHIBITOR DISPERSION RANGE UNDER THE TANK PAD CONDITIONS	3714
<i>P. Shukla, T. Fatima, F. Farelas, N. Kabir, I. Pederson, E. Uutala, J. Olivo, J. Goodwin</i>	
QUANTIFICATION OF AIRSPACE TRANSPORT KINETICS OF VOLATILE CORROSION INHIBITORS USING METAL OXIDE GAS SENSORS	3723
<i>J. Olivo, T. Natale, J. Davis, P. Shukla</i>	
MICROSTRUCTURAL CHARACTERIZATION OF SUBSURFACE CORROSION FEATURES IN FLOW-FORMED PLUTONIUM-BEARING NESTED STORAGE CANISTERS.....	3734
<i>E. Perez, R. Fuentes, M. Alderman</i>	
DEVELOPMENT OF A NOVEL EROSION MODEL FOR DETERMINING THRESHOLD VELOCITY OF POLYPHENYLENE SULFIDE (PPS) IN WATER INJECTION SYSTEM.....	3741
<i>M. Karami, Q. Wang, S. Shirazi, S. Karimi</i>	
DETECTION OF SUBSURFACE CORROSION BENEATH COATINGS USING THERMAL TIME-SERIES ANALYSIS.....	3756
<i>Q. Ren, S. Sreeharan, H. Wang, A. Chattos</i>	

PREDICTING COATING PERFORMANCE THROUGH THE INTEGRATION OF PATTERN RECOGNITION ALGORITHM VIA IMAGING AND ELECTROCHEMICAL TESTING	3767
<i>V. Ponce, R. Gupta, H. Eich, A. Nowasielski, H. Castaneda</i>	
CHALLENGING ASSUMPTIONS IN CORROSION INHIBITOR PARTITIONING: IMPLICATIONS FOR LOW WATER CUT ENVIRONMENTS	3782
<i>Y. Ding, J. Moloney</i>	
PROBING CRITICAL FACTORS BEHIND BLISTER FORMATION AND ADHESION LOSS IN STANDARD ATLAS CELL TESTING	3796
<i>S. Rao, R. Chung</i>	
API 580 AND ASME PCC-3: ONE RBI STORY, TWO ROLES	3808
<i>Y. Behnamian, S. Bohra, D. Serate, N. Mehta, S. Yuen, N. Soni, A. Macdonald, G. Robert</i>	
EFFECT OF TEMPERATURE IN ACCELERATION AND MITIGATION OF FREE FATTY ACID CORROSION IN RENEWABLE NATURAL OIL APPLICATIONS.....	3813
<i>S. Srinivasan, W. Robbins</i>	
VALIDATION OF MODERN CFD SOFTWARE IN VARIOUS EXPERIMENTAL AND COMPLEX FLOW GEOMETRIES.....	3825
<i>A. Cutright, S. Nesic, B. Brown, D. Young, M. Sami</i>	
IS LOCALIZED CORROSION A NECESSARY PRECURSOR TO ALKALINE NITRATE SCC OF CARBON STEELS?	3841
<i>A. Huggins-Gonzalez, R. Thodla, B. Rollins, S. Chawla, J. Beavers, K. Boomer, S. Doll, G. Frankel</i>	
GALVANIC INTERACTIONS ON CARBON STEEL IN INHIBITED CO ₂ ENVIRONMENTS.....	3858
<i>A. Huggins-Gonzalez, J. Vera</i>	
DESIGN CHALLENGES OF A CORROSION MONITORING NETWORK OF THE ENVIRONMENTAL SUBSURFACE SUBJECT TO SALTWATER INTRUSION.....	3875
<i>H. Eschenburg, K. Lau, S. Perme, V. Prelaz, A. Loyola, M. Sukop</i>	
EVALUATION OF VCI VAPOR TRANSPORT IN COMPLEX PIPING NETWORKS USING A SIMULATED FIELD-SCALE MODEL	3885
<i>L. Ye, W. Goldman, M. Shahlari, J. Olivo, W. Rohland</i>	
EFFICACY OF SOME COMMERCIAL CORROSION INHIBITING COMPOUNDS (CIC) IN MITIGATING CREVICE CORROSION IN CARBON STEEL COMPONENTS IN SIMULATED MARINE ENVIRONMENTS	3895
<i>M. Islam, B. Shaw, D. Solomon</i>	
THE IMPACTS OF PHOTOCHEMICAL DEGRADATION ON ORGANIC AND INORGANIC COATINGS	3909
<i>K. Blankenship</i>	
INTEGRITY IMPLICATIONS OF PIPELINES CONVERTED TO DENSE CO ₂ SERVICE	3915
<i>M. Barakat</i>	
HP40 ETHYLENE CRACKER FAILURE ANALYSIS OF DEGRADATION DUE TO EXCESSIVE SERVICE TEMPERATURES.....	3926
<i>J. Jackson, A. Carreno, A. Koochehzadeh, O. Roorda</i>	

HOW CONTROLLED-POTENTIAL CATHODIC PROTECTION SYSTEMS FOR SUBSEA STRUCTURES CAN REDUCE COST AND IMPROVE SAFETY	3940
<i>J. Jackson, A. Carreno, A. Koochekzadeh, B. Fahimi</i>	
INCREASE CORROSION RESISTANCE BY MINIMIZING SURFACE ROUGHNESS IN FACE MILLING	3953
<i>M. Rabea, D. Fidel</i>	
CORROSION-FREE AND SMART: ENHANCING VALVE RELIABILITY WITH HIGH-PERFORMANCE PLASTICS AND SMART ELECTRICAL POSITION FEEDBACK SOLUTIONS.....	3963
<i>J. Hamburger, Y. Ohms, N. Asrar, A. Al-Sahary, M. Al-Hazmi</i>	
PARAMETRIC EVALUATION OF NAPHTHENIC ACID CORROSION AND SULFIDATION UNDER HIGH TEMPERATURE HIGH VELOCITY (HTHV) CONDITIONS	3972
<i>Y. Yoon, H. Li, R. Kane</i>	
BRIDGING SIMULATION AND REALITY: AI-ENHANCED EROSION MODELING WITH CFD AND DEM	3988
<i>G. de Lima, R. Somassoundirame, M. Adams</i>	

Author Index