

**Editorial****Special Issue from the ICADET 2017 Conference**

June, 2018

It's our pleasure to introduce the third volume of Turkish Journal of Electromechanics & Energy (TJEE). With this volume, we are about to complete third year in raising our child TJEE. This is made possible by our authors, reviewers and editorial board members, and we are grateful for their time, efforts and valuable suggestions.

This special issue of the TJEE (Vol 3, No:1 January-June 2018) consists of five articles selected from the **ICADET-2017 conference** which was held in Bayburt, Turkey during September 21-23, 2017.

First study by **Bolat and Sivrioğlu** investigated active vibration suppression of a flexible blade element using magnetorheological layer patch-electromagnetic actuator. An interaction model of the MR patch electromagnetic actuator was derived and a force characterization was realized, in their work.

**Yıldırım and Keleş** reported structural properties such as phase relationships, microstructures, and hardness of Co-Cr-Mo biomedical alloys produced by investment casting technique in three different compositions.

**Kaya et al.** aimed to estimate the amount of power that can be generated using wind turbines in accordance with the wind speed data obtained from Amasra town, using Artificial Neural Networks (ANN) method. The energy generation capacity of Amasra was analyzed for different wind turbines.

A simple method for energy saving in tunnel lighting was studied by **Aksoy**. He examined innovations for illumination and lamp control methods for tunnels, and calculated the amount of energy saving theoretically.

Last study by **Gürdoğan et al.** introduced a multilayered implantable antenna design for medical implant communication system (MICS) band biotelemetry applications. Analysis and design of the antenna was carried out using CST Microwave Studio and the results were validated by means of ANSYS HFSS simulator.

Publishing the special issue was a long and meticulous process. We would like to convey our thanks to Dr. Murat ÇOLAK on behalf of ICADET 2017 Conference Organizers for accepting our invitation to publish a special issue in TJEE. We attended to the conference, and reviewed the presentations that match our journal's aim and scope. We determined 52 presentations among 600+ and invited them to submit their manuscripts for review process in TJEE. 25 manuscripts were evaluated by our reviewers and eventually 9 of those were published in two special issues.

We will continue to our endeavor in archiving and sharing the knowledge with our open-access policy. We acknowledge our publisher's (Science Literature Publishing) support always behind us, and promotion the dissemination of science without barriers. On June 30<sup>th</sup>, we are deeply saddened by the loss of the distinguished science historian Prof. Fuat Sezgin who devoted his life for archiving the scientific achievements in Islamic world. He passed away at the age of 93, leaving a true legacy behind him.

He started his carrier studying at the Faculty of Letters of Istanbul University, in 1943. He earned his Ph.D on Arabic language and literature from same university in 1950 under the guidance of German Orientalist Hellmut Ritter who helped him to establish his path in science history. He moved to Germany in 1961, and began working as a visiting professor at the University of Frankfurt. He was promoted to professorship in 1965. His efforts in Frankfurt concentrated on Islam's Golden Age of Science. In 1982, Sezgin established the Institute of the History of the Arab Islamic Sciences in Goethe University (Institut für Geschichte der Arabisch-Islamischen Wissenschaften an der Johann Wolfgang Goethe-Universität). that houses the most comprehensive collection of writings on the historical Arabic-Islamic science. In 1983, Sezgin also established a unique museum within the institute, bringing together more than 800 replicas of ancient scientific instruments, tools, and maps, mostly belonging to the Golden Age of Islamic science [1]. He also founded a very similar museum in İstanbul which was inaugurated on 25 May 2008 [2].

He devoted his life studying and listing scientific contributions made by Muslim scholars throughout history. He prepared 17-volumes "**Geschichte des Arabischen Schrifttums**" (History of Arabic – Islamic Sciences) which is one of the principal sources for the history of science and technology in the Islamic world. As part of his meticulous efforts, he was known to read and understand 27 languages. He was the recipient of several prestigious awards, and member of several academies yet more importantly, he was a great example for young scientists in terms of dedication and curiosity in learning even in his later ages. We plan to commemorate his contributions to the science literature and his legacy.



Professor Fuat Sezgin



Professor Sezgin next to terrestrial globe with world map which seventh Abbasid Caliph al-Mamūn (reigned 813–833 c.e.) commissioned a large group of astronomers and geographers to make. This and many other replicas of medieval age scientific instruments are available at Istanbul Museum of the History of Science and Technology in Islam

Photo credits: Sabah, Turkish Daily Newspaper

#### References and further reading:

- 1) <https://globintel.com/turkey/fuat-sezgin-bio-biography-age-wife-career-publications-awards-recognition-and-death-1924-2018/>
- 2) <https://www.tcmb.gov.tr/en/news/542/53656/president-erdogan-receives-prof-fuat-sezgin>
- 3) His biography, <http://www.biyografya.com/biyografi/16909>
- 4) The web site of the institute he established "Institut für Geschichte der Arabisch-Islamischen Wissenschaften in Goethe University at Frankfurt" (mainly in German) <http://www.uni-frankfurt.de/58601604>, and the museum within it <https://www.uni-frankfurt.de/59012099/Museum>
- 5) The web site of Istanbul Museum of the History of Science and Technology in Islam which was dedicated to his work, <http://www.ibttm.org/ENG/>
- 6) His publications: [https://www.uni-frankfurt.de/58972511/Andere\\_Themen#Katalog](https://www.uni-frankfurt.de/58972511/Andere_Themen#Katalog) (in English, and German) <http://www.islamtarihikaynaklari.com/index.php/haber-ve-duyuru/378-arap-islam-bilimleri-tarihi-geschichte-des-arabischen-schrifttums-cevriyiyor> (in Turkish), Last access date: 04/07/2018

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