



## ICEM Staff Research Publications

### List of Publications in AY2022/23

- 1 Sohaib K. Abujayyab, Kassem, M.M., Khan, A.A., Wazirali, R., Coşkun, M., Taşoğlu, E., Öztürk, A. and Toprak, F, (2022), Wildfire Susceptibility Mapping Using Five Boosting Machine Learning Algorithms: The Case Study of the Mediterranean Region of Turkey, published in Advances in Civil Engineering, (December 2022). [Research Article]
- 2 Motasem Y.D. Alazaiza, Ahmed Albahnasawi , Zulfiqar Ahmad , Mohammed J.K. Bashir, Talal Al-Wahaibi, Mohammed Shadi S. Abujazar, Salem S. Abu Amr, Dia Eddin Nassani , (2022), Potential use of algae for the bioremediation of different types of wastewater and contaminants: Production of bioproducts and biofuel for green circular economy, published in Journal of Environmental Management, (October 2022). [Research Article]
- 3 Alkalbani, A.K., Girma T. Chala, and Alhaitham Alkalbani, (2023), Experimental investigation of the rheological properties of water base mud with silica nanoparticles for deep well application, published in Ain Shams Engineering Journal, (January 2023). [Research Article]
- 4 Mohammed Shadi S. Abujazara, Sakine Ugurlu Karaağaç, Hamza Ramadan, Salem S. Abu Amr, Motasem Y.D. Alazaiza , (2022), Application of pinecones powder as a natural coagulants for sustainable treatment of industrial wastewater, published in Desalination and water treatment, (October 2022). [Research Article]
- 5 Mohammed Shadi S. Abujazara, Sakine Ugurlu Karaağaç, Salem S. Abu Amr, Suja Fatihah, Mohammed J.K. Bashir, Motasem Y.D. Alazaiza, Eiman Ibrahim , (2022), The effectiveness of rosehip seeds powder as a plant-based natural coagulant for sustainable treatment of steel industries wastewater, published in Desalination and water treatment, (September 2022). [Research Article]
- 6 Fariz, M., Nasir, M., Abdul Rahman, A.R., Muhammad Fathi, Y., Nor, M.I. and Girma T. Chala, (2023), Transfer of Technology for Tactical Floating Bridge Local Fabrication, published in Journal of Innovation and Technology, (January 2023). [Research Article]
- 7 Motasem Y.D. Alazaiza, Ahmed Albahnasawi, Omar Al-Maskari, Gomaa A.M. Ali, Murat Eyvaz, Mohammed Shadi S. Abujazard, Salem S. Abu Amr, Dia Eddin Nassanig, (2022), Microplastic in the environment: identification, occurrence, and mitigation measures, published in Desalination and water treatment, (October 2022). [Research Article]
- 8 Kadir Ulutaş, Abbas F. M. Alkarkhi, Sohaib K M Abujayyab and Salem S. Abu Amr , (2022), Multivariate Analysis for Air Contamination and Meteorological Parameters in Zonguldak, Turkey, published in Jordan Journal of Civil Engineering, (October 2022). [Research Article]
- 9 Alazaiza M.Y.D., Albahnasawi A., Al Maskari O., Al Maskari T., Abujazar M.S.S., Abu Amr S.S., Nassani D.E, (2022), Role of natural coagulants in the removal of heavy metals from different wastewaters: principal mechanisms, applications, challenges, and prospects, published in Global NEST Journal, (November 2022). [Research Article]
- 10 Abdallah R. Ismail, Hamdy Kashtoh , Mohamed A. Betiha , Salem A. Abu Amr , Kwang-Hyun Baek , and Nour Sh. El-Gendy , (2022), Valorization of Waste Cooking Oil into Biodiesel via Bacillus stratosphericus Lipase Amine-Functionalized Mesoporous SBA-15 Nanobiocatalyst, published in International Journal of Chemical Engineering, (November 2022). [Research Article]

- 11 Almotairi, K.H., Hussein, A.M., Abualigah, L., Sohaib K. Abujayyab, Mahmoud, E.H., Ghanem, B.O. and Gandomi, A.H., (2023), Impact of Artificial Intelligence on COVID-19 Pandemic: A Survey of Image Processing, Tracking of Disease, Prediction of Outcomes, and Computational Medicine, published in *Big Data and Cognitive Computing*, (January 2023). [Research Article]
- 12 Suvarna Raju P, AJ.Solomon Raju, C. Venkateswara Reddy & G. Nagaraju, (2022), Nectar robbing by bees on the flowers of *Volkameria inermis* (Lamiaceae) in Coringa Wildlife Sanctuary, Andhra Pradesh, India, published in *Journal of Threatened Taxa* , (October 2022). [Research Article]
- 13 Salem S. Abu Amr, Abbas F.M. Alkarkhi, Mohammed Shadi S. Abujazar, Motasem Y.D. Alazaizad, Wasin A.A. Alqaraghuli, Rami J.A. Hamad, Yahya Özdemir , Eiman Ibrahim , (2022), Multivariate models for the effect of two coagulants on palm oil mill effluents, published in *Desalination and water treatment*, (October 2022). [Research Article]
- 14 Mohammed Shadi S. Abujazara, Sakine Ugurlu Karaağaç, Salem S. Abu Amr, Suja Fatihahd, Mohammed J.K. Bashir, Motasem Y.D. Alazaiza, Arij Yusofd, Mohamad M. Abou Aud , (2023), Factorial design and optimization of pinecone seed powder as a natural coagulant for organic and heavy metals removal from industrial wastewater, published in *Desalination and water treatment*, (January 2023). [Research Article]
- 15 Mohd Amir Shazwan, H., Shawkat Ali, Nor, M.I., Intan Syaquirah, M.Z. and Girma T. Chala, (2023), Finite Element Analysis of a Wheel Assembly for a Pipeline Corrosion Inspection Robot, published in *Journal of Innovation and Technology*, (January 2023). [Research Article]
- 16 Sakine Ugurlu Karaağaç, Mohammed Shadi S. Abujazara, Mahmut Kopana , Salem S. Abu Amr, Motasem Y.D. Alazaiza , (2022), The potential use of olive seeds powder as plant-based natural coagulant for sustainable treatment of industrial wastewater, published in *Desalination and water treatment*, (December 2022). [Research Article]
- 17 M. I. N. Ma'arof, Z. Harith, K. H. Lim, Girma T. Chala, M. F. M. Nasir, (2023), A Study on Electronically Controlled Motorcycle Body Panel for Convection Heat Transfer, published in *International Journal of Emerging Technology and Advanced Engineering*, (January 2023). [Research Article]
- 18 Suvarna Raju, Solomon Raju AJ, (2022), Syconium-wasp association and ornithochory in Indian Bat Fig tree, *Ficus amplissima* Sm. (Moraceae) , published in *Species Discovery Journal*, (September 2022). [Research Article]
- 19 Raniyah Waziralia, Mohammed Shadi S. Abujazarb, Sohaib K.M. Abujayyab, Rami Ahmad, Suja Fatihahf, A.E. Kabeelg , Sakine Ugurlu Karaağaç, Salem S. Abu Amr, Motasem Y.D. Alazaiza, Mohammed J.K. Bashir, Ibrahim Y Sokar, (2022), Productivity modelling of an inclined stepped solar still for seawater desalination using boosting algorithms based on experimental data, published in *Desalination and water treatment*, (December 2022). [Research Article]
- 20 Suvarna Raju, Solomon Raju AJ, S.Purna Chandra Rao , (2022), Melittophily in Drumstick tree, *Moringa oleifera* (Moringaceae) and myrmecophily in Curry Leaf tree, *Murraya koenigii* (Rutaceae), published in *Species Discovery Journal*, (September 2022). [Research Article]
- 21 Motasem Y. D. Alazaiza, Ahmed Albahnasawi, Murat Eyvaz, Tahra Al Maskari, Dia Eddin Nassani, Salem S. Abu Amr, Mohammed Shadi S. Abujazar and Mohammed J. K. Bashir , (2023), An Overview of Green Bioprocessing of Algae-Derived Biochar and Biopolymers: Synthesis, Preparation, and Potential Applications, published in *Energies*, (January 2023). [Research Article]
- 22 Nor, M.I., Asmar, A.R., Lim, K.H., and Girma, T. Chala, (2023), Exhaust Manifold Assessment for Backpressure Minimization, published in *Journal of Innovation and Technology*, (January 2023). [Research Article]
- 23 Suvarna Raju. Palathoti, Abdullah H. Al-Aghbari, Victor O. Otitolaiye , (2023), Effect of Long/Extended Working Hours on the Occupational Health and Safety of Oil and Gas Workers in the Sultanate of Oman, published in *International Journal of Occupational Safety and Health*, ( 2023). [Research Article]

- 24 M. I. N. Ma'arof, M. F. M. Nasir, M. N. Ridzuan, R. E. M. Nasir, K. Rajendran, Girma T. Chala, (2023), Effects of diffuser length of an open and ducted propellers in UAV application, published in International Journal of Emerging Technology and Advanced Engineering, (January 2023). [Research Article]
- 25 Abu Amr S.S., Abujazar M.S.S., Karaagaç S.U., Mehdi K.K., Alazaiza M.Y.D., Bashir M.J.K., Fatimah S.6, and Vakili A.H. , (2022), Factorial design and optimization of date stone as a natural coagulant for organic and heavy metals removal from industrial wastewater, published in Global NEST Journal, (September 2022). [Research Article]
- 26 Eram Fatima, Mohammad Tariq<sup>2</sup>, Hafiz Mohd. Arif, Zeb Fatima, (2023), Memory, Nostalgia, and Trauma: A Critical Study of the Short Fiction of Bharati Mukherjee, published in International Journal of English and Studies, (January 2023). [Research Article]
- 27 Kadir Ulutaş<sup>1,2</sup> Sohaib K.M. Abujayyab<sup>3,4</sup> Salem S. Abu Amr<sup>3,2</sup> Abbas F.M. Alkarkhi<sup>5</sup> Sibel Duman<sup>6</sup>, (2023), The effect of air quality parameters on new COVID-19 cases between two different climatic and geographical regions in Turkey, published in Theoretical and Applied Climatology, (2023). [Research Article]
- 28 Dr Don Anton Robles Balida, (2023), Research Writing Can Make or Break: Publish or Perish, published in Amazon, (2023). [Book]
- 29 Motasem Y. D. Alazaiza, Shan He, Dongxiao Su, Salem S. Abu Amr, Pey Yi Toh and Mohammed J. K. Bashir, (2023), Sewage Water Treatment Using *Chlorella Vulgaris* Microalgae for Simultaneous Nutrient Separation and Biomass Production, published in Separations (MDPI), (2023). [Research Article]
- 30 M. Shahnawaz Khan, Sadia Shakoor, Sunil Pandey, Amit Kumar and S.K. Emdadul Islam, (2023), Antimicrobial and drug delivery aspects of nanocomposites, published in Nanocomposites-Advanced Materials for Energy and Environmental Aspects. (1st Edition), (2023). [Book Chapter]
- 31 S.K. Emdadul Islam, Da-Ren Hang, Chi-Te Liang, M. Shahnawaz Khan and Sadia Shakoor, (2023), Role of nanocomposites in hydrogen production, published in Nanocomposites-Advanced Materials for Energy and Environmental Aspects. (1st Edition), (2023). [Book Chapter]
- 32 Sadia Shakoor, M. Shahnawaz Khan and S.K. Emdadul Islam, (2023), Nanocomposites for the treatment of textile effluents, published in Nanocomposites-Advanced Materials for Energy and Environmental Aspects. (1st Edition), (2023). [Book Chapter]
- 33 Rasha A. Abdelrahim, Victor O. Otitolaiye, Faris Omer, Zeena Abdelbasit, (2023), A Scoping Review of the Occupational Health and Safety Governance in Sudan: The Story So Far, published in Safety and Health at Work, (2023). [Research Article]
- 34 Haizatul Hafizah Hussain, Shaharin Anwar Sulaiman , Girma Tadesse Chala, Hazlina Husin, (2023), Effect of Crude Oil and Nitrogen Gas Flow Rates on the Time Taken for Flow Initiation of Waxy Crude Oil, published in Processes [MDPI], (2023). [Research Article]
- 35 Suvarna Raju P, AJ. Solomon Raju, (2023), Andromonoecy functional through heterostyly and large carpenter bees as principal pollinators in *Solanum carolinense* L. (Solanaceae) , published in Journal on threatened Taxa , (2023). [Research Article]
- 36 Suvarna Raju P, AJ. Solomon Raju, (2023), Polychorous Puncture Vine *Tribulus terrestris* L. (Zygophyllaceae), a potential forage source for a guild of insect pollinators during the wet season , published in Journal on threatened Taxa , (2023). [Research Article]
- 37 Suvarna Raju P, AL-Rawahi, M, Riyad Mahfud, Victor Otitolaiye, (2022), Effects of Mercury Concentration on the Health and Safety of Oil and Gas Workers, published in International Journal of Occupational Safety and Health, (2022). [Research Article]

- 38 Javad Hashempour, Mohammed Al Khamis, Shah Nawaz Khan, Jeff Kimble, Hayri Sezer, (2023), Evaluating correlation of blood pressure and pulse rates of firefighters with body mass index, gender and ambient temperature during a fire and rescue training, published in *International Journal of Occupational Safety and Health*, (2023). [Research Article]
- 39 Javad Hashempour, Zubaida Shebani, Jeff Kimble, (2023), Mental distress symptoms among Muscat firefighters: The impact of sociodemographic factors, sleep disturbance and smoking, published in *International Journal of Emergency Services*, (2023). [Research Article]
- 40 Rasha Ali Abdelrahim, Victor O. Otitolaiye, Faris Omer & Don Balida, (2023), An Overview of the Occupational Safety and Health Management in Sudan, published in *Occupational Health and Safety Society of Nepal*, (2023). [Research Article]
- 41 Palathoti Suvarna Raju, Aluri Jacob Solomon Raju, (2022), Entomophily and Ornithochory in the Indian sandalwood, published in *Contribuții Botanice – 2022, LVII: 143-152*, (2022). [Research Article]
- 42 Don Anton Robles Balida, (2023), Domestic Tourists' Perceptions toward Ecotourism, published in *International Conference Tourism Research*, (2023). [Research Article]
- 43 Don Anton Robles Balida, (2023), Ethical Challenges in Online Teaching and Learning: The case of a virtual class, published in *Russian Law Journal*, (2023). [Research Article]
- 44 Julanda Al Riyami, Girma T. Chala, Hashil Al Owaisi, (2023), A Study on the Hydropower Energy Generation by Utilizing Domestic Water Supply, published in *Journal of Advanced Research in Applied Sciences and Engineering Technology*, (2023). [Research Article]
- 45 M. I. N. Ma'arof, A.F Zakaria, R. Liang, Girma T. Chala, N. Ikhsan, M. F. M. Nasir, (2023), Dynamic Cornering Fatigue Test of New Lightweight Racing Wheel for Formula Society of Automotive Engineers (FSAE) Racecar, published in *Journal of Advanced Research in Applied Sciences and Engineering Technology*, (2023). [Research Article]
- 46 Don Anton Robles Balida John Decretales Navarro, Louiege Binobo Darroca, Jeanneth Fermasis, Bañas, (2023), Teaching Pedagogies in the New Normal, published in *Russian Law Journal*, (2023). [Research Article]
- 47 Don Anton Robles Balida, Voleta V. Guillergan, Hene Libiano Hapinat, (2023), The effects of Workshop Intervention on Research Writing Skills, published in *Russian Law Journal*, (2023). [Research Article]
- 48 Mohd Amir Shazwan, H., Nor, M.I., Nur Qistina, J., Lim, K.H., Nurzaki, I. and Girma T. Chala, (2023), Roll-Cage's Hollow-Tubing Specification Assessment for an Off-Road Buggy, published in *Journal of Innovation and Technology*, (2023). [Research Article]
- 49 Said S. Al Riyami, Girma T. Chala, Alex Bernard, and Khalid Al Maawali, (2023), A case study on thermal analysis of the disc brake used for heavy-duty cars, published in *Platform- A Journal of Engineering*, (2023). [Research Article]
- 50 Don Anton Robles Balida, (2023), COVID-19 Precautionary Measures and Practices for Delivering Modular Distance Learning, published in *World Journal of English Language*, (2023). [Research Article]
- 51 Motasem Y. D. Alazaiza, Ahmed Albahnasawi, Tahra Al Maskari, Mohammed Shadi S. Abujazar, Mohammed J. K. Bashir, Dia Eddin Nassani and Salem S. Abu Amr, (2023), Biofuel Production Using Cultivated Algae: Technologies, Economics, and Its Environmental Impacts, published in *Energies*, (2023). [Research Article]
- 52 Salem S. Abu Amr, Mohammed Shadi S. Abujazar, Motasem Y. D. Alazaiza, Ahmed Albahnasawid, Mohammed J. K. Bashir, Dia Eddin Nassan, (2023), The potential use of natural coagulants for microalgae harvesting: a review, published in *Water Quality Research Journal*, (2023). [Research Article]
- 53 Y. P. Toh, M. J. K. Bashir, X. Guo, L. P. Wong, D. Ozturk, Salem S. Abu Amr, J. W. Lim, (2023), Advanced treatment of poultry slaughterhouse wastewater using electrocoagulation and peroxidation:

- parametric analysis and process optimization, published in International Journal of Environmental Science and Technology, (2023). [Research Article]
- 54 Suvarna Raju.Palathoti, Tasneem Al Falki, Victor O. Otitolaiye, (2023), Causal Effects of Occupational Stress on Healthcare Workers at selected Health Facility in Oman, published in Occupational Health and Safety Society of Nepal International Journal of Occupational Safety and Health, (2023). [Research Article]
- 55 Salem S. Abu Amr, Mohammed Shadi S. Abujazar, Sakine Ugurlu Karaağaç, Riyad Mahfud, Motasem Y.D. Alazaiza, Rami J.A. Hamad, (2023), Application of plant-based natural coagulant for sustainable treatment of steel and iron industrial wastewater, Karabuk, Turkey, published in Desalination and Water Treatment, (2023). [Research Article]
- 56 Sivi Varghese. V. R. Renjith, (2023), Burning behavior and thermal hazards of binary blended n-propanol-diesel pool fires, published in Journal of Mechanical Science and Technology, (2023). [Research Article]
- 57 Abbas F.M. Alkarkhia, Muneer M.A. Ayashb, Salem S. Abu Amrc, Wasin A.A. Alqaraghulid, Muzafar Zulkifli, (2023), Statistical model for comparing the performance of four natural and chemical coagulants using polynomial model, published in Desalination and Water Treatment, (2023). [Research Article]
- 58 Abdelrahim R, Otitolaiye V, Omer F, Abdelbasit Z, Balida D, (2023), Occupational Safety and Health Management in Selected Industrial Sectors in Sudan, published in International Journal of Occupational Safety and Health, (2023). [Research Article]
- 59 Palathoti S R,Al-Aghbari A, Otitolaiye V O, (2023), Effect of LongExtended Working Hours on the Occupational Health and Safety of Oil and Gas Workers in the Sultanate of Oman, published in International Journal of Occupational Safety and Health, (2023). [Research Article]
- 60 Li Wen Liew , Mohammed JK Bashir, Pey Yi Toh, Motasem Y.D. Alazaiza, Salem S. Abu Amr, Kuan Shiong Khoo, Ratchaprapa Raksasat, Jun Wei Lim , (2023), Microalgae cultivation in stabilized landfill leachate for simultaneous treatment and biomass production, published in Journal of the Taiwan Institute of Chemical Engineers, (2023). [Research Article]
- 61 Girma T. Chala, Shaharin A. Sulaiman, (2023), Voids size distribution in gelled waxy crude oil under dynamic and static cooling, published in Petroleum Research, (2023). [Research Article]
- 62 Al Muhannad Al Omairi and Girma T. Chala, (2023), The role of silica nanofluid as a plugging agent for enhanced oil recovery – Experimental approach, published in Journal of Advanced Research in Applied Sciences and Engineering Technology, (2023). [Research Article]
- 63 Motasem Y.D. Alazaiza, Ahmed Albahnasawib, Murat Eyvaz, Dia Eddin Nassani, Salem S. Abu Amr, Mohammed Shadi S. Abujazar, Omar Al-Maskari, (2023), Electrochemical-based advanced oxidation for hospital wastewater treatment, published in , (2023). [Research Article]
- 64 Asif Zamir, Aamir Hussain Bhat , M. Shahnawaz Khan, Al-Haitham Alkalbani, Alex Bernard, (2022), Modified Teaching Pedagogy to improve student's self-learning, published in International Conference on Sustainable Development Goals to Improve the Quality of Education and Research in Higher Education Institutes, Pakistan, (2022). [Conference Paper]
- 65 Sabra Al Shukairi, Eman Ibrahim, Shaikha Al Shekaili, Fatima Zeb, (2022), Realization with the experiences evolved by Online Teaching & Learning in the post Covid era., published in International Conference on Sustainable Development Goals to Improve the Quality of Education and Research in Higher Education Institutes, Pakistan, (2022). [Conference Paper]
- 66 Alex Bernard, Dr.G.Varaprasad, (2022), Ergonomic Risk Assesment of Sitting postures followed by students in classrooms using Digital Human Modeling , published in International Conference on Sustainable Development Goals to Improve the Quality of Education and Research in Higher Education Institutes, Pakistan, (2022). [Conference Paper]

- 67 Aamir Hussain Bhat, Asif Zamir, (2022), Effective feedback on assessment to improve student learning, published in International Conference on Sustainable Development Goals to Improve the Quality of Education and Research in Higher Education Institutes, Pakistan, (2022). [Conference Paper]
- 68 Dr Don Anton Robles Balida, (2023), Perceptions and Attitudes of Domestic Tourists toward Ecotourism (offshoot study), published in International Conference on Tourism Research, (2023). [Conference Paper]
- 69 T. H. Yong, M. I. N. Ma'arof, Kugenraj A/L Shankar, K R. Y. M. Yong, G. T. Chala, M. F. M. Nasir, (2023), Proposed Handle Height for Infantry Assault Bridge's Stretcher Adapter, published in Human Factors and Ergonomics Malaysia Conference, (2023). [Conference Paper]
- 70 T. H. Yong, M. I. N. Ma'arof, K. Shavarebi, K. Raman, H. Husain, R. A. Ghani, Girma T. Chala, M. F. M. Nasir, (2023), Proposed Nutritional Guideline for Motorcycling Activities, published in Human Factors and Ergonomics Malaysia Conference, (2023). [Conference Paper]
- 71 K. Shavarebi, W. Y. Ping, M. I. N. Ma'arof, M. A. S. Hashim, S. Pasupathy, Girma T. Chala, M. F. M. Nasir, (2023), Application of Augmented Reality (AR) in Preconstruction Stage: Are Malaysia Ready? published in Human Factors and Ergonomics Malaysia Conference, (2023). [Conference Paper]
- 72 N. F. Yahya, M. I. N. Ma'arof, T. K. Reuben Hwa, S. Pasupathy, R. Jeyagopi, Girma T. Chala, M. F. M. Nasir, (2023), Review of the Role of Building Information Modelling (BIM) in Enhancing Communication in Construction Projects, published in Human Factors and Ergonomics Malaysia Conference, (2023). [Conference Paper]