

Minutes of the Business Meeting Working Party 3:  
Corrosion by Hot Gases and Combustion Products (WP3)  
10.09.2009 EUROCORN 2009 Nice, France

1. Prof. Michael Schütze (DECHEMA) opens the meeting and welcomes the participants.

2. Prof. Schütze presented the three-year, working program of the WP3. The WP3 business meetings will continue to take place annually in conjunction with EUROCORN. Organisation of WP3 technical workshops every 2-3 years is proposed. Sessions organized at EUROCORN are as followed:

- 2-day topical session at EUROCORN 2009-10-13
- 1-day workshop in cooperation with working party 4: Nuclear corrosion (WP4) at EUROCORN 2009
- 1 or 2 day WP3 topical session is planned for EUROCORN 2010 depending on the input of authors

3. In collaboration with other working parties joint sessions will also be held in the future at EUROCORN

4. Information about EFC, working parties, events, courses etc. is published on its webpage **[www. efcweb.org](http://www.efcweb.org)**. It will also be available in Materials and Corrosion.

5. The results of a joint collaborative research and testing program within the 6<sup>th</sup> Framework Program of EU were published in the EFC series book No. 53.

6. Participation in EU research programs has an average 5 % success rate.

Some of the participants at the meeting reported about research projects submitted to the EU, among these:

- a project from Holland about SOFC – submitted
- a project from Perez et al. from Madrid, Spain. According to the information of the participant the project should be submitted.
- a project submitted by a working group at RWTH Aachen, Germany deals with exhaust ducts on cars.
- a project in which development of coatings for oxyfuel power plants is planned has been submitted by a working group at Delft university in Holland
- H<sub>2</sub> – IGCC submitted by ETN Brussels.

7. Development of standards for high temperature corrosion

At the moment there are still no standards for high temperature corrosion on an international level. The first voting stage for the following draft documents for international high temperature is complete:

- ISO /TC 156 NP 21608 deals with oxidation testing under isothermal conditions.
- ISO / TC 156 NP 26146 is concerned with thermocyclic testing.
- ISO / TC 156 NP 13573 establishes the post experimental investigation procedures after the corrosion test.

Prof. Maruyama from Tokyo University in Japan is preparing new draft documents dealing with investigations in molten salts.

Draft documents presently in preparation:

- Method for electrochemical corrosion test of metallic materials in molten salts.
- Method of dipping and embedding test in molten salt for metallic materials.

The next meeting on the development of international high temperature corrosion standards will be hosted by Prof. Schütze at Dechema-House in Frankfurt/Main, Germany.

#### 8. List of high temperature corrosion events

A list of conferences in the field of high temperature corrosion is given in the attachment.

#### 9. Preparation of publications for the EFC series of books

- *EFC 41: Corrosion by carbon and nitrogen - Metal dusting, carburisation and nitridation* – published  
Edited by M. Schuetze, H. Grabke,
- *EFC 47: Novel approaches to improving high temperature corrosion resistance* – published  
Edited by: M. Schütze and W. Quadackers
- *EFC 52: Progress in Corrosion - The First 50 Years of the EFC* - submitted  
Edited by Paul McIntyre & J Vogelsang
- *EFC 53: Standardisation of thermal cycling exposure testing* – published  
Edited by M Schütze and M Malessa
- *EFC 57: submitted to the publishers* – to appear early 2010

Frankfurt/Main, Germany 14.10.2009

Dr. K. Aleksandrov

## **Attachment**

### **List of events related to corrosion & high temperature materials**

<b>Title, Date, Location</b>	<b>URL</b>
EUCOMAS 2009 1-2 July 2009, Augsburg, Germany	<a href="http://www.eucomas.eu">www.eucomas.eu</a>
3rd International Meeting on Developments in Materials, Processes and Applications of Emerging Technologies, 21-23 July 2009, Manchester, UK	<a href="http://www.mpa-meeting.com">www.mpa-meeting.com</a>
Gordon Research Conference on High Temperature Corrosion 26-31 July 2009, New London, USA	<a href="http://www.grc.org/programs.aspx?year=2009&amp;program=hightemp">www.grc.org/programs.aspx?year=2009&amp;program=hightemp</a>
60 <sup>th</sup> Annual Meeting of the International Society of Electrochemistry 16-21 August 2009, Beijing, China	<a href="http://event09.ise-online.org">http://event09.ise-online.org</a>
International Conference on Processing & Manufacturing of Advanced Materials (THERMEC' 2009) 25-29 August 2009, Berlin, Germany	<a href="http://www.thermec.uow.edu.au">www.thermec.uow.edu.au</a>
EUROCORR 2009: "Corrosion: from the Nanoscale to the Plant" 6-10 September 2009, Nice, France	<a href="http://www.eurocorr.org">www.eurocorr.org</a>
EUROMAT 2009 European Congress on Advanced Materials and Processes 7-10 September 2009, Glasgow, UK	<a href="http://www.euromat2009.fems.eu">www.euromat2009.fems.eu</a>
ProcessNet Jahrestagung 8-10 September 2009, Mannheim, Germany	<a href="http://www.processnet.org/jt2009">www.processnet.org/jt2009</a>
Oxyfuel Combustion Conference 8-11 September 2009, Cottbus, Germany	<a href="http://www.OCC">www.OCC</a>
5 <sup>th</sup> International Conference "Advances in corrosion protection by organic coatings" 14-18 September 2009, Cambridge, UK	<a href="http://www.materials.manchester.ac.uk/events">www.materials.manchester.ac.uk/events</a>
5. Thüringer Grenz- und Oberflächentage 15-16 September 2009, Friedrichroda, Germany	<a href="http://www.thgot.de">www.thgot.de</a>
7. Thüringer Biomaterialkolloquium 17 September 2009, Friedrichroda, Germany	<a href="http://www.thgot.de">www.thgot.de</a>
6. Aachener Ölwärme-Kolloquium 16-17 September 2009, Hamburg, Germany	<a href="http://www.owi-aachen.de/kolloquium2009">www.owi-aachen.de/kolloquium2009</a>
43. Metallographie-Meeting 16-18 September 2009, Aachen, Germany	<a href="http://www.dgm.de/dgm/metallographie">www.dgm.de/dgm/metallographie</a>

52. Internationales Feuerfest-Kolloquium 23-24 September 2009, Aachen, Germany	<a href="http://www.feuerfest-kolloquium.de">www.feuerfest-kolloquium.de</a>
ZVO-Oberflächentage 2009 23-25 September 2009, Bremen, Germany	<a href="http://www.oberflaechentage.de">www.oberflaechentage.de</a>
BALTIC 21: „Phosphorus Recycling and Good Agricultural Management Practice“ 28-30 September 2009, Berlin, Germany	<a href="http://www.bam.de/baltic.htm">www.bam.de/baltic.htm</a>
EFC Workshop “Solutions for High Temperature Corrosion Protection in Energy Conversion Systems” 30 September-2 October 2009, Frankfurt am Main, Germany	<a href="http://www.dechema.de/efcws09">www.dechema.de/efcws09</a>
216 <sup>th</sup> ECS Meeting 4-9 October 2009, Vienna, Austria	<a href="http://www.electrochem.org/meetings/biannual/216/216.htm">www.electrochem.org/meetings/biannual/216/216.htm</a>
4. Freiburger Fachtagung Dampferzeugerkorrosion 6-7 October 2009, Freiberg, Germany	<a href="http://www.saxonia-freiberg.de/cgi-bin/click.system?navid=1262&amp;detail=1&amp;id=56&amp;sid=c">http://www.saxonia-freiberg.de/cgi-bin/click.system?navid=1262&amp;detail=1&amp;id=56&amp;sid=c</a>
8 <sup>th</sup> Int. Conf. on Magnesium Alloys and their Applications 26-29 October 2009, Weimar, Germany	<a href="http://www.dgm.de/dgm/magnesium">www.dgm.de/dgm/magnesium</a>
Stainless Steel World Conference & Exhibition 10-12 November 2009, Maastricht, the Netherlands	<a href="http://www.stainless-steel-world.net">www.stainless-steel-world.net</a>
TACT 2009 - International Thin Films Conference 14-16 December 2009, NTUT, Taipei, Taiwan	<a href="http://www.tact.org.tw/tact2009">www.tact.org.tw/tact2009</a>
NACE Corrosion 2010 14-18 March 2010, San Antonio, USA	<a href="http://www.nace.org">www.nace.org</a>
EUCHEM 2010 Conference on Molten Salts and Ionic Liquids 14-19 March 2010, Bamberg, Germany	<a href="http://www.dechema.de/euchem2010">www.dechema.de/euchem2010</a>
Euro Superalloys: European Symposium on Superalloys and their Applications 25-28 May 2010, Freiburg, Germany	<a href="http://www.dgm.de/dgm/superalloys/">www.dgm.de/dgm/superalloys/</a>
12 <sup>th</sup> International Ceramics Congress 6-11 June 2010, Montecatini Terme, Tuscany, Italy	<a href="http://www.cimtec-congress.org">www.cimtec-congress.org</a>
5 <sup>th</sup> Forum on New Materials: Materials Solutions for Sustainable Energy 13-18 June 2010, Montecatini Terme, Tuscany, Italy	<a href="http://www.cimtec-congress.org">www.cimtec-congress.org</a>
MSE 10 – Material Science and Engineering 30 August – 2 September 2010, Nürnberg, Germany	<a href="http://www.dgm.de">www.dgm.de</a>
12 <sup>th</sup> Int. Conf. on Aluminium Alloys 5-9 September 2010, Yokohama, Japan	<a href="http://www.icaa12.org">www.icaa12.org</a>

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EUROCORR 2010  
13-17 September 2010, Moscow, Russia

[www.eurocorr.org](http://www.eurocorr.org)

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61<sup>st</sup> Annual Meeting of the International Society of  
Electrochemistry  
26 September – 1 October 2010, Nice, France

<http://event10.ise-online.org>

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Titanium 2010  
3-5 October 2010, Orlando, USA

[www.titanium.org](http://www.titanium.org)

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Matériaux 2010  
18-22 October 2010, Nantes, France

[www.materiaux2010.net](http://www.materiaux2010.net)

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ISHOC  
8-11 November 2010, Zushi, Japan

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