

PPCHEM FORUM SOUTH AFRICA

PPCHEM Forum South Africa
The Venue, Pretoria, South Africa
November 13–14, 2019



Objective

Plant damage caused by corrosion, unplanned shutdowns, and/or impairment of efficiency and plant performance for chemical reasons are still among the major root causes of huge economic losses.

Often an inadequate selection of the individual chemical regime or inappropriate chemical monitoring in conjunction with countermeasures applied too late are reasons for these setbacks. The forum will demonstrate by selected case studies the possible negative economic impacts as well as how an optimum plant chemistry can contribute to improving the economic situation of the individual plant.

A fundamental understanding of the interaction between the water qualities occurring in the power plant, the various materials used, and the different processes and conditions of the individual systems is of essential importance to avoid these impacts and to improve the economic benefits.

This forum offers easy-to-understand insights into the aims and tasks of power plant chemistry, as well as into the necessary basics, such as water chemistry, corrosion science, etc., not only to chemical specialists, but also to the "non-chemist".

The different possible operating regimes, the relevant guidelines (e.g. IAPWS, EPRI, VGB), and the correct and optimum selection and application in relation to the individual plant design will be demonstrated, as well as the necessary considerations for the operational monitoring concept.

Language: The forum will be held in English.

Duration: 2 days

Location: The Venue, Summit Place Office Park, Pretoria, South Africa

Registration Fees

- Early Bird Fee: 200.00 USD
- Regular Fee: 250.00 USD
- Early Bird Fee available until August 31, 2019.
- The registration fee includes buffet lunch, dinner as well as morning coffee and afternoon tea.
- The fee also includes an e-paper subscription to the PowerPlant Chemistry® journal from January/February 2020 until November/December 2020.
- Participants are kindly asked to book their own hotel rooms.

Event Registration

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Content / Major Topics

1. Case studies of damage and impairment due to chemistry and the relevant economic effects

2. Basics of power plant chemistry

- General water chemical principles
- Materials, corrosion and deposits
- Standstill corrosion
- FAC (flow-accelerated corrosion)
- Water treatment

3. Sampling, monitoring and data management

- Considerations for proper sampling extraction and rooting
- Changing the water chemistry means changing the monitoring concept
- "Garbage in \leftrightarrow Garbage out" – Correct monitoring starts at the extraction and handling of the sample
- Obligatorily needed – "Nice to have" – Expensive "gimmick" without benefit

4. Chemical operating regimes and guidelines

- Applicable standards (e.g. IAPWS, VGB, and others)
- Turbine guidelines
- Boiler types and design and the resulting requirements on plant chemistry
- Application of organic treatment chemicals/products (risks, special requirements)
- Chemical measures and action during the different operational phases (start-up, cycling, base load, shutdown, and lay-up)

5. Effective cycle chemistry management

- What does effective cycle chemistry look like?
- What does a chemist need to know and do to be successful?
- How can chemistry risks be communicated to engineers and managers?
- How can major chemistry upsets be managed?

6. Cooling water systems

For further information or questions on the agenda, please contact Michael Rziha at michael.rziha@ppchem.com.