

JOINING IN CAR BODY ENGINEERING 2019

FEBRUARY 20-21, 2019
DETROIT, MICHIGAN, USA

CAR BODY ENGINEERING



In cooperation with



THE OHIO STATE UNIVERSITY

THE RIGHT JOINING TECHNOLOGY

Body shop joining technologies clearly are the key enablers in managing and realizing modern lightweight design car body concepts, which increasingly feature advanced mixed material concepts. The oft-repeated claim “The right material in the right place...” is in fact incomplete without having its proper continuation in mind: “... with the right joining technologies!”.

When choosing the “right” joining technology, however, the basic constraint is to ensure the economically sound producibility of car body designs, to keep a focus on engineering solutions that put cost efficiency and flexibility aspects at the center of attention.

Finding and developing such technologies is what the US-based Automotive Circle conference Joining in Car Body Engineering is focusing on. The conference aims to bring about an intensive exchange of information and networking among expert automotive engineers from OEM as well as their suppliers, providing valuable contacts and ideas to develop modern car body joining solutions tailored to the American market requirements.

We are looking forward to your conference participation!

PROGRAM COORDINATION:



Andrea Huber
Presidium, Automotive Circle

IN COOPERATION WITH:



Prof. Glenn S. Daehn
The Ohio State University

MEET THE LEADING OEM NETWORK

INTERNATIONAL OEM ADVISORY BOARD



Dr. Stefan M. Baginski
BMW Manufacturing
Co., LLC, US



Bryan Macek
FCA US LLC, US



Michael W. Danyo
Ford Motor Company, US



Anthony Leanza
Honda R&D Americas,
Inc., US



Daniel Saltzmann
Nio USA, Inc., US



Dr. Christian Schübeler
Volkswagen AG, DE

COOPERATION PARTNER:



PROGRAM

TUESDAY, FEBRUARY 19TH, 2019

7.00 –

9.00 pm **Get-together and pre-registration, Exhibitor's Forum**
(Room: Woodward C+D)

WEDNESDAY, FEBRUARY 20TH, 2019

7.30 am **Registration and handover of conference documents**

☕ **Coffee & breakfast snack, exhibition forum**

8.45 am **Welcome and conference introduction**

Andrea Huber, Automotive Circle, DE

9.00 am **Next-generation automotive design and manufacturing: opportunities, constraints and the outsized role of joining**

Prof. Glenn S. Daehn, Ohio State University, Department of Materials Science and Engineering, US

KEY-
NOTE

LATEST OEM JOINING PROJECTS

9.30 am **Joining, body and production concept of the first BMW X7**

Dr. Stefan M. Baginski, BMW Manufacturing Co., LLC, US

10.00 am **Advanced joining for aluminum intensive body vs. mixed material bod**

Daniel Saltzmann, Nio USA, Inc., US

10.30 am ☕ **Coffee & contacts**

11.00 am **Auto/steel partnership: mixed materials joining phase 1 – goals, methodology, results**

Bryan Macek, FCA US LLC, US

11.30 am **Challenges and recent developments in numerical prognosis for self-piercing riveting**

Dr. Markus Israel, Volkswagen AG, DE

ADHESIVE BONDING TECHNOLOGIES

12.00 am **Using design of experiments to model body shop adhesive dispensing systems**

Eric Cole, Dow Automotive Systems, US

12.25 am **Improving bond durability of structural adhesives for light-weight materials**

Syed Mahdi, Henkel Corporation, US

12.50 pm 🍴 **Lunch**

JOINING @ FORD, IN COOPERATION WITH FORD MOTOR COMPANY

2.00 pm **Dearborn stamping plant with the box floor weld line for the F150**

Michael W. Danyo, Ford Motor Company, US

2.30 pm **Departure shuttle bus**

GUIDED TOUR @ FORD

Opportunity to visit the Ford Dearborn stamping plant, with focus on the welding cell. With this cell Ford is currently able to do 70 million welds per year. This has not been exposed to any specialist community before. During this exclusive tour there will also be some information about non-destructive testing in relation to the welding cell.

GUIDED
TOUR



5.00 pm **Back in the hotel**

6.00 pm 🍴 **Get-together**

7.00 pm **Networking Night**

Enjoy an evening with good food, drinks and music in a relaxed atmosphere and network with your international peers.

THURSDAY, FEBRUARY 21ST, 2019

7.30 am ☕ **Coffee & breakfast snack, exhibition forum**

THERMAL & MECHANICAL JOINING TECHNOLOGIES

8.00 am **Impulse joining of advanced materials and structures**

Anupam Vivek, Ohio State University, US

8.25 am **Enabling carbon fiber composite and metal joining in today's factory**

Dr. Ryan Hahnen, Honda R&D Americas Inc., US

8.50 am **New development of hole- and threadforming screws and resistance element welding for the use of high-strength steels as well as large aluminum component thicknesses without a prehole**

Dominik Froehlich, Arnold Fastening, US

9.15 am **Joining modern materials – mechanically and electrically**

Troy Waldherr, Tox Pressotechnik L.L.C., US

9.40 am ☕ **Coffee & contacts**

10.10 pm **Live poll session**

INTER-
ACTIVE

10.20 am **SPR of UHSS to aluminium and SSPR of aluminium to UHSS**

Paul Briskham, Atlas Copco IAS, GB

10.45 am **Self-piercing riveting of high and ultra-high strength steels**

*Matthias Wissling; Matthew Smith, Stanley Engineered Fastening
Tucker GmbH, DE*

11.10 am **Inserts for in-situ integration of assembly interfaces into
thermoset and thermoplastic composite materials**

Till Ruffing, Stéphane Baron, ARaymond, FR

LATEST DEVELOPMENTS IN LASER TECHNOLOGY

11.35 am **Current trends in automotive laser application**

Dr. Axel Luft, Laserline GmbH, DE

12.00 pm 🍴 **Lunch**

1.00 pm **Laser welding of aluminum for lightweight designs**

Nathan Harris, Trumpf Inc., US

1.25 pm **Robotic 3D laser cutting in automated manufacturing**

Markus Remm, Jenoptik Automotive North America, US

1.50 pm **LLT shows the possibilities for automatic gap compensation
using OCT as seam tracking sens**

Richard Steinbrecht, Lessmueller Lasertechnik GmbH, DE

2.15 pm **Laser-assisted clinching, clinch nut and SPR, innovative
joining of next generation of AHSS**

*Mark A. Savoy, Utica International Inc., US; Hassan Ghassemi-Armaki,
ArcelorMittal Global R&D, US*

2.40 pm **Panel discussion based on results of live poll session**

INTER-
ACTIVE

3.00 pm **Closing remarks and end of the conference**

Subject to change (status as of January 29th, 2019)

INFORMATION

CONFERENCE FEES

Early-Bird: **1,599.00 USD***

(for registrations received until January 20th, 2019)

Standard: **1,799.00 USD***

For special prices, such as **Group Booking** and **Junior Participation**, please visit our website.

* All prices net.

CONFERENCE FEES INCLUDE

Fees including full conference participation: Authority for downloading the presentations on the internet, list of delegates, participation in the Ford Guided Tour, luncheons, coffee breaks and the participation in the Networking Night.

CONFERENCE VENUE / HOTEL

The Westin Book Cadillac Detroit

1114 Washington Boulevard

Detroit, MI, 48226, United States

The price for accommodation is 169.00 USD, plus applicable state and local taxes. We kindly ask you to make your own hotel reservation until January 31st, 2019 at The Westin Book Cadillac Detroit Hotel. For booking, please visit our website.



REGISTRATION AND FURTHER INFORMATION
AT WWW.AUTOMOTIVE-CIRCLE.COM

REGISTER
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Pictures: Ford Motor Company

YOUR CONTACT

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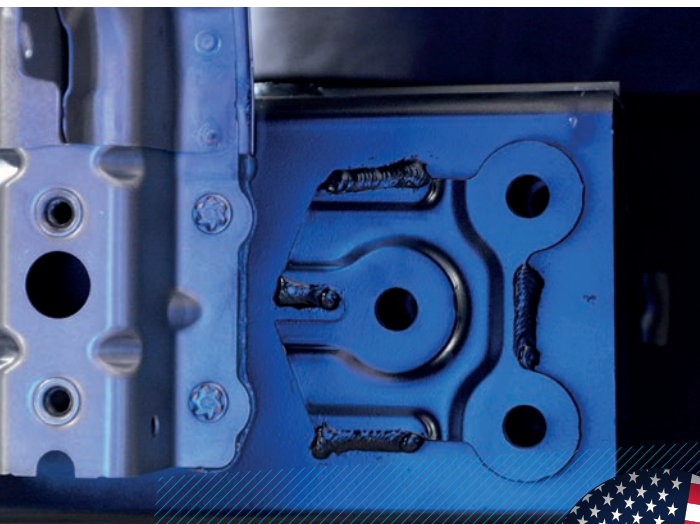
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