

**1<sup>st</sup> International Seminar on:**  
**Advances in Resistance Welding**  
**18-20 October 2000, Copenhagen, Denmark**

**ANNOUNCEMENT**

**Organisers:**

SWANTEC Software and Engineering ApS  
European Institute for the Joining of Materials (JOM)

**Background:**

Resistance welding, as a productive and competitive joining technology, has been widely applied in automotive, aerospace, electrical, electronic, mechanical and many other industrial sectors. The increasing requirements of safety, environment protection and economical effects have resulted in rapid development and application of new materials with high strength and good functionality (e.g. lightweight, environmental-friendliness, corrosion resistance and heat resistance etc). This, however, results in difficulties in welding of complex geometries (spot welding of multiple layers and projection welding of various shapes) and welding of materials difficult to join (such as high strength steel, stainless steel as well as silver, copper, aluminium and titanium alloys etc.) often involving dissimilar metal combinations. This has made resistance welding rather complex to apply and difficult to obtain optimised conditions in production. It certainly deserves more attention from both industry and institutions. Owing to the widespread applications of resistance welding as well as the recent developments of machines, tools and new methods, there is a great demand from industry to advance the applications of resistance welding and to obtain up-to-date information of the technology.

**Objectives:**

This seminar is the first professional meeting on resistance welding in the northern part of Europe with a focus on industrial applications. It is organised with presentations by well-known experts from Germany, United Kingdom, Belgium, The Netherlands and Denmark.

The objectives of the seminar are:

- To bring up the latest developments on industrial applications of resistance welding thereby to contribute to the modernisation of the technology in industries.
- To provide an opportunity for industrialists and specialists in resistance welding to share their experiences and expertise at an international level.

**Topics:**

The seminar topics include spot welding, projection welding, seam welding and resistance brazing. Presentations will cover materials, electrodes, machines and computer technologies in:

- Applications of resistance welding for challenging products and complex material combinations.
- Advances in resistance welding machine, electrodes and monitoring equipment.
- Modernisation of industrial applications of resistance welding with computer technology.

**Proceedings:**

Proceedings of all presentations will be distributed to participants at the seminar.

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**PROGRAMME**

**Seminar on 19 October 2000:**

- 08:45– 09:00 **Introduction** by *Dr. W. Zhang (SWANTEC) and Prof. R. L. Apps (JOM)*
- 09:00– 10:00 **State-of-the-art in Industrial Applications of Resistance Welding**  
*Stefan Schreiber, SLV Duisburg GmbH, Duisburg, Germany*
- 10:00– 10:45 **Resistance Welding of Complex Geometries and Metal Combinations**  
*Niels Bay, Technical University of Denmark, Lyngby, Denmark*
- 10:45– 11:00 Coffee Break
- 11:00– 11:30 **Preventive Maintenance on Multi-point Resistance Welding Machines**  
*Patrick Van Rymenant, De Nayer Institute, Sint Katelijne Waver, Belgium*
- 11:30– 12:00 **Simultaneous Resistance Welding**  
*Birthe Laursen, Danfoss A/S, Nordborg, Denmark*
- 12:00– 13:00 Lunch
- 13:00– 14:00 **Process and Quality Control in Resistance Welding**  
*Steve Westgate, TWI, The Welding Institute, Cambridge, UK*
- 14:00– 14:30 **Integrating Resistance Welding in Automatic and Semi-automatic Welding Machines**  
*Eisse Jan Drewes, AWL-Techniek B.V., Harderwijk, The Netherlands*
- 14:30– 14:45 Coffee Break
- 14:45– 15:30 **Computer Simulation of Resistance Welding Processes**  
*Wenqi Zhang, SWANTEC Software and Engineering ApS, Hoersholm, Denmark*
- 15:30– 16:00 **35 Years Industrial Experiences with Resistance Welding and a Vision to the Future**  
*Adrian Melton, Welding Technology Consultant, Burnley, UK*
- 16:00– 17:00 **Closure Discussions**

**Tuition Course on SORPAS<sup>®</sup> (the software for simulation of resistance welding):**

18 October 2000:

- 12:00 – 13:00 Lunch  
13:00 – 17:00 Tuition Course

20 October 2000:

- 09:00 – 13:00 Tuition Course (repeat)  
13:00 – 14:00 Lunch

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**GENERAL INFORMATION**

**Venue of Seminar:**

The seminar will be held on 19 October 2000 at:

Conference Room 1, Building 101A, Technical University of Denmark, 2800 Lyngby, Denmark.

**Location of Tuition Course on SORPAS<sup>®</sup>:**

The tuition course on SORPAS<sup>®</sup> will be held on 18 and 20 October 2000 at:

Room 019, Building 424, Technical University of Denmark, 2800 Lyngby, Denmark.

**Accommodation:**

Hotel rooms have been preliminarily reserved but please secure the reservation before 18 September at:

**Scandic Hotel Eremitage**

Klampenborgvej, Storcenter 62  
2800 Lyngby  
Tel.: (+45) 45 88 77 00  
Fax: (+45) 45 88 17 82

**DKK 825** for single or double room.

Including breakfast.

Be sure to mention the reference code "DTU1710" to receive this special rate.

**Hotel Fortunen**

Ved Fortunen 33  
2800 Lyngby  
Tel.: (+45) 45 87 00 73  
Fax: (+45) 45 87 12 22

**DKK 525** for single room.

**DKK 725** for double room.

Including breakfast.

**Travel:**

The seminar site, Technical University of Denmark (DTU), is located in the town of Lyngby, 10 km north of Copenhagen. You can get to the campus by taxi or public transportation.

Train from Copenhagen Airport:  
Transportation time: 40 min.  
Price: DKK 33

Train from Central Copenhagen:  
Transportation time: 20 min.  
Price: DKK 27.50

Taxi from Copenhagen Airport  
Transportation time: 30-45 min  
Price: DKK 350-400

Taxi from Central Copenhagen  
Transportation time: 20 min  
Price: DKK 150-200

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**REGISTRATION FORM**

*Please return the completed form with payment before 29 September 2000.*

**Participant:**

Name: \_\_\_\_\_  Ms.  Mr.  Dr.  Prof.  
Organisation: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Post code: \_\_\_\_\_ City: \_\_\_\_\_  
Country: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**Participation:**

Seminar:	<input type="checkbox"/> 19 October	Euro 350,-
Tuition Course:	<input type="checkbox"/> 18 October	Euro 70,- / free
	<input type="checkbox"/> 20 October (repeat)	Euro 70,- / free

*Notice: 1. The tuition course is free of charge for participants attending the seminar.  
2. All prices are exclusive VAT.*

**Payment:**

- Cheque made payable to SWANTEC Software and Engineering ApS.
- Bank transfer to Danske Bank, DTU-Branch, 2800 Lyngby, Denmark.  
Reg. No. 4263, Account No. 4263877810.

*Notice: Your name in the transfer is important for identification.*

**Please return to:**

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