

8TH INTERNATIONAL SEMINAR

“NUMERICAL ANALYSIS OF WELDABILITY”

25 - 27 SEPTEMBER 2006

GRAZ - SEGGAU, AUSTRIA

The seminar is organized by the Institute for Materials Science, Welding and Forming of the Graz University of Technology under the sponsorship of IIW Commission IX, Working Group “Mathematical Modelling of Weld Phenomena”.

Objectives of the 8th International Seminar 2006

The following items (among others) of development and application of numerical analysis shall be discussed:

- Melt pool and arc phenomena,
- Solidification,
- Microstructural modelling in weld metal and heat-affected zone,
- Microstructure and mechanical properties,
- Influence of post weld heat treatment,
- Crack phenomena and testing methods,
- Residual stresses and distortion,
- Hydrogen effects,
- Special welding processes,
- Modelling tools and computer programs.

Invitation and Call for papers

- Deadline for the submission of abstracts: **April 1st 2006**
- Authors will be informed about the acceptance of their abstract until **May 1st 2006**
- Deadline for the submission of final papers: **September 1st 2006**
- Author guidelines are available on the web site.

Publications

After a peer review process, the contributions will be published in a book similar to the previous seminars.

IIW-Kenneth Easterling Best Paper Award

This award, which is sponsored by the Institute for Materials Science, Welding and Forming of Graz University of Technology, will be presented for the third time.

Venue

This Seminar will take place at Schloss Seggau, the former bishop residence in the Styrian wine area 40 km south of Graz, Austria.

Seminar Organisation

Chairman: H. Cerjak
Institute for Materials Science, Welding and Forming,
Graz University of Technology
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1ST SOUTH-EAST ASIA IIW INTERNATIONAL CONGRESS

“WELDING IN SOUTH-EAST ASIA: A CHALLENGE FOR THE FUTURE”

21 - 22 NOVEMBER 2006 BANGKOK - THAILAND

This IIW International Congress is organised by the Welding Institute of Thailand.

Congress Theme

The large volume of development activity expected for South-East Asia in the coming years, more especially in the industrial sectors, constitutes a real **Challenge for the Future** for the welding technology, notably in terms of education, competitiveness, automation and quality management.

Congress Scope and Topics

The sustainable development of South-East Asia depends on the continued development of infrastructure and strategic industry sectors. With this in mind, the First South-East Asia IIW Congress will focus on fields of activity which are especially relevant to the region, such as:

- Construction.
- Transportation.
- Off-shore oil and gas exploration, extraction and beneficiation.
- Petrochemical and Refinery.
- Power generation.
- Food and Beverage.

Issues and developments in these fields of activity will be addressed. The overall aim of the congress will be to make a major contribution to industrial expansion unlike any the region has seen for many years.

The Congress will notably include 4 Technical Sessions:

Technical Session #1: Education – Processes

- **Education:** Welders, Specialists, Technologists, Engineers, Inspection Personnel, NDT Operators.
- **Processes:** Manual, Semi-Automatic, Automatic, New Developments of Movement and Productivity.

Technical Session #2: Materials – Design

- **Materials:** Plates, Tubes, Castings, Forgings and Accessories, Metallurgical and Physical Properties, Construction Precautions, Material Behavior, Filler Material, Special Tests, Joints of Dissimilar Materials.
- **Design:** Damage Analysis at Design Stage, Fatigue, Corrosion, Creep, Rupture, Comparison of Design and Construction Codes, Comparison of Analysis Software.

Technical Session #3: Fabrication – Applications Engineering

- **Fabrication:** Cutting, Forming or Stamping, Welding, Repair Procedures and Experience, Finishing.
- **Applications Engineering:** Methods, Procedures, Processes, Behavior, Tools, Safety, Automation, Codes, Standards, Criteria.

Technical Session #4: Quality Management

- Control, Inspection During, After and in Service, DT and NDT Methods and Innovations (experiences with degradation mechanisms), Assessment, Fitness for Services.

Call for papers

Interested parties wishing to present a paper within the scope of the congress are invited to submit the title of their intended paper and preliminary abstract of no more than 200 words to the congress organizers.

Schedule for submission of papers:

- Final date for Abstracts of Papers: **June 30, 2006.**
- Acceptance of Papers: **August 31, 2006.**
- Final date for Submission of Papers: **September 30, 2006.**

All accepted papers are to be included in the conference proceedings. Authors presenting papers at the congress will be given a reduced price for participation in the congress.

Venue

The congress will be held in Bangkok, Thailand, at the Imperial Queen's Park Hotel.

Social Programme

A special tour programme will be proposed to the Congress Delegates within Bangkok and the surrounding provinces.

Organising Committee

Welding Institute of Thailand
King Mongkut's Institute of Technology North Bangkok
1518 Pibulsongkram Road, Bangsue, Bangkok 10800 Thailand

Ms. Watcharee PAISART or Ms. Jintana PHAPHITAK

Phone: 66(0)-2587-7670 / 66(0)-2912-2020

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E-mail: iiw@weldingcongress.in.th

Web site: www.weldingcongress.in.th

5TH ASIAN PACIFIC IIW INTERNATIONAL CONGRESS

7 - 9 MARCH 2007

SYDNEY - AUSTRALIA

NOVOTEL HOTEL, SYDNEY OLYMPIC PARK

This IIW International Congress is hosted by the Welding Technology Institute of Australia (WTIA) and is the fifth in a very successful series held in the region. Australia hosted the first IIW International Congress in Tasmania in 1988 and then Melbourne in 2000. In 1996 a Congress was held in Auckland, New Zealand, and the Singapore Welding Society co-hosted with WTIA a Congress in that country in 2002.

The 2007 Congress will be held in conjunction with the WTIA 55th Annual Conference and Australian Institute for Non-Destructive Testing (AINDT) 2007 National Conference and is part of WTIA Technology Week (5 - 9 March 2007). The Congress is also supported by the International Committee for Non-destructive Testing (ICNDT).

Congress sessions will be held 09.00 to 17.30 Wednesday and Thursday, and 09.00 to 15.30 Friday and will include focus on IIW Commissions V, XI, XII, XIII and XV. Site Tours are being planned for both Tuesday morning and afternoon.

It is expected that a number of other events will be held during this WTIA Technology Week including IIW Commission meetings or forums and industry training courses.

Who Should Attend

Delegates attending the Congress will be drawn from a wide range of industries including mining, oil and gas off-shore, pipelines, power generation, petrochemical, fabrication and construction, steel and shipbuilding, pulp and paper, mineral processing, defence and others.

These delegates are expected to attend from many of the countries in the Asian Pacific Region, member countries of IIW and of course from Australia and New Zealand.

Sydney offers the international visitor an excellent range of sights and attractions, and the venue is located in the heart of the charismatic Sydney Olympic Park. A social programme will capitalise on the highlights of Sydney, its harbour and surrounds.

Congress Objectives

This IIW International Congress aims to bring together people from a wide range of industry, research and academic backgrounds to provide an environment for discussion of modern trends and current advances in the ever-increasing and demanding field of materials welding and joining; as used in the total product life cycle of practically every component around us.

The Congress will particularly focus on the common needs of the Asian Pacific Region and will facilitate the sharing and discussion of issues and challenges, and the creation of co-operative plans for future development.

The theme of this Congress will follow similar IIW Congress themes of promoting welding and joining for the creation of sustainable development and environment. The specific objectives of holding an IIW International Congress are:

- i. to expose delegates from industry in the host country and surrounding countries in the region to the work of the IIW and the international community, through the numerous experts who will participate;
- ii. to identify the needs of the countries in the region and produce IIW supported programs to help meet those needs, particularly through the efforts of the host country and others in the region;
- iii. to have international government or aid organisations formally involved in the Congress and subsequent programs;
- iv. to have authors from the less developed countries in the region presenting papers on work in their countries;
- v. to form Regional Groupings of IIW consisting of representatives of the regional countries that could then provide input to the main IIW Commissions.

Technical Programme

Papers will be presented in the areas of:

Pipelines	Repair and Maintenance
Pressure Equipment	Education and Training
Inspection and Testing	OH&S
Weldment Corrosion	Design of Weldments
Welding and Joining Processes	Codes/Standards
Structural Integrity	Weldability of Materials

Abstracts of papers should be submitted **immediately** to the WTIA Events Coordinator as below. After acceptance, the final date for submission of completed papers is **1st December 2006**.

Trade Exhibition and Sponsorship

There will be a Trade Exhibition held concurrently with the Congress. A variety of Sponsorship packages will also be available.

Registration

A registration brochure will be available shortly, and can be accessed via the website www.wtia.com.au or by emailing the WTIA Events Coordinator.

Welding Technology Institute of Australia
 PO Box 6165, Silverwater, NSW 1811 AUSTRALIA
 The Events Coordinator
 Phone: +61 (0)2 9748 4443
 Fax: +61 (0)2 9748 2858
 E-mail: events@wtia.com.au



IIW INTERNATIONAL CONFERENCE ON DESIGN, FABRICATION AND ECONOMY OF WELDED STRUCTURES, DFE2008 24 - 26 APRIL 2008 UNIVERSITY OF MISKOLC, HUNGARY



FIRST ANNOUNCEMENT AND CALL FOR PAPERS

Introduction

The main requirements of modern welded metal structures are the load-carrying capacity (safety), the fitness for production, and economy. These requirements can be met by structural optimization: the economy is achieved by minimizing a cost function. The safety and fitness for production are guaranteed by fulfilling the design and fabrication constraints. The topics of this conference are grouped according to these aspects of design, fabrication and economy, worked out by Professor József Farkas during his half century long professional activity. The aim of the conference is to bring together the world academics, researchers and practitioners in the broad fields of welded structures, structural mechanics, associated computation and structural engineering, to review recent achievements in the advancement of knowledge and understanding in these areas, share the latest developments, and address the challenges for the present and the future.



Previous conferences

Three international meetings were organized at the University of Miskolc in this field; the International Symposium on Tubular Structures (ISTS) in 1996, the Design of Metal Structures in 1997, and the International Conference on Metal Structures (ICMS) in 2003. Experienced and reputable international publishers have produced the Proceedings in a high standard.

Call for papers

Authors intending to present papers are invited to submit abstracts (preferably via e-mail) of 350-400 words (in English) by **30th April 2007** belonging to one of the following broad areas of interest:

Design: Structural Analysis and Design, Numerical Methods and Algorithms, Stability, Fracture, Fatigue, Vibration and Damping, Connections, Thin-walled Structures, Beams and Columns, Trusses, Frames, Towers, Plates and Shells, Tubular Structures, Steel and concrete composite structures, Application of Finite Element and Boundary Element Methods, Fire Safety, Wind Engineering, Earthquake Resistance, Structural Safety and Reliability, Damage Mechanics, Structural Materials, Design Codes, Industrial applications

Fabrication: Construction Technology and Methods, Welding Technologies, Residual Welding Stresses and Distortions, Post-welding Treatments, Fabrication Sequences, Environment Protections, Erection, Maintenance, Repair, Strengthening and Rehabilitation, Industrial applications.

Economy: Structural Optimization, Fabrication Costs, Applied Mathematical Methods, Cost Engineering, Evolutionary Techniques, Neural Networks, Expert Systems, Industrial applications.

Language: The language of the Conference is English.

Target dates

30 April 2007	: Abstract submission
15 June 2007	: Notification of provisional acceptance
30 October 2007	: Submission of camera ready manuscript

15 December 2007 : Notification of final acceptance
 24-26 April 2008 : Conference, distribution of the proceedings

Publication of Papers

Accepted papers will be published as the Proceedings of the International Conference on Design, Fabrication and Economy of Welded Structures by **Horwood Publishing Limited**, UK. The Proceedings will be available to all registered participants upon arrival at the Conference.

Special Sessions

A number of special sessions will be organised and held within the framework of the DFE2008 International Conference. Special sessions, while devoted to the reporting and discussion of the latest developments on a particular theme, will be expected to have international relevance. Prospective organisers are invited to submit proposals for special sessions as soon as possible, and by **31 March 2007** at the latest. They will be expected to identify potential contributors from around the world, and invite authors to prepare and submit papers for the special session. Special sessions will typically feature at least **8 presentations**. Special sessions and their organisers will be listed on the website in due course. Authors interested in contributing a paper to a special session will be required to submit their abstracts directly to the organiser of the special session, at the same time making a copy available to the Conference chairman. The general deadlines for the submission of abstracts and full papers will also apply for contributions to special sessions. The list will be updated as more proposals are accepted.

University of Miskolc

The history of the University began in 1735, when the first Mining and Metallurgical Academy was founded in Selmecbánya (Banská Stiavnica). In the ancient library there is a collection of the old technical books from the last 6 centuries. Now there are eight faculties and institutes at the University: Materials Science and Engineering, Earth Science and Engineering, Mechanical engineering, Law, Economics, Arts faculties and the Béla Bartók Music and Health Care institutes. There are about 15 000 students at the university. The training period for engineers is 5 years on MSc. level. There are about 1 500 students at the Faculty of Mechanical Engineering. Education is going on in Hungarian, but there is a special course for foreign students in English. There are also postgraduate and Ph.D. courses available on different fields.

Further Information

For further details, please contact:

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E-mail: dfc2008@uni-miskolc.hu

COMING EVENTS

IIW events

25 - 27 September 2006 Graz - Seggau (Austria)	8 th International Seminar "Numerical Analysis of Weldability"	Institute for Materials Science, Welding and Forming of the Graz University of Technology Web site: http://iws.tugraz.at/seggau.html
21 - 22 November 2006 Bangkok (Thailand)	1 st South-East Asia IIW International Congress	Welding Institute of Thailand Tel: + 66 2587 7670 Fax: + 66 2586 9014 E-mail: iiw@weldingcongress.in.th Web site: http://www.weldingcongress.in.th
7 - 9 March 2007 Sydney (Australia)	5 th Asian Pacific IIW International Congress	Welding Technology Institute of Australia Tel: + 61 (0)-2 9748 4443 Fax: + 61 (0)-2 9748 2858 E-mail: events@wtia.com.au Web site: http://www.wtia.com.au
2007 - Croatia	60 th IIW Annual Assembly	Hrvatsko Drustvo za Tehniku Zavarivanja
24 - 26 April 2008 University of Miskolc (Hungary)	IIW International Conference on "Design, Fabrication and Economy of Welded Structures, DFE2008"	Prof.Dr. Jarmaj, Karoly University of Miskolc, Hungary H-3515 Miskolc, Egyetemvaros Tel. +36-46-565111 ext 2028 voice post Fax. +36-46-563399 E-mail: altjar@uni-miskolc.hu Web site: http://www.alt.uni-miskolc.hu/dfc2008
2008 - Austria	61 st IIW Annual Assembly	
2009 - Singapore	62 nd IIW Annual Assembly	
2010 - Ukraine	63 rd IIW Annual Assembly	
2011 - India	64 th IIW Annual Assembly	

Other welding events

20 - 22 September 2006 Aachen (Germany)	Große Schweißtechnische Tagung (DVS annual meeting)	DVS (German Welding Society) Conference Department Tel.: + 49 (0) 211/1591-302/ -303 Fax: + 49 (0) 211/1591-300 E-mail: tagungen@dvs-hg.de Web site: www.the-joining-specialists.de
31 October - 2 November 2006 Atlanta/GA (USA)	2006 FABTECH International and AWS Welding Show	Web site: www.aws.org/expo
14 - 17 May 2007 Beijing (China)	ITSC 2007 – International Thermal Spray Conference	DVS (German Welding Society) ASM Web site: www.asminternational.org/itsc
21 - 24 May 2007 Moscow (Russia)	International Trade Fair Joining Cutting Surfacing	DVS (German Welding Society) Messe Essen
19 - 22 June 2007 Shanghai (China)	Beijing Essen Welding and Cutting International Trade Fair Joining Cutting Surfacing	DVS (German Welding Society) Messe Essen
19 - 21 June 2007 Aachen (Germany)	8 th International Conference on Brazing, High Temperature Brazing and Diffusion Bonding	DVS (German Welding Society)
16 - 18 September 2007 Basel (Switzerland)	Große Schweißtechnische Tagung (DVS annual meeting)	DVS (German Welding Society) Conference Department Tel.: + 49 (0) 211/1591-302/ -303 Fax: + 49 (0) 211/1591-300 E-mail: tagungen@dvs-hg.de Web site: www.the-joining-specialists.de
2 - 4 June 2008 Maastricht (Netherlands)	ITSC 2008 - International Thermal Spray Conference	DVS (German Welding Society)
17 - 19 September 2008 Dresden (Germany)	Große Schweißtechnische Tagung (DVS annual meeting)	DVS (German Welding Society) Conference Department Tel.: + 49 (0) 211/1591-302/ -303 Fax: + 49 (0) 211/1591-300 E-mail: tagungen@dvs-hg.de Web site: www.the-joining-specialists.de
14 - 19 September 2009 Essen (Germany)	17 th International Trade Fair Joining Cutting Surfacing	DVS (German Welding Society) Messe Essen