

Juschem Solutions Pvt. Ltd. presents a much needed highly interactive training
on

“An Insight to Coal Quality & Combustion”



An Insight Coal Quality and Combustion provides an understanding of the importance of managing coal quality from the exploration to mining and transportation. It also provides an overview of the end-use of coal by the coal users power generation sectors and the impact of coal quality on these processes. The training emphasizes the need to optimize a coal resource, a product's specifications and correct method of sampling and analysis to deliver optimum combustion to maximize profitability.

This training is an ideal introduction for users of the coal, particularly quality professionals or operation or station head senior personnel who need to understand the “bigger picture” behind coal quality. Over the years, several hundred people have been through this training in India

The course includes two days of lecturing, discussion and case studies. Training material is also provided which covers the topics addressed during the sessions.

For Your In-House Training Requirement

Topics covered

An Introduction to Coal

coal formation, coal rank, coal type, coal impurities and coal classification.

Sampling

precision, accuracy, bias, uncertainty, the seven golden rules of sampling, manual sampling, automatic samplers.

Coal Analysis

coal analytical tests and laboratory calculations, laboratory quality control.

Case Study

Loss in GCV between as billed, as received and as fired in biggest power Generation Company

Coal Quality and impact on Boiler

Coal Quality considered during design of boiler and the effect on boiler due to quality variation

Coal Combustion

the PF power-station and the impact of coal quality on power generation, and environmental considerations.

Experience with Imported coal

Case study

Presenter



Soumitra Banerjee M.Sc. Applied Chemistry
Chief Technical Officer

25 years' experience in coal sampling-analysis and Power Plant Chemistry.

Mr. S Banerjee is a seasoned power plant Chemistry and water treatment professional with in-hand experience of about 23 yrs after passing M.Sc. Applied Chemistry from Government Engineering College, Jabalpur in 1995. He has worked with India's Pioneer Water Treatment Company and with Giant Private Power Generators in India viz. Tata Power, Adani Power, Jindal Power, LPGCL as HOD Power Station Chemistry and Environment. He has both experiences of sub critical and super critical power plants, commissioning-O&M and troubleshooting of water treatment plants, boiler water, cooling water, stator water and waste water. He was also associated with a reputed Institute of Power Technology as a faculty on Water treatment and Power Plant Chemistry. He has presented many papers on water treatment, power plant chemistry and water management in national seminars and magazines and also **written an academic text book on water treatment - power plant chemistry** for regular post graduate degree curriculum of Jindal Institute of power technology. Mr. Banerjee is currently the owner of Juschem Solutions Pvt. Ltd., serving on power plant chemistry and water treatment also working as consultant to many companies.

Day 1

- Origin of Coal
- Coal Formation
- Composition of Coals
- Maceral groups
- Chemical Structure of Coal
- Brief about coal mining
- Coal reserves and production statistics in India
- Overview of Coal Handling Plant
- Coal Classification
- Composition of Coal
- Characteristics of Coal
- Grades of Coal in India
- Coal Pricing as per Govt. of India of different grades
- Coal Rank
- National And International Standards for coal sampling and analysis
- SOP for Coal Sampling
- Collection of samples (lots-sub lots)
- Precautions during sampling
- Discussion on IS 436

Day 2

- Analysis
- Proximate & Ultimate Analysis
- Discussion on IS 1350
- Activity – Example of Proximate Analysis
- Significance of Various Parameters in Proximate Analysis
- ISO, GB and ASTM
- GCV analysis
- CAG investigation report on NTPC (Case study)
- Awareness of AFT, CHNS, TGA
- ARB, ADB, DB, DAF
- Influence of Coal Properties on Combustion
- Coal Quality and Boiler Efficiency
- How Boiler Design is affected by Coal
- Influence on Coal Mill
- Experience with Imported Coal

Question and Answer sessions

Course information

When? On Demand.

Venue

In House or through Microsoft Teams
(Enquiry for in-house training are welcome)

Additional

Course Material in Soft + training video

All enquiries invited at +91 7985635683
email: contact@just-chemicals.com