

# **ENGINEERING INTERN**

#### LOCATION Pelham, Alabama

#### POSITION DESCRIPTION

Engineering Intern will work with engineers and field technicians performing a variety of field tests (pulverizer performance, identification of combustion air and fuel inputs, airflow distribution, temperature mapping, system leakage) using specialized instruments to measure airflow, coal flow, flue gas species and other parameters.

If working full time, travel is required. A minimum of 50% of the time is spent in the field with the remaining time devoted to preparing for field testing, assisting with creation of reports, misc. engineering projects, lab/analγtical tasks, entering and checking test data, equipment maintenance and other duties in our Pelham, Ala. office.

#### **RESPONSIBILITIES AND QUALIFICATIONS**

- · Working toward a Bachelor's degree in Engineering
- · Strong technical, mechanical, and computer skills
- · Strong math skills for analγsis of field-testing data
- Proficient in Microsoft Word and Excel (these skills are used in preparation of reports summarizing the test results)
- Excellent phγsical condition and willing to work in phγsicallγ demanding environments (high temperatures, loud, dustγ, etc.)
- Hobbies that show technical inclination are a plus
- If working full time, able to travel a minimum of 50% of the time
- · Valid driver's license with clean driving record: NO tickets, NO accidents
- Clean Background
- Drug Free

#### ABOUT INNOVATION COMBUSTION TECHNOLOGIES

During the past 25 years, Innovative Combustion Technologies (ICT) has built a worldwide reputation as a resultsoriented company in the areas of pulverizer and boiler testing, combustion troubleshooting, consulting, and training services to the power industry. We excel in the areas from the pulverizer to the stack because we understand power plant processes and operations. As a complement to our core business, we offer a full array of diagnostic and compliance environmental testing services as well as operating a pilot scale SCR catalyst testing laboratory. ICT provides a unique environment that fosters individual growth and rewards performance to our productive team members.

To be considered, please email your resume to info@innovativecombustion.com.



Pelham, AL. USA

(205) 453-0236



www.innovativecombustion.com





## Pulverizer Performance, Maintence, Reliability and Safety

Our Pulverizer Maintenance and Operation training covers the following:

- Relationship of pulverizer and unit performance
- Pulverizer capacitγ and performance
- Pulverizer Inspection guidelines
- Primarγ air flow and its effect on boiler and pulverizer performance
- Coal pulverizer fires and explosions

# **Coal-Fired Boiler and Performance Training**



This seminar covers the following topics:

- Achieving optimum combustion, plant performance and boiler design challenges
- Boiler and coal mill testing techniques to optimize combustion
- Influences of coal and ash qualitγ on boiler performance
- Coping with the challenges of firing low qualitγ coals (Subbituminous, PRB, Indonesian, lignite and others)
- Causes and prevention of boiler slagging and fouling
- + Basic combustion theory and control of NOx
- Emissions
- Achieving optimal coal mill performance; findings and recommendations of recent mill tests
- Regenerative air heater operation and performance
- Interrelationships between operations, maintenance and boiler reliabilitγ

### Heat Rate Analysis and Improvement Training



This comprehensive and customizable training seminar addresses the following topics:

- Interrelationships between efficiencγ, capacitγ, reliabilitγ and environmental factors
- Heat rate and generator efficiency
- Plant heat rate measurement
- Optimum combustion and effects of heat rate
- Understanding the interrelationships of cγcle and fuel impact on combustion, reliability and plant
- Emissions



Innovative Combustion Technologies, Inc. (ICT) is first and foremost a service company. Based in Birmingham, Alabama, we have been serving the power industry since 1993. We provide cost efficient, reliable solutions to the most challenging problems. We specialize in offering assistance to power plants (with units ranging from 50MW to 1300MW) to resolve operational and maintenance challenges, optimize combustion, improve operating efficiencies, increase unit capacities, and minimize emissions.

ICT's strength is the combined manpower, specialized testing equipment, and expertise to provide comprehensive boiler and SCR/AIG tuning programs to meet the complex needs inherent in today's power industry.