

# APTI 427 - Combustion Source Evaluation

APTI 427 - Combustion Source Evaluation: 3.5 to 4.5 days

Principal instructor: Dr. Brian Doyle

Supplemental instructor: Gary Saunders.

Dr Doyle wrote the Student Manual and the slide presentations for this course for EPA (subcontract to ICES) in 2003. Subsequently he has taught it to a video camera for EPA as well as in a class room setting.

## Benefits:

This is a relatively advanced (Level IV) course that presumes some familiarity with combustion sources. It provides a more in-depth study than the Combustion Source Inspection course. There is an emphasis on understanding how real combustion systems work. Basic analytical relationships for fuel flow, air flow and emission calculation are presented. Each chapter has review problems/questions.

## Target Audience:

This is a fairly technical course targetted to those involved with air pollution inspection, permitting, regulation or management of combustion sources. The course can be challenging for students with limited experience around combustion sources but the vast majority have found it beneficial and have passed the final exam..

## Topics:

- Description of the various types of combustion systems
- Fuel characteristics and analysis
- Combustion fundamentals, quantitative relationships, premixed combustion
- Formation and control of major air pollutants