

---

## Editorial

---

### Zafer Utlu\*

Faculty of Engineering and Natural Sciences,  
Istanbul Atlas University,  
34408, Istanbul, Türkiye  
Email: zafer.utlu@atlas.edu.tr  
\*Corresponding author

### Elif Altintas Kahrیمان

Engineering Faculty,  
Haliç University,  
34060, Istanbul, Türkiye  
Email: elifaltintaskahriman@halic.edu.tr

**Biographical notes:** Zafer Utlu is a Full Professor of Mechanical Engineering at İstanbul Atlas University. He received McS and PhD in Energy from Ege University in 2003. He has a wide range of experience of thermodynamic analysis including energy and exergy analyses, renewable energy technologies, energy storage, energy systems, heat pumps, waste heat recovery technologies, thermophotovoltaic systems, hydrogen production and power cycles. He carried out over the 30 projects in many national and international projects, which are supported by the Scientific & Technological Research Council of Turkey and British Council, UNDP, ISTKA, and industry. He published a lot of refereed papers on an international and national basis. He has provided consultancy in the design/development of several major solar power plants and Technology Transfer Office Research and Application Center. He is a Fellow of World Society of Sustainable Energy Technologies. He is also Head of Sustainable Energy Systems Researches and Application Center.

Elif Altintas Kahrیمان received her BS degree from Kocaeli University, Kocaeli in 2012. She received her MS degree and PhD from Eskişehir Osmangazi University, Eskişehir in 2015 and 2020 respectively. She is currently an Assistant Professor at the Faculty of Engineering, Haliç University. Her research interests are applied mathematics, projective geometry, fuzzy set theory, fuzzy logic, fuzzy algebra, intuitionistic logic, discrete geometry, game theory, and neural network.

---

Nowadays, sustainable energy technologies have emerged as a crucial focal point, driven by the imperative of decarbonising energy policies worldwide. Within this framework, safeguarding the habitability of our planet and ensuring ongoing development necessitate not only diversifying energy sources and fostering scientific inquiry for the future but also mandating strategic plans aligned with these objectives. Sustainable energy technologies are indispensable for a sustainable world, encompassing a spectrum of hardware, techniques, skills, methods, and processes employed in energy production and the provision of energy services. Additionally, they entail the means of generating, transforming, storing, and, significantly, transmitting energy to future generations.

Furthermore, climate change has underscored the urgency of reducing the use of fossil energy sources and increasing the adoption of sustainable energy technologies. This special issue comprises numerous papers related to integrated energy systems for sustainable energy policies. These papers were selected from the 11th Global Conference on Global Warming 2023 (GCGW-2023), held in Istanbul, Turkey, on 14–16 June 2023, and the 19th International Conference on Sustainable Energy Technologies, SET2022, held on 16–18 August 2022 and expanded as well submitted for this journal to undergo a reviewing process. These selected articles highlight a variety of integrated sustainable energy systems addressing sustainability-related issues such as carbon footprint, carbon capture technologies, solar technologies, life cycle assessments, economic and environmental impacts, and green growth.

We extend our gratitude to the responsible authors of the selected articles for their cooperation and to the reviewers for their evaluations, which have contributed to improving the quality of the articles. Additionally, as guest editors, we would like to express our deep appreciation to the journal's Editor-in-Chief, Professor Dr. Ibrahim Dincer, for accepting this study and for their support throughout the publication process.