



IChemE ADVANCING  
CHEMICAL  
ENGINEERING  
WORLDWIDE

NEW  
open access  
journal

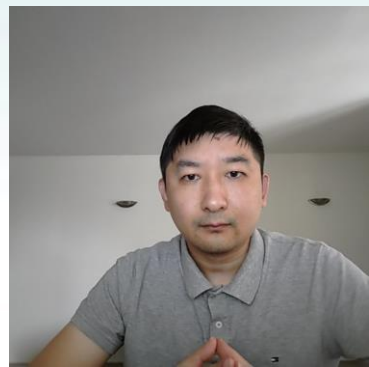


@DChEJournal

Introducing

# Digital Chemical Engineering (DChE)

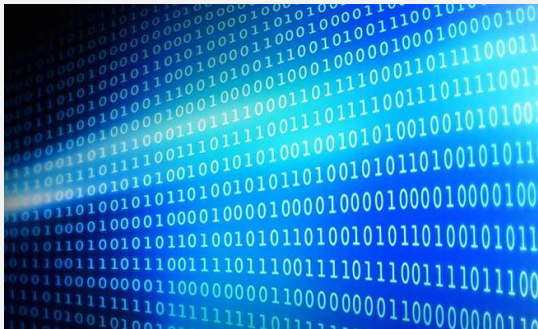
**Professor Jin Xuan**  
**Editor-in-Chief**



# Digitalisation in Chemical Engineering

- The emerging digital transformation in the chemical industry brings new challenges and opportunities, and is fundamentally changing the way of future chemical engineering research, innovation, education and enterprise.

Data



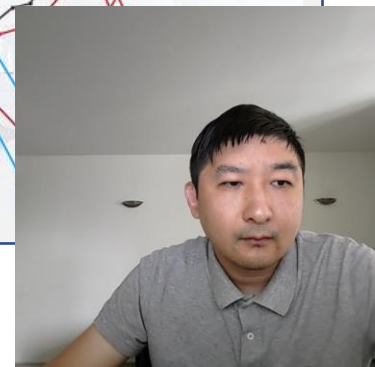
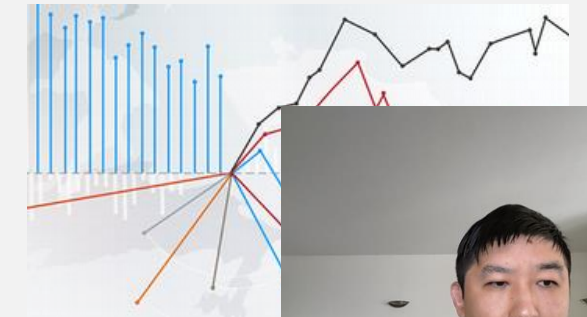
Algorithm



Hardware



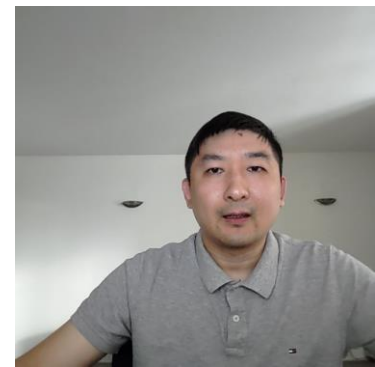
Business



# Digital Chemical Engineering




- For new interdisciplinary research across the domains of chemical engineering and digital sciences and technologies
- Launched July 2021
- Gold open access
- No Author Processing Charge (APC) until May 2022




# Editorial board



## Professor Jin Xuan


 Loughborough University, United Kingdom


 Subject areas - Artificial intelligence, Process simulation, Process modelling, Machine learning, Digital twins, Industry 4.0, Ethics, Data Science, Digital economy, Process systems engineering, Engineering and society, Life cycle assessment, Reaction engineering, Process optimization

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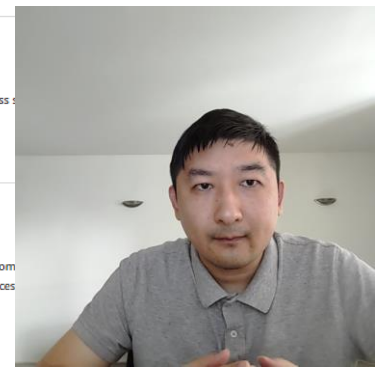


## Assist. Prof. Helen Durand

 Wayne State University, United States of America

 Plant-wide control of nonlinear systems, Centralized and distributed economic predictive control, Operational safety and cybersecurity of closed-loop process order modeling in predictive control

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## Diversity & Inclusion Pledge

- **Long-Term Targets:** We would like to have at least 40% of our editorial board, by the end of 2022, to be female.
- **We Represent a Global Authorship:** We hope to have editorial presence of at least 1 editorial board member in all continents by 2023.
- **We provide opportunity:** We want to have at least 50% of editors female on the journal by 2024.



# Topics

Manufacturing-and-Resources  
Industrial-symbiosis Digital-twins  
Process-control Virtual-reality  
Health-and-Wellbeing Education  
Engineering-and-society  
Process-modelling Big-data Digital-Economy Sensors  
Process-system-engineering  
Energy LCA Catalysis Industry-4.0  
Safety-and-Risk Water Data-Science  
Reaction-Engineering Bio-resources  
Blockchain Machine-learning Sustainability  
Cyber-physical Systems-thinking  
Ethics Automation Materials Robotics  
Circular-Economy Artificial-intelligence  
Process-simulation



# Types of Paper

- **Original research papers** report on the outcomes of original research.
- **Review papers** of relevance to the core topics covered by the journal are welcomed.
- **Perspectives** are short opinion papers addressing a key, emerging, research area.
- **Short communications** are short reports dealing with especially timely new ideas and specific points such as novel research techniques, fresh analysis of existing work or interesting aspects or results of work-in-progress.
- **Case studies** are usually from industrial users/researchers presenting successful application cases of implementing digital solutions to improve or enable products, processes or systems in practice. Papers of this type should include the overview of problems, discussion of implementation and discussion of impact and improvement from the proposed approach.



# Special issue: Advances in the Digitalisation of the Process Industries

- We are pleased to support the Advances 2021 conference. Papers within the scope of the conference are welcomed for submission to this special issue
- Potential topics include, but are not limited to Digital operations, Digital engineering and construction, Digital tools and standards, Digital training and research, Digital twins
- Guest Editors: **Jhuma Sadhukhan** (University of Surrey, UK), **David Cameron** (University of Oslo, Norway), **Chris Hamlin** (Hancock Hamlin, UK)





# Thank you very much!



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Catherine Cliffe (Managing Editor)

