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ENGINEERING FACULTY

e - Newsletter

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Editor

Res. Assist. Abdullah NİĞDELİOĞLU



SUMMER COURSE

Computer Engineering Department Instructor Dr. MHD WASIM RAED organized an IOT Summer Program with our students in the summer term.

- Purpose of the Program: To provide students with applied IOT training by explaining the basic concepts of sensors, actuators and microcontrollers such as Arduino Uno / Arduino Nano.
- The program consists of 2 theoretical and 1 practical lessons concentrated between 10-15 July.





LATEST ACADEMIC PUBLICATIONS

1) Prof. Dr. ZAFER ASLAN

- Awareness of Space and Earth Systems by Musical Actions, EÖ Ay, OA Büyükbayram, Z Aslan, G Özdemir, International Conference on Computational Science and Its Applications, 160-176.
- Estimating the Effect of TEC Data on Rain with Modelling and Wavelet Transformation Analysis, S Doven, B Güdar, K Al-Nimer, Z Aslan, International Conference on Computational Science and Its Applications, 59-72.
- Prediction of Wind Speed by Using Machine Learning, U Şener, Bİ Kılıç, A Tokgözlü, Z Aslan, International Conference on Computational Science and Its Applications, 73-86.
- COVID-19 pandemisinin kurumsal ağlarda veri kullanım oranına olan etkisi, A YILMAZ, Z ASLAN, Anadolu Bil Meslek Yüksekokulu Dergisi 17 (66), 95-115.
- A presentation was made at the ICCSA2023 (The International Conference on Computational Science and Its Applications) symposium held in Greece on July 5, 2023. <https://iccsa.org/>, <https://www.youtube.com/watch?v=ZdvUE8cOgsc>.

2) Dr. Öğr. Üyesi ABBAS UĞURENVER

- Cemiloglu, A.; Licai, Z.; Ugurenver, A.; Nanehkaran, Y.A. Optimal Exploitation of Urban Water Supply Networks Based on Pressure Management with the Nondominated Sorting Differential Evolution (NSDE) Algorithm. Water 2023, 15, 2583, <https://doi.org/10.3390/w15142583>.

3) Dr. Öğr. Üyesi HASAN VOLKAN ORAL

- As part of the COST Action CA 20133 Project: Current challenges and future perspectives for the full circular economy of water in European countries yayını Q1 sınıfı Journal of Environmental Management – Elsevier.
- Within The Context Of Environmental Sustainability, An Example of Nature-based Solutions And Circularity In An Urban Ecosystem: Maltepe Park Titled Study as Oral Presentation IV. Baskent International Conference On Multidisciplinary Studies

4) Dr. Öğr. Üyesi DİLŞAD AKGÜMÜŞ GÖK

- AKGÜMÜŞ GÖK D. (2023). Prototype Production and Investigation of Mechanical Properties of Leaf Springs used in Air Suspension System, Engineering Solid Mechanics, 12, 1-8, (Q2), DOI: 10.5267/j.esm.2023.7.004.
- The project titled "Development and Prototype Production of 3D Printer for Mass Production of Special Structured Hybrid Composite Filaments" realized within the scope of TÜBİTAK 2209-B Industrial License Research Project, which he consulted, has been completed.

**5) Prof. Dr. BEŞİR ŞAHİN**

- Nehir Tokgoz, Mehmet Tahir Erdinç, Önder Kaşka, Besir Sahin*, (2023) Investigations of flow structures and performances of heat transfer in semi-circular grooved ducts by applying field synergy principal analysis: An experimental and numerical study” titled article, published in journal of “International Communications in Heat and Mass Transfer 144 (2023) 106801 which is within the scope of SCI-Expanded, JCR category and WoS-JCI categories Q1.
- C Canpolat, H Hamzah, B Şahin, Flow Control Around a Cylinder With a Perforated Cylinder Journal of Fluids Engineering, 1-30 (2023)” titled article, published in journal of “Journal of Fluids Engineering which is within the scope SCI-Expanded, category of WOS JCI, Q2.

6) Doç. Dr. RAHELEH MIRZAEI

- Lanxia Guo, Raheleh Nowzari, Hasan Saygin, Mohammed Al-Bahrani, Mazyar Ghadiri Nejad, Shaghyegh Baghaei, Experimental investigation and two-factor factorial analysis of a solar air heater with scrap wire meshes and cans as energy storage components, Journal of Energy Storage, Volume 70, 2023, 107998, ISSN 2352-152X, <https://doi.org/10.1016/j.est.2023.107998>.

7) Dr. Öğr. Üyesi KAVEH DEHGHANIAN

- Oussama Tidjani and Kaveh Dehghanian, Analysis of Reinforced Walls Under Static and Dynamic Loadings, s. 327-333, Proceedings of 4th International Symposium of Engineering Applications on Civil Engineering and Earth Sciences 2023 (IEACES2023), 31 May-2 June 2023, Karabuk University, Karabük, Turkey.
- Gülnisa Özkan, Kaveh Dehghanian and Ali Kahriman, Patlatma Kaynaklı Titreşimlerin Saha Tepkisi Üzerindeki Etkisi, s. 101-111, Proceedings of 4th International Symposium of Engineering Applications on Civil Engineering and Earth Sciences 2023 (IEACES2023), 31 May-2 June 2023, Karabuk University, Karabük, Turkey.
- Rüya YILDIRIM, Kaveh DEHGHANIAN, ŞİDDETLİ DEPREMLERİN SIĞ TEMELLER ÜZERİNDEKİ ETKİSİ VE DEĞİŞEN SİSMİK KOŞULLARA TEPKİLERİNİN DEĞERLENDİRİLMESİ, 220-231, 11th INTERNATIONAL CONGRESS ON ENGINEERING, ARCHITECTURE AND DESIGN, 10-12 June, Istanbul.

8) Doç. Dr. HÜSEYİN ÇAĞAN KILINÇ

- Mou Leong Tan, Asaad M. Armanuos, Iman Ahmadianfar, Vahdettin Demir, Salim Heddami, Ahmed M. Al-Areeq, Sani I. Abba, Bijay Halder, Huseyin Cagan Kilinc, Zaher Mundher Yaseen, Evaluation of NASA POWER and ERA5-Land for estimating tropical precipitation and temperature extremes, Journal of Hydrology, Volume 624, 2023, 129940, ISSN 0022-1694, <https://doi.org/10.1016/j.jhydrol.2023.129940>.

**9) Dr. Öğr. Üyesi MOHAMMED ALKRUNZ**

- Syed Taimoor Ali and Mohammed Alkrunz, "Discrete-time Adaptive IDA-PBC Control For DC-DC Boost Converter with Uncertain Constant Power Load", International Journal Of Electronics, Electrical And Electronics Engineering.
- Wissal Rageb and Mohammed Alkrunz, "Improvement Of VAWT Savonius Turbine Mechanical Power For The Power Generation Purposes Of Bosphorus Shore Poles". Paper is presented at 8th International New York Academic Research Congress On Life, Engineering, And Applied Sciences 2023, June, Istanbul, Turkey.
- Enas Walid Benzeglam and Mohammed Alkrunz, "Discrete-Time Adaptive Ida-Pbc Control For PMSM Motor With Uncertain Speed In The Structure Of Port-Controlled Hamiltonian System". Paper is presented at 8th International New York Academic Research Congress On Life, Engineering, And Applied Sciences 2023, June, Istanbul, Turkey.

10) Dr. Öğr. Üyesi MERAL YILDIRIM YALÇIN

- Kurtfaki, M., & Yildirim-Yalcin, M. (2023). Characterization of Laurus nobilis L. leaf essential oil incorporated maize starch and rice protein films. Journal of Food Measurement and Characterization. Springer Science and Business Media LLC. <https://doi.org/10.1007/s11694-023-02013-4>.

11) Dr. Öğr. Üyesi ELİF ÇAKIR

- Cakir, E., Yildirim, M. R., Pour, K. N., Ozülkü, G., Toker, S. Ö., & Arici, M. (2023). Possibility of using black olive seed powder in formulations to functionalize bread. Latin American Applied Research, 53(4), 395-401. <https://doi.org/10.52292/j.laar.2023.1073>.

12) Prof. Dr. ABDULHADİ BAYKAL

- Slimani, Y., Almessiere, M. A., Baykal, A., Jermy, R., Auwal, I. A., & Shirsath, S. E. (2023). Ce substituted NiCo₂O₄ microspheres and nanoflakes: Comparison on magnetic features. Nano-Structures & Nano-Objects, 35, 101000. <https://doi.org/10.1016/j.nanoso.2023.101000>.
- Caliskan, S., Almessiere, M. A., Baykal, A., Slimani, Y., Demir Korkmaz, A., Gungunes, H., & Auwal, I. A. (2023). Structural, magnetic properties, and hyperfine interactions of Ni_{0.8}Cu_{0.1}Zn_{0.1}MoxFe_{2-2x}O₄ (0.0 ≤ x ≤ 0.1) nanospinel ferrites. Applied Physics A: Materials Science & Processing. Springer Science and Business Media LLC. <https://doi.org/10.1007/s00339-023-06867-9>.

13) Prof. Dr. MEHMET EMİN TACER

- The publication of the book Electromechanical Energy Conversion for publication by the IAU publication commission continues.

**14) Arş. Gör. BÜŞRA SELENAY ÖNAL**

- Önal, B.S. & Koçali, K. (2023). “Thermophotovoltaic System Setup and Analysis with Using Gallium Antimonide (GaSb) Cell in High Temperature”, “Multidisciplinary Insights: Geothermal Wells, Preservation, Engineering, and Chemical Processes”, pp: 139-169, <https://iksadyayinevi.com/wp-content/uploads/2023/06/MULTIDISCIPLINARY-INSIGHTS-GEOTHERMAL-WELLS-PRESERVATION-ENGINEERING-AND-CHEMICAL-PROCESSES.pdf>.

15) Dr. Öğr. Üyesi SÜLEYMAN ŞİMŞEK

- Samet Uslu, Suleyman Simsek, Hatice Simsek, RSM modeling of different amounts of nano-TiO₂ supplementation to a diesel engine running with hemp seed oil biodiesel/diesel fuel blends, Energy, Volume 266, 2023, 126439, ISSN 0360-5442, <https://doi.org/10.1016/j.energy.2022.126439>. (<https://www.sciencedirect.com/science/article/pii/S0360544222033254>).
- Şimsek, S., Gürüf, G., Uslu, S. et al. Exergy, exergoeconomic, enviroeconomic, and sustainability index analysis of diesel engine fueled by binary combinations of diesel/waste animal fat biodiesel. J Therm Anal Calorim 148, 7767–7780 (2023). <https://doi.org/10.1007/s10973-023-12273-3>.
- Sathyanarayanan, S., Suresh, S., Uslu, S. et al. Optimization of gasoline engine emission parameters employing commercial and sucrolite-catalyst coated converter using response surface methodology. Int. J. Environ. Sci. Technol. 20, 1725–1738 (2023). <https://doi.org/10.1007/s13762-022-03968-5>.
- Trakya University-Istanbul Aydın University cooperation, 1 BAP acceptance was received under the additional advisory of doctorate.