

## On-line Course in Corrosion and Water Chemistry



Scandinavian branch of the International Association for the Properties of Water and Steam

c/o IDA, Kalvebod Brygge 31-33,  
1780 København V

### First SIAPWS Water Chemistry Network Course

SIAPWS is happy to announce the first course held in relation to the SIAPWS Water Chemistry Network. The intention of these is to provide courses that you attend from your pc, but still with the possibility to ask questions and discuss with the other attendants and the lecturer. The debut course is presented below:

#### Corrosion types

The first lecture gives an overview of the different corrosion types that may appear in a power plant. This covers both the water-steam side and the flue gas side of the plant. The goal is to present the preconditions for the different types of corrosion and give examples of the appearance so that they may be identified by non-experts.

Key words:

- Uniform and pitting corrosion
- Stress corrosion cracking and corrosion fatigue
- Erosion corrosion, flow accelerated corrosion
- Crevice corrosion
- Galvanic corrosion
- Hydrogen corrosion
- Microbial corrosion
- High temperature corrosion

#### Corrosion and water chemistry

The second lecture goes through the corrosion types that may appear in the water-steam circuit. The focus is on the components of the circuit and the corrosion types that they are susceptible for, and how the corrosion may be minimised by optimising water chemistry and conservation.

Key words:

- Water chemistry and iron oxides
- Uniform corrosion versus pitting corrosion
- Erosion corrosion
- Components versus corrosion
- Salts in the water-steam circuit
- Preservation

#### Format and registration

The course is held as a Skype meeting lasting 2 x 1 h approximately. When you register, you will receive an invitation to each lecture with a link for joining.

Date and time: 1<sup>st</sup> lecture: Wednesday, May 10<sup>th</sup>, 14:00  
2<sup>nd</sup> lecture: Thursday, May 11<sup>th</sup>, 14:00

Price: 2 x 900 DKK, i.e. 1800 DKK in total

Registration: [IDA course website](#)

Please, register before May, 8<sup>th</sup>

If you have questions regarding SIAPWS or the SIAPWS Water Chemistry Network, please feel free to contact the SIAPWS Committee:

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Links:

[Minutes—SIAPWS Annual Meeting, 30 March, Bristaverket](#)

[SIAPWS open website \(@Matarvattensektion.se\)](#)

[SIAPWS Open Facebook Group](#)

[SIAPWS Member Facebook Group](#)

[SIAPWS Water Chemistry Network web-](#)



## Minutes of the SIAPWS Annual Meeting, March 30<sup>th</sup>, Brista CHP

[Link to full version](#)



The meeting was kindly hosted by Brista CHP, and the SIAPWS Committee would like to express gratitude for the hospitality, the presentation of the plant and the visit by Sarah Sjögren.

The annual report of the Chair concluded that 2016 was an active year with the introduction of the SIAPWS Water Chemistry Network. The network directly follows up on the discussion at the 2016 annual meeting on how best to promote transfer of knowledge from old to young colleagues and share experiences in general.

On the international front, the IAPWS meeting in Dresden in September 2016 was very successful with release of new Technical Guidance Documents and intense discussion and work in the Power Cycle Chemistry subgroup. SIAPWS is involved in the preparation of two of the upcoming Technical Guidance Documents.

The member fees stays the same in 2017 as in the previous years, i.e.

Group member	Company with several plants, 4 or more participants	Fee: 2000 €/year
Company member	Company with few plants, up to 3 participants	Fee: 300 €/year
Institution	University, research company	Fee: 100 €/year
Personal member	Small company, private person, one named participant	Fee: 50 €/year

The finances of SIAPWS in 2016 has improved the net balance to 136.000 DKK, because the income from the member fees was substantially higher than the expenses. It is important to save up money for the next international meeting to be hosted by SIAPWS within the next decade

Karsten Thomsen and Roger Lundberg were on election for the Executive Committee according to schedule. Both were re-elected for the coming two-year period. Jørgen Peter Jensen had to withdraw from the committee, and Monika Nielsen were elected instead. Both are employed by Dong Energy.

Karsten Thomsen was elected as leader of the SIAPWS delegation for the next annual meeting in Kyoto, Japan, in late August.

After these formal points of the agenda, Karsten Thomsen presented an account of the IAPWS meeting in Dresden and summarised the thoughts behind the SIAPWS Water Chemistry Network.

The workshop consisted of three interesting presentations:

- 1) Hampus Belander presented experiences with an evaporation unit for the concentrate from treatment of flue gas condensate. This makes it possible by simple means to concentrate the salts in the reject further and to saturate the combustion air for the boiler.
- 2) Roger Lundberg told about the development of the water treatment for flue gas condensate over the last decade or so. He summarised the changes in technology over time and the experiences gained to reach the present stage.
- 3) Lastly, Sarah Sjögren summarised the flue gas condensate treatment at Brista CHP and the changes that it had undergone to reach the present well-functioning condensate treatment plant.

The meeting ended with a plant visit to the new Brista plant.

