

SAFETY IN ENGINEERING SPECIAL INTEREST GROUP (SESIG

## Synopsis

This presentation introduces TRIZ (Theory of Inventive Problem Solving) as a systematic methodology for fostering innovation and problem-solving. TRIZ offers structured tools to address challenges by identifying patterns of inventive solutions. The session begins with an overview of TRIZ principles and its problem-solving framework. It then explores how TRIZ can be effectively applied in Occupational Safety and Health (OSH) and safety engineering to mitigate risks, enhance workplace safety, and develop proactive hazard control measures. Through real-world examples, attendees will gain insights into leveraging TRIZ for continuous safety improvements and innovative OSH solutions.

## Speaker

Dr. Zaki Yamani Bin Zakaria is a Senior Lecturer at the School of Chemical and Energy Engineering, Universiti Teknologi Malaysia (UTM). He holds a Ph.D. in Chemical Engineering from UTM and has expertise in catalytic reaction engineering, process safety, and engineering education research. With a strong academic and professional background, Dr. Zaki is a member of several engineering institutions, including IEM, BEM, and IChemE. He has received numerous awards for his research and contributions to education. Dr. Zaki has also been actively involved in consultancy, research projects, and academic leadership roles at UTM, significantly impacting the engineering field.