



# *Root Cause Failure Analysis for Machinery and Piping Part 1: Introduction to RCFA*

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**Middle East Turbomachinery Symposium Short Course 7**

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## Schedule

## Agenda

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- 08:30 Class Start
- 10:00 Morning Break
- 12:00 Lunch
- 13:00 Resume Class
- 15:00 Afternoon Break
- 17:00 End Class

- Introduction
- RCFA Process Initial Steps
- Metallurgy for Failure Analysis
- Summary of Fracture Modes
- Modal Test Demonstration & Class Exercise
- Dynamics for Failure Analysis
- RCFA Process – Analysis and Solutions
- RCFA Class Exercise



# Instructors

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- Tim Allison, Ph.D.
  - 9 years experience, 7 years at SwRI
  - Interests include failure analysis, machinery dynamics, experimental methods
  - [tim.allison@swri.org](mailto:tim.allison@swri.org)
- Thomas Chirathadam, Ph.D.
  - 5 years experience, 3 years at SwRI
  - Interests include machinery design, life analysis, and failure studies
  - [thomas.chirathadam@swri.org](mailto:thomas.chirathadam@swri.org)