

# Istanbul Aydın University



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## ENGINEERING FACULTY

## e - Newsletter

DECEMBER / 2024

Issue: 27



### VISITING

Prof. Dr. Mahmoud Hsino from the Academy of Applied Sciences Stanislaw Staszic in Pila visited our Department of Civil Engineering. During the visit, discussions were held regarding potential collaborative projects and publications.



### METaverse AND EDUCATION (ARIS888)

Upon the invitation of the Department of Software Engineering, Dr. Metin ÇENGEL, Lecturer at Sakarya University of Applied Sciences (<https://lnkd.in/dXir2dgV>), gave a seminar on "Metaverse and Education." Following the seminar, a workshop was held in the Aris888 Metaverse environment with the participation of faculty members (from the Faculty of Engineering and Communication) and graduate students. We would like to thank Dr. Metin ÇENGEL, his team, and Prof. Dr. Numan ÇELEBİ (<https://lnkd.in/dtuahUVG>), Dean of the Faculty of Computer and Information Sciences at Sakarya University, for their enlightening contributions on the Metaverse and its usage, as well as for the educational session and workshop.





## TECHNOLOGY AND INNOVATION CONFERENCE

The TECHNOLOGY and INNOVATION CONFERENCE, featuring numerous expert participants and speakers from leading organizations in the industry, was held on campus in collaboration with the Department of Software Engineering and the Information Management Platform. The conference saw broad participation from department students. During this event, where we were immersed in technology and knowledge, our distinguished speakers addressed current topics. The conference was moderated by Prof. Dr. Ferdi SÖNMEZ. It was decided that the next event will be held at Boğaziçi University in collaboration with Istanbul Aydın University, the Information Management Platform, and Boğaziçi University.

**DAVETLİSİNİZ:**  
**Teknoloji ve İnovasyon Konferansı**

*Bilişim Yönetim Platformu; yeni sezon ilk etkinliğiyle karşınızda. İstanbul Aydın Üniversitesi ile yapacağımız konferansa tüm teknoloji gönüllülerini bekliyoruz. Katılım kontenjanla sınırlıdır.*

**30 KASIM 2024 CUMARTESİ**  
SAAT : 14:00

YER : İSTANBUL AYDIN ÜNİVERSİTESİ, MÜHENDİSLİK FAKÜLTESİ, FLORYA YERLEŞKESİ

- Yapay Zeka
- DEVOPS
- Otomasyon
- YAZILIM GELİŞTİRME

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İstanbul Aydın Üniversitesi  
**30 Kasım Cumartesi**  
Mühendislik Fakültesi

### Teknoloji ve İnovasyon Konferansı

Konuşmacılarımız

<b>Ercan Yağmur</b> IT Manager	<b>Alper Günay</b> IT Manager	<b>Adem Öztürk</b> IT Senior Expert
<b>Büşra Ekşi</b> IT Expert	<b>Mustafa Erol Çakan</b> Digital Marketing and AI Consultant	<b>Merve Kocagöz</b> Software Engineering Manager
<b>Beytullah İyigün</b> Service Manager	<b>Ersin Binal</b> E-Commerce Director	<b>Fehmi Darbay</b> E-Commerce CEO

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## HULT PRIZE ACTIVITY

Yasin Tubail, a student of Software Engineering, is the coordinator of the HULT Prize Program at the IAU Campus. The HULT Prize is known as the Nobel Prize for students and is funded by former U.S. President Bill Clinton. It holds annual competitions aligned with the United Nations' 17 Sustainable Development Goals. It is a social entrepreneurship competition aimed at solving global problems. The advisor is Prof. Dr. Ferdi SÖNMEZ. It provides students with advantages in job placement and career development.



## PROJECT

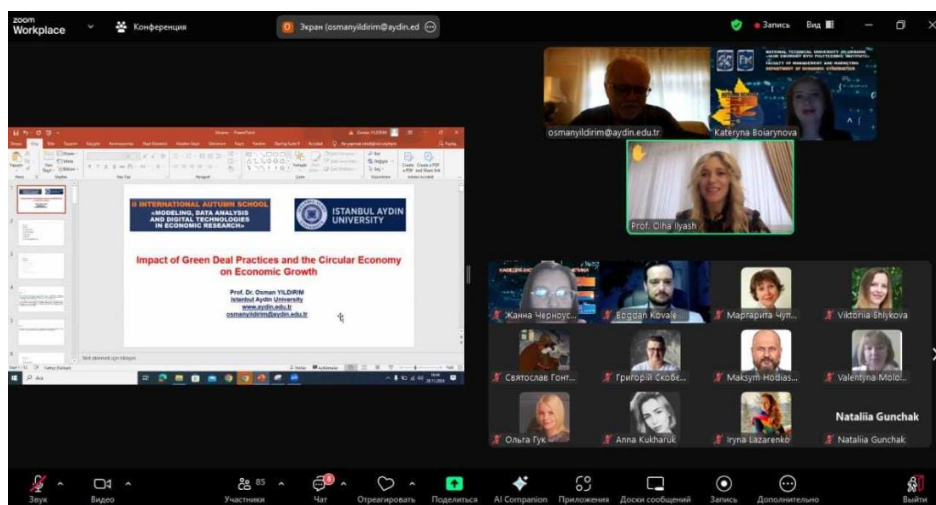
Prof. Dr. Ferdi SÖNMEZ, the Head of the Department of Software Engineering, has been appointed as a Consultant for the European Union Framework Programs under the TÜBİTAK International Cooperation Department. He has also been assigned as an Expert Evaluator for 6 EIC projects by the COST Association. In November and December, he performed 8 TÜBİTAK Teydeb peer review/monitoring duties. We sincerely congratulate our faculty member.





## CONFERENCE

Prof. Dr. Osman YILDIRIM served as a co-chair at the XVIII International Scientific-Practical Conference.



## PRESENTATION OF PAPER

Dr. Büşra Selenay ÖNAL, a faculty member from the Department of Mechanical Engineering, presented her paper titled "Investigation of Condensation Heat Transfer Characteristics in Different Pipe Types Using Artificial Neural Networks" at the 15th International Exergy, Energy and Environment Symposium (IEEES2024), an international conference held from December 19-21, 2024.





### ACTIVITIES

On December 26, 2024, a presentation was given to our students by Mr. Anıl Yılmaz, a representative of HİSTOGRAM Makina, a company with offices within the TEKMER center, in Dr. Cem Savaş AYDIN's Product Planning and Control-I course.



On December 27, 2024, Mr. Şems Hakan Sönmez, the owner of Ortak Akıl Consulting and author of the book "Human Resources Management in Enterprises," visited the Department of Industrial Engineering. A meeting was held with him regarding the creation of internship opportunities for our faculty's students, and it was agreed to get in touch with our Career Center regarding this matter.





Dr. Semih YÖN participated in the Smart Factory Solutions Summit and Industry 4.0 Applications Exhibition held at the Istanbul Expo Center on December 20, 2024.



## WEBINAR

Assoc. Prof. Dr. Hasan Volkan ORAL from the Department of Civil Engineering conducted a webinar on December 12th titled "Introduction to EU Technical Cooperation Cost Projects, H2020 Project Relationship, and TÜBİTAK 2515 Definition."

İSTANBUL AYDIN  
UNİVERSİTESİ

20 Yıl

COST  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY

AB TEKNİK İŞBİRLİĞİ  
**COST PROJELERİ TANITIMI,  
H2020 PROJE İLİŞKİSİ,  
TÜBİTAK 2515 TANIMI**

Sunucu  
**Doç. Dr. Hasan Volkan ORAL**  
MÜHENDİSLİK FAKÜLTESİ İNŞAAT MÜHENDİSLİĞİ (İNGLİZCE)  
Öğretim Üyesi

12 Aralık 2024  
Perşembe 10.00

Zoom ID: 86348340046  
Zoom Password: 4441428

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## PROJECT EVALUATION REFEREE DUTY

Assoc. Prof. Dr. Hasan Volkan ORAL from the Department of Civil Engineering was given the task of Project Evaluation Referee in the field of "Water for Circular Economy" in Water4All-Call 2024 projects. We sincerely congratulate our faculty member.



## FOOD ENGINEERING DEPARTMENT DINNER

A department dinner was organized by the Department of Food Engineering.





### LATEST ACADEMIC PAPERS

#### **Prof. Dr. Abdulhadi BAYKAL**

Yassine Slimani, Munirah Abdullah Almessiere, Abdulhadi Baykal, Ayse Demir Korkmaz, Hakan Gungunes, Sagar E. Shirsath, Denis S. Klygach, Tatiana I. Zubar, Alex V. Trukhanov, and Latifah I. Al-Jumaiah *Inorganic Chemistry* 2024 63 (43), 20749-20761 DOI: 10.1021/acs.inorgchem.4c03468

Almessiere, M. A., Ünal, B. A. Y. R. A. M., Baykal, A., Korkmaz, A. D., Gondal, M. A., Slimani, Y., ... & Güngüneş, H. (2024). Exploring dielectric and electrical characteristics in Sr<sub>0.5</sub>Ba<sub>0.5</sub>SnxFe<sub>12-x</sub>O<sub>19</sub>/CoFe<sub>2</sub>O<sub>4</sub> nanocomposites. *Ceramics International*, 50(24), 52330-52343.

#### **Prof. Dr. Beşir ŞAHİN**

Ilhan and B. Sahin (2024) Financial Analysis of a Wind Turbine Evaluated for Installation to a Village Farm. 2nd International Conference on Trends in Advanced Research. 22-23 November, 2024, pp. 113-123, Konya, Türkiye.

Klavuz, H Akıllı, M. Özgören ve Beşir Şahin (2024), Hava-su etkisinde bulunan bir insansız deniz aracındaki akış karakteristiklerinin belirlenmesinde sas ve les türbülans modelleri ile karşılaştırılması, 10.Ulusal Havacılık ve Uzak Konferansı, Ankara Yıldırım Beyazıt Üniversitesi 18-20 Eylül, UHUK-2024, Ankara, Türkiye

Ozgoren, M., Kenan, Ö., Şekeroğlu, E., Yanıktepe, B., Erdem, M., Şahin, B., (2024), Bir Otonom Aracın Akış Karakteristiklerinin PIV Yöntemiyle Üniforms Akış Şartlarında İncelenmesi, 10. Ulusal Havacılık ve Uzak Konferansı, Ankara Yıldırım Beyazıt Üniversitesi, Ankara-Türkiye, 18-20 Eylül, UHUK-2024, Ankara, Türkiye

#### **Prof. Dr. Ferdi SÖNMEZ**

Ferdi Sönmez, Ercan Öge (2024), Yapay Zeka Destekli Uçtan Uca İşe Alım Uygulaması, International Open Source Conference (Uluslararası Açık Kaynak Konferansı – UAKK) 2024.

#### **Prof. Dr. Yusuf Cengiz TOKLU**

Unsalan,O., Toklu,Y.C., Altunayar-Unsalan, C., Calis Acikbas, N., Acikbas, G., Cercevik, A.E. (2024) "Micro-Raman and FTIR spectroscopic characterization of the first Turkish lunar regolith simulant". *Astrophysics and Space Science*, 369:121.



### **Assoc. Prof. Dr. Raheleh MIRZAEI**

Study the Impact of Active Cooling Systems on Solar Cell Efficiency". International Journal of Techniques  
Yazarlar: Afaq Jasim Mahmood, Muhammed J. Kadhim, Raheleh Nowzari, Faeza Saleh Dihin

### **Assist. Prof. Dr. Arif ULU**

Ulu, A. (2024). Application of response surface methodology in the optimisation of polymer concrete mechanical properties. *Sigma Journal of Engineering and Natural Sciences*, 42(6), 1973-1985.

Ulu, A., Tutar, A. I., Shams, M., & Cakir, F. (2024). Impact of iron powder and blast furnace slag on the mechanical properties of polymer concrete: An experimental and hyperparameter-tuned ANN-based study. *CHALLENGE*, 10(4), 149-158.

### **Assist. Prof. Dr. Elif ÇAKIR**

Çakır, E., & Bayram, Y. (2024). The Effect of Functional Component Grape Seed Powder on the Bioactive, Physicochemical, and Sensory Properties of Wild Cornelian Cherry (*Cornus mas L.*) and Blackthorn (*Prunus spinosa*) Fruit Leathers. *Harran Tarım ve Gıda Bilimleri Dergisi*, 28(4), 720-727.

### **Assist. Prof. Dr. Mert BÜYÜKDEDE**

Büyükdede, M. (2024). Türkiye Yüzyılı Maarif Model Kapsamında Hazırlanan Fizik Öğretim Programı İle 2018 Yılı Türkiye Fizik Öğretim Programının Karşılaştırılması, Gazi Üniversitesi Uluslararası Türk Dünyası Eğitim Bilimleri-IV Kongresi, Sözlü Sunum, 12-13 Aralık 2024, Ankara.

### **Assist. Prof. Dr. Şahin DEMİRCİ**

Sahiner, M.; Demirci, S.; Sahiner, N. Super Porous Carboxymethyl Cellulose–Tannic Acid (TA@CMC) Cryogels with Antioxidant, Antibacterial, and  $\alpha$ -Glucosidase Enzyme Inhibition Abilities. *Polysaccharides* 2024, 5, 823-841. <https://doi.org/10.3390/polysaccharides5040051>



**Assist. Prof. Dr. Yavuz NACAĞLI**

Comparison of the Effects of Using Biodiesel, Hydrogen and Kerosene on the Performance of an UAV Turbojet Engine, 15th International Exergy, Energy, and Environment Symposium (IEEES-15) - December 19-21, 2024.

**Res. Assist. Gamze MADEN MÜFTÜOĞLU**

Gamze Maden Müftüoğlu, Fatma Zehra Sarı, Mehmet Baysan Detailed Evaluation of Structural Variant Detection Algorithms Through a Diverse Set of Benchmark Datasets 19 Aralık 2024