

# Comparative study of deep learning and machine learning techniques for corrosion and cracks detection in nuclear power plants

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The detection of corrosion and cracks in nuclear power plants is a critical task that requires accurate and efficient monitoring systems. Traditional inspection methods can be time-consuming and may not be able to detect defects in hard-to-reach areas. In recent years, machine learning and deep learning techniques have emerged as promising alternatives for the detection of corrosion and cracks in nuclear power plants.

This paper will compare the latest research on machine learning and deep learning techniques for corrosion and crack detection in nuclear power plants. It includes an overview of the different machine learning and deep learning algorithms that have been applied in this field. This article also investigates the effect of different input features and transfer learning techniques on the accuracy of corrosion and crack detection models. Additionally, a systematic review of publicly available datasets for corrosion and crack detection in nuclear power plants will be presented.

## Speaker Bio

**Primary authors:** Mr AL-ABED ALLAH, Malik (Mechanical Engineering Department, King Fahd University of Petroleum & Minerals (KFUPM), Saudi Arabia); Dr SHAMS, Afaque (Mechanical Engineering Department, King Fahd University of Petroleum & Minerals (KFUPM), Saudi Arabia, Interdisciplinary Research Center for Renewable Energy and Power Systems (IRC-REPS), KFUPM, Saudi Arabia); Dr TOOR, Ihsan Ul Haq (Mechanical Engineering Department, King Fahd University of Petroleum & Minerals (KFUPM), Saudi Arabia, Interdisciplinary Research Center for Advanced Materials (IRC-AM), KFUPM, Saudi Arabia); Dr IQBAL, Naveed (Electrical Engineering Department, KFUPM, Saudi Arabia, Center for energy and Geo processing, KFUPM, Saudi Arabia)

**Presenter:** Mr AL-ABED ALLAH, Malik (Mechanical Engineering Department, King Fahd University of Petroleum & Minerals (KFUPM), Saudi Arabia)

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