



# Safety Risks in Boilers & Fire Systems



**When:** April 6, 2011 from 1:00 - 5:00pm

**Where:** EHS Partnerships Ltd. 4303—11 Street SE; Calgary, AB

**Cost:** \$45.00

Pre-Registration is required online at the CSSE website ([www.cssecalgary.com](http://www.cssecalgary.com))

## Objective

The objective is to transfer the essential concepts and promote the importance of improving safety at the workplaces related to Boilers & Fired Systems. This seminar will also discuss the importance of the integration of Health, Safety and Environmental departments with the objectives of maintenance and production areas and using maintenance, operation and safety instrumented systems data to strengthen HSE predictions.

The first part includes the fundamental concepts of safety in boilers and fired systems risks and then a general description of safety risks & recommendations of prevention measures.

The second part contains a basic description of safety instrumented system applications in boilers and fired systems. Participants will do a basic practice, including completion of a hazard assessment, discussion and selection of critical safety risks and implementing controls and prevention measures.

The third part includes a general guideline for a safety management plan applied to boilers & fired systems. The importance of an economical evaluation to demonstrate the benefits obtained by improving safety and efficiency will be discussed.

## Speakers

**Carlos Batista Msc P. Eng.** - CBA Engineering Support Services

- Bachelor in Mechanical Engineering
- Msc. Environmental Diagnosis and Assessment and Msc. Occupational Health & Safety
- Environmental Management ( University of Calgary)
- 18 years of experience in oil refinery, electric power generation, gas pipelines construction; landfills gas facilities, manufacturing, food industry and maintenance
- Teacher Assistant ( Part time) in Thermodynamic courses (1987- 1997) and Researcher in combustion processes (1988-1990)
- **Co Facilitator** of Study Group for APEGGA National Practice Examination at Bow Valley College, Calgary, Alberta (2010-present)
- Instructor in the General Fundamental of Engineering Course

**Edgar Delgado, P. Eng, CAP, CFSE** - Owner at Diversified Process Solutions Inc.

- Bachelor in Electronics Engineering
- Certified Functional Safety Expert by the CFSE Governance Board and Certified Automation Professional by ISA.
- Over 13 years of experience as specialist in Instrumentation, Control and Automation
- Experienced in detailed engineering phase of various sized projects within several industrial facilities including oil and gas offshore platforms, Oil Sand operations, refineries, chemical facilities and mass production food plants
- Broad expertise in application development, testing, and start-up of Safety Instrumented Systems (SIS) and Burner Management System (BMS).
- Well versed in IEC61511, IEC 61508, ISA84, and CSA B149.3 industrial standards and procedures.

## SEMINAR SCHEDULE

**12:30-1:00**

Registration

**1:00—1:30**

Fundamental Concepts of Safety in Boiler & Fired Systems

**1:30— 2:00**

Safety Risks & Recommendations of Prevention Measures

**2:00—2:10**

Refreshment break and networking

**2:10—2:40**

Safety Instrumented Systems Applications in Boilers and Fired Equipment

**2:40—3:20**

Hazard Assessment and Controls

**3:20—3:30**

Refreshment break and networking

**3:30—4:00**

Guidelines for a Safety Management Plan Applied Boilers & Fired Systems

**4:00—4:40**

Basic Financial Evaluation and Benefits for Improving, Safety and Efficiency

**4:40—5:00**

Conclusions and Q&A

**To register, visit the CSSE website at [www.cssecalgary.com](http://www.cssecalgary.com).**