
Editorial

Sandro Nižetić

Laboratory for Thermodynamics and Energy Efficiency,
Faculty of Electrical Engineering, Mechanical
Engineering and Naval Architecture (FESB),
University of Split,
Rudjera Boskovicica 32,21000, Split, Croatia
Email: snizetic@fesb.hr

Biographical notes: Sandro Nižetić is a Full Professor at the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB) at University of Split, Croatia. His research is in the field of thermodynamics, energy, energy efficiency in buildings, smart technologies and renewable energy sources. For his research work he received several major awards including the Croatian State Prize for the research for 2016 and 2021, as well as also rector prize for the research from the University of Split for 2018 and 2020. Based on the Stanford and Elsevier ranking list, he was among 2% of the world's top cited scientist in 2019, 2020 and 2021.

Global warming issue is changing and shaping global economies and affecting life quality in many aspects. The present economic system is causing rapid use of various limited raw resources, and which is followed by excessive energy generation, still mainly obtained by utilisation of fossil fuel resources. The side effects of the present system are climate issues that are directly causing casualties and various hazards in general. In recent years, they are efforts from leading countries and general willingness to modify present energy generation systems. The main goal is to switch these energy generation systems to the renewable energy generation, as more acceptable solutions for the environment. The energy transition towards renewables is complex task that requires both demanding investments and time. Regarding current technological developments, there are already concepts who have strong potential for the wide market implementation, however, still there is necessity for the further improvement of these technologies to reach maturity from the techno-economic point of the view. In that sense, the role of the research community is key and beneficial one. Moreover, organisation of international conferences, such as Global Conference on Global Warming (GCGW-21) Conference, is important driver as it is helps to bring together various engineering disciplines. Finally, the energy and environmental aspect must be evaluated together, when considering or evaluating some novel technological solutions.

This special issue is related to selected papers from the GCGW-21 that was held virtually from Croatia, on August 1–4, 2021. GCGW-21 Conference is important international event that is focused on various energy related issues, as well as environmental implications of energy technologies, systems, or processes. Over 200 delegates from 30 countries participated in this and by that contributed to the further development of energy solutions and considering environmental effects.

I would like to express my sincere appreciation to the keynote and invited speakers, to the technical program committees, session chairs, reviewers and to the valuable

authors for their general contribution. Special thanks also to the GCGW-21 organisation team, for their smooth and efficient organisation. I would like to thank to the conference founder Prof. Dr. Ibrahim Dincer for his general support and efforts during the conference preparation and organisation. Prof. Dr. Sandro Nižetić would also like to acknowledge the general support provided by the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture together with the University of Split.