

## **NADDRG December 6<sup>th</sup>, 2023 Fall Meeting Agenda (tentative as of December 4<sup>th</sup>)**

### **7:30-8:25 - Breakfast**

**8:25-8:30** - Kick off Meeting, Rules of engagement - Sergey Golovashchenko NADDRG President.

**8:30-9:00** – “ANN enhanced plasticity modeling and ductile fracture characterization of commercially pure Ti”  
- Abrar Ebrahim, Qi Zhang, Jinjin Ha, University of New Hampshire.

**9:00-9:30** - “In-Plane Torsion Testing and Modeling for DDQ Steel Characterization Under Large Deformations”, - Matt Eaton, Brad Kinsey, Jinjin Ha, University of New Hampshire.

**9:30-10:00** - "Experimental Measurement of the Stress Gradient in a Bent Sheet", Chester Van Tyne, Colorado School of Mines.

### **10:00\_10:30 - Coffee Break**

**10:30-11:00** – “Simulation of trimming of UHSS and understanding of mechanisms driving sheared edge stretchability”, Sergey Golovashchenko Oakland University and Saeid Nasheralahkami -US Steel.

**11:00-11:30** – “AI-assisted feedback to sheet metal stamping processes for automotive applications”, William Halsey, Kidambi Kannan, Deepak Pokkalla, Vincent Paquit, Rich Davies, Liang Huang, Andrey Ilinich, Krishna Murali, and Seokpum Kim.

### **11:30- 1:00 – Lunch**

**1:00-1:30** – “Automated testing and machine learning applied to sheet metal forming” - Dirk Mohr, ETH Zürich.

**1:30-2:00** - "Improving the Reliability of the HER Test Using Artificial Intelligence", FADI Abu-Farha, FADI-AMT LLC.

### **2:00-2:30 – Coffee Break**

**2:30-3:00** – “Physics-Informed Artificial Intelligence for Enhanced Forming Design and Manufacturing” - Qingyu (William) Yang, Wayne State University.

**3:00-3:30** – “Sustainable Steel and Coating for Hot Stamping” - Constantin Chiriac, Ford Motor Co.

**3:30-4:00** – “Forming limit characterization of PHS1800 under hot stamping conditions, experiment and model” - Pedram Samadian, Ryan George, RJ He, Constantin Chiriac, Cliff Butcher, Michael Worswick - Waterloo University

**4:00 4:05** - Meeting adjourned, closing remarks, - Sergey Golovashchenko, NADDRG President

Directions to the venue of the NADDRG Spring Meeting on Wednesday December 6<sup>th</sup>, 2023

Address:

755 W. Big Beaver Building, Conference Room A (Room Number 232)  
Troy, MI 48084

Parking is available around the building, and is free. Park on the North (close to Big Beaver Road), or on the East (by the freeway ramp) sides of the building; avoid parking in labeled / tenant-assigned parking spots.

Come in to the building through the **revolving doors** on the North side, by the 3 flag poles:



Walk past the Security / Reception Desk, and take an elevator on the **right** side of hallway, underneath the sign “Floors 1-14”, to **Floor 2**:



Go **right** after you exit the elevator; walk past two automatic swinging doors, and turn **right** on to the mezzanine walk bridge (before the door to the stairwell).

**Conference Room A (Room 232)** is close to the end of this walk bridge, on your **left**.

