



# **6<sup>th</sup> International Congress and Exhibition on Aluminium Heat Exchanger Technologies for HVAC&R 2019**

07 – 08 May, 2019  
Düsseldorf/Germany

# **6<sup>th</sup> International Congress and Exhibition on Aluminium Heat Exchanger Technologies for HVAC&R 2019**

The 6<sup>th</sup> International Congress and Exhibition on Aluminium Heat Exchanger Technologies for HVAC&R, organised by the DVS – German Welding Society, will take place from 07 to 08 May, 2019 in the Radisson Blu Scandinavia Hotel in Düsseldorf/Germany.

Stringent environmental requirements for increasing energy efficiency and reducing emissions are the greatest challenges the heating, ventilation, air conditioning and refrigeration industry faces. The 6<sup>th</sup> International Congress on Aluminium Heat Exchanger Technologies for HVAC&R is dedicated to these challenges.

This is a must-attend event for producers, suppliers and users in the field of air conditioning and refrigeration.

Leading specialists and authorities from the sector, well-known experts from industry and research and other important decision makers from this field will further promote technologies by means of presentations, comments and technical discussion.

The congress will provide numerous opportunities to establish or strengthen business relationships and network with industry professionals.

An exhibition of participating companies running in parallel with the congress will help to expand further networking opportunities.

The congress language is English.

# Tuesday 07 May, 2019

09:30 - 11:00 Registration and Exhibition

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11:00 - 11:15 **Welcome / Introduction**

H.-W. Swidersky (Solvay Fluor GmbH)

## Overview about the current market and its future

Chair: H.-W. Swidersky (Solvay Fluor GmbH)

11:15 - 11:45 **How will HFC-Gas regulation impact the European/The global market for Aluminium Heat Exchangers?**

B. Vestergaard (Hydro Precision Tubing Tønder a.s)

11:45 - 12:15 **Future refrigerant trends under the EU F-Gas Regulation and the MP-Kigali Amendment**

F. Flohr (Daikin Chemical Europe GmbH)

12:15 - 12:45 Exhibition

12:45 - 14:00 Lunch

## HVAC&R and HX products

Chair: R. Mittelstädt (GSI mbH, NL SLV Hannover)

14:00 - 14:30 **High performance heat exchanger tube production methods – Miniaturizing of MPE profiles**

R. Beckert\* (WEFA Inotec GmbH), C. Becker, P. Hora, J. Maier

14:30 - 15:00 **Alternatives to traditional PaintFlux solutions – Aluminium brazing PaintFlux toolbox**

J. Rudolph (Honeywell Specialty Chemicals Seelze GmbH)

15:00 - 15:30 Exhibition and Coffee Break

## HVAC&R and HX products

Chair: R. Mittelstädt (GSI mbH, NL SLV Hannover)

**15:30 - 16:00 Improved corrosion resistance of mechanically expanded heat exchangers by applying zinc arc spray coating**

X. - J. Jiang\* (Precision Tubing, Extruded Solutions, Hydro), E. Senel, J. H. Nordlien, B. F. Lillestol

**16:00 - 16:30 Micro channel heat exchanger for residential air-conditioners**

G. Hayase (Samsung Electronics CO. LTD)

**18:00 - 22:30 Social Evening Event**

Enjoy a boat trip on the river Rhine to strengthen business relations in an enjoyable and informal atmosphere including a tasteful buffet and some impression of Düsseldorf.

**17:30 Starting at the Radisson Blu Scandinavia Hotel (about 20 min by foot)**

**18:00 Boarding at Rheinterrasse boats dock „Düsseldorf 1“**

**22:30 End of the Event**

Participants should bring casual and waterproof clothes and are required to register (see Registration Form).



# Wednesday 08 May, 2019

09:30 - 10:00 Welcome Coffee and Exhibition

## Research and Development

Chair: H.-W. Swidersky (Solvay Fluor GmbH)

10:00 - 10:30 **Ultra-high pressure laminated aluminium heat exchangers for jet engines**  
A. Shirzadi (The Open University)

10:30 - 11:00 **Inner grooved tube development**  
U. Jessen\* (Hydro Innovation & Technology – Precision Tubing), X. -J. Jiang

11:00 - 11:30 Exhibition / Coffee Break

11:30 - 12:00 **TRILLIUM® Technology - an enabler for efficient aluminium HEX manufacturing**  
C. Martín Callizo\* (Gränges Sweden AB), T. Stenqvist, S. Koscielski

## Corrosion

Chair: H.-W. Swidersky (Solvay Fluor GmbH)

12:00 - 12:30 **A new coating technology to increase corrosion resistance of MPE brazed heat exchangers**  
B. Morton\* (Circle-Proscoc, Inc.), S. Roberts

12:30 - 12:45 Conclusion remarks

12:45 - 13:45 Lunch

The programme is subject to change without prior notice.

The current programme of lectures can be found at any time at [www.dvs-ev.de/hvacr2019](http://www.dvs-ev.de/hvacr2019)

\*The names of the presenting authors are followed by an asterisk.

# Presenting Authors\*, Co-Authors, Chairs

## B

**Becker, C.** WEFA Inotec GmbH, Singen/Germany  
**Beckert, R.\*** WEFA Inotec GmbH, Singen/Germany

## F

**Flohr, F.\*** Daikin Chemical Europe GmbH, Düsseldorf/  
Germany

## H

**Hayase, G.\*** Samsung Electronics CO. LTD, Suwon-city,  
Gyeonggi-do/South Korea  
**Hora, P.** Institute of Virtual Manufacturing ETH Zurich,  
Zurich/Switzerland

## J

**Jessen, U.\*** Hydro Innovation & Technology - Precision Tubing,  
Tonder/Denmark  
**Jiang, X. - J.\*** Innovation & Technology - Precision Tubing,  
Extruded Solutions, Hydro, Håvik/Norway

## K

**Koscielski, S.** Gränges Sweden AB, Finspång/Sweden

## L

**Lillestol, B. F.** Innovation & Technology - Precision Tubing,  
Extruded Solutions, Hydro, Håvik/Norway

## M

**Maier, J.** WEFA Inotec GmbH, Singen/Germany  
**Martín Callizo, C.\*** Gränges Sweden AB, Finspång/Sweden  
**Mittelstädt, R.** GSI mbH, NL SLV Hannover/Germany  
**Morton, B.\*** Circle-Prosco, Inc., Bloomington/USA

## N

**Nordlien, J. H.** Innovation & Technology - Precision Tubing,  
Extruded Solutions, Hydro, Håvik/Norway

## R

- Rudolph, J.\*** Honeywell Specialty Chemicals Seelze GmbH,  
Seelze/Germany
- Roberts, S.** Company: Circle-Proscio, Inc., Bloomington/USA

## S

- Senel, E.** Innovation & Technology - Precision Tubing,  
Extruded Solutions, Hydro, Håvik/Norway
- Shirzadi, A.\*** The Open University & Cambridge Joining  
Technology Ltd., Milton Keynes/Great Britain
- Stenqvist, T.** Gränges Sweden AB, Finspång/Sweden
- Swidersky, H.-W.** Solvay Fluor GmbH, Hannover/Germany

## V

- Vestergaard, B.\*** Hydro Precision Tubing Tønder a.s, Tønder/Denmark

## **Exhibitors** (Status: 22 January, 2019)

- E. Krieg GmbH
- Erbslöh Aluminium GmbH
- Honeywell Speciality Chemicals Seelze GmbH
- Hydro Precision Tubing Remscheid GmbH
- Schoeler GmbH
- SECO/WARWICK S.A.
- Solvay Fluor GmbH
- Sono-Tek Corporation



# 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/hvacr2019](http://www.dvs-ev.de/hvacr2019)

**(only possible until 01 May, 2019)**

Contact person:

Ms Britta Wingartz

[britta.wingartz@dvs-hg.de](mailto:britta.wingartz@dvs-hg.de)

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

DVS-Members            EUR 650

Non-Members            EUR 750

The fee includes one Congress Proceeding, Coffe 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 20 April, 2019. No refunds will be given for cancellation made after 20 April, 2019.

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 6<sup>th</sup> Congress Heat Exchanger Technologies for HVAC&R 2019 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 ScandinaviaHotel Düsseldorf. Reservations, cancellations and possible changes should be made directly with the hotel.

**Please send your reservation directly to:  
[reservations.duesseldorf@radissonblu.com](mailto:reservations.duesseldorf@radissonblu.com)**

Price for single room: EUR 165

Price for double room: EUR 185

(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 05 – 08 May, 2019.
- The official deadline for reservations is 25 March, 2019.
- 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%.

## Route Description

Radisson Blu Scandinavia Hotel

Karl-Arnold-Platz 5

40474 Düsseldorf/Germany

T +49 211 4553-3500





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Organisation

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**Simone Weinreich | Brigitte Brommer**

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[www.dvs-ev.de/hvacr2019](http://www.dvs-ev.de/hvacr2019)