# Minutes of SIAPWS EC Meeting 2018-3 (04.04.2018)



#### 1. Update since last meeting

- Karsten and Arja have been to Jönköping Energi, where they have problems with FAC.
- Roger supplemented with experience from Västerås.
- Matarvattensektionen has their annual meeting on 26.-27. April in Göteborg. Roger has circulated some material from the 2017 annual meeting to the EC.
- Jere opened for a discussion on Fe-analysis and referred to Finnish experiences.

## Many laboratories are reporting total iron levels of 2-5 ppb Fe. Is this really possible with 1-5 cm cuvettes and 2 nm slit width?

For better signal-to-noise –ratio (= lower limit of detection LoD and quantification LoQ) we need to utilize 4 nm slit width and 5 cm cuvette for more radiating power into the sample and a double monochromator device for reducing the harmful effect of stray light.

It is known that relative concentration error is quite high in absorbance range below 0.3 A, which is the absorbance area of low concentration samples.

No one I know is using rescaling of the transmittance scale or analyte preconcentrating techniques in order to be in the low relative concentration error absorbance range or for gaining lower LoQ. See the second reference.

#### How do you see the following ferrozine method with elevated temperature?

PPChem magazine had an article a few years ago. According to the article it was discovered that complete dissolution of hematite in water sample occurs using 150 °C for at least 30 minutes in sample pretreatment.

This same statement is included in Hach method for total iron which we also tested lightly (not statistically) some weeks ago. See the Hach reference.

We performed parallel measurements using plain and Fe-spiked samples. Our conclusion was that the limit for quantification (LoQ) is close to 10 ppb Fe using device DR6000 with conventional cuvette.

For analytical precision we had about ±1 ppb Fe. The only troubling thing was that our fresh mixed bed sample iron level was higher than in demi water sample from the tank. Microbubbles or resin pieces perhaps...

The common thing among my Finnish colleagues seems to be that no routine acid cleaning is done for the glassware after analysis. Do you think it is necessary?

#### 2. Billing status

- All on the list for 2017 have paid their bills.
- The 2018 billing will be made in May/June 2018. Karsten will act on that.

#### 3. Appointment of EC roles in the new EC

Chair: Karsten Thomsen
Vicechair: Roger Lundberg
Secretary: Monika Nielsen

Cashier: Monika Nielsen with back-up from the EC

Members/coordinator: Arja Lehikoinen, Niklas Berg

#### 4. SIAPWS annual meeting

- Information from the meeting is now available on <a href="http://matarvattensektionen.se/siapws/">http://matarvattensektionen.se/siapws/</a>
- The minutes and material from the meeting will be circulated according to mailing list and uploaded to FB. Monika will act on that.

#### 5. SIAPWS Water Chemistry Network

- Participant status now?? 1 participant for the first course on corrosion we need more.
- Further announcement of courses covering abstracts in next week. Karsten and Lea will
  write an abstract on the courses, and this will be circulated according to the mailing list.
- Planning of further courses when the two first are done.

### 5. The Finnish Campaign

No news about VGB in Finland. Jere will inform the EC when any news appears.

#### 6. Physical EC-meeting/workshop

- EC-meeting structure: Mix of Skype meetings and physical meetings.
   The EC agreed on one physical meeting per year. The first meeting will be in Helsinki on the 8.- 9. May.
- Proposals for the workshop on the 8.- 9. May:
  - Purpose: Brainstorming on how to develop/promote SIAPWS in the Nordic countries
  - Initialisation of national sub-groups under SIAPWS?
     Sweden: Existing as Matarvattensektionen + ADV Kemi
     Denmark: Only through SIAPWS, could be extended to 15-20 persons/companies
     Finland: Water Chemistry group under VGB could be revitalised and extended to smaller CHPs and industrial plants (like Matarvattensektionen in Sweden)
  - SIAPWS as the covering organisation above the national sub-groups information exchange catalysed through SIAPWS - "topic of the month" from each national group exchanged?
  - SIAPWS Conference in English as a yearly/semi-annual meeting supplementing Matarvattenkonferensen each November in Stockholm
  - Strategy on information on SIAPWS and information exchange
  - Sponsorship
  - Budget and economy in a larger organisation

Potential new Finnish members will be invited to participate in some part of the workshop.

Ref. remark: Karsten and Roger will prepare agenda and topics for the workshop according to the proposals from the EC and other members to the list above. Arja and Jere will take care of the physical arrangement of the workshop and the contact to Finnish colleagues. ".

#### 7. Next EC meeting

- 8.- 9. May 2018 in Helsinki