



Kin-ichi Matsuyama

Chairman of Commission III

Doc. III-1441r1-07

**IIW ANNUAL ASSEMBLY 2007 in DUBROVNIK, CROATIA**  
held at the University of Dubrovnik in Dubrovnik, Croatia

IIW Commission III Meeting

Meeting dates: 2 ~ 4 July, 2007

Meeting time for this year: 14:00 ~ 18:00 on 2 & 4 July

8:30 ~ 18:00: on 3 July: the Workshop on Friction Welding

14:00 ~ 16:00 on 4 July: Joint Workshop on EMF exposure

**draft Agenda**

[Monday on 2 July; 14:00 ~ 18:00] at Room: B-24

*<The first Plenary Session>*

**1. INTRODUCTION AND WELCOME REMARKS**

The Commission III meeting starts at **14:00 on 2 July** at **University of Dubrovnik in Dubrovnik, Croatia**. Welcome remarks by the Chairman Dr. K. Matsuyama.

**2. APOLOGIES FOR ABSENCE**

**3. MINUTES OF THE 59th ANNUAL ASSEMBLY AND INTERMEDIATE MEETINGS HELD AT EWI**

Doc. III-1401-06, Doc. III-1402-06 and Doc. III-1412-06

**4. ANNUAL REPORT 2006 OF THE COMMISSION III**

Doc. III-1413-07

**5. APPROVAL OF THE AGENDA**

Doc. III-1441-07 (This document)

**6. MATTERS ARISEN AFTER THE LAST ANNUAL ASSEMBLY MEETING**

Doc. III-1438-07

**7. BUSINESS PLAN OF C-III and IIW BUSINESS PLAN 2007 ~ 2012**

Doc. III-1416-07 and others

**8. CREATING PEER REVIEW COMMITTEE**

Peer review starts from this year for the articles of Welding in the World.  
Each Commission shall create own review committee.

**9. STANDARDISATION WORKS**

Progress report of current standardization works related to this IIW Commission III, ISO, CEN and CENELEC. (Doc. III-1439-07, Doc. III-1440-07)



The following DIS drafts were waiting translation to French and Germany under the Vienna Agreement to circulate DIS voting through ISO/CS. (Doc. III-1418-07~III-1422-07)

ISO number	Title	State
ISO/DIS 25239	Friction stir welding – Aluminium Part 1 ~ Part 5	Waiting DIS voting

Note: Titles were changed at the last WG-S meeting.

Corrigenda for ISO 14270 through ISO 14273 were provided. Those documents stay in IIW as a document for the next revision works. (Doc. III-1452-07)

The Commission Chairman will provide some proposal for the joint Workshop to make a statement on the limit values for occupational persons like welding operators. This draft may be also discussed after some introduction.

**<Start each SC and WG sessions>**

**10. WG-A1 SESSION (Testing of weld)**

The session is managed by Mr. Galtier Agenda may be circulated later.

**11. WG-A2 SESSION (Monitoring and control)**

The session is managed by Mr. Uran. The following items are planned for this session.

1. State of the art in process measuring and regulation of RW processes.
2. Plan for the future works of this WG
3. Plan for a workshop about intelligent RW controllers in Graz

**12. SC III-A SESSION (Resistance welding and allied processes)**

The session is managed by Mr. Kimchi. Complete Agenda may be circulated later.

**12.1 Presentation**

- III-1423-07 Share of spot welding and other methods in automotive production  
By M. Janota and Neuman
- III-1444-07 Prediction of post weld hardness of advanced high strength steels for automotive application using a dedicated carbon equivalent number  
By N.J.den Uijl et al.
- III-1445-07 Development of a system for resistance welding of multiple dissimilar joints in a motor projection switch  
By Janez Macek et al.
- III-1446-07 The influence of significant parameters on mechanical properties of the resistance flash welds  
By Zeljko Bilic et al.
- III-1447-07 On the influence of reduced cooling time in RSW  
By E. Tolf et al
- III-1448-07 Simulation-Aided Development of New Blind Rivets and Lock Bolts for Producing Form-Fit Joints with Superior Mechanical Properties  
By Sumanjit Singh
- III-1455-07 Resistance Spot Welding of Trip Steels  
By Cs. Orosz and B. Palotas



[Tuesday on 3 July; 8:30 ~ 18:00] at Room: Big amphi

**13. ONE-DAY WORKSHOP on “Recent Advances in Friction Welding and Allied Processes”**

The workshop is planned as follows: (Doc.III-1442-07)

Time	Title	Authors	IIW Doc.-Nr
08:30~09:00	Aspects of the material flow during friction stir welding of 5754 Al alloy	B. Radu, D. Dehelean, R. Susan-Resiga, V. Safta (RUMANIAN)	III-1434-07
09:00~09:30	Cracking and Local Melting in Mg-alloy and Al-alloy during Friction Stir Spot Welding	M. Yamamoto, A. Gerlich, T. North, K. Shinozaki (JAPAN)	III-1429-07
09:30~10:00	Aluminium Friction Stir Processing of Al 6061	M. Iordachescu, P. Vilaça, D. Iordachescu, J.A. Porro (RUMANIAN)	III-1433-07
10:00~10:30	Friction Stir Welding of Non-Weldable Aluminium Alloys of 2000 and 7000 Series	A. Pietras, B. Rams, Al. Węglowska, M. Węglowski, L. Zadroga (POLAND)	III-1431-07
10:30~11:00	<b>COFFEE BREAK</b>		
11:00~11:30	Friction Stir Welding of Aluminium High Pressure Die Castings: Parameter Optimisation and Gap Bridgeability	W. Van Haver, X. Stassart, B. de Meester, A. Dhooze (BELGIUM)	III-1424-07
11:30~12:00	Measuring Methods to Describe the Fatigue Behaviour of Friction Stir Welded Aluminium Joints	M.Gutensohn, G. Wagner, D. Eifler (GERMANY)	III-1437-07
12:00~12:30	Monitoring of the Friction Stir Welding Process to Describe Parameter Effects on Joint Quality	T. Jene, G. Dobmann, G. Wagner, D. Eifler (GERMANY)	III-1430-07
12:30~13:30	<b>LUNCH BREAK</b>		
13:30~14:00	Developments in NDT Focusing Defects In FSW of Aluminium Alloys	T. Santos, P. Vilaça, L. Quintino (PORTUGAL)	III-1426-07
14:00~14:30	Microstructure and Properties of Friction Stir Processed Investment Cast Ti-6Al-4V	A. Pilchak, M. Juhas, J. Williams	III-1435-07
14:30~15:00	Mechanical Properties of Friction Stir Welded Carbon Steel joint - Friction Stir Welding with and without Transformation	H. Fujii, L. Cui, K. Nakata and K. Nogi (JAPAN)	III-1453-07
15:00~15:30	Recent Developments In Friction Stir Welding and Friction Materials Processing of Titanium and Titanium Alloys	M. Russell, C. Blignault, N. Horrex and C. Wiesner (UK)	III-1428-07
15:30~16:00	<b>COFFEE BRAKE</b>		
16:00~16:30	Towards Multidimensionality and Flexibility in FSW Using an Industrial Robot	M. Soron (SWEDEN)	III-1432-07
16:30~17:00	Metallurgical Aspects of Friction Welds in a AE42 Magnesium Alloy	G. Pinheiro, C. Olea, JF dos Santos and KU Kainer (GERMANY)	III-1436-07
17:00~17:30	Formation of Friction Welding Joints in Heat Resistant Alloys	S.I. Kuchuk-Yatsenko, I.V. Ziakhov (UKRAINE)	III-1427-07

Note: Document III-1425-07 was cancelled by authors.

17:30 ~ 18:00: Explanation on paper works for publication. All authors shall stay in the room.



[Wednesday on 4 July; 14:00 ~ 16:00] at Room: D-01

**14. JOINT WORKSHOP WITH C-III, C-VIII AND C-XII on “Health, Safety and Quality in Welding”**

The first session on EMF (C-III members will joint only the first session of the Joint Workshop: III-1443-07)

III-1450-07 European Limits on the EMF Exposure and Welding  
by L.Costa, P. Montenovi (VIII-2024-07)

III-1457-07 Measurement and Numerical Simulation of Electromagnetic Field in Arc Welding  
by S Yamane, Y Yamamoto, K Oshima (XII-1930-07)

III-1449-07 Exposure Electromagnetic Fields During Resistance Welding Operations  
by Jean Noel Boyer (III-1449-07)

Short Discussion on EMF

[16:00~16:30: Coffee Break]

[Wednesday on 4 July; 16:30 ~ 18:00] at Room B-24

**15. WG B1 SESSION (Standardization on FSW) (Doc. III-1418-07~III-1422-07)**

Mr. Bolser may manage this session, and give brief introduction of the DIS drafts for ISO voting.

**16. WG B2 SESSION (Mechanical properties data base)**

Mr. Fujii manages this session. Agenda may be circulated later.

**17. WG B3 SESSION (Modeling for FSW)**

This Session may manage by Dr. dos Santos because the leader Mr. D’Alvise cannot attend this Meeting this year.

**18. SC III-B SESSION (Friction based processes)**

Dr. Dos Santos manages this session. Complete Agenda may be circulated later.

**19. WG-S SESSION (Standardization)**

The session is managed by Mr. Matsuyama. Agenda may be circulated later.

**<The final Plenary Session>**

**20. REPORTS OF WORKING GROUPS AND SUB-COMMISSIONS**

Both SC Chairmen are expected to report their current state and future work programs including their WG’s reports.

**21. PLAN FOR IIW 2008 IN GRAZ**

Discussion on the meeting plan including a workshop or some special events for IIW 2008 in Austria. The tentative title of Workshop is “Monitoring and control for resistance welding and related processes.” Commission III members shall decide the concrete title and plan of the Workshop.



## 22. RESOLUTIONS

## 23. ANY OTHER BUSINESS

## 24. DATE AND VENUES FOR NEXT MEETINGS

The next annual assembly has been planned in Graz, Austria. It is scheduled in the second week of July 2008.

The intermediate meeting of Com. III may be planned to resolve the voting results of DIS drafts on FSW this winter. The dates and places should be decided at this coming Annual Assembly meeting.

## 25. CLOSING THE MEETING

The meeting will be closed at 18:00 on 4 July 2007.

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The schedule may be varied depending to the situation of each session.

*Time limit of each presentation:*

Presentation : 15 ~ 20 min or less

Q & A : 10 min or less.

Total time for one presentation: 25 min or less

An OHP and a projector (beamer) will be prepared for the presentation.



**INTERNATIONAL INSTITUTE OF WELDING  
COMMISSION III  
RESISTANCE WELDING, SOLID STATE WELDING AND  
ALLIED JOINING PROCESSES**

**Sub-Commission III-B “Friction Based Processes”**

**AGENDA**

**Venue:**

The next Intermediate Meeting of Sub-Commission III-B will be held on the 4<sup>th</sup> July 2007 as part of the IIW Annual Assembly 2007 in Dubrovnik.

**Agenda**

1. Welcome of the Chairman
2. Annual Report of the Sub-Commission III-B
3. Status of the compilation work at GKSS for the round robin / bench marking programme of Sub-Commission III-B2
4. Intermediate Meeting Sub-Commission III-B 2007 in combination with the “3<sup>rd</sup> International Seminar on FSW Modelling and Material Flow Seminar”. Venue: GKSS, Geesthacht, Germany, 11 - 12 October 2007.

