



LÖT 2016

11th International Conference on Brazing,
High Temperature Brazing and Diffusion Bonding

June 7 – 9, 2016
Aachen/Germany

www.dvs-ev.de/LOET2016



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Programme is subject to change without notice.

LÖT 2016

From June 7 to 9, 2016 the 11th International Conference on Brazing, High Temperature Brazing and Diffusion Bonding represents once again one of the world-wide leading conferences in this field. The conference brings together the professional world of joining technology in Aachen.

The technical development is still progressing faster and faster. Innovative products are manufactured from most modern materials, which are subjected to extreme conditions both during the manufacturing and in operational applications. Therefore, a crucial role is given to the joining technique. Particularly the brazing technique offers a multiplicity of interesting solutions to the manufacturer to join different kinds of materials and products.

Even for the application of these joining processes a special level of knowledge is necessary, which results from the application-oriented information exchange of practice and science and mediates the newest realisations.

It will offer a basis on which

- the transfer of scientific findings to operational practice can be elaborated,
- the production process can be optimised with regard to technical and economic aspects,
- new materials methods and production methods can be presented,
- the professional contact between users and researchers can be established or intensified.

It is a great pleasure for us inviting all specialists and interested experts to LÖT 2016 to inform about latest developments and trends and additionally to compare the latest findings in international dialogues.

Already today we know: LÖT 2016 will be a conference highlight in this year.

We would be pleased to see you in Aachen.

Dr.-Ing. Roland Boecking
General Manager DVS

Prof. Dr.-Ing. Kirsten Bobzin
Conference Chairman

Meetings

June 6, 2016

- 15:00 - 16:00 Programmkommission LÖT 2016
Room Tagungs-Treff
-

June 9, 2016

- 14:30 - 17:30 IIW Commission XVII
Brazing, soldering and diffusion joining
Room Tagungs-Treff

Sponsors of the LÖT 2016



voestalpine Böhler Welding Fontargen GmbH, Eisenberg / Germany



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by voestalpine



Soldering & Brazing – As an insider, we have insight into processing methods and understand how to apply them as the essential factor for optimum soldering results. Our expertise has been formulated over many years of experience providing solutions and the knowledge gained from countless application challenges.

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Tabletop Exhibition

Concurrent with the 11th International Conference on Brazing, High Temperature Brazing and Diffusion Bonding the following exhibitors are presented:

Exhibitors

- Castolin GmbH, Kriftel/DE
- EMAG eldec Induction GmbH, Dornstetten/DE
- EUROMAT GmbH, Baesweiler/DE
- GTD GRAPHIT TECHNOLOGIE GmbH, Langgoens/DE
- Hauck Heat Treatment B.V., Eindhoven/NL
- Höganäs GmbH, Düsseldorf/DE
- Lew Induktive Erwärmungsanlagen GmbH, Gumpoldskirchen/AT
- InnoBraze GmbH, Esslingen/DE
- Johnson Matthey Metal Joining, Royston/GB & Zürich/CH
- Linde AG, Linde Gases Division, Pullach/DE
- Listemann Technology AG, Eschen/LI
- Lucas Milhaupt Inc., Cudahy/USA
- Mahler GmbH, Plochingen/DE
- MAT-TECH B.V., Son/NL
- Metglas Inc., Conway/USA
- PFARR GmbH, Buttlar/DE
- PVA Löt- und Werkstofftechnik GmbH, Wettenberg/DE
- REUTER TECHNOLOGIE GmbH, Alzenau/DE
- SCHMETZ GmbH, Menden/DE
- Sentes-BIR A.S., Izmir/TR
- Umicore AG & Co. KG, Hanau/DE
- UST Kurt Roth e.K., Straubenhardt/DE
- VACUUMSCHMELZE GmbH & Co. KG, Hanau/DE
- VBC Group, Loughborough/GB
- voestalpine Böhler Welding Fontargen GmbH, Eisenberg/DE
- Wall Colmonoy, Swansea/GB
- Wesgo Ceramics GmbH, Erlangen/DE
- WPX Faserkeramik GmbH, Troisdorf/DE

Status: March 4, 2016

Information

Conference Location

Eurogress Aachen
Monheimsallee 48
52062 Aachen
Germany

Registration

E-mail or fax

Send your complete registration form to
DVS – German Welding Society
Conference Department
P.O. Box 10 19 65
40010 Düsseldorf, Germany
P +49. (0)211. 1591-302/-303
F +49. (0)211. 1591-300
[tagungen@dvs-hg.de](mailto>tagungen@dvs-hg.de)

Online

You can also use the online registration: www.dvs-ev.de/LOET2016
(will be closed by June 1, 2016)

If your registration form has not been received by DVS May 20, 2016, you will pay a late registration fee of EUR 80. This applies also to on-site registration. A registration confirmation/invoice will be sent to you within 10 business days of receiving your registration.

Payment

By credit transfer:

DVS – German Welding Society
Commerzbank AG, Düsseldorf,
BIC-code: DRESDEFF300
IBAN-code.: DE82 3008 0000 0212 6011 00

Any bank charges which may be incurred will be borne by the attendees.
Keyword for credit transfer (please do not forget): LÖT 2016, no. of invoice and name of attendee.

By credit card:

MasterCard, Visa, American Express (all are accepted)

Cancellations

All cancellations must be in writing to DVS by May 20, 2016. Cancellations after May 20, 2016 cost EUR 100 for administrative fee. No refunds will be given for cancellation made after May 31, 2016. A substitute can be nominated.

Opening

Session Chairmen: P. He, H. Schmoor

09:00 Opening / Welcome**R. Boecking**

General Manager DVS

K. Bobzin

Conference Chairman

H. Schmoor

Chairman of the Brazing and Soldering Society

09:15 Metallurgical alloys and joints probed down to the atomic scale

D. Raabe

10:20 Brazer, Operator and Brazing Coordinator – Increasing demand for qualified specialists

T. Wilhelm

10:40 Transformation/dissolution testing in a grouping and read across approach to determine the environmental classification of alloy brazing pastes

N. Dom*, N. Moelants, H. Krappitz, D. Schnee

11:00 Tabletop Exhibition, Poster Session, Coffee Break**Joining of ceramics, glass and metals I**

Session Chairmen: T. Oyama, B. Zigerlig

11:20 Ultrasonic soldering of metals, light metals, glasses and ceramics

I. Rass

11:40 Active soldering of ceramic-ceramic and ceramic-metal compounds for aerospace applications

A. Schmidt*, T. Schubert, T. Weißgärber, B. Kieback, M. Funke, M. Süß, C. Wilhelmi

12:00 Low temperature joining as an alternative process to soldering in thermal applications

T. Baffie*, T. Dessolier

12:20 A preliminary research of microstructure and properties of Li-Ti ferrite joints fabricated by brazing technique with bismuthate glass solder

P. He, P. Lin*, T. Lin, M. Zhao

- 12:40 The effect of Ag-Cu-Ti braze preform thickness on the nano-mechanical properties of alumina-to-alumina brazed joints**
T. Kassam*, N. Ludford, H. Nadendla, U. Hangen

13:00 Tabletop Exhibition, Poster Session, Lunch Break

Joining of ceramics, glass and metals II

Session Chairmen: J. Janczak-Rusch, P. Battalsky

- 14:00 Experimental investigations of TiAl-brazes for ceramic joining**
H.-P. Martin*, A. Triebert

- 14:20 Development of Cu-Al-Ti filler metals for $\text{Al}_2\text{O}_3/\text{SS}$ brazed joints applied for Na-S batteries cells**
H. Heo*, K. Jung, C. Kang

- 14:40 Brazing of kovar to alumina and LTCC for integration of ceramic pressure sensors**
J. Schilm*, A. Pönicke, A. Goldberg, U. Partsch, A. Michaelis

- 15:00 Influence of sandwich brazing filler metal compositions on hardmetal-steel joint stress and strain evolution**
M. Magin*, D. Schnee, M. Schimpfermann, S. Rassbach

- 15:20 Sealing performance of Ag-CuO brazing filler on porous $\text{La}_0.6\text{Sr}_0.4\text{Co}_0.2\text{Fe}_0.8\text{O}_{3-\delta}$ applied in an oxygenation membrane module**
S. Herzog*, A. Kaletsch, C. Broeckmann

15:40 Tabletop Exhibition, Poster Session, Coffee Break

Joining of light weight metals I

Session Chairmen: K. Matsu, H. Janssen

- 16:00 Structure and strength of titanium honeycomb and heat exchanger joints brazed by new amorphous foils**
A. Shapiro*, Y. Flom

- 16:20 Repair brazing and protection of titanium turbine components using polymer bonded tapes**
S. Uddin*, I. Reinkensmeier, H. Krappitz, J. Barnikel

- 16:40 Surface pretreatment of steel sheet for compound casting process of low-distortion and low-gap aluminium cast-steel sheet hybrid**
L. Gerdts*, K. Bobzin, M. Öte, S. Wiesner

17:00 Mechanical properties of brazed aluminum / stainless steel**mixed joints**

V. Fedorov*, M. Elssner , S. Weis, G. Wagner

17:20 Tabletop Exhibition, Poster Session, Coffee Break**Joining of light weight metals II**

Session Chairmen: A. Shapiro, M. Türpe

17:40 Material effects on the cathodic arc cleaning in laser-plasma processing of aluminum alloys

T. Radel*, P. Woizeschke, F. Vollertsen

18:00 Brazing of magnesium alloy and austenitic stainless steel using a copper-filler deposited by means of an arc-PVD process

B. Lehmkert*, W. Tillmann, L. Wojarski, M. Manka

18:20 Arc-brazing of high-strength steels using copper-based brazing materials

M. Angerhausen*, U. Reisgen, V. Wesling, J. Barthelmie, C. Geffers

18:40 Penetrating and diffusion behavior of eutectic liquid during Mg/steel contact reactive brazing using pure nickel as interlayer

H. Li*, W. Long, H. Nie, S. Zhong, Z. Chen

19:00 Award Presentations**19:15 - 22:00 Welcome Reception**

All attendees are invited by DVS to partake in the refreshments.

Process and product quality

Session Chairmen: H. Li, D. Schnee

- 08:40 Advances in strength measurements of glass sealants used for solid oxide fuel cells**

S.-M. Groß-Barsnick*, C. Babelot, D. Federmann, U. Pabst

- 09:00 Applications of the electrical resistance measurement for a quality assurance of brazed joints**

N. Sievers*, W. Tillmann

- 09:20 Fatigue strength of brazed components considering the influence of brazing quality, mean stresses and loading type**

J. Baumgartner*, W. Tillmann, K. Bobzin, L. Wojarski, M. Öte, M. Manka, S. Wiesner, N. Sievers

- 09:40 Investigation of the effect of surface contamination on the wetting behavior of Cu-based filler alloys**

S. Wiesner*, K. Bobzin, M. Öte, W. Tillmann, L. Wojarski, M. Manka, A. Eilers

- 10:00 Tabletop Exhibition, Poster Session, Coffee Break**

Diffusion bonding

Session Chairmen: H. Xiong, U. Reisgen

- 10:20 Diffusion bonding – an application review**

S. Jahn*, F. Gemse, S. Dahms, U. Broich

- 10:40 Diffusion brazing of AgCu+Ni for high temperature applications**

D. Feil*, T. Herberholz, A. Fix, F. Wetzl, M. Guyenot, G. Schmitz

- 11:00 Brazing and diffusion bonding in 3D-manufacturing of titanium alloy structures**

R. Denteneer, L. Krassenburg, J. Brom, M. Menninga, A. Kodentsov, M. H. Biglari*

- 11:20 Diffusion bonding of large scale parts – system requirements**

S. Jahn, F. Gemse, U. Broich, J. Pfeiffer*

- 11:50 Assembly of heat exchanger reactors by brazing and diffusion bonding**

C. Bernardi*, D. Macel

- 12:10 Critical approach to the parameters of the diffusion bonding process using the example of 1.1191**

F. Petzoldt*, J. Bergmann, R. Schürer, A. Regensburg

12:30 Simulation of temperature and load distribution for diffusion bonding

S. Jahn, A. Fey*, F. Gemse, S. Dahms

12:50 Tabletop Exhibition, Poster Session, Lunch Break

Brazing processes

Session Chairmen: J. E. Indacochea, K. Bobzin

13:40 Optimization of temperature-/timecycles in brazing through thermodynamic calculations

O. Stahn*, W. Müller, J. Wilden, B. Schmorl

14:00 Development of a combined brazing-nitriding process for the production of bipolar plates made of chromium coated metal sheets

U. Holländer*, F. Weber, I. Scharf, M. Müller, T. Lampke, K. Möhwald, H. Maier

14:20 The mechanisms of surface deoxidation of stainless steels in vacuum brazing processes

C. Kunz, L. Wegewitz*, S. Schöler, K. Möhwald, W. Maus-Friedrichs

14:40 Fluxfree brazing of copper based alloys and steels at temperatures between 650 °C and 850 °C in monosilane-doped nitrogen

F. Weber*, U. Holländer, J. Schaup, K. Möhwald, H. Maier

15:00 Corrosion protection of steel pipes by soldering-clad layers

A. Shapiro, G. Fischer*

15:20 Gaseous process gas additives as flux substitute in arc brazing

G. Buchholz*, U. Reisgen, K. Willms

15:40 Tabletop Exhibition, Poster Session, Coffee Break

Properties of filler metals and brazed joints

Session Chairmen: W. F. Gale, G. Wagner

16:00 Brazing properties and mechanical strength of new silver based brazing filler metals on the basis Ag-Cu-Zn-Mn with a 10-20 weight % reduced silver content

M. Schimpfermann*, D. Schnee

16:20 Influence of the microstructure on the properties of Fe-based brazed joints

S. Weis, M. Elssner*, T. Uhlig, G. Wagner

- 16:40 Influence of surface morphology on wetting behaviors of Zn-Al filler metal on aluminum matrix composite**
H. Zhao*, S. Elbel, P. Hrnjak
-

- 17:00 Temperature effects on microstructures of brazing porous copper to copper using Cu-based filler metal**
T. Zaharinie*, M. Sami, F. Yusof, A. Tadashi
-

- 17:20 Grain boundary penetration at pure copper of brazed joint between pure copper / dissimilar metals**
Y. Miyazawa*, A. Hirono, T. Wasada, Y. Andou, F. Kanazaki
-

- 18:00 Sightseeing Historic Old Town of Aachen**

Brazing of / with nickel alloys I

Session Chairmen: W. Miglietti, I. Reinkensmeier

-
- 08:40 New nickel based brazing alloy suitable for very corrosive environments**

U. Persson*, N. Bornebergård

-
- 09:00 Influence of boron and phosphorus containing nickel based brazing alloy on different base materials**

M. Marsilius*, T. Hartmann

-
- 09:20 Examination of the influencing factors on the microstructure of AISI 304/ BNi-2 joints**

M. Manka*, W. Tillmann, L. Wojarski, F. Walther, P. Wittke, A. Schmiedt

-
- 09:40 Brazing joint properties of Ni-Cr-Si-P amorphous brazing foils at elevated temperatures**

T. Hartmann*, M. Marsilius

-
- 10:00 Microstructure and strength properties of austenitic and ferritic stainless steels when brazed with various nickel and iron based amorphous brazing foils**

E. Theisen*, W. Coughlan, D. Kemmenoe, S. Baker

-
- 10:20 Tabletop Exhibition, Poster Session, Coffee Break**

Brazing of / with nickel alloys II

Session Chairmen: M. Boretius, H. Krappitz

-
- 10:40 Microstructure and mechanical properties of Ti_3Al/Ni -based superalloy joints brazed with AuNi filler metal**

H. Xiong*, H. Ren, B. Chen

-
- 11:00 Nickel-brazing-pastes in automotive production application examples**

M. Schmitt

-
- 11:20 Multi-scale FEA modeling of braze joints for gas turbine applications**

B. Riggs*, B. Alexandrov, A. Benatar, R. Xu

-
- 11:40 Brazing of SLM generated nickel base materials for turbine application in the hot gas area**

I. Reinkensmeier*, S. Piegert

-
- 12:00 Best Poster Award**

-
- 12:10 Lunch Break**

Development of filler metals

Session Chairmen: A. Rabinkin, K. Möhwald

12:40 A modelling approach to the understanding of brazing filler metal compositions

R. Snell*, J. Willingham, P. Webb, I. Todd, R. Goodall

13:00 In-situ synthesis of difficult-to-form brazing filler metals

W. Long, G. Zhang, Q. Zhang*

13:20 Development of copper and nickel based brazing solders with a low brazing and a high re-melting temperature

M. Schmieding*, U. Holländer, K. Möhwald, H. Maier

13:40 Joining of steels at low temperatures by Ni nanoparticles

S. Hausner*, S. Weis, G. Wagner

14:00 A new silver reduced vacuum brazing filler metal with an improved stainless steel wetting behavior for vacuum sealing applications

G. Wiehl*, D. Hildebrandt

14:20 Braze alloy modification using alternative galvanic platings on hardmetal saw tips

S. Rassbach*, G. Whiel, M. Magin, M. Schimpfermann

14:40 Closing Remarks

Poster Session Industrial co-operative research

Projects about the industrial co-operative research are shown. From this publicly sponsored research results are presented about the following subjects:



Influence of the oxide layer on the brazeability of aluminium

E. Hofmann et al., Technical University of Dresden, Institute for Surface and Production Engineering

Determination of failure criteria of mechanically and corrosively loaded brazed joints of sheets made of stainless chromium-nickel steel

U. Holländer et al., Leibniz University Hannover, Institute for Materials Science

Fluxfree brazing of copper based alloys and steels at temperatures between 650 °C and 850 °C in monosilane-doped nitrogen

U. Holländer et al., Leibniz University Hannover, Institute for Materials Science

Development of high-temperature resistant Co-based brazing fillers

T. Uhlig et al., Technical University Chemnitz, Institute of Material Science and Engineering

Poster Session

- 01 Strength of titanium base metals after brazing at different temperatures in the range of 680-1000 °C**
A. Shapiro*, Y. Flom
- 02 Joining of some perovskite ceramic materials using air-brazing technology**
T. Sydorenko*, Y. Naidich
- 03 Development of brazing alloys based on Al-Si-Cu and Al-Si-Ge system for brazing of aluminum alloys with low solidus temperature**
I. Pashkov*, J. Karpova, V. Bazhenov, T. Bazlova
- 04 Keyhole brazing an approach for energy efficient brazing by using the deep penetration effect**
T. Radel*, P. Woizeschke, F. Vollertsen
- 05 Joining 7075 aluminium alloy to galvanized steel by CMT process**
Y. Qin*, G. Jiao, Z. Yu
- 06 Low temperature soldering of glass to metal and its joint properties**
H. Li*, W. Tillmann, H. Teng, Y. Pei
- 07 Construction of an experimental set-up for brazing stainless steel samples in low vacuum atmosphere consisting of mono-silane-doped argon**
S. Schöler*, U. Holländer, C. Kunz, L. Wegewitz, W. Maus-Friedrichs, K. Möhwald
- 08 Economic processing of high volume binder burn out in vacuum furnace**
R. Stein*, M. Stroiczek
- 09 Development of scaled thrust chamber with diffusion bonding**
H. Lee*, K. No, J. Yoon, J. Yoo
- 10 Development of the reaction zone at the steel interface during aging of reactive air brazed ceramic/metal joints**
S. Wiesner*, K. Bobzin, M. Öte
- 11 Reactive partial transient liquid phase diffusion bonding of SiC-SiC**
C. Schaak*, W. Tillmann, J. Pfeiffer
- 12 Brazing of dissimilar metals with thermal gradients and mechanical characteristic**
M. Kurata*, K. Kawata, Y. Miyazawa

Poster Session

- 13 Title effect of current load at relative low temperature on microstructure of copper joined by Sn-based alloy**

N. Moriyama*, K. Takeru, Y. Miyazawa

- 14 Effect of brazing temperature on the microstructure and strength of FGH96/DD6 joints**

B. Chen*, H. Xiong, W. Zou, Y. Cheng, W. Mao

- 15 Evaluation of new silver-free brazing filler metals**

A. Shapiro*, M. Duffey, J. Marchal, B. Alexandrov

- 16 Development of AlCuTi and AlCuAgTi brazing filler alloys for joining processes of aluminum alloys with low brazing temperatures**

T. Henning*, W. Tillmann, L. Wojarski, M. Manka

- 17 Characterization of Ti-6Al-4V joints, brazed with a nano-structured Cu-W filler material**

M. Kuck*, W. Tillmann, L. Wojarski, B. Lehmet, N. Sievers

- 18 Micro vickers hardness of sintered Ag nano particles at elevated temperature and grain growth**

T. Obara*, H. Yamaguchi, Y. Miyazawa, A. Mochizuki, H. Kida

- 19 Wettability and the joint strength of Ag-Cu-Sn brazing filler metals on mild steel base metal**

B. Din Kamar*, L. Sisamouth, F. Yusof, T. Ariga, M. Hassan

- 20 Arc brazing of aluminum matrix composites using AlAgCu filler**

M. Elssner*, V. Fedorov, S. Weis, G. Wagner

- 21 Characterisation of transient liquid phase bonding solidification processes with rapidly solidified brazing ribbons**

L. Pongratz*, K. Bobzin, M. Öte, S. Wiesner, M. Apel, J. Mayer, A. Aretz

- 22 Influence of thermomechanical treatment on the liquid metal embrittlement of copper-brazed plate heat exchangers**

T. Uhlig*, V. Fedorov, S. Weis, G. Wagner

- 23 Soldering of diamond using Zn-15Al solder by applying ultra-sonic vibration**

K. Susukida*, K. Tada, T. Yamazaki

- 24 Interfacial reaction analysis of Cu-7.0P/Cu joint using micro-wave hybrid heating**

M. Lufti*, F. Yusof, S. Ramesh, A. Tadashi, M. Hamdi

- 25 Heat resistant joining of cBN grains using Zr and C by tungsten filament heating**

H. Tozaki*, H. Yamamoto, T. Yamazaki

Poster Session

- 26 Joining of magnesium alloy plate to stainless steel plate by spot brazing and analysis for interfacial structure**

K. Yokota*, H. Umemura, Y. Miyazawa

- 27 Direct bonding of aluminium to copper using solid-liquid interdiffusion**

F. Petzoldt*, J. Bergmann, R. Schürer, A. Regensburg, K. Michels

- 28 A study of the mechanical stability of silver brazing filler metals at elevated temperature**

R. Snell*, P. Barmeda, Z. Song, P. Webb, J. Willingham, R. Goodall

- 29 In-situ synthesis of reinforcements in the filler layer for brazing of graphite to CuCrZr alloys**

Y. Mao*, K. Wang, S. Yu, S. Wang, Q. Deng

- 30 Development of new ceramic to metal assemblies by brazing for high temperature applications up to 1300 °C and with good corrosion resistance under wet and dry hot air**

J. Caboche*, C. Colin, J. Fruhauf, M. Boussuge

- 31 Effect of brazed layer thickness on interfacial reaction between WC-Co**

R. Sakashita*, Y. Miyazawa, T. Goto, T. Takato

- 32 Properties of selected nickel and iron based brazing filler metals**

A. Osmand*, M. Weinstein, L. Lee, L. Johnson, A. Battenbough

Registration Desk and Check-In / On-site Registration

Registered attendees should check in and pick up their conference tickets incl. the conference proceedings as soon as possible at the registration desk.

The registration desk will be located in the foyer of the Eurogress Aachen, (P +49. (0)241. 9131-538). Opening hours for the registration desk are as follows:

Monday, June 6, 2016	16:00 - 17:30
Tuesday, June 7, 2016	08:00 - 18:00
Wednesday, June 8, 2016	08:00 - 17:00
Thursday, June 9, 2016	08:00 - 14:00

Registration Fees

See registration form or online www.dvs-ev.de/LOET2016

Conference Information

The conference will take place as a **discussion event**. The names of the lecturers are followed by an **asterisk**. The language of the conference is **English**.

Conference Proceedings

The conference proceedings will be published in advance with all illustrations and tables.

Poster Session

During the conference a poster session will be held in the Saal Berlin (see pages 17-20). The contributions to the poster session will be published in the conference proceedings (volume 325 of the DVS report series). The presenters of the posters will be available for discussion at the times mentioned in the conference programme. In addition, further contacts with the presenters can be arranged.

Award Presentations

Since 2010 the Erich Lugscheider Award is granted every 3 years at the LÖT conference. With this award distinguished persons in the field of brazing are honoured for rendering outstanding services for the international interconnect-edness of brazing and soldering technology and the exchange of knowledge as promoted by Professor Erich Lugscheider.

At the suggestion of the programme committee the DVS – German Welding Society has launched a promotional scheme for one of the best contributions. The successful contribution will be chosen by a neutral prize committee, which will include members of the programme committee.

This year the DVS is giving an award for the best poster at the LÖT 2016. Until Wednesday evening (17:00) all participants are asked to tick the poster presentation they think is the best one on their voting paper (enclosed in your conference documents). The presentation with the best design and realization of the topic will be honored with an award on Thursday at 12:00.

List of Attendees

All attendees having registered before May 25, 2016 will be entered into a list of attendees. This list will be distributed free of charge during the conference.

Aachen – sightseeing tour of the historical city

Wednesday, June 8, 2016, 17:30. Start from the Eurogress Aachen.

Discover Aachen by an interesting walk through the historical centre with its venerable old merchants' houses and winding lanes.

Please indicate your participation on the registration form. **The number of participants is limited.**

Hotel Reservation

Hotel reservations can be made by filling in the enclosed reservation form and faxing it to the

aachen tourist service e.V.

P.O. Box 10 22 51

52022 Aachen, Germany

P +49. (0)241. 18029-50

F +49. (0)241. 18029-53

incoming@aachen-tourist.de

or online: www.aachen-congress.de/hotels/loet2016

Parking Area

There are a lot of parking spaces in the underground car park of the Eurogress.

Charges: max. EUR 10 daily

Travel Connections

Train:

Good connections between Düsseldorf - Aachen and Cologne - Aachen.

Car:

E 314 Antwerpen - Hasselt - Heerlen - Aachen

E 40 London - Brüssel - Lüttich - Aachen

A 4 Olpe - Cologne - Aachen

A 44/46 Düsseldorf - Neuss - Aachen

Plane:

Airport Maastricht-Aachen (NL), 41 km - www.maa.nl

Airport Köln/Bonn, 85 km - www.koeln-bonn-airport.de

Airport Düsseldorf, 90 km - www.duesseldorf-international.de

Presenting Authors, Poster Presenters, Session Chairmen

A

Angerhausen, M. RWTH Aachen University, Aachen/DE

B

Baffie, T. CEA-LITEN Grenoble, Grenoble/FR

Batfalsky, P. Forschungszentrum Jülich GmbH, Jülich/DE

Baumgartner, J. Fraunhofer Institut für Betriebsfestigkeit und Systemzuverlässigkeit, Darmstadt/DE

Bernardi, C. Institut de Soudure Association, Yutz/FR

Biglari, M. H. Mat-Tech BV, Son/NL

Bobzin, K. RWTH Aachen University, Aachen/DE

Boecking, R. DVS – German Welding Society, Düsseldorf/DE

Boretius, M. Listemann Technology AG, Eschen/LI

Buchholz, G. RWTH Aachen University, Aachen/DE

C

Caboche, J. MINES-ParisTech - Centre des Materiaux, Evry/FR

Chen, B. Beijing University of Technology, Beijing/CN

D

Din Kamar, B. University of Malaya, Kuala Lumpur/MY

Dom, N. Umicore, Olen/BE

E

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