

## PRESENT A JOINT DINNER MEETING

### "Identifying Procedural Non-Compliance and Latent Causes of Repeated Machinery Failures"

**Date:** Thursday, May 19, 2022

**Time:** 5:30 pm Social Hour: Fellowship and Networking

6:30 pm Dinner

7:30 pm Brief Presentation by Social Sponsor: Allied High Tech

7:40 Main Presentation

**Place:** HOLIDAY INN GRAND RAPIDS-AIRPORT

3063 Lake Eastbrook Blvd. SE

(616) 285-7600

Social Sponsor:  
Allied High Tech

**Cost:** Members and Non-members \$30.00

Students, retirees and unemployed \$15.00

Payment in advance (before Monday, May 16, NOON!) by credit card at links below

OR (For members and their guests ONLY) check or cash at the door.

Credit Card with NO FEE before Wednesday, May 19, 4:00 pm EDT

Non-Members must pay in advance at this link: Members, Non-Members, Guests & Guest (\$30):

<https://eportal.asminternational.org/myasm/s/store#/store/browse/detail/a174R00000KsyKYQAZ>

Student, Retired, & Unemployed (\$15):

<https://eportal.asminternational.org/myasm/s/store#/store/browse/detail/a174R00000KsyKiQAJ>

RESERVATIONS TO [DaAliya@itothen.com](mailto:DaAliya@itothen.com) **Sign up by Monday, May 16, at NOON!**

Please email Debbie at [DaAliya@itothen.com](mailto:DaAliya@itothen.com) EVEN IF YOU sign up on the ASMI Website.

Folks: The new normal means you must sign up on time. Please! Holiday Inn is less flexible than our other recent venue. Please sign up now while you are thinking about it.

**Reserve now! Even if you pay through the ASM International link, please send names and company affiliations for name tags to [DaAliya@itothen.com](mailto:DaAliya@itothen.com).**

**Menu: Stuffed Chicken Dinner. If you require a Vegetarian or other special meal, please inquire.**

### **PRESENTATION DETAILS: Family and Friends are Welcome!**

This presentation is about the experience of discovering procedural non-compliance as a root-cause of several critical equipment failures. These are often failures that many others had previously investigated but had not identified root-causes of the failures. By recognizing that there are 3 areas to consider when analyzing failure---- physical, human, and latent---- the mindset of the investigator broadens to consider more than the broken

component. To illustrate the concepts, a basic summary of three major equipment failures will be used to show how the physical, human, and latent causes of failure can lead to procedural non-compliance. In basic terms, people do not always follow the outlined procedures, but they don't seem to realize it. Additionally, certain "red flags" will be presented in plain terms that can alert the investigator to the possible existence of procedural non-compliance as a root-cause. By recognizing the existence of these types of failure causes, the investigator can more easily determine root-causes of failure.

Don't miss this opportunity to hear from an experienced person with a unique viewpoint. Note that this presentation is an adaptation of three excellent talks that Phil presented at IMAT in St. Louis in 2021. If you work at a company that uses equipment, join us! Gain a new perspective!

**SPEAKER BIO:** Phil Hailes has thirty-five years of practical engineering experience in the power generation, mining, and manufacturing industries. His special skill is his particular ability to resolve recurring equipment problems through the use of failure and fracture analysis, NDT techniques, engineering principles and "hands-on" experience, as well as his insight into human factors. He is currently Lead Engineer at Intermountain Power Plant, in Delta, UT, where he has been since 1999. Before that he worked in various maintenance and reliability engineering positions in the mining industry. He obtained his BS in Mechanical Engineering and MBA from Brigham Young University, in Provo, UT. He has also served on the OWNER-USER COMMISSION, National Board of Boiler and Pressure Vessel Inspectors (2005), and is a member of the AMERICAN SOCIETY OF CIVIL ENGINEERS, Forensics Div, Education Committee. He has had varied experiences, going back to nuclear submarine overhauls with General Dynamics, and various maintenance and troubleshooting work early in his career at Cummins Engine and Caterpillar, Inc.

### **UPCOMING PROGRAM:**

**Some members of the chapter have inquired about a local failure analysis seminar, maybe this summer.**

**This would be an in-person event, with "eyes – brains – hands" involved.**

**If you are interested, please email Debbie Aliya at [DaAliya@itothen.com](mailto:DaAliya@itothen.com)**

**If you have other training needs, please also let a board member know!**