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ENGINEERING FACULTY

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ERASMUS + STAFF TEACHING MOBILITY

One of our professors from the Department of Civil Engineering, Prof. Dr. Gökhan ARSLAN taught at Vilnius Technical University for two weeks within the scope of Erasmus staff teaching mobility.



Erasmus+

TEKNOFEST

The technical reports of the team, whose advisor is Assist. Prof. Dr. Süleyman ŞİMŞEK, in the Electric Vehicle and Hydrogen Powered Vehicle categories at Teknofest, have been found successful.



[TR]

Değerli Yarışmacımız,

TEKNOFEST Uluslararası Efficiency Challenge Elektrikli Araç Yarışması başvurunuz için teşekkür ederiz.

Göndermiş olduğunuz Gelişme Raporu'nuz detaylı bir şekilde objektif kriterler üzerinden, alanında uzman ekiplerce incelenmiştir.

Değerlendirme sonucunuza KYS portalı üzerinden ulaşabilirsiniz. Başvurularım sayfasından "**Başvuru Hareketleri**" üzerinden tıklayarak kriter bazlı sonuçlarınızı görebilirsiniz.

Gelişme Raporu,

Elektromobil Kategorisi baraj puanı **844'dür**. Puanı 844 ve üzerinde olan takımlar başarılı bulunmuştur.

Hidromobil Kategorisi baraj Puanı **809'dür**. Puanı 809 ve üzerinde olan takımlar başarılı bulunmuştur.

Çalışmalarınızda Başarılar Dileriz.



PROJECT ACCEPTANCE

Under the supervision of Dr. Necip Gökhan Kasapoğlu, the TAI Lift Up Industry-Focused Undergraduate Graduation Project titled "Efficiency of Optical Wireless Communication Link Between Ground Station and Aircraft (Land-Air)" is being conducted by the project team, which consists of Azize Aktan, Barış Türkmen, Melikenur Bakırhan, Amen Gerald Mgaya, and Buğrahan Nalbant, and they are supported by the 2209-B Tübitak University Students Industry-Oriented Research Projects Program.



The project team, consisting of Ömer Kardeş, Talha Tetik, Muhammet Mengi, and Ömer Talha Uzun, is working under the guidance of Dr. Necip Gökhan Kasapoğlu on the "Predictive Maintenance System" as a Graduation Design Project. The team is receiving funding from the 2209-B Tübitak University Students Industry-Oriented Research Projects Program.



TÜBİTAK



MEETING

Assoc. Prof. Dr. Hasan Volkan ORAL went to Spain for the COST Action LIAISE Core Group and Management Committee meeting on April 23-24, 2024.



BOOK EDITORSHIP

Faculty members of the Engineering Faculty, Prof. Dr. Hasan SAYGIN, Assoc. Prof. Dr. Hasan Volkan ORAL, Assist. Prof. Dr. Kaveh DEGHANIAN, and Assist. Prof. Dr. Tevfik Denizhan MÜFTÜOĞLU, have signed a contract with Taylor and Francis for a scientific book titled 'Nature-based Solutions and Circularity Perspectives in Multidisciplinary Approaches in the Built Environment'. Our faculty members will be the editors of this book.





ACTIVITY

An activity was held with department academicians on March 6.





LATEST ACADEMIC PUBLICATIONS

Prof. Dr. Abdulhadi BAYKAL

Biomedical applications of rare earth element (REE) doped magnetic ferrite nanoparticles and nanocomposites, *Magnetic Nanoparticles and Polymer Nanocomposites Fundamentals and Biological, Environmental and Energy Applications*, Elsevier (Book Chapter)

Magnetic nanocomposites for biomedical and environmental applications, *Magnetic Nanoparticles and Polymer Nanocomposites Fundamentals and Biological, Environmental and Energy Applications*, Elsevier (Book Chapter)

Impact of the rare earth elements doping on the copper ferrite spinel magnetic nanoparticles, *Magnetic Nanoparticles and Polymer Nanocomposites Fundamentals and Biological, Environmental and Energy Applications*, Elsevier (Book Chapter)

Magnetic nanocomposites for energy storage and wastewater treatment applications, *Magnetic Nanoparticles and Polymer Nanocomposites Fundamentals and Biological, Environmental and Energy Applications*, Elsevier (Book Chapter)

Removal of organic pollutants from wastewater using spinel manganese ferrite nanoparticles, *Magnetic Nanoparticles and Polymer Nanocomposites Fundamentals and Biological, Environmental and Energy Applications*, Elsevier (Book Chapter)

Prof. Dr. Ali SINAĞ

Bilge, S., Dogan-Topal, B., Gürbüz, M.M. et al. Recent trends in core/shell nanoparticles: their enzyme-based electrochemical biosensor applications. *Microchim Acta* 191, 240 (2024). <https://doi.org/10.1007/s00604-024-06305-4>

Yusuf Osman Donar, Selva Bilge, Duygu Bayramoğlu, Beyza Özoylumlu, Samed Ergenekon, Ali Sınağ, Recent developments and modification strategies in electrochemical sensors based on green nanomaterials for catechol detection, *Trends in Environmental Analytical Chemistry*, Volume 41, 2024

Amira Gaber, Selva Bilge, Duygu Bayramoğlu, Yusuf Osman Donar, Ali Sınağ, Synthesis and characterization of ordered mesoporous carbon-based materials for electrochemical detection of environmental pollutants, *Trends in Environmental Analytical Chemistry*, Volume 42, 2024

Amira Gaber, Selva Bilge, Yusuf Osman Donar, Ali Sınağ, Waste hazelnut shell based effective hydrothermal carbon/SnO₂ nanoparticles: Towards electrochemical sensing of catechol in green tea, fruit juice, and urine samples, *Microchemical Journal*, Volume 201, 2024



Assoc. Prof. Dr. Hasan Volkan ORAL

Tracing Circularity in Building's Sustainability Assessment Methods: An Exploratory Approach ', 5th Symposium on Circular Economy and Sustainability 5thCESUST2024

Assoc. Prof. Dr. Hüseyin Çağan KILINÇ

Hai, T., Ahmadianfar, I., Halder, B. et al. Surface water quality index forecasting using multivariate complementing approach reinforced with locally weighted linear regression model. Environ Sci Pollut Res (2024). <https://doi.org/10.1007/s11356-024-33027-0>

"A Comparative Study of Daily Streamflow Forecasting Using Firefly, Artificial Bee Colony, and Genetic Algorithm-Based Artificial Neural Network", published in Acta Geophysica.

Assist. Prof. Dr. Üyesi Arif ULU

Ulu, A., Metin, M., Arikoglu, A. et al. From Material to Field Test: An Improved Under Sleeper Pad Model. Arab J Sci Eng (2024). <https://doi.org/10.1007/s13369-024-08979-7>

Assist. Prof. Dr. Elif ÇAKIR

Technological quality, bioactive features, and glycemic index of gluten-free cakes formulated with lyophilized wild Prunus spinosa fruit, Elif Cakir *, Görkem Ozülkü , Hatice Bekiroglu , Muhammet Arici , Osman Sagdic , Quality Assurance and Safety of Crops & Foods

Er, A., Cakir, E., Celik, S., Ozel, A.E., Akyuz, S. (2024). Polycyclic Aromatic Hydrocarbons (PAHs) and Spectroscopic Identifications of PAHs. In: Interdisciplinary Cancer Research. Springer, Cham. 2 Springer International Publishing. https://doi.org/10.1007/16833_2024_232, First online 13 April 2024

Assist. Prof. Dr. Hayder MOHAMMEDQASİM & Assist. Prof. Dr. Roa'a MOHAMMEDQASEM

Jasim, A.A., Hazim, L.R., Mohammedqasim, H. et al. e-Diagnostic system for diabetes disease prediction on an IoMT environment-based hyper AdaBoost machine learning model. J Supercomput (2024). <https://doi.org/10.1007/s11227-024-06082-0>

Enhancing predictive performance in Covid-19 healthcare datasets: a case study based on hyper adasyn over-sampling and genetic feature selection, Journal of Engineering Science and Technology(JESTEC), Volume 19, Issue 2, April 2024



Assist. Prof. Dr. Kaveh DEHGHANIAN

Gulnisa Ozkan and Kaveh Dehghanian 2024 IOP Conf. Ser.: Mater. Sci. Eng. 1304 012005 DOI 10.1088/1757-899X/1304/1/012005

Assist. Prof. Dr. Mahmoud ZIADA

Mahmoud ZIADA, Harun TANYILDIZI, Mucteba UYSAL, The influence of carbon nanotube on underwater geopolymer paste based on metakaolin and slag, Construction and Building Materials, Volume 414, 2024,

Mahmoud Ziada, Harun Tanyildizi, Maksut Seloglu, Ahmet Coskun, Bacteria-based crack healing of 3D printed PVA fiber reinforced geopolymer mortars, Journal of Building Engineering, Volume 86, 2024

Harun Tanyildizi, Metehan Bulut, Mahmoud Ziada, Bacteria-Based Crack Healing of Nanosilica and Carbon Nanotube Modified Engineered Cementitious Composites, Journal of Materials in Civil Engineering, American Society of Civil Engineers

Assist. Prof. Dr. Melda YÜCEL

Yücel, M., Bekdaş, G., & Nigdeli, S. M. (2024). Ayarlı Kütle Sönümleyicisi Parametrelerinin Metasezgisel Yöntemler ile Optimizasyonu. Yapıların Aktif ve Pasif Kontrolü: Matlab Simulink Uygulamaları, 17-24, doi: 10.5152/3104.

Assist. Prof. Dr. Necip Gökhan KASAPOĞLU

N. G. Kasapoğlu, O. Ozan, G. Kaya, G. Tarhan and M. Doğan., "MTF-Based Performance Comparison of Techniques for Deblurring Optical Satellite Imagery", Journal of Aeronautics and Space Technologies, pp. 102-115, vol. 17, no. Special Issue (2024).