

## REGISTRATION

You are kindly asked to register using the enclosed form or online under [www.beamtec-conf.com](http://www.beamtec-conf.com).

The registration fee includes the conference proceedings, lunch, coffee breaks and dinner.

Registration deadline: **April 03, 2019**

After registration you will receive an acknowledgement and invoice.

Registration fee: 900,00 €

Students: 300,00 €

Participation of accompanying persons at the dinner evening: 65,00 € incl. 19 % VAT

## PAYMENT

Please transfer the total fee after having received the invoice.

## CANCELLATIONS

Cancellations of participation at the conference are generally asked to be made in writing to the SLV Halle. In case of cancellation before the registration deadline the fee will be refunded in full. For cancellations received after **April 03, 2019** the full fee will be charged and the conference booklet submitted. A substitute participant will be accepted. In this case there will be no additional cost.

Through submitting the registration form you accept processing of personal data by the SLV Halle GmbH for registration in our data base.

## CONFERENCE PLACE / CONFERENCE OFFICE

Schweißtechnische Lehr- und Versuchsanstalt Halle GmbH  
Köthener Straße 33a, 06118 Halle (Saale), Germany  
Tel.: +49 345-5246-600  
Fax: +49 345-5246-412  
E-Mail: [conferences@slv-halle.de](mailto:conferences@slv-halle.de)

## HOTEL ACCOMMODATION (Keyword Beamtec)

Accommodation has been reserved at the following hotels:

**Dorint Hotel Halle** (Deadline: March 13, 2019)

Phone: +49 345 2923-606, [reservierung.halle-charlottenhof@dorint.com](mailto:reservierung.halle-charlottenhof@dorint.com)

**TRYP BY WYNDHAM HALLE** (Deadline: February 27, 2019)

Phone: +49 345 6931-0 ; [info@tryphalle.com](mailto:info@tryphalle.com)

Please send your hotel booking directly to the Dorint Hotel or TRYP BY WYNDHAM HALLE. Any cancellation of hotel reservation must be made in writing directly to the hotels.

## PLACE FOR THE DINNER EVENING ON APRIL 10<sup>th</sup>, 2019

Industrie- und Handelskammer Halle-Dessau  
Franckestraße 5  
06110 Halle (Saale)

## HOW TO GET THERE

### By car:

Using the motorway A 14 leave it at the exit „Halle-Trotha/Wettin“ (15). Follow the road B 6 to Halle-Trotha (Magdeburger Chaussee). When you see the petrol station Aral on the left turn left after 400 m (direction Köthen/Köthener Straße). In a few minutes you are at the SLV Halle.

### By train:

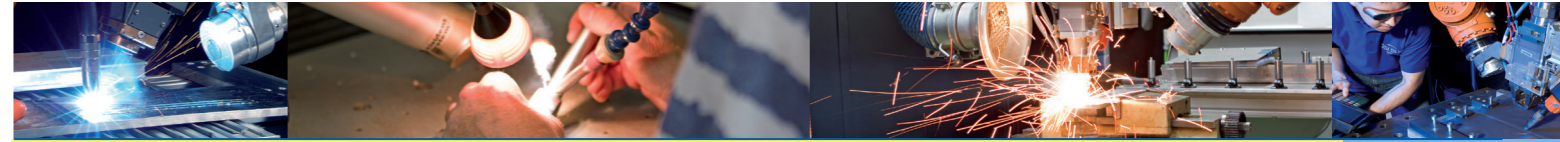
Use a taxi to: SLV Halle GmbH, Köthener Straße 33a or go by tram No. 3, 8 and 12, direction Halle-Trotha, get off at the last stop „Trotha/Köthener Straße“ and continue straight ahead until you see SLV Halle on your left.

### By plane:

Between Leipzig/Halle Airport and Halle Hauptbahnhof (main railway station) use the Airport Express. Trains shuttle every 60 minutes. From the main station you may use a taxi or the tram to SLV Halle.



DVS SLV HALLE



INVITATION  
&  
PROGRAM



11<sup>th</sup> INTERNATIONAL CONFERENCE  
BEAM TECHNOLOGY

DVS SLV HALLE  
A company of the DVS – German Welding Society

Schweißtechnische Lehr- und  
Versuchsanstalt Halle GmbH  
Köthener Straße 33 a  
06118 Halle (Saale), Germany

+ 49 345 5246-0

[www.slv-halle.de](http://www.slv-halle.de)

In cooperation with DVS GSI SLV

ZUSE-GEMEINSCHAFT  
FORSCHUNG, DIE ANKOMMT.  
The SLV Halle GmbH is a member of „Zuse-Gemeinschaft“

April 10<sup>th</sup> to 11<sup>th</sup>, 2019  
Halle (Saale)  
Germany

Ladies and Gentlemen,  
Dear Colleagues,

Due to the developments in the field of power beam technology, the diagnostics of power beam processes, the welding know how, the further development of processes under modified pressure and increasing number of approaches of additive manufacturing technologies new fields of application are developing continuously.

The conference taking place every three years joins experts from all over the world who intend to inform about and exchange their knowledge on the latest state-of-the-art of laser and electron beam technologies in research and development as well as in industrial application.

The Schweißtechnische Lehr- und Versuchsanstalt Halle GmbH and German welding society (DVS) invites you to the

**11<sup>th</sup> International Conference Beam Technology  
from April 10<sup>th</sup> to 11<sup>th</sup>, 2019**

Yours sincerely



Prof. Dr.-Ing. Steffen Keitel  
CEO of SLV Halle GmbH



Dr. Herbert Staufer  
Chairman of IIW commission IV  
Chairman of BeamTec program committee



PROGRAM

## TUESDAY, APRIL 9<sup>th</sup> 2019

19.00 - 21.00 **Come together Evening**  
Dorint Hotel, Dorotheenstraße 12, 06108 Halle (Saale)

## WEDNESDAY, APRIL 10<sup>th</sup> 2019

08.00 Registration - Coffee / Tea / exhibition

09.00 **Opening of the conference**  
Prof. Dr.-Ing. S. Keitel, CEO of SLV Halle GmbH

### Block 1 – Beam Diagnostics

09.30 **Monitoring of beam characteristics for improved productivity**  
C. Ribton, A. Ferhati, N. Longfield, P. Luffs, TWI Ltd, Cambridge, UK

10.00 **Closed Keyhole EBW Using Online Weld Depth Control**  
Mr. Scott Harding, Rolls-Royce plc., Derby; Sofia Del Pozo, Nicholas Longfield, Colin Ribton, Phillip Juffs, TWI Ltd., UK

10.30 Coffee / tea break / poster presentations / exhibition

### Block 2 - Power Beam Welding

11.00 **Temporal modulation of energy input during laser welding of duplex stainless steels**  
S. Ulrich, M. Schmitz, Dr. S. Jahn, Guenter Koehler Institut Jena; P. Schaaf, TU Ilmenau, Germany

11.30 **Investigation of advanced Laser-MAG Tandem Hybrid Welding for joining gap flawed thin sheet metal parts**  
Dr. H. Staufer, S. Egerland, M. Ruehrnoessl, M. Schorn, Fronius international GmbH, Austria

12.00 **Comparative Studies on Electron Beam and Laser Beam Welded S355 Structural Steel and AISI12 Aluminium Alloy**  
Dipl.-Ing. P. Hollmann, Dipl.-Ing. J. Drechsel, Prof. Dr.-Ing. habil. R. Zenker, Prof. Dr.-Ing. U. Löschner, TU Bergakademie Freiberg, Germany

12.30 Lunch / poster presentations / exhibition

## WEDNESDAY, APRIL 10<sup>th</sup> 2019

### Block 3 - Metallurgy of Beam Welding

13.30 **Quality improvement of laser welds on thick duplex plates by laser clad buffering**  
M.Sc. A. StraBe; Dr.-Ing. A. Gumenyuk, Univ.-Prof. Dr.-Ing. M. Rethmeier, Bundesanstalt für Materialforschung und -prüfung Berlin, Germany

14.00 **Reduction of distortion by using the LTT-effect for high-alloy steels in Electron Beam Welding (EBW)**  
M.Eng. F. Akyel; S. Gach, Dr.-Ing. S. Olschok, Uni.-Prof. Dr.-Ing U. Reisgen, RWTH Aachen, Germany

14.30 Coffee / tea break / poster presentations / exhibition

15.00 **Influence of Local Electron Beam Short Time Annealing on Cold-Formed TRIP Steels**  
Dipl.-Ing. L. Halbauer, Dr.-Ing. A. Buchwalder, Prof. Dr.-Ing. habil. R. Zenker, Prof. Dr.-Ing. habil. H. Biermann, TU Bergakademie Freiberg, Germany

15.30 **Study of the Effect of Beam Offset on the Metallurgical and Mechanical Properties of Copper-Nickel Electron Beam Welding**  
Ms P. Palak, Pandit Deendayal Petroleum University GUJARAT, India

16.00 Finish 1. Conference day

19.00-22.00 **Dinner Evening**  
IHK Halle-Dessau, Franckestraße 5, 06110 Halle (Saale)

## THURSDAY, APRIL 11<sup>th</sup> 2019

### Block 4 - Additive Manufacturing

8.30 **Advanced beam diagnostics for 3D additive manufacturing laser scanner systems**  
M.Eng. S. Holesch; K. Lampmann, S. Wolf, Dr. O. Märten, Dr. R. Kramer, PRIMES GmbH, Germany

09.00 **Laser deposition welding with centric material feed and circular direct diode modules**  
M.Eng. M. Güpner, J. Ernst-Abbe-Hochschule Jena, Prof. Dr.-Ing. J. Bliedner, S. Ulrich, Guenter Koehler Institute of Joining and Material Testing; Dr.-Ing. M. Schnick, Oscar PLT GmbH, Germany

## THURSDAY, APRIL 11<sup>th</sup> 2019

09.30 **Investigations into Electron Beam Wire - Based Additive Manufacturing on an Fe - Based Alloy**  
P. Hengst, A. Jung, Prof. Dr.-Ing. habil. R. Zenker, TU Bergakademie Freiberg, Germany

10.00 Coffee / tea break / poster presentations / exhibition

10.30 **Large-Part Metal Additive Manufacturing: Industrial Adoption Trends and a Technical Overview**  
Dr.-Ing. M. Wahl, evobeam GmbH; Nieder-Olm, Germany; J. O'Hara, Sciaky Inc., USA

11.00 **Extreme High-speed Laser Material Deposition (EHLA) for the manufacturing of corrosion and wear resistant layers with high productivity**  
M.Sc. G. Bultel, Fraunhofer ILT, Aachen, Germany

11.30 **EB SurfSculpt of Titanium materials for medical applications**  
M.Eng. S. Gach; S. Janßen, Dr.-Ing. S. Olschok, Uni.-Prof. Dr.-Ing U. Reisgen, H. Fischer, RWTH Aachen, Germany

12.00 Lunch / poster presentations / exhibition

### Block 5 - Reduced Pressure / Vakuum for Power Beam

13.00 **Local Vacuum Electron Beam Welding Equipment for large scale, thick section circumferential welding**  
Dr. B. Baufeld, Nuclear AMRC, University of Sheffield; M. Nunn, TWI Limited, Cambridge, UK

13.30 **Local vacuum electron beam welding technology and application**  
Eur Ing, M. Nunn; R. Wong, TWI Limited, Cambridge, UK

14.00 **Laser beam welding with local vacuum for tube production**  
Dr.-Ing. C. Otten, B. Gerhards, LaVa-X GmbH, Herzogenrath, Germany

14.30 **Final remarks**  
Prof. Dr.-Ing. S. Keitel, CEO SLV Halle GmbH