

Istanbul Aydın University



EDITORIAL BOARD:

ISTANBUL AYDIN UNIVERSITY

Prof. Dr. Mustafa AYDIN
Chairman of the Board of Trustees

Prof. Dr. İbrahim Hakkı AYDIN
Deputy Rector of Istanbul Aydın University

Prof. Dr. Hasan Hüseyin BALIK
Deputy Dean of Faculty of Engineering of
Istanbul Aydın University

Prof. Dr. Rafet AKDENİZ
Dean Vice of Faculty of Engineering of
Istanbul Aydın University

Assist. Prof. Dr. Dilşad AKGÜMÜŞ GÖK
Dean Vice of Faculty of Engineering of
Istanbul Aydın University

ENGINEERING FACULTY

e - Newsletter

FEBRUARY / 2025

Issue: 29



ACADEMIC BOARD MEETING

The Faculty of Engineering 2024-2025 Spring Semester Academic Board Meeting was held in the D Block Orange Hall with the esteemed participation of Deputy Rector, Prof. Dr. İbrahim Hakkı Aydın.



PRESENTATION OF A PAPER

Prof. Dr. Yusuf Cengiz Toklu, a faculty member of the Civil Engineering Department, participated in the 3rd Meeting of the Lunar Science Working Group, organized as part of the Moon Program, which marks a significant step in Turkey's space journey. The event took place on February 11-12, 2025, at the METU Culture and Convention Center, hosted by TÜBİTAK UZAY. During this meeting, our esteemed professor presented a paper titled "Development of Regolith Simulants for Lunar and Martian Concretes."





SEMINAR

Prof. Dr. Yusuf Cengiz Toklu, a faculty member of the Civil Engineering Department, delivered a seminar on Aerospace Engineering at METU on February 10th.

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

SEMİNER DUYURUSU
10.02.2025 Pazartesi, 11:00, İnşaat Mühendisliği Bölümü, DR2 Amfisi

Y. CENGİZ TOKLU, Prof. Dr.
ODTÜ, CE'67

Uzay İnşaat Mühendisliği



Prof. Toklu İnşaat Mühendisliğinde Lisans ve Yüksek Lisans dereçelerini ODTÜ'den, Mekanik Doktorası dereçesini de Pierre ve Marie Curie, Paris VI üniversitesinden almıştır. Mesleki hayatında büyük projelerde önemli görevler almış, akademik hayatta da, ODTÜ'den başlamak üzere, pek çok üniversitede öğretim üyesi olmuştur. Çeşitli bilimsel ve teknik kuruluşlara üye olan Dr. Toklu halen İstanbul Aydın Üniversitesinde görev yapmaktadır. Uzay inşaat mühendisliği alanında, grubuyla beraber önemli çalışmalar yapmış olan Dr. Toklu dünyada Türkiye'yi 10. ülke yaparak ay toprağı benzerini yaptığı gibi Çinlilerin geçirdiği örneğin benzerini üreterek de dünyada bu konuda en ön sırayı almıştır. Bu alandaki son çalışmalarını en uygun ay betonu elde etme ve optimum ay yapıları tasarlanması üzerinedir. Dr. Toklu'nun başka bir çalışması da Enerji Enküçüklemeli Sonlu Elemanlar Yöntemi (ESEY) üzerinedir. Bu yöntem sayesinde tüm yapı mühendislerinin çok yaygınca kullandığı SEY yönteminin başarısız olduğu pek çok problemin çözülmesi mümkün olmaktadır.








SELECTION AS A COMMITTEE MEMBER

Prof. Dr. Zafer Aslan has been selected as a committee member at the International Meet and Expo on Environmental Sciences, held from February 13-15, 2025, at UFE, Dubai. We congratulate our professor.



PARTICIPATION IN THE CONFERENCE

Dr. Abdulkader Alwer, participated in the International Conference on Cognitive Computing, Intelligence, and Data Science Applications (CCIDSA).





ACTIVITY

On February 24th, the birthday of our Faculty of Engineering Secretary, Ayşegül Ediş, was celebrated. The event was honored by the presence of our esteemed Vice Rectors, Prof. Dr. Zafer ASLAN and Prof. Dr. Ali SINAĞ.



STAND DAYS

As part of the İAÜ Stand Days, the Industrial Engineering Club's booth was visited, and discussions were held regarding student activities.





VISITING

On February 14, 2025, Mr. Şems Hakan Sönmez, a shareholder of our external stakeholder Ortak Akıl Management Consulting Company and an M.Sc. Industrial Engineer, visited our Industrial Engineering Department and gifted us his book titled "Human Resources Management in Enterprises." Mr. Şems Hakan particularly supports our department in the On-Site Application Internship program, especially for our 3rd-year students.





LATEST ACADEMIC PAPERS

Prof. Dr. Zafer ASLAN

Deniz, O.; Ahi, Y.; Aslan, Z.; Dökmen, F.; Orta, A.H. An Analysis of Quality Parameters Changes in Agricultural Water Systems with Wavelet Transform Model. *Water* 2025, 17, 662. [https:// doi.org/10.3390/w17050662](https://doi.org/10.3390/w17050662)

Assoc. Prof. Dr. Hasan Volkan ORAL

Lucca, E., Kofinas, D., Avellán, T., Kleemann, J., Mooren, C. E., Blicharska, M., ... & El Jeitany, J. (2025). Integrating “nature” in the water-energy-food Nexus: Current perspectives and future directions. *Science of The Total Environment*, 966, 178600.

Oral, H. V., & Aksu, O. H., The Social Awareness Impact of Nature-Based Solutions: DOSUDER (Nature-Based Solutions, Circularity and Sustainability Applications Association).

Assoc. Prof. Dr. Hüseyin Çağan KILINÇ - Assist. Prof. Dr. Mahmut Esad ERGİN

Kilinc, H.C., Apak, S., Ergin, M. E. et al. Enhancing Hydrological Time Series Forecasting with a Hybrid Bayesian-ConvLSTM Model Optimized by Particle Swarm Optimization. *Acta Geophys.* 2025. , 10.1007/s11600-025-01570-0.

Assist. Prof. Dr. Abdulkader ALWER

Defect Detection in Casting Products Using Grid Search Augmented PCA-CNN Hybrid Model,. Cem Savas Aydin, Abdulkader Alwer, International Conference on Cognitive Computing, Intelligence, and Data Science Applications (CCIDSA), Communications in Computer and Information Science, Springer

Assist. Prof. Dr. Şahin DEMİRCİ

Sahiner, Mehtap, Selin S. Suner, Sahin Demirci, Ramesh S. Ayyala, and Nurettin Sahiner. 2025. "Toxicity Evaluation of Sulfobetainized Branched Polyethyleneimine via Antibacterial and Biocompatibility Assays" *Toxics* 13, no. 2: 136. <https://doi.org/10.3390/toxics13020136>



Assist. Prof. Dr. Mahmoud M S ZIADA

Ali, I., Canpolat, O., Doğruöz Güngör, N., Yüzer, N., Uysal, M., Tanyıldızı, H., ... & Al Hayo, B. (2025). Comparison of Bacterial Healing Performances of Cave Bacteria and *Sporosarcina pasteurii* in Cement-Based Mortar. *Processes*, 13(3), 673.