

## Minutes of SIAPWS EC 2017-8 (03.11.2017)



### 1. Update since last meeting

IAPWS work on Corrosion Product Sampling.

The student in mind for the project has chosen to work with something else, and therefore we must search for a new candidate. We will search for a new student and expect the work to be finished for the IAPWS meeting in 2019.

### 2. Billing status from 2017

*“Analyses for the fee” agreement*

Some laboratories have been contacted regarding this setup. No one has yet responded. We will follow up on that.

*Ordinary Billing*

In progress – invoices will be shipped in November 2017.

*Follow up on normal members*

EON Wärme will be a Group member in 2017. In 2018 they will evaluate the member ship form (Group member or Company member)

### 3. SIAPWS Water Chemistry Network

#### 3.1. Course evaluation

Evaluation of Corrosion course on 1. and 2. November 2017.

Unfortunately, only 4 participants, but the feedback was very positive.

#### 3.2. Course planning for Water Chemistry Network

Course planning is ongoing and there is now an overall plan for the coming year (see next page).

We will promote the courses on the Matarvattenkonferensen 2017.

### 4. Matarvattenkonferensen 2017

No remarks.

### 5. Next annual SIAPWS meeting

The next annual SIAPWS meeting was discussed.

Karsten will contact Jere Espo from Finland about the next meeting, and Roger will contact Söder Energi.

### 6. Next EC meeting

Karsten will make the calendar booking – 5. December 2017.

We will invite Mats Hellmann and Jere Espo as associated members to the EC. This is to include Finland in the SIAPWS work and get a stronger position in Sweden.

## Scope of the course

The course is intended for:

- Chemists on energy and industrial plants with water treatment and water steam chemistry
- Young chemists that wants a comprehensive introduction to the water chemistry area
- Experienced chemists who want to extend their network to learn from other and find sparring for the daily operation of the plants
- Practical people/technicians who have experience in the field, but want an introduction to the theory behind.

## Course content

Theme	Swedish Handbook	Other references	Presenter/Remark,
Failure, failure mechanisms, inspection of boilers and turbines	Kap. 4, 5, 12	TGD on turbine chemistry	Leona Korcakova
Water treatment incl. flue gas condensate treatment, troubleshooting, optimization, bacterial attacks	Kap. 6, 14	TGD on demin plant integrity, VGB standards	Roger Lundberg Starting point for a planned workshop on FGC-treatment
Preservation, conservation of plants	Kap. 11	Several TGDs	Mats Hellman
Circuits on energy plants, water-steam circuit, district heating circuits, cooling circuits. Transport mechanisms, depositions, removal of contaminants	Kap. 3.3-3.6 Kap. 7-8	Danish District Heating Assoc. Rec. Corrosion Protection and Water Treatment, German standard AGFW FW-510	Karsten Thomsen
General water chemistry Physical chemistry, equilibria, distribution, solubility, analytic parameters	Kap. 2.5	VGB S-010	Karsten Thomsen Supplemented by own figures, calculations
Water steam chemistry, conditioning, water treatment in the circuit, troubleshooting, how to attack the problem	Kap. 7-8, 10	TGDs on conditioning	Mats Hellman
Control and supervision, instrumentation, quality assurance, data processing, sampling systems	Kap. 9	TGD on instrumentation, TGD on corrosion product sampling and analysis	Karsten Thomsen

The first three courses are planned to the spring of 2018, the next four for the fall of 2018.

The courses will be Skype-based - 2-2½ hour per session, alternatively 1½ hour for presentation and questions, thereafter 1-1½ hour a couple of days later for the workshop part with own problems/experiences. The idea is to get as much workshop as possible to involve the participants fully.

The participants will get the relevant parts of the Swedish Handbook, the TGDs + relevant papers in advance and the expectation is that they read the material up to the web-course. The participants will be asked to contribute with their own experiences and observations.

## Motivation for participants

The participants should follow the course, instead of reading the stuff themselves, from these reasons:

- The essential things will be summarized and discussed by presenters that have long experience within the field
- The participants will be involved in the course and the following workshop through examples from their own plant/experience. Application of the theory/approach presented on own plants will give thorough learning.
- The participants will expand their personal network learning to know the other in course and the presenters. Subsequently, this will be an advantage taking care of the chemistry at their own plants, because the network is essential when new problems or operational changes appear.
- The course will give a structured reading and learning of the material. Often will intentions of reading things like that be pushed ahead of one, because the everyday always present task that seems to be more important.