

# Journal Pre-proof

Announcement of the 2021 Journal of Aerosol Science Excellence in Research Award Recipients

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PII: S0021-8502(21)00672-8

DOI: <https://doi.org/10.1016/j.jaerosci.2021.105948>

Reference: AS 105948

To appear in: *Journal of Aerosol Science*

Please cite this article as: Hogan C, Announcement of the 2021 Journal of Aerosol Science Excellence in Research Award Recipients, *Journal of Aerosol Science*, <https://doi.org/10.1016/j.jaerosci.2021.105948>.

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## Announcement of the 2021 Journal of Aerosol Science Excellence in Research Award Recipients

In 2020, motivated by the celebration of 50 years of publication of the Journal of Aerosol Science, the JAS editors, editorial advisory board, and publisher elected to establish the Journal of Aerosol Science Excellence in Research (JASER) Award. The annual award, with a nomination period from March 1 to June 30<sup>th</sup> each year, is open to researchers at all career levels. It is intended to acknowledge the quality, originality, and depth of contribution in aerosol research (as defined by scope of the Journal of Aerosol Science) over quantity and acceptance by specific journals. The JASER Award may be bestowed for a single paper or collection of related papers of particular significance to Aerosol Science. Nomination for the JASER Award is demonstrated specifically through an aerosol scientist's peer-reviewed published papers in the five (5) years preceding the award year, with an emphasis on research where the nominee is either the first author or senior/corresponding author. Published papers can be from multiple journals but at least one (1) paper needs to have been published in the Journal of Aerosol Science during the 5-year period.

This editorial serves to announce the inaugural co-winners of the JASER Award for 2021 and to provide a brief summary of their recent research work, as selected by the winners to highlight. The co-winners will share a \$1,000 honorarium. The award committee, consisting of Pratim Biswas (University of Miami), Simone Hochgreb (University of Cambridge), Chris Hogan (University of Minnesota), and Jungho Hwang (Yonsei University), have selected:



**Professor Maosheng Yao, Peking University** Professor Yao is a Boya Distinguished Professor in the College of Environmental Sciences and Engineering at Peking University in Beijing, China. Professor Yao received his Ph.D. in Environmental Science from Rutgers University in 2006, and completed postdoctoral research in the Department of Chemical and Environmental Engineering at Yale University. His current research interests include bioaerosols, air toxicity, and environmental health. His work on SARS-CoV-2 aerosol detection was named one of the Top 10 Scientific Advances in Eco-Environment Fields in China. Several of his research patents have been successfully commercialized and widely used in China, including for application in monitoring SARS-CoV-2. Professor Yao initiated the National Bioaerosol Symposium in China, and organized and chaired state level Bioaerosol and Antibiotic Resistance Genes (ARG) Xiangshan conferences. Currently, Professor Yao serves as the Executive Vice Chair for the Indoor Environment and Health Branch of the Chinese

Society for Environmental Sciences. Some of Professor Yao's recent works include: Zhou et al. (2021), spearheading robot-enabled cyclone collection efforts for airborne SARS-CoV-2 detection in hospital environments during earlier COVID-19 pandemic; Chen et al. (2020), discovering that when mice are exposed to airborne toxic substances, they release a distinctive profile of volatile organic compounds (VOCs) within minutes through exhaled breath; Ma et al. (2021), showing that COVID-19 patients in the earlier stages of infection emit millions of SARS-CoV-2 viruses per hour, which provided key evidence for aerosol transmission of COVID-19 during the early COVID-19 pandemic; Li et al. (2018), reporting on the finding that an aerosol route is a major dispersion method for antibiotic resistance genes (ARGs); and Chen et al. (2018), presenting the development of a system that can monitor in real-time the health effects of air pollution.



**Associate Professor Jérôme Yon, INSA Rouen Normandie.**

Dr. Yon obtained his Master's degree in 1999 and his PhD degree in 2003 at Rouen University focusing on studies of diesel spray formation. Since 2004, he is an Associate Professor at CORIA Laboratory (CNRS, University and INSA Rouen Normandie) and lecturer at INSA (National Institute for Applied Sciences). He obtained his French habilitation to conduct research (HDR) in 2014 for his contributions to the metrology of fractal aggregates and to the characterization of soot particles. He is currently head of the integrated preparatory school, which is the 2 first years of the INSA engineering school. Dr. Yon's research activities focus primarily on the characterization of the concentration, size, morphology, aggregation dynamics, and optical and radiative properties of soot particles formed in hydrocarbon flames. He specializes in the use of aerosol metrology and in the development of optical diagnostics for measurements of nanoparticle-laden aerosol, such as analysis of extinction spectra, angular and spectral light scattering, and laser-induced incandescence. He is currently member of the French Association for Research and Study on Aerosols (ASFERA), CNRS Research Group on soot (GDR Suie) and member of the Laser Induced Incandescence international workshop. Some of Dr. Yon's recent works include: Morán et al. (2021), examining how the interplay between surface growth and aggregation for soot particles affects aggregate morphology; Yon, Morán, Ouf, et al. (2021), discussing the important distinction between individual and population fractal dimensions for fractal-like aggregates commonly formed in high temperature aerosol synthesis systems and combustion systems; Argentin et al. (2021), focusing on a critical examination of the application of Rayleigh-Debye-Gans theory in the interaction of light with fractal aggregates; Yon, Morán, Lespinasse, et al. (2021), focusing on improved angular light scattering techniques to analyze the spatial variation in soot particle properties in a laminar diffusion flame; and Lefevre et al. (2019), discussing the coupling of optical and non-optical techniques for the study of coated soot morphological restructuring and radiative properties.

On behalf of the editors, editorial advisory board, and early career researcher editorial board of the Journal of Aerosol Science, I extend hearty congratulations to Professor Yao and Dr Yon for their successful research efforts and accomplishments in Aerosol Science. I would also like to strongly encourage the Journal of Aerosol Science readership and greater aerosol research community to nominate collaborators, current and former students, advisors, and colleagues for the 2022 JASER award!

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 24 December, 2021

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