



# The 2019 International Workshop on Intelligentized Welding Manufacturing - LEX (IWIWM'2019-LEX)



Nov. 9, 2019, University of Kentucky, Lexington, Kentucky, USA

## Call for Contributions and Participations

This workshop aims at bringing leading researchers around the world together to share latest advancements in innovative uses of advanced sensing/control and artificial intelligence to solve challenging issues in welding manufacturing and identify the challenges and future directions. The workshop will be featured by keynote and invited talks, selected from submitted contributions, focusing on machine vision, big data analytics, machine learning, and human-robot collaboration. The workshop will also be featured by round table discussion that would lead to the identification of challenges and opportunities in using artificial intelligence to welding manufacturing.

IWIWM'2019-LEX is part of the IWIWM'2019 - consisting of IWIWM'2019-Shanghai, Nov. 6, 2019 in Shanghai, China and IWIWM'2019-LEX - which is the newest in the successful IWIWM series which have been co-sponsored by the Robotics & Automation Committee of Chinese Welding Society (CWS), Shanghai Jiao Tong University (SJTU), and other leading academic institutions.

The registration for participation in the IWIWM'2019-LEX is open to all welding researchers in the world with or without the submission of a contribution. To also be considered for Invited Talks in IWIWM'2019, you can submit your full papers for possible publication in the peer-reviewed, SCI-indexed "Transactions on Intelligent Welding Manufacturing (TIWM)". You may also submit your full papers to the planned Special Issue (submission details will follow) on Trends in Intelligentizing Robotic Welding in the Journal of Manufacturing Processes (JMP) (IF=2.809) or abstracts voluntarily to [qiye.wang@uky.edu](mailto:qiye.wang@uky.edu) for the guest editors to evaluate for suitability first. Topics for IWIWM'2019-LEX, TIWM and JMP special issue include but are not limited to:

S01: Welding application of machine learning  
S03: Virtual & Digital welding manufacturing  
S05: Intelligent control of welding process and quality  
S07: Intelligentized additive manufacturing (3D printing)  
S09: Intelligentized robotic welding technologies  
S11: Intelligentized welding workshop realization

S02: Welding application of big data analytics  
S04: Sensing technologies for welding process  
S06: Knowledge modelling of welding process  
S08: Intelligentized, digitalized welding equipments  
S10: Tele and network welding technologies  
S12: Human-robot collaborative welding

**Types of Submissions: (1) Papers to TIWM:** TIWM publishes papers in three categories for authors to choose freely: Feature Article (up to 25 pages) for significant advancements or review/tutorial papers co-authored by a world leader, Research Papers (up to 16 pages) for major technical advancements, or Technical Notes (8 pages or shorter) for verification of novel concepts and methods. The authors shall prepare the manuscripts according to the typesetting format requirements of the TIWM, make the layout with the software SPLNPROC, and submit the contributions at <https://ocs.springer.com/ocs/en/home/TIWM2017>. (2) Voluntary Abstracts for guest editors to evaluate for suitability for the JMP special issue: up to 400 words. (3) Full Papers to JMP Special Issues: Refer to instructions at <https://www.journals.elsevier.com/journal-of-manufacturing-processes>

### Important Dates:

Voluntary Submission of Abstracts:	August 1, 2019
Feedback of Abstracts:	August 15, 2019
TIWM Submission of Full Papers:	September 30, 2019
JMP Special Issue Submission of Full Papers:	December 1, 2019

### Honorary Chairs of the IWIWM'2019-LEX:

**Prof. Rudolph Buchheit** (Dean, College of Engineering, University of Kentucky)  
**Prof. Jiluan Pan** (Tsinghua University; Academician, Chinese Academy of Sciences)

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