Pipeline Integrity Management and Corrosion Prevention

28 April - 30 April 2015 | Ibis Lagos Airport, Nigeria
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Course Overview
This program is designed to provide an in-depth understanding of the engineering principles behind successful integrity management of piping systems & pipelines in operation. Practical aspect of design considerations, sizing, rating, pipeline integrity, internal inspections, analysis, repair, testing, pipeline protection shall be presented.

The program shall also provide more information about pipeline defects, determining pipeline integrity, cracks, corrosion, and other possible failures and damages. This will lead the participants to prepare them for ensuring safe operations and preventing any incidents.

Benefits of Attending
The training program will include instructions, guidelines and orientation to;

• Master prime engineering issues and activities required to operate piping systems and pipelines in optimum condition
• Assess a range of integrity threats and discussing key issues affecting the integrity of pipelines
• Recognise the different stages and procedures of pipeline integrity management
• Understand piping and pipeline failures, major threats and risks including time dependent degradation (corrosion, cracking, pitting etc) and also third party inflicted damages
• Learn and comprehend the inspection and monitoring process
• Develop a deeper understanding of integrity management plans and implementation procedures

Why You Should Not Miss This Event
Featuring comprehensive and structured reference materials, this intensive program is led by a renowned expert with more than 30 years of experience in prime engineering activities. It includes case studies, key concepts and relevant integrity management techniques, including defect assessment and repairs.

This program features the latest techniques used to develop a comprehensive integrity management program covering both pipelines and their associated facilities. Attendees will gain an in-depth understanding starting from design and selection of materials, all the way to construction codes and standards, pipeline integrity threats, the critical aspects of risk assessment, corrosion analysis and prevention, as well as the development of inspection programs.

Key Issues to be Addressed at this Professional Training
• Using the latest techniques to develop a comprehensive integrity management program for pipelines and their associated facilities
• An in-depth analysis of risk and defect assessment, as well as the critical aspects of risk assessment
• Procedures, strengths, limitations and applicability of a solid Pipeline Integrity Management program based on a risk-based approach
• The evaluation (analysis as per API 570) and prevention of corrosion
Who Should Attend
The course is specifically designed for project managers and technical personnel responsible for the management, implementation and reporting of pipeline integrity inspection activities, such as the following:

- Pipeline engineers
- Corrosion engineers
- Integrity specialists
- Consultants active in the fields of pipeline inspection and assessment
- Personnel from certification and regulatory bodies involved with pipeline inspection and pipeline integrity.

Also suitable for supervisors, engineers and technicians responsible for ensuring the adequate protection of pipeline assets; maintenance planners, regulators and service-providers to the pipeline industry.

Pre-event questionnaire
In order for this workshop to fully benefit you, a pre-course questionnaire will be sent to you in order to test the area where your training needs lies. The results from this questionnaire will ensure that this entire workshop will be delivered at a level that is catering to your needs.

Workshop Methodology
Highly interactive program with technical discussions, problem-solving exercises and case studies using an experiential learning training approach.

Partner
General marine and oil Services Ltd (GMO) Rc 228702 is one of the foremost Petroleum and Cargo Inspection Companies in Nigeria. Since inception, GMO has been in the fore front of providing quality services in its core areas of activities which include: Inspection, Laboratory Testing and Quality analysis, Quantity Certification, Calibration Services, EIA, Training and Consultancy Services among others. GMO activities are guided by integrity and professionalism and are executed with the highest professional ethics, by a crop of professional and well trained staff to the satisfaction of our clients and customers. GMO is the one stop vehicle for your business.

About the Course Facilitator

Narendra Kumar Roy  
Director  
Charisma Careers Pvt Ltd

Narendra is a director on the board of Charisma Careers Pvt. Ltd in Vadodara, India and is also advisor to Charisma Global Networks Ltd. in Auckland, New Zealand. Since 1984, he also served as an advisor to Gramya Research.

Graduating in Mechanical Engineering at the Bihar Institute of Technology, Sindri, Ranchi University, India in 1966, Narendra completed his Master of Engineering with specialization in Mechanical Machine Design at University of Roorkee; India two years later.

In 1994, he joined Jacobs Engineering (UK/USA) as a Project Engineering Consultant, heading all functions of Project Management and Engineering. Subsequently, he joined Humphreys & Glasgow Consultants Ltd as General Manager. Narendra was the Chief Engineer of Projects & Development India Ltd. under the Project Management Group before joining VXL India Ltd. as the General Manager (Technical). During his stint in VXL, Narendra was responsible for planning and establishing scientific Predictive Maintenance systems and Nondestructive Testing Laboratory. He also helped establish systems for life assessment of pipelines, equipments and boilers including corrosion monitoring.

He has co-authored 3 books on:
- Engineering Manual of Valves
- Thermal Insulation
- Project Management in Indian Scenario

Additionally, Narendra has published more than 120 papers in various national and international technical journals, as well as proceedings of the seminars and conferences with main areas related to pressure vessels, pumps and piping, pipeline designs & Inspection as per ASME and API Code. Narendra is the Honorary Editor of the Journal for Process Equipments & Piping Technology (J-PEP), published by Charisma Careers Pvt. Ltd (Gramya Research Analysis Institute), Vadodara, India.

Up to date, Narendra has conducted numerous trainings on pipeline technology, pipeline inspection, pipeline integrity management, process plant design and inspection in countries like Malaysia, India, Oman, Qatar, Indonesia and New Zealand. He frequently conducts trainings on Pressure Vessel Design, Inspection, in-service inspection, defect evaluation, safe life evaluation and related repairs & alterations.

Narendra is a professional member of the American Society of Mechanical Engineers (ASME), American Water Works Association (AWWA), Indian Institute of Metals, Society of Piping Engineers and Designers, USA, Project Management Institute, USA and is listed in Who is Who in the World.
Day 1
Tuesday, 28 March 2015

Module 1
Pipes & Pipeline Terminology & Components

- Selection of Pipes and Pipeline Components & Fittings
- Valves Types and Selection

Module 2
Pipeline Design & Construction Codes

- Piping Codes and Standards
- Metallic Piping Design as per ASME B31.3
- Liquid Hydrocarbon Pipeline design and Testing to ASME B31.4
- Gas Transmission Pipeline Design & Testing to ASME B31.8

Module 3
Selection of Piping Materials, Welding Processes

- Selection of Engineering Materials of Construction for Piping System
- Materials Selection Of Piping Systems for Saline Water Services
- Welding Specification of Carbon Steel & Alloy Steel Piping

Module 4
Welding Quality and Inspection

- Selection of Engineering Materials of Construction for Piping System
- Materials Selection Of Piping Systems for Saline Water Services
- Welding Specification of Carbon Steel & Alloy Steel Piping

End of Day 1
Module 5
Corrosion, Types and Prevention

- Designing to Minimize Different Types of Corrosion with Case Histories
- Corrosion Control & Cathodic Protection System of Pipelines
- Pipeline Corrosion Protection

Module 6
Pipeline Corrosion Evaluation, Safe Thickness

- Piping Inspection for Corrosion Evaluation, Analysis per API 570

Module 7
Inservice Piping and Pipeline Inspection, Evaluation

- Piping Inspection for Corrosion Evaluation, Analysis per API 570

End of Day 2
Day 3
Thursday, 30 April 2015

Module 8
Fitness for Service Issues

- Fitness for service, Understanding State of Technology API 579
- In-service Inspection for Safe Remaining Life of Pipelines & Systems

Module 9
Pipeline Integrity

- Gas Pipeline Integrity Threats, Consequences as per ASME B31.8 S

Module 10
Factors affecting Piping Integrity

- Introduction to Risk Based Inspection
- Purpose of Risk Based Inspection per API 581
- Development of Inspection Programs per RBI API 581

Module 11
Plant & Field Case Histories: Discussions & Solutions

- Post-course Test 2

End of Day 3

Other Relevant Programs by CapSource

- Onshore Pipeline Engineering
- JVs and Alliances in Oil and Gas
- Pressure Vessel Inspection, Defect Assessment And Repair
- Above Ground Atmospheric Storage Tanks
- Practical Pigging Operations
- Pipeline Repair Methods, Hot Tapping, & In-Service Welding
### Delegate Registration Form

**Delegate Registration Form**

**1st DELEGATE**

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**AUTHORISATION**

I understand and agree to CapSource terms and conditions (Signatory must be authorised to sign on behalf of contracting Organisation)

Name: __________________________
Job Title: _______________________
Date: ___________________________
Direct Line: _____________________

Company Stamp

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**INVOICE DETAILS**

Name: __________________________
Department & Job Title: ___________
E-mail: __________________________
Company: _________________________
Direct Line: _____________________

**FINANCE CONTACT DETAILS**

Name: __________________________
Department & Job Title: ___________
E-mail: __________________________
Company: _________________________
Direct Line: _____________________

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- For cancellations received in writing seven (7) days or less prior to an event (including day 7), participant is entitled to pay full amount (100%) stated on the invoice with no Credit Voucher issued, however the delegate will still be entitled to a complete set of course documentation.

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