

Consultant / Trainer  
**Jan Zander**



The **Petrogenium**. Boiler Water Treatment and Demineralisation course provides understanding and guidance to staff, with the purpose to improve the reliability, efficiency and effectiveness of steam generation and distribution at your refinery, petrochemical complex or LNG facility. Over many years the Petrogenium experts gathered deep technical expertise in the operation and troubleshooting of all Utility complex aspects and its associated equipment. This knowledge and resulting best practices were collected and built the foundation for the course.



### Participants

This **Petrogenium**. course targets both inexperienced, and experienced staff. Depending on questions that may be raised in advance, the course can be slightly customized for a specific refinery, plant or unit. The option for post-course consultancy/help-desk support is also available.

Participants may include: (new) engineers and senior operational staff whereas based on the attendee profile a more theoretical or practical course approach can be followed. If desired the 2-day can be structured with site specific support activities and exercises during various sessions.



### Learning Objectives

Understanding of all factors related to steam generation to improve the reliability, efficiency and effectiveness of steam production units and distribution at refineries, petrochemical complexes or LNG facilities. Knowledge and skills in solving problems that are experienced in many manufacturers' sites but are not described in detail in most textbooks, in order to help the participants in trouble shooting several steam systems once they come across these issues.

# Programme

## DAY 1

- Introduction
  - Basic water chemistry
  - Water sources & surge
  - Sedimentation & clarification
  - Filtration
  - Ion exchange / demin plant
  - Water integrity protection
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## DAY 2

- De-aeration & oxygen scavenging
- BFW pumps & NPSH
- Boilers & combustion basics
- Boiler water treatment
- Condensate treatment
- Steam distribution, control & dynamics

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### Why select Petrogenium.?

The above support will be provided by principal consultants with 30+ years world-class experience in the technology and hands-on know-how from operation of refinery units.

### Contact Petrogenium.:

Email: [training@petrogenium.com](mailto:training@petrogenium.com)

Website: <https://www.petrogenium.com/training/>

***Because Experience Matters***