



# JOINING IN CAR BODY ENGINEERING 2023

## THE NORTH AMERICA NETWORK

FEBRUARY 14-15, 2023 | ROCHESTER, MI, USA

### TUESDAY, FEBRUARY 14, 2023

**08.00 am** Registration and welcome coffee

**08.45 am** Welcome

*Dr. Sibylle Freitag, Automotive Circle, DE*

#### SPOT WELDING INNOVATIONS

**09.00 am** Advanced engineering and manufacturing simulation approaches for developing welding applications

*t.b.d., Honda Development & Manufacturing of America, US*

**09.30 am** Improved joining technologies for high strength 7xxx series aluminum alloy

*Dechao Lin, Novelis, US*

**10.00 am** Electrode texturing for aluminum-aluminum resistance spot welding

*Eric Gindlesberger, KTH Parts Industries, US*

**10.30 am** ☕ Coffee Break | 👤 Meet the Speakers

**11.00 am** Introduction of an innovative, thermally decoupled welding insert to join all multi-material combinations on a standard BIW assembly line

*Sean Farrell, Gaming Engineering, FR*

**11.30 am** Fatigue and corrosion properties of dissimilar aluminum to steel welds joined by ultrasonic interlayered resistance spot welding process

*Luke Walker, The Ohio State University, US*

**12.00 pm** Welding cell 4.0

*Raj Bhavsar, Diakont S.r.l., IT*

**12.30 pm** 🍴 Lunch Break | 👤 Meet the Speakers

#### SOLUTIONS FOR CHALLENGING JOINTS

**01.45 pm** Resistance spot riveting of mixed materials

*Taylor Scott, Howmet Fastening Systems, US*

**02.15 pm** Enabling joining of aluminum castings for mixed material design with self-pierce-riveting

*Dr. Matthias Wissling, Stanley Engineered Fastening, DE*

**02.45 pm** Material characterization for self-pierce riveting

*Amanda Freis, Garret Huff, Ford Motor Company, US*

**03.15 pm** ☕ Coffee Break | 👤 Meet the Speakers

**03.45 pm** Introduction of a new laser-assisted mechanical joining system with industrial production readiness

*Dr. Wolfgang Pfeiffer, Tox Pressotechnik GmbH & Co. KG, DE*

**04.15 pm** Utilizing robot guidance to improve flow drill fastening processes with pre-holes

*Ruth Kocsis, Atlas Copco IAS, US*

#### OEM REPORT

**04.45 pm** Joining technology in the new BMW iX

*t.b.d., BMW Manufacturing, US*

**05.15 pm** 👤 Get Together

**06.00 pm** 🍷 Conference Dinner

*All speakers, members of the board and delegates are kindly invited to attend*



Find more information at

[WWW.AUTOMOTIVE-CIRCLE.COM](http://WWW.AUTOMOTIVE-CIRCLE.COM)

#### CONFERENCE FEE

**EARLY-BIRD:** USD 2,099.00

(For registrations received by January 13, 2023)

**STANDARD:** USD 2,199.00

#### CONFERENCE VENUE

Royal Park Hotel

600 E University Drive

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### WEDNESDAY, FEBRUARY 15, 2023

#### JOINING THE BATTERY ELECTRIC REVOLUTION

**09.00 am** Achieving success with automated fluid dispensing in modern automotive assembly

*Michael Bonner, Saint Clair Systems, Inc., US*

**09.30 am** Adhesive bonding technology for the production of energy storage systems for electric vehicles

*Dr. Holger Fricke, Fraunhofer-Institute for Manufacturing Technology and Advanced Materials (IFAM), DE*

**10.00 am** Joining aluminum castings by flowform and the sealing solutions achieved by flowform with the various sealants

*Dr. Xuzhe Zhao, Arnold Fastening Systems, US*

**10.30 am** ☕ Coffee Break | 👤 Meet the Speakers

**11.00 am** Overcoming flow fastener limitations while minimizing cost impact through innovative design changes

*Dr. Brandt Ruskiewicz, Semblex, US*

**11.30 am** Friction stir welding in automotive battery tray production

*Ed Volcic, Kuka Robotics Corporation, US*

#### PRODUCTION FLOW

**12.00 pm** Production flow management

*Eric Tiefenthaler, Mercedes Benz US International, US*

**12.30 pm** 🍴 Lunch Break | 👤 Meet the Speakers

#### QUALITY MATTERS

**01.45 pm** Optical coherence tomography (OCT) as live sensor for quality assurance

*Richard Steinbrecht, Lessmüller Lasertechnik, DE*

**02.15 pm** Automated vision-based remote laser weld quality system

*Guangze Li, General Motors Company, US*

**02.45 pm** In-process quality monitoring for laser brazing with an AI approach

*Jay Flowers, Scansonic, US*

**03.15 pm** OEM Conclusions

*Members of the OEM Advisory Board*

**03.30 pm** Farewell

*Dr. Sibylle Freitag, Automotive Circle, DE*

**03.35 pm** End of conference

*Subject to change (Status as of January 6, 2023)*



#### **YOUR CONTACTS**

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#### **IN COOPERATION WITH:**



**THE OHIO STATE UNIVERSITY**

#### **YOUR MODERATOR**

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Edison Joining Technology Center,  
The Ohio State University, US



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[WWW.AUTOMOTIVE-CIRCLE.COM](http://WWW.AUTOMOTIVE-CIRCLE.COM)