



GERMAN WELDING  
SOCIETY



# **10<sup>th</sup> International Congress and Exhibition on Aluminium Brazing 2018**

12 – 14 June, 2018  
Düsseldorf/Germany

[www.dvs-ev.de/aluminium-brazing](http://www.dvs-ev.de/aluminium-brazing)

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on Aluminium Brazing 2018



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## Aluminium Brazing 2018

The International Aluminium Brazing Congress, organised by the DVS – German Welding Society, will take place from 12 – 14 June, 2018 in Düsseldorf/Germany in the Radisson Blu Scandinavia Hotel.

The conference provides opportunities for establishing and strengthening business relationships, expanding networks and growing confidence in the art of aluminum brazing through expert presentations, technical discussions and exhibits by participating companies.

The organisers are sure to have an interesting offer of lectures held by well recognised speakers and heartily invite you to take part in this significant event.



# Tuesday 12 June, 2018

|       |                                                                                                                                                                                     |
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| 08:30 | Registration                                                                                                                                                                        |
| 10:15 | <b>Welcome / Introduction</b><br>Hans-Walter Swidersky (Chairman of the Aluminium Brazing Conference)<br>Hartmut Schmoor (Chairman of the Brazing and Soldering Society of the DVS) |

|                    |                                                                                                                                                                                                                                                                                           |
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| <b>Materials I</b> |                                                                                                                                                                                                                                                                                           |
| Chair:             | Hans-Walter Swidersky                                                                                                                                                                                                                                                                     |
| 10:30              | <b>Inside filler – a brazing sheet turned inside out</b><br>Volker Sass* (Hydro Aluminium Rolled Products GmbH), Hartmut Janssen, Gerhard Bermig, Nico Eigen, Manfred Mrotzek                                                                                                             |
| 11:00              | <b>Brazed high strength MPE tube solutions</b><br>Nagaraj Vinayagam Govindaraj (Hydro Aluminium as, Innovation & Technology – Precision Tubing Extruded Solutions), Arvid Espedal, Ulrik Jessen, Jan Halvor Nordlien*                                                                     |
| 11:30              | <b>The determining role of brazing temperature in fatigue behavior of aluminium material for automotive exchanger applications</b><br>Anne-Gaelle Villemiane* (VALEO), Armelle Danielou* (Constellium Technology Center), Vincent Renault, Josselin Paturaud, Julien Saunier, Clara Pilon |

12:00 Lunch and exhibition

|                     |                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Materials II</b> |                                                                                                                                                                                |
| Chair:              | Raimund Sicking                                                                                                                                                                |
| 13:00               | <b>Minimising residual flux – introducing TRILLIUM® Lean</b><br>Richard Westergård* (Gränges Sweden AB), Slawomir Koscielski                                                   |
| 13:30               | <b>Material concept for corrosion resistant brazed MPE heat exchangers</b><br>Nico Eigen* (Hydro Aluminium Rolled Products GmbH), Volker Sass, Manfred Mrotzek, Gerhard Bermig |
| 14:00               | <b>The long-life corrosion behaviour of vacuum brazed heat exchanger alloys</b><br>Alan Gray* (Innoval Technology Ltd.), Adam Nadin, Gerhard Hanko, Petra Kaufmann             |
| 14:30               | Exhibition and coffee break                                                                                                                                                    |

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| <b>Testing and design</b>                                                                                                                                                                                                  |                                                                                                                                                     |
| Chair:                                                                                                                                                                                                                     | Raimund Sicking                                                                                                                                     |
| 15:00                                                                                                                                                                                                                      | <b>New field representative corrosion test for climate condensers</b><br>Joerg Schaper* (MAHLE Behr GmbH & Co. KG), Oliver Mamber, Matthias Pfitzer |
| 15:30                                                                                                                                                                                                                      | <b>Interaction of coolant chemistry with brazing residue</b><br>Serge Lievens* (Arteco), Andreas Haas, Sandra Claeys, Jürgen De Kimpe               |
| 16:00                                                                                                                                                                                                                      | Exhibition                                                                                                                                          |
| <b>18:00 – 22:00 Social Evening Event</b><br>Enjoy a boat trip on the river Rhine to strengthen business relations in an enjoyable and informal atmosphere including a tasteful buffet and some impressions of Düsseldorf. |                                                                                                                                                     |
| 17:30                                                                                                                                                                                                                      | <b>Boarding at Rheinterrasse boats dock “Düsseldorf 3”</b>                                                                                          |
| 18:00                                                                                                                                                                                                                      | Departure                                                                                                                                           |
| 22:00                                                                                                                                                                                                                      | <b>End of the Event</b><br>Participants should bring casual and waterproof clothes and are required to register (see Registration Form).            |



# Wednesday 13 June, 2018

09:30      Exhibition

**Applications**  
Chair:      Alan Gray

|       |                                                                                                                                                                                                |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:30 | <b>Application methods for brazing pastes</b><br>Hartmut Schmoor (Schmoor Brazing)                                                                                                             |
| 11:00 | <b>Development of a waterborne aluminium brazing flux dispersion system for on-demand wet fluxing, and paint flux application</b><br>Alfred Siggel (Honeywell Specialty Chemicals Seelze GmbH) |
| 11:30 | <b>Surface passivation and flux removal of aluminum heat exchangers for e-mobility</b><br>Peter Englert (HeicheGroup)                                                                          |

12:00      Lunch and exhibition

**Equipment**  
Chair:      Rainer Mittelstädt

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|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13:00 | <b>Low oxygen high purity batch, semicontinuous and continuous CAB furnaces at S/W meeting latest brazing process requirements</b><br>Piotr Skarbinski (SECO/WARWICK), Maciej Stempniewicz |
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**Process control / Quality management**  
Chair:      Rainer Mittelstädt

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| 13:30 | <b>Auditing brazing processes linked to standards</b><br>Derek Davies (EABS – European Association for Brazing and Soldering)                                                       |
| 14:00 | <b>High demand of qualified specialists for brazing – training &amp; certification methods of brazers and brazing coordinators</b><br>Thomas Wilhelm (GSI mbH, Branch SLV Duisburg) |

14:30      Exhibition and coffee break

**Research and development I**  
Chair:      Hartmut Janssen

|       |                                                                                                                                                              |
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| 15:00 | <b>The influence of surface chemistry on the brazeability of clad aluminium heat exchanger materials</b><br>Alan Gray* (Innoval Technology Ltd.), Adam Nadin |
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| 15:30 | <b>Aluminium vacuum brazing – surprising process or understood incompletely?</b><br>Matthias Türpe* (MAHLE Behr GmbH & Co. KG), Evelyn Hofmann, Uwe Füssel, Bernd Grünenwald, Jörg Zschetzsche |
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**Research and development II**  
Chair:      Hartmut Janssen

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|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16:00 | <b>Corrosion resistance of Al-Mn-Zn-Sm alloy for fin stock of aluminum heat exchangers</b><br>Yoshihiro Kinoshita* (Huaфон Nikkei Aluminium Corporation), Yongjin Gao, Stefan Norgren, Chen Renzong, Dongyan Ding |
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| 16:30 | <b>Brazing in controlled atmosphere with different TRILLIUM® claddings on Mg containing core materials</b><br>Richard Westergård (Gränges Sweden AB), Slawomir Koscielski, Torkel Stenqvist* |
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# Thursday 14 June, 2018

09:30      Exhibition

| Research and development III |                                                                                                                                                                                                                                                                                     |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chair:                       | Hans-Walter Swidersky                                                                                                                                                                                                                                                               |
| 10:00                        | <b>Recrystallisation behaviour of extruded 3000-series aluminium after minor deformation</b><br>Raimund Sicking* (Rhein-Waal University of Applied Sciences), Dimitar Michev                                                                                                        |
| 10:30                        | <b>Influence of the condensate severity on corrosion mechanisms of aluminium brazing sheets used for automotive charge air cooler and consequence on accelerated test relevance</b><br>Lionel Peguet* (Constellium Technology Center), Hanane Noui, Florian Monnier, Lucile Magnier |
| 11:00                        | <b>A combination of NOCOLOK® Zn flux and NOCOLOK® Li flux for improved corrosion resistance</b><br>Leszek Orman* (Solvay Fluor GmbH), Hans-Walter Swidersky                                                                                                                         |
| 11:30                        | <b>Final remarks</b><br>Hans-Walter Swidersky (Solvay Fluor GmbH)                                                                                                                                                                                                                   |
| 11:40                        | Lunch and exhibition                                                                                                                                                                                                                                                                |
| 13:00                        | End of the Event                                                                                                                                                                                                                                                                    |

# Presenting Authors\*, Co-Authors, Chairs

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| <b>Claeys, Sandra</b>      | Arteco, Zwijnaarde/BE                                                                        |
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| <b>Danielou*, Armelle</b>  | Constellium Technology Center, Voreppe/FR                                                    |
| <b>Davies*, Derek</b>      | EABS – European Association for Brazing and Soldering, Grantham/UK                           |
| <b>De Kimpe, Jürgen</b>    | Arteco, Zwijnaarde/BE                                                                        |
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| <b>Englert*, Peter</b>     | HeicheGroup, Schwaigern/DE                                                                   |
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| <b>Hofmann, Evelyn</b>     | Modine Europe GmbH, Filderstadt/DE                                                           |

The programme is subject to change without prior notice.  
\*The names of the presenting authors are followed by an asterisk.

J

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## Exhibitors (Status: 24 April, 2018)

- Aleris Rolled Products Germany GmbH
- BRAZING TECHNOLOGIES EUROPE s.r.o. / BRAZING TECHNOLOGIES INC
- E. Krieg GmbH
- Erbslöh Aluminium GmbH
- Gränges Sweden AB
- Honeywell Specialty Chemicals Seelze GmbH
- Huafon Nikkei Aluminium Corporation
- Hydro Precision Tubing
- Ipsen international GmbH
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- Schoeler GmbH
- SECO/WARWICK
- Solvay Fluor GmbH
- Sono - Tek Corporation
- TAV VACUUM FURNACES SPA
- Thermasys Tubing / ARUP GmbH

## Terms and Conditions

### Congress Location

Radisson Blu Scandinavia Hotel  
Karl-Arnold-Platz 5, 40474 Düsseldorf/Germany

### Registration

Send your completed registration form to:

DVS – German Welding Society  
P.O. Box 10 19 65, 40010 Düsseldorf/Germany  
P +49 211 15 91-155  
F +49 211 15 91-300

You can also use the online registration

[www.dvs-ev.de/aluminium-brazing](http://www.dvs-ev.de/aluminium-brazing)

**(only possible until 6 June, 2018)**

Contact person:

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### Registration Fee for the Congress (free of VAT)

|             |         |
|-------------|---------|
| DVS-Members | EUR 780 |
| Non-Members | EUR 930 |

The fee includes one Congress Proceeding, Coffee Breaks, Lunch and the Social Evening Event.

### Cancellation

All cancellations must be requested in writing to DVS. An administration fee of EUR 150 will be applied to any cancellation made on or before 25 May, 2018. No refunds will be given for cancellation made after 25 May, 2018.

Of course a substitute can be nominated  
(please contact Ms Britta Wingartz).



# Information

## Payment

Registrants will be sent a confirmation together with an invoice for the registration fee, upon receipt of the completed registration form by DVS.

## Exhibition

Concurrent with the 10<sup>th</sup> International Congress an Exhibition on Aluminium Brazing 2018 will be held. Since the exhibition space is unfortunately very limited we recommend you to book early. The booking will be handled on a first come, first served basis. For more information please look at the registration form.

## Accommodation

Accommodation is available at the congress hotel, Radisson Blu Scandinavia Hotel Düsseldorf. Reservations, cancellations and possible changes should be made directly with the hotel.

**Please book online directly on the website of the hotel.**

Price for single room: EUR 155

Price for double room: EUR 175

(incl. breakfast buffet, pool and fitness room with sauna, free use of WLAN)

## Terms and conditions

- Rate is per night.
- This offer is bookable for 11 – 15 June, 2018.
- The official deadline for reservations is 23 April, 2018.
- This offer is bookable on request and is subject to availability.
- Free cancellation is possible until 72 hours prior to arrival. Late cancellation and no shows will be charged 90%.

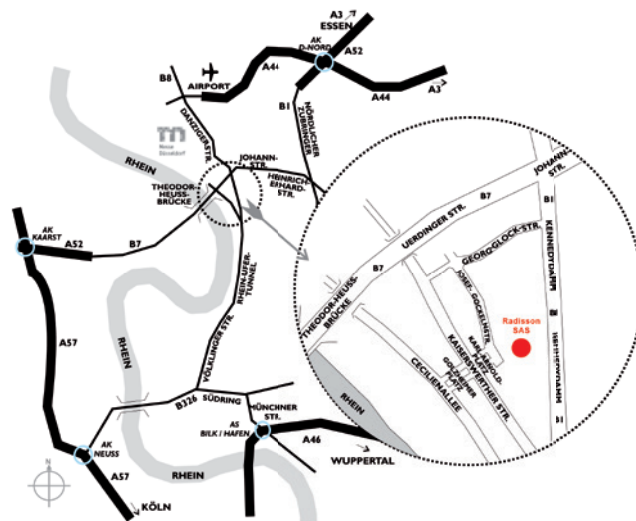
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