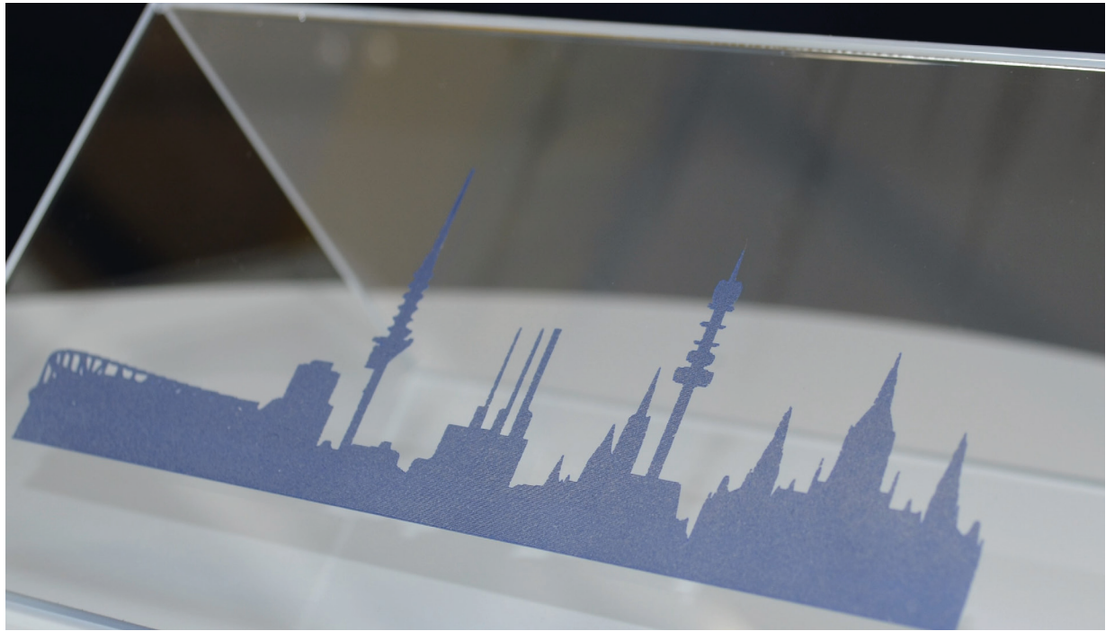
WORKSHOP

Laser Processing of Glass Materials

March 13 - 14, 2024
in Hannover



Content of the workshop

For the 13th time, the Bayerische Laserzentrum GmbH (blz) and the Laser Zentrum Hannover e.V. (LZH) are organizing the collaborative workshop Laser Processing of Glass Materials on March 13 and 14, 2024. For the first time, the workshop will take place in english as a lunch-to-lunch event.

In 2024, you can once again look forward to exciting presentations from research and industry on the topic of laser-based glass processing at the Laser Zentrum Hannover e.V. premises. The workshop will focus on the following topics:

- Additive Manufacturing
- High Precision Processing
- Large Scale Processing

The first thematic focal points of the workshop will be discussed on March 13, before we offer you an evening buffet for personal exchange with a guided tour through the test field of the Laser Zentrum Hannover e.V..

We warmly invite you to our 13th workshop on Laser Processing of Glass Materials in Hannover. Get an overview of the current state of research as well as important industrial trends and future developments in laser-based glass processing. Take advantage of our evening buffet to make contacts in your field in a relaxed atmosphere.

We look forward to welcoming you in Hannover in March 2024.

Registration

Please register for the workshop on the **blz website** or via e-mail to **j.krauss@blz.org** by **March 6, 2024** at the latest.

Participation fees
690 Euro (738,30 Euro incl. 7 % VAT)

Participation can not be cancelled free of charge. In case of cancellation until February 28, 2024, cancellation costs of 50% of the participation fee will be charged. After this date or in the event of non-attendance, we will calculate the full participation fee. Cancellation must be made in written form. We will accept a substitute participant at no additional cost.

Services
- Conference documents in digital form
- Catering during the workshop

Location
Laser Zentrum Hannover e.V. (LZH)
Hollerithallee 8, 30419 Hannover
Directions: www.lzh.de/index.php/en/contact-and-map

Accomodation
If you are in need of accommodation during your stay in Hannover, we can recommend the following hotel:

Hotel Havelser Hof
Hannoversche Straße 45, 30823 Garbsen
info@havelserhof.de

You get special conditions, using the keyword „Glasworkshop“ for your reservation.

Organizers:

blz Bayerisches Laserzentrum

LZH Laser Zentrum Hannover e.V.

Supported by:

bayern photonics Innovationsnetz Optische Technologien

PhotonicNet Innovationsnetz Optische Technologien

enterprise europe network

Program

Wednesday, March 13th, 2024

From 12:30 **Registration**

13:00 – 13:10 **Welcome**
Prof. Dr.-Ing. Stefan Kaierle
Laser Zentrum Hannover e.V.

Additive Glass Manufacturing

13:10 – 13:50 **Volumetric heating for increased deposition rates in Digital Glass Forming**
Dr. Edward Kinzel
University of Notre Dame

13:50 – 14:20 **Process strategy for boundary layer-free additive glass manufacturing of components with varying surface curvatures**
Khodor Sleiman
Laser Zentrum Hannover e.V.

14:20 – 14:50 **Coffee break**

14:50 – 15:20 **Use of CO_2-lasers in powder based (PBF) additive manufacturing of glass**
Christian Dini
Luxinar GmbH

15:20 – 15:50 **Laser powder bed fusion of high density glass**
Brian Seyfarth
Friedrich Schiller University Jena

15:50 – 16:20 **Coffee break**

16:20 – 16:50 **Diode laser array processing of screen-printed glass-containing structures: realizing new functionalities and material combinations**
Dr. Mykola Vinnichenko
Fraunhofer Institute for Ceramic Technologies and Systems (IKTS)

16:50 – 17:20 **3D forming of soda-lime silicate float glass by laser**
Dr. Kai Schillinger-Engel
Fraunhofer Institute for Mechanics of Materials (IWM)

17:20 – 18:30 **Experimental field exhibition**

From 18:30 **Dinner and Networking**

Thursday, March 14th, 2024

From 8:30 **Registration**

9:00 – 9:10 **Welcome**
Katharina Rettschlag
Laser Zentrum Hannover e.V.
Dr.-Ing. Hans-Joachim Krauß
Bayerisches Laserzentrum GmbH

High Precision Glass Processing

9:10 – 9:40 **From fundamental understanding to high performance laser glass processing solutions**
Dr. Sandra Höhm
Corning Laser Technologies GmbH

9:40 – 10:10 **Laser based shape correction of fused silica surfaces**
Emrah Uluz
Fraunhofer Institute for Laser Technology (ILT)

10:10 – 10:40 **Unlocking Glass Processing Potential with Structured Light**
Dr. Max Kahmann
TRUMPF Laser- und Systemtechnik GmbH

10:40 – 11:10 **Coffee break**

Large Scale Glass Processing

11:10 – 11:40 **Laser structuring for functionalization of 3D-molded thin glasses**
Friedrich Schneider
LPKF SolarQuipment GmbH

11:40 – 12:10 **Ultrafast laser glass welding employing large laser foci and scanning optics – a path to industrial applications**
Dirk Nodop
ifw Jena

12:10 – 12:40 **Retrofitting functions in the building envelope using portable laser technology**
Dr. Thomas Rainer
HEGLA boraident GmbH & Co. KG

From 12:40 **Final discussion**

Contact the organizers

Bayerisches Laserzentrum GmbH
Dr.-Ing. Hans-Joachim Krauß
Head of Services
Konrad-Zuse-Straße 2-6
91052 Erlangen
Phone: +49 (0)9131 / 97790-23
E-Mail: j.krauss@blz.org
URL: www.blz.org

Laser Zentrum Hannover e.V.
Katharina Rettschlag, M.Sc.
Head of Glass Group
Hollerithallee 8
30419 Hannover
Phone.: +49 (0)511 / 2788-283
E-Mail: k.rettschlag@lzh.de
URL: www.lzh.de