

## 7 Affordable and Clean Energy

### Prof. Çelebioğlu became chief editor of the prestigious journal

Prof. Selin Aradağ Çelebioğlu was appointed as the "Editor-in-chief" of the "Journal of Thermal Sciences and Technology". The journal started its publication in 1977 with the aim of encouraging the development of heat science and technology and enabling the publication of original, theoretical, numerical and experimental papers in its field, is published twice a year in April and October. Original and compilation articles on the subject of heat science and technology are included and each article is evaluated by at least two referees who are experts in their field.

More: <http://tibtd.org.tr/en/journal/>

### National design for sustainable hydroelectric power plants

Prof. Dr. Selin Aradağ, Research Assistant Oğuzhan Ulucak, laboratory technician Ali Öznehir and graduate student Aslı Beril Ejder started to "Domestic Design and Production of Components of Sarıyar Hydroelectric Power Plant (HEPP) Project" with TÜBİTAK MAM, TOBB ETÜ and Çankaya University. The project was funded by the Electricity Generation Corporation of Türkiye.

More: <https://me.tedu.edu.tr/en/node/22823>



" Prof.Dr Selin Aradağ'ın  
TEDU TECH projesi"

### Evaluating computational fluid dynamics simulations

Dr. Oğuzhan Ulucak from the Department of Mechanical Engineering, delivered a presentation to the Electricity Generation Corporation of Türkiye to share his views on how to evaluate computational fluid dynamics simulations.

## Academic Activity List of SDG7

Gezer D., TAŞCIOĞLU Y., Çelebioğlu K., Frequency containment control of hydropower plants using different adaptive methods, *Energies*, cilt.14, sa.8, 2021 , **International , Article.**

Un B. E. , YILDIZ H. U. , Tavli B., Impact of Critical Node Failures on Lifetime of UWSNs with Incomplete Secure Connectivity, 2021 IEEE International Black Sea Conference on Communications and Networking, BlackSeaCom 2021, Virtual, Bucharest, Romanya, 24 - 28 Mayıs 2021, **International , Conference Paper.**

TEKİN N., YILDIZ H. U. , GÜNGÖR V. Ç. , Node-Level Error Control Strategies for Prolonging the Lifetime of Wireless Sensor Networks, *IEEE SENSORS JOURNAL*, cilt.21, sa.13, ss.15386-15397, 2021 , **International , Article.**

Karaca M., Joint optimization of target wake time mechanism and scheduling for IEEE 802.11ax, *TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES*, cilt.29, sa.3, ss.1659-1671, 2021 , **International , Article.**

Balta-Ozkan N., Yildirim J., Connor P. M. , Truckell I., Hart P., Energy transition at local level: Analyzing the role of peer effects and socio- economic factors on UK solar photovoltaic deployment, *Energy Policy*, cilt.148, 2021 , **International , Article.**

Mete E., Ellialtıoğlu S. Ş. , Gulseren O., ÜNER D., Elucidating the Barriers on Direct Water Splitting: Key Role of Oxygen Vacancy Density and Coordination over PbTiO<sub>3</sub> and TiO<sub>2</sub>, *Journal of Physical Chemistry C*, cilt.125, sa.3, ss.1874-1880, 2021 , **International , Article.**

Ulucak O., Kocak E., BAYERÖ., BELDEK U., Yapic E. O. , Ayli E., Developing and Implementation of an Optimization Technique for Solar Chimney Power Plant With Machine Learning, *JOURNAL OF ENERGY RESOURCES TECHNOLOGY-TRANSACTIONS OF THE ASME*, cilt.143, sa.5, 2021 , **International , Article.**