

# SYMPOSIUM ON INTELLIGENTIZED WELDING MANUFACTURING (IWM-SYMPOSIUM)

We are organizing a symposium (IWM-Symposium) devoted to the developments of key technologies toward future intelligent/smart, robotic and automated welding manufacturing as part of the 76th Annual Assembly of International Institute of Welding (IIW) and International Conference on Welding and Joining to be held in Singapore, July 17-21, 2023. Welding manufacturing includes all welding and joining based processes including welding, joining, cladding, additive manufacturing, repair deposition, remanufacturing etc. IIW IWM-Symposium topics include but not limited to

- Welding manufacturing processes sensing, monitoring, identification (dynamic model) and control
- Robotization of all welding manufacturing processes
- Human-robot collaborative welding and additive manufacturing
- Application of deep learning, artificial intelligence, computer vision, image/signal process processing to welding manufacturing
- Application of data driven techniques to welding manufacturing

To be considered, please submit your one-page abstract including title, authors, affiliations, corresponding author's email address, and work summary to Symposium Co-Chair YuMing Zhang at [yuming.zhang@uky.edu](mailto:yuming.zhang@uky.edu) by April 30, 2023 or submit it to the **Intelligentized Welding Manufacturing** session using the IIW2023 international conference online submission system (<https://iiw2023.com/international-conference/>). The acceptance decision will be made within a week and the corresponding author will be notified from the International Conference Chair Wei Zhou. All accepted abstracts are expected to present at the IWM-Symposium in person and submission of a full paper is encouraged but optional.

We are also open for nomination and self-nomination for Keynote and Invited Speaker. The nomination will include the one-page abstract and a bio of the nominee. The decision will be made no later than May 7, 2023 and all nominators and nominees will be notified of the decision.

We have received the following nominations for Keynote/Invited Speakers:

- Professor Shangben Chen - Cheung Kong Scholar and Professor of Materials Science and Engineering, Shanghai Jiao Tong University, China; Chair of Robotics & Automation Committee of Chinese Welding Society (CWS); Deputy Secretary-General of Chinese Welding Society; Standing member of board of directors, CWS; Editor-in-Chief, Transactions on Intelligentized Welding Manufacturing
- Professor YuMing Zhang – James Boyd Professor and Professor of Electrical Engineering, University of Kentucky, USA; Fellow of AWS, ASME, SME, IEEE and AAI (Asia-Pacific Artificial Intelligence Association); Editor – SME Journal of Manufacturing Processes.

Please contact the symposium co-chair YuMing Zhang at [yuming.zhang@uky.edu](mailto:yuming.zhang@uky.edu) for questions and inquiries.

## **Symposium Co-Chairs:**

Professor YuMing Zhang, [yuming.zhang@uky.edu](mailto:yuming.zhang@uky.edu)

University of Kentucky, USA

Dr Stephan Egerland, [Egerland.Stephan@fronius.com](mailto:Egerland.Stephan@fronius.com)

Fronius International, Austria

## **International Conference Chair:**

Professor Wei Zhou and Professor John Pang

Nanyang Technological University, Singapore