



The Combustion Institute

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Naian Liu

2020 Candidate Profile: The Combustion Institute Board of Directors

Reasons for Nomination

Although fire has been a topic of interest to the Combustion Institute since its very foundation in 1958, our understanding of fire remains limited. As Hoyt C. Hottel (1903–1998) described, "A case can be made for fire being, next to life processes, the most complex of phenomena to understand". The complexity of fires comes from that there is a huge number of different fires that involve complex interactions among chemical reactions, heat transfer, and fluid mechanics, with diverse scenarios and controlling mechanisms. The discipline of fire science is less mature than other combustion topics, and more decades of fruitful research are required to gain a full understanding of this natural combustion phenomenon. My major motivation for serving the Board of



Directors is to promote combustion research in the field of fire science. During the past 20 years, I have been dedicated to the theoretical and experimental studies on the combustion of extreme fire behaviors in large-scale fires. If elected to the Board of Directors, I will endeavor to promote cross-disciplinary research aiming at closer collaboration between combustion science and fire science. I commit to serve the international combustion community with the same rigor and enthusiasm that have enabled me to serve the fire community.

See the next page for the candidate's curriculum vitae.

Naian LIU

Professor, Director, State Key Laboratory of Fire Science
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Education

1995 B. A. Engineering Thermophysics, University of Science and Technology of China
2000 Ph. D. Engineering Thermophysics, University of Science and Technology of China

Professional Experiences

2019- *Director*, State Key Laboratory of Fire Science, University of Science and Technology of China
2009-2019 *Vice Director*, State Key Laboratory of Fire Science, University of Science and Technology of China
2007- *Professor*, University of Science and Technology of China
2004-2007 *Associate Professor*, University of Science and Technology of China
2001-2003 *Lecturer*, University of Science and Technology of China
2000 *Visiting Scholar*, the University of Tokyo

Selected Invited Lectures

2020 *Plenary Lecture*, the 38th International Symposium on Combustion, Canada
2019 *Plenary Lecture*, 12th Asia-Pacific Conference on Combustion, Japan
2017 *Plenary Lecture*, 9th International Seminar on Flame Structure, Russia
2014 *Keynote Speech*, 7th International Conference on Forest Fire Research, Portugal
2013 *Plenary Lecture*, 7th International Seminar on Fire and Explosion Hazards, USA
2010 *Plenary Lecture*, 8th Asia-Oceania Symposium for Fire Science and Technology, Australia
2007 *Plenary Lecture*, 7th Asia-Oceania Symposium for Fire Science and Technology, Hong Kong

Selected Honors and Awards

2019 *Distinguished Paper Award*, the 37th International Symposium on Combustion, Ireland
2018 *Fellow*, the Combustion Institute
2016 *Excellent Paper Award*, the 8th International Seminar on Fire and Explosion Hazards, China
2016 The National Science Fund for Distinguished Young Scholars
2016 China Leading Talent of Technological Innovation of Ten-Thousands Talents Scholars
2012 *Excellent Paper Award*, the 9th Asia-Oceania Symposium on Fire Science and Technology
2010 China National Science and Technology Progress Award, First-class Award

Selected Professional Activities

● Journal Service

2019- *Member of Editorial Board*, Applications in Energy and Combustion Science
2016- *Associate Editor*, International Journal of Wildland Fire
2016- *Associate Editor*, Fire Technology
2016- *Member of Editorial Board*, Fire Safety Journal
2013-2015 *Associate Editor*, Fire Safety Journal
2013- *Associate Editor*, IAFSS Newsletter "Fire Safety Science News"
2011-2017 *Member of Editorial Board*, Fire Science Reviews

● Association Service

2020- *Chair*, Chinese Section of the Combustion Institute
2019- *Member*, Gold Medal Nomination Committee of the Combustion Institute
2019- *Member*, the Hiroshi Tsuji Early Career Researcher Award Committee of the Combustion Institute
2018- *Member*, Fellow Selection Committee of the Combustion Institute
2015-2018 *Member of Board of Directors*, International Association of Wildland Fire
2012- *Standing Director*, China Association of Public Safety Science and Technology
2012- *Member*, China National Committee for Standardization of Forest Fire Protection
2011- *Member*, International Scale Modeling Committee
2010- *Member*, the International Forum of Fire Research Directors

● Symposium/Conference Service

2020 *Program Scientific Co-Chair*, the 13th International Symposium on Fire Safety Science, Canada
2019 *Scientific Advisory Board Chair*, the 9th International Seminar on Fire and Explosion Hazards, Russia
2017 *Colloquium Coordinator*, Fire Research, the 37th International Symposium on Combustion, Ireland
2016 *Colloquium Co-chair*, Fire Research, the 36th International Symposium on Combustion, Korea
2014 *Colloquium Co-chair*, Fire Research, the 35th International Symposium on Combustion, USA
2016 *Topic Chair*, Wildland fires, the 12th International Symposium on Fire Safety Science, Sweden
2016 *Chair*, Poster Session, the 12th International Symposium on Fire Safety Science, Sweden
2017 *Program Chair*, the China National Symposium on Combustion 2017, China
2016 *Program Chair*, the China National Symposium on Combustion 2016, China
2015 *Award Committee Chair*, the 10th Asia-Oceania Symposium on Fire Science and Technology, Japan
2015 *Co-chair*, Organizing Committee, the 8th International Seminar on Fire and Explosion, China
2014 *Leader Expert*, Workshop "Wildfires and Climate Change", the 11th International Symposium on Fire Safety Science, New Zealand
2014 *Topic Chair*, Wildland fires, the 11th International Symposium on Fire Safety Science, New Zealand
2014 *Scientific Committee Member*, the 7th International Conference on Forest Fire Research, Portugal
2013 *Executive Committee Member*, the 7th International Symposium on Scale Modeling, Japan
2013 *Scientific Committee Member*, the 4th Fire Behavior and Fuel Management Conference, Russia
2012 *Technical Program Chair*, the 9th Asia-Oceania Symposium on Fire Science and Technology, China
2012 *Organizing Committee Chair*, Annual Meeting of the International Forum of Fire Research Directors, China