
Editorial

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Biographical notes: Tahir Hikmet Karakoc is a Full Professor of the Faculty of Aeronautics and Astronautics at Anadolu University, Eskisehir, Turkey. He received his MSc and PhD degrees in 1983 and 1987, respectively. He has published many papers at various national and international conferences, while he has authored several books. He is also a member of many journals and associations. His research areas include aviation, energy and energy economy, gas turbine engines, fuels, isolation and installation.

It is with great excitement that we open a new journal with this, the first issue of the *International Journal of Sustainable Aviation (IJSA)*. We are now with another prestigious publisher, Inderscience Publishers, Inc., and I would like to take this opportunity to thank the Publishing Editor, Dr. M.A. Dorgham and his team, D. Simpson, J. Corlett, L. Harris, S. O'Mara, J.N. Silo, and all members of Inderscience for their outstanding efforts to the journal. The sustainable aviation community continues to expand markedly from engineering, science to business and social studies. During the past few decades, there has been increasing interest in sustainable and aviation. Limitations of carbon emissions, and so global warming, are centred around the Kyoto agreement, from which aviation is specifically excluded. According to International Panel on Climate Change (IPCC) Reports, aviation contributes around 6% of greenhouse gases (GHG), and this may cause as much as 9% of the greenhouse effect. As other industries plan to cut their emissions and as passenger numbers grow, airlines could become one of the larger contributors to global warming as soon as 2020. Expert forecasts suggest a doubling of the global commercial jet fleet to over 35,000 by 2025. *IJSA* intends to provide an ideal platform for disseminating high-quality research results, whether the research relates to methods, models and applications. Papers in related areas such as green aircraft/airlines, aircraft environmental impacts such as emissions/noise, alternative/green aviation fuels, alternative/renewable/clean energy technologies, Sustainable aircraft design, technological change, innovation, research and development, aviation management, fleet planning/scheduling; air traffic management; future air transport, airport design, management, planning, development are welcome. Welcome also are studies devoted to method, modelling, theory, computational simulation, design, experiment, and measurement. All contributions are peer-reviewed by experts in a constructive way as quickly as possible using advanced electronic communication technologies. In this first issue, eight papers are in press related to following topics: New linear kalman filter for GPS navigation, airport development and sustainability for a

multi-airport system in Italy, optimisation of energy and exergy of turbofans, a comparison of longitudinal controllers for autonomous UAV, NO_x emission model of turbofans, hybrid power train for light aircraft and investigation of fatty acid methylesters in jet fuel.

Our primary objective is to build *IJSA* into a medium for the free discussion of ideas. With the support of the aviation communities, and the publisher, the editors and we will work hard to sustain *IJSA* as the premier journal in the aviation field. My special thanks go to the editorial board members, referees and authors for their dedication to the success of *IJSA*. I invite all to become avid readers of *IJSA* and join us in this adventure.