

## **Seminar on Smart Scan – Germany**

Date: 12-July-2023, 10am – 4pm

Location: TH Deggendorf, Germany

Sponsored by: Deggendorf Institute of Technology, Ontario Tech  
University, NSERC

### **Invited Talk**

**Title: Smart Scan for Asset Integrity Using CT Technologies**

Speaker: Dr. Hossam A. Gabbar, PEng, Distinguished Lecturer  
IEEE NPSS, Director of Smart Energy Systems Lab, Ontario  
Tech University, Canada



#### **Abstract:**

This talk will present research advances on smart scan for integrity control in industrial facilities using computed tomography (CT). The talk will cover case studies from nuclear power plant where 2D/3D intelligent algorithms are developed to detect anomalies with incremental learning techniques.

#### **Bio**

Dr. Gabbar is a full Professor in the Department of Energy and Nuclear Engineering, the Faculty of Engineering and Applied Science, at Ontario Tech University (UOIT), where he has established the Smart Energy Systems Lab (SESL). He is the recipient of the Senior Research Excellence Award for 2016, UOIT. He is recognized among the top 2% of worldwide scientists with high citation in the area of smart energy. He is a Distinguished Lecturer of IEEE NPSS. He is leading national and international research in the areas of smart energy, safety engineering, and interconnected infrastructures. Dr. Gabbar obtained his B.Sc. degree in 1988 with first class of honor from the Faculty of Engineering, Alexandria University (Egypt). In 2001, he obtained his Ph.D. degree from Okayama University (Japan). From 2001 till 2004, he joined Tokyo Institute of Technology (Japan), as a research associate. From 2004 till 2008, he joined Okayama University (Japan) as an Associate Professor, in the Division of Industrial Innovation Sciences. From 2007 till 2008, he was a Visiting Professor at the University of Toronto. He also worked as process control, safety, and automation specialist in energy and oil & gas industries. Dr. Gabbar has more than 250 publications, including patents, books / chapters, journal, and conference papers.