This tutorial discusses the coatings and cathodic protection (CP) used to mitigate external corrosion oil and gas infrastructure. It describes various types of mainline coatings, girthweld coatings, repair coatings, insulators, and weight coatings (e.g., concrete coatings) used in the industry over 70 years. It presents the principles of CP and merits and demerits of different criteria used to apply CP. This tutorial also provides an overview of 50 standards on coatings and CP.

Ideal Participants
- Oil and gas personnel not familiar with strategies to control external corrosion

Maximum number of participants: 25

Materials
- “Corrosion Control in the Oil and Gas Industry” S. Papavinasam, Publisher: Gulf Professional Publishing (Imprint of Elsevier) ISBN: 978-0123-970-220, Oct. 15, 2013: Chapter 9 (This book will be available as reference material for the duration of the tutorial and may be bought at a reduced price by the participants).
- Handouts of the presentation

Tutorial Organisation
- The tutorial is typically offered over one full day in four sessions
- Each session is for 90 minutes duration

Tutorial Contents
- Introduction
- Coatings
  - Polymeric coatings
  - Girthweld coatings
  - Repair coatings
  - Insulators
  - Metallic (Thermal spray) coatings
  - Concrete coatings
- Cathodic protection
  - Principle
  - Amount of current
  - Current source
  - Potential criteria
  - Applicability of cathodic protection
  - Factors influencing the effectiveness of cathodic protection
  - Stray current effects of cathodic protection
  - Materials and accessories

Tutorial Outcome
The participants will acquire knowledge to effectively control external corrosion

Tutorial Fee
Contact: training@corrmagnet.com or see events