

# HIGH ENERGY PIPING (HEP) SEMINAR

## JANUARY 31<sup>ST</sup> - FEBRUARY 2<sup>ND</sup>, 2023

### COURSE DESCRIPTION

Our High Energy Piping (HEP) Seminar for the Power Industry will be held over 2.5 days (January 31<sup>st</sup> – until noon on February 2<sup>nd</sup>) in Austin, TX. During this time, we'll share our comprehensive expertise on specific topics geared towards being proactive with regards to managing these assets. As the energy landscape has shifted and the call for more flexible operation has increased, it's important that strategies are in place to ensure personnel safety and unit reliability are maintained. SI aims to provide attendees with a rich educational experience surrounding the following technology areas to provide a holistic review of component health:

#### Engineering Analysis

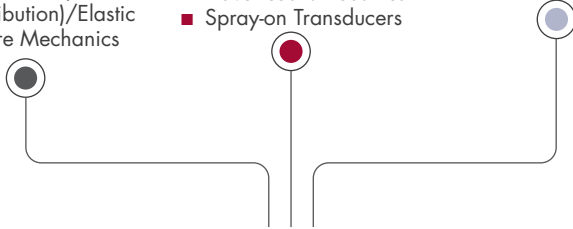
- Stress Analysis
- Inelastic (creep redistribution)/Elastic
- Fracture Mechanics

#### Non-destructive Examinations

- Advanced Ultrasonics
- Spray-on Transducers

#### Materials

- Condition Assessment
- Failure Analysis



### CONTINUOUS MONITORING & DATA MANAGEMENT

#### EVENT DETAILS

**Event Date:** Tuesday, January 31<sup>st</sup> - Thursday, February 2<sup>nd</sup>

**Duration:** 8:00am to 5:00pm Tues. and Wed.  
8:00am to 12:00pm on Thurs.

**Individual Price:** \$1,195

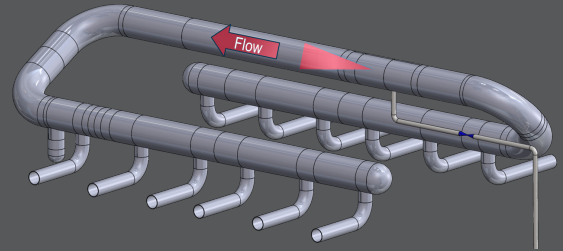
**Location:** Lone Star Court  
10901 Domain Drive Austin, Texas 78758  
Telephone: 512-814-2625

#### REGISTRATION

[www.structint.com/high-energy-piping-hep-seminar](http://www.structint.com/high-energy-piping-hep-seminar)

### THIS SEMINAR IS ESPECIALLY RELEVANT FOR

- Plant Managers
- System Engineers and Managers
- Corporate Piping Engineers
- Metallurgists
- Engineering and Maintenance Managers
- Anyone interested in gaining knowledge of high energy piping systems is welcome



### COURSE TOPICS

#### Development and Management of an HEP program

- Elements of a program
- Components and systems included
- Code requirements
- Best practices

#### Stress analyses (explanation of the intricacies, when, what, and how to apply)

- Creep redistribution
- Creep lifetime prediction
- Creep crack growth
- Fatigue: aspects of cycling (operational data needs)

#### Metallurgical analyses (lab tour of SI's Materials Lab, which may include an interactive review of samples)

- Piping damage mechanism
- Industry issues
- Grade 91 refresher/update

#### Application of NDE (new techniques, post-processing methods, when, what, and how to apply)

- Code versus serviceability examinations
- Post-processing methods
- Spray-on transducers
- Technique and component matching

#### Continuous monitoring and data management

- Data to be managed
- PlantTrack™
- Online monitoring → damage tracking

### INSTRUCTORS

**Ben Ruchte** – Director, Senior Metallurgist

**Kane Riggerbauch** – Senior Consultant, Analytical Services

**Steve Gressler** – Technical Director/Account Executive

