

Consortium Materials technology for thermal energy processes – minutes board meeting no 3/18

Date	September 17, meeting time 09.00-10.30	
Place	Telephone meeting	
Participants	Lars Mikkelsen Anna Jonasson Andreas Borg Johan Hernblom Kyosti Vanska Annika Stålenheim Pamela Henderson Rikard Norling Johan Moverare Jan-Erik Svensson Bertil Wahlund (secr.)	B&W Vølund E.ON Energilösningar GKN Aerospace Sandvik MT (from item 6.2) Sumitomo SHI FW (SFW) Vattenfall Vattenfall Swerea KIMAB Linköpings universitet Chalmers Energiforsk
Prevented	Christoph Gruber Sebastian Kaiser Thomas Norman Erik Skog (chair) Jukka Meskanen Dilip Chandrasekaran Matti Huhtakangas Susanne Selin Jesper Ederth Helena Oskarsson Erik Dahlén Vesna Barišić Søren Aakjær Jensen	Andritz Andritz B&W Vølund Erik Skog AB Fortum Kanthal/Sandvik Heating Technology MH Engineering Sandvik Heating Technology/Kanthal Sandvik Materials Technology Siemens Stockholm Exergi Sumitomo SHI FW (SFW) Ørsted
Distribution	participants, prevented and Sven Andersson Per Kallner Andreas Sundlöf Erik Westman Heike Martinsson Henrik Lindståhl Mikael Fransson Ulf Hagman Erika Antonsson Toni Holkko Lucas Enström Ulf Lindqvist Jesper Baaring Johan Thelander Magnus Eklind Anna Holstein Magnus Eriksson Per Tunberg Patrik Schneider Jasmin Aspen Erik Thornström	
		B&W Vølund/Götaverken Vattenfall Söderenergi Söderenergi Söderenergi Tekniska verken i Linköping AB Tekniska verken i Linköping AB Göteborg Energi AB Göteborg Energi AB Gävle Energi Gävle Energi Jämtkraft AB Öresundskraft Karlstads Energi AB Karlstads Energi Mälarenergi AB Mälarenergi AB Mälarenergi AB Kraftringen Kraftringen Swedenergy

1 Agenda

The distributed agenda was approved. Due to lack of participants it was noted that the board did not have the power to make decisions up to item 6.2 when JH joined the meeting.

In ES absence, BW was elected as chairperson for the meeting.

2 Person to approve minutes

PH Vattenfall was elected to approve the minutes

3 Minutes from board meeting 2/18

The minutes from board meeting 2/18 were approved with the following comments

- All KME reports reviewed at the meeting are approved and available on the member pages.

4 Notifications

4.1 Coming dissertations

Upcoming dissertations

- Hugo Wärner, KME 701, Licentiate degree, 14 December, Linköping university
- Julien Phother, KME 714, Licentiate degree, date not set, 2018, Chalmers
- Johan Eklund, KME 709, Licentiate degree, date not set, 2018, Chalmers
- Andrea Olivas, KME 720/HTC, PhD, early next year 2019, Chalmers

Recently defended dissertations

- Patrik Alnegren, HTC, June 12, on Fuel cells

4.2 Coming conferences and workshops

KME/HTC conference is planned for 19-20 or 20-21 March 2019, Gothenburg.

The 27th International Conference on the Impact of Fuel Quality on Power Production and the Environment, September 24-28, 2018, Lake Louise, Canada. <http://blogs2.abo.fi/fuelqualityimpact/>

High Temperature Corrosion under Complex Conditions, Deposits, and Salts: Towards Greener Energy, September 26-29 2018, Dechema, Frankfurt, Germany.

5 Budget

BW informed that in-kind contribution is 100 % or over in all but the projects KME-715 and KME-720, which are underfinanced due to lower in-kind.

KME-720. The project activities and its budget and used cash at Chalmers has been reduced to match the lower industry in-kind contribution. The lower in-kind is due to a previously reported incident.

KME-715. The revised final reports of industry in-kind contribution showed that the project is underfinanced. This will need to be sorted out with the project participants. As the agreement are formulated, an amount in-kind will have to be transferred into cash, if the reported in-kind falls below the agreed amounts. The board is notified about the situation, and it is delegated to Energiforsk/KME and project participants to solve the situation.

No further comments from board on the final budget follow-up.

6 Approval of final project reports

Evaluation and approval of remaining the three final project reports.

6.1 KME-709, Increased steam temperature in grate fired boilers – Steamboost

Project leader: Torbjörn Jonsson, Chalmers, HTC

Industry partners: B&W Völund, Kanthal, Sandvik MT and Göteborg energi

The approval of the report was postponed at the last meeting.

Comments

- New updated version of report is provided.
- Board and reference group consider the report as good and extensive.

Decision

- The report is approved.

6.2 KME-706, Weldability of nickel-base superalloys for energy applications

Project leader: Lars Nyborg, Chalmers

Industry partner: GKN Aerospace

Comments

- Swedish summary is lacking
- Chapter 1.5 *Project organisation* should be further elaborated. The section should explain engaged staff, including PhD students, technicians, staff at participating companies, etc.
- Headlines 2 *Results and Analysis* does not reflect the text in the chapter. The text includes and mixes background, experimental and results, which is confusing. The chapter should be revised and re-arranged. Separate chapters for the respective sections should be considered.

Decision

- The report is approved when the above comments are attended to.
- The approval is delegated to KME/Energiforsk, provided that the revision of the report is not too extensive. If a major revision of the report is required, approval is put as a question to the board by e-mail.

6.3 KME-719, Development of weldability assessment and understanding of hot cracking in boiler and gas turbine materials

Project leader: Lars Nyborg, Chalmers

Industry partner: GKN Aerospace IT

Comments

- Chapter 1.5 *Project organisation* should be further elaborated. The section should explain engaged staff, including PhD students, technicians, staff at participating companies, etc.
- Conclusions are drawn for each alloy. Are there any similarities between them and could any general conclusions could be drawn? A section 5.5 *Summarising conclusions* could be considered.
- The goal fulfilment needs to be elaborated (describe each goal, and then the fulfilment of the respective goals; in what way each goal has been achieved)

Decision

- The report is approved when the above comments are attended to.
- The approval is delegated to KME/Energiforsk, provided that the revision of the report is not to extensive. If a major revision of the report is required, approval is put as a question to the board by e-mail.

7 Programme conference HTC/KME 2019

Planned March 19-20 or 20-21, 2019, Gothenburg.

Comments:

- Poster session valuable and could be arranged, but not compulsory
- Invite external speakers that could give information about the global status or trends of (thermal) power generation; business and technical global perspective.
- Svebio could perhaps give perspective on world-wide use of biomass
- Speakers giving industrial perspective would be interesting.
- Broaden the conference with KME-external projects, for example other biokraft projects.

8 Others

New KME 2018-2021 is initiated, with five projects to start with.

9 Next meetings

No more meetings planned in KME 2014-2018. BW will inform when the last three reports are available, and if further actions is needed by the board.

Thanks to all for excellent co-operation!

Minutes by

Minutes approval

Bertil Wahlund

Pamela Henderson, Vattenfall