Scandinavian IAPWS Committee - SIAPWS
c/o IDA, Kalvebod Brygge 31 - 33, 1780 København V

23 March 2013

Minutes of the ordinary general meeting 2013
Scandinavian IAPWS Committee

The ordinary general meeting of Scandinavian IAPWS Committee was held
21 March 2013 from 9 to15
at **Öresundsverket**, Flintrännegatan 19C, 211 24 Malmö, Sweden.

Participants

Name	E-mail	Organisation
Agata Zietek	agata.zietek@jonkopingenergi.se	Jönköping Energi
Anders Fredrikson	anders.fredrikson@tekniskaverken.se	Tekniska Verken i Linköping
Annika Malmberg	annika.malmberg@molndalenergi.se	Mölndal Energi
Bo Ramsbäck	bosse@bramava.se	Ramsbäck Matarvattenteknik
Ebbe Höffner	ehkk@c.dk	Privat medlem
Elisabeth Dahlin Zanders	elisabeth.dahlin@goteborgenergi.se	Göteborg Energi
Eva Fransson	Eva.Fransson@eon.se	Karlshamn Kraft
Jüri Tavast	juri.tavast@siemens.com	Siemens
Jørgen Peter Jensen	jorpj@dongenergy.dk	Dong Energy
Kaj Thomsen	kth@kt.dtu.dk	DTU
Karol Daucik	laroksro@gmail.com	Larok sro
Karsten Thomsen	karsten.thomsen@vattenfall.com	Vattenfall, Engineering DK
Mats Hellman	mats@hellmanvatten.se	Hellman Vatten
Mikael Norell	Mikael.Norell@eon.se	E.ON Värme Sverige
Monika Nielsen	moneb@dongenergy.dk	Dong Energy

Agenda

1. Election of moderator and clerk of minutes
2. Annual report of the chairman
3. The financial situation, here under:
   - Report on the financial situation
   - Membership fee for 2013
   - Membership status for Matarvattensektionen as group member
4. Election of members of the Executive Committee (EC). The EC suggests re-election of the vice chairman Karsten Thomsen and cashier Kaj Thomsen
5. Election of an auditor. EC suggests re-election of Anders Fredrikson
6. Authorisation of the leader of the Scandinavian delegation to next IAPWS meeting at Greenwich University, London.
7. Technical workshop
8. Any other business
9. Visit at the new combined cycle plant, Öresundsverket

Scandinavian IAPWS Committee - SIAPWS

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

Election of moderator and clerk of minutes
Mats Hellman was chosen as moderator and Karsten Thomsen as clerk.

Annual report of the chairman
Mats Hellman presented the report, see Annexe 1.

Financial situation
Kaj Thomsen presented the account of 2013, see Annexe 2. The membership fees have brought approximately 76.000 DKR as income, the expenses (memship fee of the IAPWS and travel expenses of the delegated member to the IAPWS meeting in USA) were approximately 26.000 DKR. With the surplus of the year, the capital increased to approximately 275.000 DKR.

SIAPWS has accepted to arrange the international meeting in 2015 and the capital will be needed to finance this event. It will be necessary to find sponsors for the remaining cost of the arrangement.

It was decided to keep the membership fees for 2013 and consider an increase for 2014. The fees have not increased for several years, and for 2013 they will remain as follows:

Group membership:	2000 €	(participants from several sites)
Company membership:	300 €	(participants from a single site/plant)
Institution (university):	100 €	
Private person:	50 €	

Matarvattensektionen has been considered a group member during a three year period ending with 2013, and it has to be decided how to continue. The general meeting suggests that this agreement is prolonged for another three year period. It has worked to reach some of the members of the Matarvattensektionen and the interest to take part in the association is increasing. The board of the Matarvattensektionen is positive to continue for another period but the suggestion has to be approved at their annual meeting later this spring.

Election of members of the executive committee
Karsten Thomsen and Kaj Thomsen were both re-elected for the executive committee.

Election of an auditor
Anders Fredrikson was re-elected as auditor of the account.

Authorisation of the leader of the Scandinavian delegation
Mats Hellman as chairman was authorised to represent SIAPWS at the upcoming IAPWS meeting in London, September 2013.

Any other business
No remarks

Scandinavian IAPWS Committee - SIAPWS
c/o IDA, Kalvebod Brygge 31 - 33, 1780 København V

Visit at the new combined cycle plant, Öresundsverket
After the technical workshop the meeting finished with an interesting visit to the plant.

SIAPWS wishes to thank E.ON Nordic and the personnel involved for hosting the meeting.

Technical workshop
The idea of the technical workshop at the general meeting is informal exchange of information and experiences between the members. This year the workshop consisted of several presentations as the starting point of discussion.

Karol Daucik: New IAPWS Technical Guidance Document on Steam Purity
This presentation gives a preview on the new technical guidance document under preparation for approval at the next IAPWS meeting. The focus is on the chemical/technical background of the quality criteria of steam for turbines. The presentation is enclosed as Annexe 3.

Jüri Tavast: When does acid conductivity present a risk for the turbine?
Turbines are vulnerable to damages caused by corrosion fatigue and stress corrosion cracking; both may be initiated/enhanced at high acid conductivity in the steam. This presentation summarises many years experience concerning the more or less dangerous contaminants behind the acid conductivity and discusses the implication of organic conditioning agents on the turbine materials. The presentation is enclosed as Annexe 4.

Karsten Thomsen: Experiences with measurement of degassed, acid conductivity when doing chemistry service for Vattenfalls CHP's
The laboratory at Nordjyllandsværket supports a few of Vattenfalls CHP's with chemical analysis of the water-steam circuits. Recently, degassed acid conductivity has been introduced as part of the on-site measurements, and this presentation summarises the experiences. At one site the measurements has been part of a closer look at the chemistry behind conditioning with DEHA (N,N-diethylhydroxylamine). The presentation is enclosed as Annexe 5

Mats Hellman: Contamination of the water-steam cycle at Fiskeby Board
This is a case study of a contamination that led to periodic high acid conductivity in the steam and the actions taken to track down the source of the contamination. This turned out to be the cartridge filter used for condensate filtration. Several materials were tested but all seemed to leach organics into the condensate that caused the acid conductivity through the breakdown product acetate. The presentation is enclosed as Annexe 6.

Monika Nielsen: Contamination of the water-steam circuit at Herningværket with ECO wash water
This is a case story of a severe contamination of the water-steam circuit at a medium size drum boiler. Due to a series of unfortunate incidents water with fly ash were sucked backwards into the condensate/feedwater train and thus caused a contamination that overwhelmed the instrumentation. The presentation is enclosed as Annexe 7.

Scandinavian IAPWS Committee - SIAPWS
c/o IDA, Kalvebod Brygge 31 - 33, 1780 København V

Kaj Thomsen: Measuring the ionic conductivities of morpholine and cyclohexylamine
This presents the outcome of a master project at the Danish Technical University. The ionic conductivities of morpholine and cyclohexylamine (used as organic conditioning agents) were determined and subsequently applied in modelling of pH and conductivity of mixtures in feed water. The presentation is enclosed as Annexe 8.

Eva Fransson: Water processing and surveillance of water chemistry at Öresundverket
Öresundsverket is from 2009 and is an advanced combined cycle plant for combined heat and power production. This is a presentation of the E.ON Nordic plant; see Annexe 9a and the process diagram in Annexe 9b.