

Corrosion in Oil and Gas Industry

Dates: 7 - 9 February 2023.

Time: 09:00 a.m. - 02:00 p.m.

Fees: 200 K.D.

Objectives:

At the end of the course, participants will be able to:

- Cover some corrosion fundamentals, such as definitions, different environments, and CO₂ and H₂S corrosion deterioration. Understand the corrosion rate expressions, electrochemical reactions, polarization, passivity, and influence of flow rate.
- Know forms of corrosion, such as general, galvanic, pitting, erosion, stress, etc.
- Understand the gravimetric and some electrochemical measurement techniques, such as Potentiodynamic Polarization, Linear Polarization Resistance (LPR), and Electrochemical Impedance Spectroscopy (EIS).
- Understand the multiphase flow in petroleum pipelines, and analyze some corrosion failures in oil and gas industry. In addition, the course will introduce participants to different protection methods for oil and gas industry.
- Practically examine microstructure (optical microscope), material characterization, and calculate the corrosion rate (electrochemical methods).

Prerequisites: An understanding of basic chemistry and physics.

Instructors: Dr. Rihan Rihan, Eng. Bader Al-Wakaa, Eng. Abeer Al-Farhan, and Eng. Hanan AL-Enezi .

Participants: Individuals with a diploma or bachelor degree in engineering or chemistry who, wish to broaden their knowledge in the field of corrosion in oil and gas industry.

