



Working Party 9 on MARINE CORROSION

MINUTES OF MEETING 6 SEPTEMBER 2005 AT EUROCORN 2005 CONFERENCE, LISBON, PORTUGAL

Present:

Name	Organisation	Country	email
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Huizinga, S. (<i>ad hoc secretary</i>)	Shell Global Solutions	NL	syitze.huizinga@shell.com
Johnsen, R.	NTNU	NO	roy.johnsen@ntnu.no
Kivisäkk, U. (<i>chairman</i>)	Sandvik	SE	ulf.kivisakk@sandvik.com
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1. OPENING AND WELCOME

The chairman, Ulf Kivisäkk, opened the meeting. It was agreed that Sytze Huizinga would take minutes.

The agenda was approved.

Kivisäkk stressed that everyone is to confirm his membership to the secretary of WP 9, Ebbe Rislund at ebr@force.dk, with address details, so that the membership list can be updated.

2. APOLOGIES FOR ABSENCE

Apologies for absence had been received from L. Berthagen, J. Birn, G. Ferrari, O. Lahodny-Sarc and E. Rislund.

3. MINUTES OF LAST MEETING - 23 MAY 2005 AT CEA, PARIS

The minutes of the meeting of 23rd May 2005 in Paris were presented by Kivisäkk and approved. Kivisäkk will arrange distribution to the WP members.

Dupont-Morral pointed out that the predecessor to the Waterborne project, which is proposed for the 7th Framework EU sponsored programme, is part of the 6th Framework programme.

Kivisäkk mentioned that there will not be a combined session with another WP in Eurocorr 2005.

4. STATUS OF ONGOING WORK ON EFC PUBLICATIONS

4.1. Green book on “Corrosion behaviour and protection of non-ferrous metals in seawater”

Slides prepared D. Féron were presented at the meeting by Kivisäkk. With the exception of one paper from Germany which has not yet been received, all papers have been reviewed. Awaiting some corrections, the book is aimed to be published towards the end of 2005.

Johnsen asked if this book also considers CP, upon which Francis mentioned that some older (80's) information exists on fouling resistance of CuNi when under CP due to galvanic coupling. Huizinga mentioned that the session on copper alloys in Eurocorr 2004 also provided substantial information on this subject.

4.2. Green book on “Methodology of crevice corrosion testing for stainless steels in natural and treated seawaters” (the CREVCORR project)

This book will present the CREVCORR project work and the experimental procedures that were developed. Some slides, prepared by B. Espelid and D. Féron, outlining the status were presented by Kivisäkk. The aim is to forward the manuscript to EFC by October 2005 for publication towards the end of 2005.

5. NEW ACTIVITIES FOR WORKING PARTY 9 “MARINE CORROSION”

5.1. CREVCORR follow-up

To achieve more widely accepted standardisation the procedures developed within the CREVCORR project are being introduced into the ISO system via the French representative, guided by Féron.

5.2. Cathodic protection of CuNi alloys

According to Schleich, CP of CuNi alloys does not appear to be a highly critical issue, but information such as that available with the Copper Development Association (CDA, www.cda.org.uk; Carol Powell) is largely empirical. Schleich can provide references.

According to Johnsen, recently very few papers are published on the subject. The WP could stimulate publications on the relevant problems.

Frances, Johnsen and Havn proposed some further items for consideration, including:

- Requirements for avoiding embrittlement;
- Sub sea anodes on hot process lines;
- CP in deep water;
- Internal CP;
- Corrosion fatigue.

Schleich will liaise with CDA to define a strategy to avoid knowledge disappearing and to attempt to steer future R&D. Investigations are to include accelerated laboratory testing of copper alloys.

An option for the WP to stimulate the process would be to organise a combined session with WP 16 on Cathodic Protection, with the latter account of certification issues. For Eurocorr 2005, not enough papers were submitted for such a session, but for 2006 a ½ of full day session may be possible. Alternatively or in addition, a session could be devoted to Cu alloys in 2006, but there may again not be enough papers. The best chance of success may be to devote a session to testing methods for marine service, possibly together with WP 8 on Testing Methods.

5.3. Various other subjects

Various other areas where the WP could contribute were discussed:

- Non-metallic liners for carbon steel lines in seawater applications (Schleich).
- GRP/FRP use sub sea, e.g. in seawater transport, with the option of a combined Eurocorr session with WP 19 on polymer materials in 2007 (Francis).
- Project Waterborne - request for subsidy within EU 7th Framework (Dupont-Morral). Information was sent to WP members so that via the national contacts incorporation of corrosion aspects could be stimulated and EFC channels used to lobby with the EU.

5.4. EFC publications

Papers from successful Eurocorr sessions will be bundled and issued as green books.

6. EUROCORR 2006 / 2007

6.1. Eurocorr 2006 (Maastricht, NL)

Eurocorr 2006 will be held from 24-28 September in Maastricht, Netherlands (www.eurocorr2006.nl). Deadlines are:

15/11/05 for abstracts;
15/02/06 for acceptance;
15/05/06 for full paper.

Suggestions for sessions have been discussed under item 5 of the agenda:

- Combined session on CP of Cu alloys with WP 16 on CP;
- Combined session on testing for marine service with WP 8 on testing.

Kivisäkk will discuss these options with the WP 8 and 16 chairs.

6.2. Eurocorr 2007 (Freiburg, DE)

For Eurocorr 2007, a combined session on use of non-metallics in seawater applications with WP 19 on polymer materials has been suggested.

7. ANY OTHER BUSINESS

7.1. From the EFC board (Kivisäkk):

- Israel is now a full EFC member;

- At Eurocorr conferences, registration will no longer be required for participation in short business meetings (< 2-3 hrs), but will be required for longer, technical meetings.

7.2. From other organisations:

- NACE plans to revive STG 44 on Marine Corrosion (Francis). Kivisäkk will liaise with NACE on these plans and possible co-operation.
- A symposium on “Offshore Materials and Corrosion: 40 years on” will be organised in Aberdeen, GB, from 20-22 June 2006 by the Marine Corrosion Forum and NACE UK section endorsed by the Inst. of Corrosion in Aberdeen (www.marinecorrosionforum.org).
- A international conference “Biocorys” on biodegradation of materials will be organised by Cefracor with several other institutes from 10-14 June 2007 in Cherbourg, FR (www.cefracor.org). This will include low water microbial corrosion (Accelerated Low Water Corrosion). Dupont-Morrall presented some slides about the event, stating that ALWC has a large economic impact.

8. NEXT MEETING AND CLOSURE

It was concluded that there is no need for a spring WP meeting. Therefore the next meeting will be held in Maastricht, NL, in conjunction with Eurocorr 2006 (24-28/09/06).

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