



ICEM Staff Research Publications

List of Publications in AY2021/22

- 1 Don Anton, Alegre, R.A., Lopez, M.R.S. and Balida, G.J.D., 2022. Perspectives on Covid19 Safety Protocols among Non-Native English Speaking Teachers and Students. *World Journal of English Language*, 12(1).
- 2 Alazaiza, M.Y., AbdelFattah, F.A.M., Al Maskari, T., Bashir, M.J., Nassani, D.E., Albahnasawi, A., Abushammala, M.F.M. and Rami Hamad, 2022. Effect of COVID-19 pandemic on food purchasing and waste generation during the lockdown period in The Sultanate of Oman, *Global NEST Journal*.
- 3 Victor O. Otitolaiye and Al-Harethiya, G.M., 2022. Impacts of petroleum refinery emissions on the health and safety of local residents. *Journal of Air Pollution and Health*, 7(1), pp.69-80.
- 4 Girma T. Chala, and Negash, B.M., 2022. Artificial Neural Network and Regression Models for Predicting Intrusion of Non-Reacting Gases into Production Pipelines. *Energies*, 15(5), p.1725.
- 5 Victor O. Otitolaiye, Munauwar Mustafa, Faris Omer, Rasha Abdelrahim, 2022. Conservation and Sustainable Use Awareness among Visitors and Tour Operators of Marine Parks: Concise Review of the Benefits and Programs for Protecting Marine Biodiversity, *Journal of Environment, Agriculture, and Energy*.
- 6 Rasool, M.H., Asif Zamir, Elraies, K.A., Ahmad, M., Ayoub, M. and Abbas, M.A., 2022. A Deep Eutectic Solvent based novel drilling mud with modified rheology for hydrates inhibition in deep water drilling. *Journal of Petroleum Science and Engineering*, p.110151.
- 7 Bemgba B. Nyakuma, Olagoke Oladokun, Abubakar S. Mahmoud, Victor B. Adebayo, Samuel-Soma M. Ajibade, Abbas S. El-nafaty, Victor O. Otitolaiye, Zainab T. Jagun. Urban Air Pollution and its Effects on Health, Safety and the Environment in Nigeria: A Concise Review, *Petroleum and Coal*, 1-18.
- 8 Lim, J.W., Rishindren, M., Nor, M.I. and Girma T. Chala, 2022. Performance Analysis of Blended Tyre Pyrolysis Oil (TPO) Against Diesel in A YANMAR TF-120 Single Cylinder Diesel Engine. *International Journal of Applied Engineering and Technology*, 4(1), pp.1-5.
- 9 Rami Hamad, Al Hallaq, K.A., Tayeh, B.A., Nassar, S.S., 2022. 'Risk Analysis and Waste Management for Construction and Demolition Projects in the Gaza Strip', *Jordan Journal of Civil Engineering*, Vol 16. No.3.
- 10 M. I. N. Ma'arof, Nurfarah Kamarudin, Girma T. Chala, Timur Izmailov, 2022. Anti-Lift Assessment of Multi-Flap Motorcycle Winglet for Track Usage Via Wind Tunnel Test, *International Journal of Emerging Technology and Advanced Engineering*.
- 11 Suvarna Raju P, Al-Ghassani M, Victor O. Otitolaiye, Faris Omer, Riyad Mahfud, 2022. Effects of Discharged Effluents from Desalination Plants on Marine Living Organisms, *International Journal of Mechanical Engineering*.
- 12 Suvarna Raju P, Al-Rawahi, M, Riyad Mahfud, Victor O. Otitolaiye., 2022. Effects of Mercury Concentration on the Health and Safety of Oil and Gas Workers, *International Journal of Occupational Safety and Health*.

- 13 Girma T. Chala, Chin L. Liew, Shaharin A. Sulaiman, Muddasser Inayat, Fiseha M. Guangul, 2022. Parametric Investigation of Empty Fruit Bunch Gasification using Response Surface Methodology, Petroleum and Coal.
- 14 Abbas, M.A., Asif Zamir, Elraies, K.A., Mahmood, S.M., Aslfattahi, N., Saidur, R., Ahmad, M. and Rasool, M.H., 2022. Characterization of nano based drilling fluid for shale swelling inhibition. *Petroleum Science and Technology*, pp.1-27.
- 15 Sadig, H., Girma T. Chala, and Abbas, A.H., 2022. Experimental Investigation On The Effect Of Length To Diameter Ratio (L/D) On The Performance Of Vortex Tube. *NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal/ NVEO*, pp.1261-1269.
- 16 Victor O. Otitolaiye, Ubana DO, Suvarna Raju P, Otitolaiye AD., 2022. Uncovering Research Trends in Safety Culture in the Global Construction Industry: A Bibliometric Analysis (1995-2020), *International Journal of Occupational Safety and Health*.
- 17 Hammad Rasool, M., Ahmad, M., Ayoub, M., Asif Zamir, and Adeem Abbas, M., 2022. A review of the usage of deep eutectic solvents as shale inhibitors in drilling mud. *Journal of Molecular Liquids*, 361.
- 18 Suvarna Raju, Solomon Raju AJ, 2022. An ecological study of sexual reproduction in *Cissus quadrangularis* L. and *Cissus vitiginea* L. (Vitaceae) Species Discovery Journal (ISI, Clavirite) A45.pdf (discoveryjournals.org)
- 19 Alsedrani, M.Q. and Girma T. Chala, 2022. Investigation of the Effects of Silica Nanofluid for Enhanced Oil Recovery Applications: CFD Simulation Study. *Arabian Journal for Science and Engineering*, pp.1-20.
- 20 MIN, M.A., JB, S., NHM, N., MS, M., Girma T. Chala, and Muhammad, A.W., 2022. Topology Optimization of an Engine Mounting Bracket. *International Journal of Emerging Technology and Advanced Engineering (IJETA)*, 12(07), pp.1-6.
- 21 George, A.S., Moideen, N., Varghese, S., Warriar, A. and Khan, M.S., 2022. Accidents in the chemical industry: an analysis of the HFACS-PEFE model to examine the role of human factors. *Journal homepage: www.ijrpr.com ISSN, 2582*, p.7421.
- 22 Sivi Varghese, George, A.S., Warriar, A. and Khand, M.S., 2022. Pre-analysis of fire and smoke propagation in a multi-storied building by using FDS software.
- 23 Naresh K. Kumaran, Ho Cheng How, Girma T. Chala, Poon Han Wong, Edmund De Alwis, 2022. Performance Evaluation and Optimization of Advanced Cyclone System for Palm Waste Induced Flue Gas, Petroleum and Coal.
- 24 Bashir, M.J., Sheen, O.S., Ng, C.A., Abujazar, M.S.S., Alazaiza, M.Y. and Salem S. Abu Amr., 2022. Advanced Treatment of Palm Oil Mill Effluent Using Thermally Activated Persulfate Oxidation. *Separations*, 9(7), p.171.
- 25 Nor, M.I., Tan, G.K.H., Lim, K.H. and Girma T. Chala, 2022. Assessment of FSAE Car's Rear Suspension Arms for Bump Force. *Journal of Innovation and Technology*, 2022(21), pp.1-6.
- 26 Suvarna Raju, Solomon Raju AJ, 2022. Wasp-pollination in *Premna integrifolia* L. (Lamiaceae) Species, 2022, 23(71), 318-321 A46.pdf (discoveryjournals.org).
- 27 Fariz, M., Nasir, M., Mohamad Faizal, A., Muhammad Naim Rabbani, K., Nor, M.I. and Girma, T. Chala, 2022. A Simulation Study of Magnesium Alloy AZ31B Behavior in High-Velocity Impact and Ballistic Limit. *Journal of Innovation and Technology*, 2022(12), pp.1-7.
- 28 Arwinder Singh, J.S., Nor, M.I., Kavenraj, R. and Girma, T. Chala, 2022. A Study on Separation Efficiency of Multiphase Desander. *Journal of Innovation and Technology*, 2022(19), pp.1-7.
- 29 Ghassan et al., 2022. Impact of Surface Temperature of a Photovoltaic Solar Panel on Voltage Production, book chapter in Springer.

- 30 Suvarna Raju P, Henry Jonathan K, Sravan Kumar S, Solomon Raju AJ, 2022 Melittophily and censer seed dispersal mechanism in *Argemone mexicana* L. (Papaveraceae) Species Discovery Journal (ISI, Clavirite).
- 31 Kadir Ulutaş, Abbas F. M. Alkarkhi, Sohaib K M Abujayyab and Salem S. Abu Amr., Multivariate Analysis for Air Contamination and Meteorological Parameters in Zonguldak, Turkey, Jordan Journal of Civil Engineering, Volume 16, No. 4, 2022.
- 32 Choo, W.O., Nor, M.I., Wong, W., Xian, Z., Lim, K.H. and Girma T. Chala, 2022. A Study on Multiple Load Conditions Analysis for a Bicycle Chassis. *Journal of Innovation and Technology*, 2022(20), pp.1-6.
- 33 Ng, Y.L., Aldahdooh, M.A.A., Alazaiza, M.Y., Bashir, M.J., Chok, V.S. and Ng, C.A., 2022. Influence of alum sludge ash and ground granulated blast furnace slag on properties of cement mortar. *Cleaner Engineering and Technology*, 6, p.100376.
- 34 Suvarna Raju P, Solomon Raju AJ, 2022, Floral biology and pollination of *Jasminum angustifolium* Willd. and *J. cuspidatum* Rottler (Oleaceae), Species Discovery Scientific Society Journal, Volume 58, Issue 320, August 2022 Discovery, 2022, 58(320), 893-897 Access Link : A4.pdf (discoveryjournals.org).
- 35 Fiseha Guangul and Girma T. Chala, 2022. A Review for Sustainable Electrification of Ethiopia with Hydropower Energy, book chapter in Springer.
- 36 Alazaiza, M.Y., Albahnasawi, A., Copty, N.K., Ali, G.A., Bashir, M.J., Al Maskari, T., Salem S. Abu Amr., Abujazar, M.S.S. and Nassani, D.E., 2022. Thermal based remediation technologies for soil and groundwater: a review. *DESALINATION AND WATER TREATMENT*, 259, pp.206-220.
- 37 Nyakuma, B.B., Ajibade, S.S.M., Adebayo, V.B., Alkali, H., Victor O. Otitolaiye, Audu, J.O., Bashir, F.M., Dodo, Y.A., Mahmoud, A.S. and Oladokun, O., 2022. Carbon dioxide-assisted Torrefaction of Maize Cobs by Thermogravimetry: Product Yield and Energy Recovery Potentials. *Physics and Chemistry of Solid State*, 23(1), pp.16-24.
- 38 Anoop Warriar, Khan Khalid, Nasriani Hamed, Ndlovu Shephard, Chamchine Andrei, Graham Tony L, Asimakopoulou Eleni., Numerical investigation of the effect of ventilation conditions of Externally Venting Flames on curvilinear geometries, Proceedings of the Tenth International Seminar on Fire and Explosion Hazards, pp. 394-403.
- 39 Fariz, M., Nasir, M., Hii, T.S., Abdul Rahim, M.S., Nor, M.I. and Girma T. Chala, 2022. Effect of Pot Size in Soil Heat Transfer. *Journal of Innovation and Technology*, 2022(13), pp.1-6.
- 40 Raju PS, Jonathan KH, Raju AJS, 2022. Flower-insect interactions with special reference to honey bees with some plant species (*Albizia lebeck*, *Calliandra brevipes*, *Calliandra haematocephala*, *Mimosa pudica*, *Pithecellobium dulce*, *Hamelia patens*, *Mitragyna parvifolia* and *Hugonia mystax*) Species Discovery Journal (ISI, Clavirite)
- 41 Ayash, M., Alkarkhi, A.F., Salem S. Abu Amr, Mahmud, M.N. and Zulkifli, M., 2022. Statistical model for comparing the performance of two coagulants using response surface model. *DESALINATION AND WATER TREATMENT*, 256, pp.125-138.
- 42 Lim, J.W., Yap, D.S., Nor M.I., Timur, I. and Girma, T. Chala, 2022. An investigation of Aerodynamic Improvement on Truck's Forebody. *Journal of Innovation and Technology*, 2022(17), pp.1-7.
- 43 Eiman Ibrahim and Salem S. Abu Amr, 2022. Evaluation of Fluoride level in Drinking Water Wells and its Effects on Human Health has been published in Global Scientific Journals, GSJ: Volume 10, Issue 8, August 2022, Online: ISSN 2320-9186.
- 44 Alkalbani, A.M., Girma T. Chala, and Myint, M.T.Z., 2022. Insightful study on the effect of zinc oxide nanoparticle diameter on the rheology of water base mud at elevated temperature. *Journal of Petroleum Science and Engineering*, p.110878.

- 45 Suvarna Raju P, Solomon Raju AJ, 2022, Ecological aspects of sexual reproduction in Stinking Passion Flower, *Passiflora foetida* L. (Passifloraceae), Volume 58, Issue 320, August 2022 *Discovery*, 2022, 58(320), 921-925 Access Link : A8.pdf (discoveryjournals.org)
- 46 M. I. N. Ma'arof, Usman Shahid, Girma T. Chala, Sathurshan Suresh, 2022. Analysis and Optimization of an Aftermarket Intercooler Spray's Nozzle, *International Journal of Emerging Technology and Advanced Engineering*, pp. 94-102.
- 47 Sivi Varghese, V R Renjith, 2022. Prediction of thermal hazards and estimation of fire safety distance of process industry pool fires. *International conference on Sustainable technology and Innovation for Industry 4.0 (icstii 2022)*.
- 48 Motasem Y.D. Alazaiza, Mohammed Shadi S. Abujazar, Salem S. Abu Amr, Mohammed JK Bashir, (2022) Microplastic in the environment: Identification, occurrence, and mitigation measures" *Desalination and Water Treatment*.
- 49 Ali, I., Ahmad, M., Arain, A. H., Atashbari, V., & Asif Zamir, 2022. Utilization of Biopolymers in Water Based Drilling Muds. In (Ed.), *Drilling Engineering and Technology - Recent Advances, New Perspectives and Applications [Working Title]*. IntechOpen.
- 50 Suvarna Raju P, Solomon Raju AJ, 2022. Monoecy and melittophily in *Cardiospermum halicacabum* L. (Sapindaceae) *Species Discovery Journal*, Vol 23(72), 2022, Pages 326-330, access link. A1.pdf (discoveryjournals.org).
- 51 Mohammed Shadi S. Abujazar, Sakine Ugurlu Karaağaç, Salem S. Abu Amr, Suja Fatihah, Mohammed JK Bashir, Motasem Y.D. Alazaiza and Eiman Ibrahim (2022), The Effectiveness of Rosehip Seeds Powder as a Plant-Based Natural Coagulants for Sustainable Treatment of steel Industries Wastewater" *Desalination and Water Treatment*.
- 52 Haizatul Hafizah Hussain and Shaharin Anwar Sulaiman, Girma T. Chala, The Effect of Gas Injection Duration on the Restart Pressure of Waxy Crude Oil Pipeline, Presented at 3rd Asia Pacific Conference on Industrial Engineering and Operations Management, Johor Bahru, Malaysia, September 13-15, 2022.
- 53 Aldahdooh, M.A., Rami Hamad, Bashir, M.J., Bunnori, N.M., Johari, M.A.M. and Almaawali, S., 2022. Improving Damaged Reinforced Concrete Beam Failure Behavior Using Externally Bonded UHPFRCCs System. *International Journal of Civil Engineering*, pp.1-13.
- 54 Mohammed Shadi S. Abujazar, Sakine Ugurlu Karaağaç, Hamza Ramadan, Salem S. Abu Amr and Motasem Y.D. Alazaiza (2022) Application of Pinecones Powder as a Natural Coagulants for Sustainable Treatment of Industrial Wastewater" *Desalination and Water Treatment*.
- 55 Shaker Zabadae and Xin Lif Saleh Qanazi, Ihab Hijazi, Anas Toma, Sohaib K. M. Abujayyab, Youness Dehbi, Covid-19 severity and urban factors: investigation and recommendations based on machine learning techniques, *Palestinian Medical and Pharmaceutical Journal*.
- 56 Mohd A. Shazwan, Shawkat A. Allybocus, Lim K. Hen, M.I. N. Ma'arof, Girma T. Chala, Finite Element Analysis of a Wheel Assembly for a Pipeline Corrosion Inspection Robot, *International Conference on Innovation and Technopreneurship, The Dawn of a New Horizon, Restrategising Post COVID 19, ICIT 2021*, Nilai, Malaysia.
- 57 Suvarna Raju P., Otitolaiye, V.O., Mahfud, R. and Al Rawahi, M., 2022. Impacts of mercury exposure on human health, safety and environment: Literature review and bibliometric analysis (1995 to 2021). *International Journal of Occupational Safety and Health*, 12(4), pp.336-352.
- 58 M. I. N. Ma'arof, Girma T. Chala, Sathurshan Suresh, Shaheerthana Suresh, 2021. Use of Evaporative Cooling Spray in Turbocharged Vehicles for Efficient Cooling, *In Recent Advances in Energy and Fuel Technology*, pp. 15-31. *Book Chapter*.

- 59 Choo W. Onn, M.I.N Ma'arof, Winson Z. Xian, Lim K. Hen, Girma T. Chala, A Study On Multiple Load Conditions Analysis for A Bicycle Chassis. International Conference on Innovation and Technopreneurship, The Dawn of a New Horizon, Reestrategising Post COVID 19, ICIT 2021 Nilai, Malaysia.
- 60 Victor O. Otitolaiye, Abd Aziz, F.S., Munauwar, M. and Faris Omer, 2021. The Relationship Between Organizational Safety Culture and Organization Safety Performance. The Mediating Role of Safety Management System. *International Journal of Occupational Safety and Health*, 11(3), pp.148-157.
- 61 Mohd A. Shazwan, M. I.N. Ma'arof, Nur Qistina Jamaludin, Lim K. Hen, Girma T. Chala, Roll-Cage's Hollow-Tubing Specification Assessment for an Off-Road Buggy, International Conference on Innovation and Technopreneurship, The Dawn of a New Horizon, Reestrategising Post COVID 19, ICIT 2021, Nilai, Malaysia.
- 62 Victor O. Otitolaiye, Donald A. Otitolaiye, Faris Omer, Ubana, D., Ibrahim, A.O., Dodo, Y.A. and Nyakuma, B.B., 2021. Thermal and Kinetic Analyses of Maize Cob Combustion under Non-Isothermal and Multiple Heating Rate Thermogravimetric Conditions. *Petroleum & Coal*, 63(3).
- 63 Girma T. Chala, Muhammad Izzat Nor Ma'arof, Dharvesh Gunness, Idris Saad, 2021. Characterisation of Bioethanol Produced from Sugarcane Molasses, *In Recent Advances in Energy and Fuel Technology*, pp. 96-115. *Book Chapter*.
- 64 Victor O. Otitolaiye and Al-Harethiya, G.M., 2021. Health effects of refinery emissions on residents living near refineries. A case study of an undisclosed area in Oman. *Health*, 8(9).
- 65 Arwinder S. Singh, M. I. N. Ma'arof, Suresh Akshith, Girma T. Chala, A Study On Extraction Pipe Insulation for Solidification Prevention of Heavy Crude Oil After Extraction, International Conference on Innovation and Technopreneurship, The Dawn of a New Horizon, Reestrategising Post COVID 19, ICIT 2021, Nilai, Malaysia.
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- 67 Anoop Warriar et al., 2022. Effect of Ventilation Conditions on Externally Venting Flames Development on Curvilinear Geometries, Presented at the SFPE 14th International Conference on Performance-Based Code and Fire Safety Design (25 March 2022).
- 68 Meor R. Abdullah, M.I.N Ma'arof, Winson W. Xian, Suresh Akshith, Girma T. Chala, A Study on Multiple Load Conditions Analysis for A Conventional Bicycle vs. A Variable-Chain Stay-Length (VCL) Bicycle De1, International Conference on Innovation and Technopreneurship, The Dawn of a New Horizon, Reestrategising Post COVID 19, ICIT 2021, Nilai, Malaysia.
- 69 Girma T. Chala, S. A. Sulaiman, A. Japper-Jaafar, W. A. Kamil, and M. M. Mokhtar, 2021. Influence of Hydrostatic Pressure on the Formation of Voids in Gelled Crude Oil. *Applied Science and Engineering Progress*, vol. 15, No.4, 5569.
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- 73 Ayash M.M.A., Abu Amr S.S, Alkarkhi A.F.M., Alazaiza M.Y.D. and Rami Hamad (2021), 'Performance of Combined Persulfate and Tannin for the Treatment of Anaerobically Treated Palm Oil Mill Effluent', *Global NEST Journal*, Vol 23, No 3, pp 444
- 74 Suvarna Raju P, Solomon Raju AJ, Butterfly-flower interactions in Coringa Mangrove Forest, Andhra Pradesh, India, *Discovery*, 2021, 57(312), 835-840.
- 75 M. I N. Ma'arof, Girma T. Chala, Muhammad B. Chaudhry, Baveendra K. Premakumar, 2021. Potential of Using Microbial Fuel Cell to Generate Power from Different Concentrations of Industrial Wastewater, *In Recent Advances in Energy and Fuel Technology*, pp. 74-95. Book Chapter.
- 76 Motasem Y.D. Alazaiza, Ahmed Albahnasawi, Zulfiqar Ahmad, Mohammed J.K. Bashir, Talal Al-ahaibi, 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, *Journal of Environmental management*, 324, 2022.
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- 77 Chan, C.K. and Girma T. Chala, 2021. Overfit Prevention in Human Motion Data by Artificial Neural Network. *Platform: A Journal of Engineering*, 5(2), pp.29-37.
- 78 Victor O. Otitolaiye, AAF Shah, Faris Omer, 2022. Organizational Factors, Critical Dimensions, and Measurement Instruments for Safety Culture: A Concise Review.
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