# Ford, GM, Toyota, Honda & Volvo Examine Mixed-Material Joining, Forming & Treatment Technologies At Lightweight Vehicle Manufacturing Summit In Detroit

# <u>The 4th Lightweight Vehicle Manufacturing</u> Summit 2017

February 22-23, 2017 - Detroit, Michigan, USA

The industry-leading **Global Automotive Lightweight Materials Series** returns to Detroit on 22nd & 23rd of February, to showcase the latest edition of our Lightweight Manufacturing specific conference – <u>The 4th Lightweight Vehicle</u> <u>Manufacturing</u> Summit 2017.

Developed in close collaboration an industry advisory board, consisting of **Toyota, Ford & General Motors,** the <u>The 4th Lightweight Vehicle</u> <u>Manufacturing</u> Summit 2017 will feature a brand new agenda which will examine the latest joining, forming & surface treatment technologies and their applications for mixed material structures.

It features an expert speaker panel including **Honda**, **Volvo**, **FCA**, **GM**, **Ford**, **Deer & Company** and more, who will discuss the latest innovations in adhesives, additive manufacturing, machine learning, multi-material joining methods, corrosion mitigation techniques and more.

In addition, driven by **updated EPA regulations**, the event launches an exclusive new discussion area, focused on **specific lightweighting technologies and manufacturing techniques for medium and heavy-duty vehicles**, alongside our long-established passenger vehicles focus.

Here's a preview of our new features for 2017 -

#### **TRUCKS AND HEAVY VEHICLES:**

To drive the development of lightweighting across all the US automotive industry, for the first time this year, we introduce specific focus on Lightweighting for Medium & Heavy Duty trucks alongside passenger vehicles, in light of recent EPA regulatory changes

#### LATEST ALUMINUM DEVELOPMENTS:

This year's program will cover the whole spectrum of aluminum related technology developments, including aluminium castings, sheets & extrusions, joining with aluminum, corrosion mitigation, recycling, and more

## MANUFACTURING TECHNOLOGIES FOR MULTI-MATERIAL STRUCTURES:

We will bring together manufacturing experts to share their expertise and evaluate the pros and cons of each new technology to support practical application in manufacturing contexts

## **FUTURE FOCUS:**

We will consider what opportunities lie ahead through advanced processes and technologies for automotive lightweighting, including additive manufacturing, machine learning, plastic & composite technologies

## **CORROSION MITIGATION CHALLENGES:**

To address your current challenges associated with corrosion mitigation for multi material combination, the program will focus on corrosion testing, prevention methods for mixed materials and management of corrosion & distortion issues

#### FORMABILITY CONSIDERATIONS:

Explore the formability of new material grades, forming techniques, formability modelling

#### DEEP DIVE INTO JOINING WITH ADHESIVES:

In line with the industry's increased use of adhesives, deep dive sessions will enable you to evaluate their suitability, including failure mode analysis of adhesives in multi material structures, use of adhesives with different material combinations and more

Key speakers include:

- Dr. Paul Wolcott, Body SMT Innovation, General Motors
- **Stacey Spencer**, Materials Engineering Surface Treatment and Paint, **Volvo Group**
- Theresa Klix, Head of Metallic Materials Engineering, FCA US LLC
- Raj Sohmshetty, Group Leader Advanced Steel Technology, Manufacturing Research Department, Ford
- **Pete Edwards,** R&D Leader for Joining, **Honda Engineering North America, Inc.**
- Mohamad El-Zein Manager, Advanced Materials and Mechanics, Deere & Company
- Shawn M. Morgans, Global Vehicle Architecture Manager, Product Development Center, Ford Motor Company
- John Catterall, GSSLT Leader Underbody Structure, General Motors
- Michael W Danyo, Aluminum Technology Supervisor, Ford

For more information, visit <u>http://www.global-lightweight-vehicle-</u> manufacturing.com/