

1. Attendees

- Karsten Thomsen (Chair)
- Monika Nielsen (EC member, elected and Ørsted representative)
- Roger Lundberg (EC member)
- Jere Espo (EC member)
- Anna Edebo (EC member, E.ON representative)
- Arja Lehikoinen (EC member)
- Sara Sjögren (EC member)

2. What is going on in the different countries

– <u>Finland</u>

District cooling water quality is an issue, corrosion damage has been observed, sampling possibilities are now being installed

Valmet is considering treatment of marine scrubber water

Corrosion webinar with VTT is in planning phase - will be held in January 2021

<u>Sweden</u>

Högbytorp - much gypsum was formed in the FGC scrubber stage - acidifying with sulphuric acid instead of hydrochlorid acid led to large scaling problems when a bagfilter bag broke and fly ash was caught in the scrubber.

Högbytorp - smell of rotten eggs after Hg-resin in selective heavy metal filter between two-pass RO and EDI for polishing rinsed FGC to make-up water. The rinsed FGC has a conductivity <5 μ S/cm and perhaps the pure water eludes Sulphur-containing leachables from the resin faster than in other applications. With 100-200 μ S/cm, no "nose-disturbing" smell has been observed.

ADV web seminar on 14 October instead of the ordinary meetings - the meeting in the spring was cancelled due to Covid-19,

Uppsala: discussion/focus on perfluorinated items in the waste- and drain water. Surfaces release fluoride after the big fire 10 years ago. New plant is being built on the surface, field work releases break-down products once again.

Norrköping: Fire in woodchips fuel storage - burning for 1 week until it was burned out. Remaining fuel is contaminated with salt water used for fire-fighting. Adding extra sulphur to keep chloride in ash on superheater surfaces and avoid corrosion from chloride. Source of Sulphur is scrapped tires from cars.

Problems with the new sulphuric acid tank - oil seal pushed out when filling the tank. Start- and stop sequences for make-up water plant are reviewed and rewritten. RO-plant should be flushed with raw water at the concentrate side before stop.

<u>Denmark</u>

Skærbæk: Problems with manganese from waterworks treatment (aeration and sand filtration). Softeners installed between waterworks and demin-plant. Removes manganese, but softeners cannot be recovered.

Svendborg: Wet steam wash of turbine done after NaOH contamination of water steam cycle, and it worked smoothly. It was a one-afternoon job, but only after tight planning and check-up of boiler connections, ad hoc sampling points and possibility to manipulate safety locks in DCS beforehand.

Karsten has been working on the IAPWS TGD on FGC together with the task group. Equilibrium calculations performed with the software MINEQL may turn out interesting with regards to understanding the scaling problems often encountered when removing ammonia from the concentrated FGC in presence of low levels of hardness. So far, we have thought that lime precipitation was the trouble and it may still be so in most cases. However, the effects of high sulphate levels has not been considered: This may actually increase the solubility of lime due to complexation between calcium and sulphate; on the other hand, formation of gypsum scaling may be the result.

3. Follow up on Friday events – request to hold one from amine vendor

- 45 attendees at the first Friday event 25/9-2020.
- Recording and presentation will be saved on SIAPWS website and distributed from there. Karsten and Monika takes care of that. (*Ref. remark: this is now available, see <u>https://info.siapws.org</u>)*
- Monika will distribute the participants list to the EC (no email address due to GDPR)
- At future webinars we must prepare some questions beforehand, to get the discussion going.
- At future webinars we should get GDPR accept beforehand to allow us to distribute attendees list incl. email-addresses within the SIAPWS EC.
- Offer to present at a SIAPWS webinar from an amine vendor we don't want a commercial presentation. We will save this for a later event, where we could invite several vendors to present (i.e. Kurita, Reicon). Monika will write to the vendor.

4. Matarvattenkonferensen

- Complete list of presentations is ready
- The conference will be sent out virtually though YouTube Roger will distribute an example for internal use only.

5. SIAPWS Annual Meeting 2021 – first talk

 Virtual event only, planned e.g. as the formal meeting in the morning and then a 2-3 h workshop in the afternoon.

6. SIAPWS website & literature database – contribution from Matarvattensektionen??

Roger will follow up on this

7. Extended cooperation with BIAPWS

- There is interest and possibility for a broader cooperation with BIAPWS, in the first place on webinars and virtual courses as proposed by Paul McCann. On sight, we could invite BIAPWS to take part as users of the SIAPWS website, i.e. with access to the literature database and discussion going on. In that case, we could build up a common database of presentations and information including the often interesting presentations from the BIAPWS Symposia.
- The decision is that Karsten invites the BIAPWS inner circle (EC + a few extra) to become users at the website. Then, they can follow what is going on and decide, if they think it is of broader interest for BIAPWS members.
- Anna, Sara and Jere are to comment on this if they have any objections.

8. Miscellaneous

 Arja proposed to use a SIAPWS signature when writing in relation to SIAPWS matters. Arja circulates her example.

9. Next EC meeting

- 12. October 12:30-13:30 DK/SE time in Microsoft Teams. Monika has made the calendar booking.
- The point "what is going on in the national groups" will be moved to the end of the meeting.