

Publication Year	Research Title	KFU Author	Journal Name
2020	Pyrolysis of Low Density Polyethylene: Kinetic Study Using TGA Data and ANN Prediction	I. Dubdub & M.Al-Yaari	Polymers
	Application of Artificial Neural Networks to Predict the Catalytic Pyrolysis of HDPE using Non- Isothermal TGA Data	M. Al-Yaari & I. Dubdub	Polymers
	Advancements in Unconventional Seawater Desalination Technologies	Sayeed Rushd	Springer
	Ablation of Oil-Sand Lumps in Hydrotransport Pipelines	Sayeed Rushd	IntechOpen
	Predictive capability of field scale kinetics for simulating toe-to-heel air injection heavy oil and bitumen upgrading and production technology	Muhammad Rabiou Ado	Journal of Petroleum Science and Engineering
	Impacts of Kinetics Scheme Used To Simulate Toe-to-Heel Air Injection (THAI) in Situ Combustion Method for Heavy Oil Upgrading and Production	Muhammad Rabiou Ado	ACS Omega
	Simulation study on the effect of reservoir bottom water on the performance of the THAI in-situ combustion technology for heavy oil/tar sand upgrading and recovery	Muhammad Rabiou Ado	SN Applied Sciences
	Effect of reservoir pay thickness on the performance of the THAI heavy oil and bitumen upgrading and production process	Muhammad Rabiou Ado	Journal of Petroleum Exploration and Production Technology
	A novel route for controlling and improving the texture of porous structures through dual growth of alumina nanoparticles and carbon nanotubes using explosion process of solid fuel	M. Al-Yaari	Journal of Materials Research & Technology
2019	Experimental investigation of fluidized bed dynamics under resonant frequency of sound waves	Syed Sadiq Ali	Advanced Powder Technology
	Design and simulation of high purity biodiesel reactive distillation process	Syed Sadiq Ali	Polish Journal of Chemical Technology
	Nanopowder fluidization using combined assisted fluidization techniques of particle mixing and flow pulsation	Syed Sadiq Ali	Applied Sciences
	Modeling Friction Losses in the Water-Assisted Pipeline Transportation of Heavy Oil	Sayeed Rushd	IntechOpen
	Experimental Investigation of Volume Fraction in an Annulus with Electrical Resistance Tomography	S. Rushd	SPE Journal
	CFD Analysis of Pressure Losses and Deposition Velocities in Horizontal Annuli	S. Rushd	International Journal of Chemical Engineering
	Synthesis and evaluation of copper supported titanium oxide nanotubes as electrocatalyst for the electrochemical reduction of carbon dioxide to organics	SK Safdar Hossain	Catalysts
	Hydrogen-rich syngas production via steam reforming of palm oil mill effluent (POME) – A thermodynamics analysis	Sk Safdar Hossain	International Journal of Hydrogen Energy
	Effect of Fineness of Basaltic Volcanic Ash on Pozzolanic Reactivity, ASR Expansion and Drying Shrinkage of Blended Cement Mortars	Majdi Adel Al-Faiad	Materials

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2019	Numerical simulation of the impact of geological heterogeneity on performance and safety of THAI heavy oil production process	Muhammad Rabiou Ado	Journal of Petroleum Science and Engineering
	A detailed approach to up-scaling of the Toe-to-Heel Air Injection (THAI) In-Situ Combustion enhanced heavy oil recovery process	Muhammad Rabiou Ado	Journal of Petroleum Science and Engineering
	Design and simulation of high purity biodiesel reactive distillation process	Avijit Basu	Polish Journal of Chemical Technology
	Nanopowder fluidization using combined assisted fluidization techniques of particle mixing and flow pulsation	Avijit Basu	Applied Sciences
	A Review of Liner for Shaped Charges	Arshad Hussain	Engineering, Technology & Applied Science Research
	PVA/Starch/Propolis/Anthocyanins rosemary extract composite films as active and intelligent food packaging materials	Arshad Hussain	Journal of Food Safety
	Phosphorylated nanocellulose fibrils /PVA nanocomposite membranes for biogas upgrading at higher pressure	Arshad Hussain	Separation Science & Technology
	Adsorption of CO ₂ on Amine-functionalised green metal-organic framework: An interaction between Amine and CO ₂ molecules	Arshad Hussain	Environmental Science and Pollution Research
	Enhancing the thermal, mechanical and swelling properties of PVA/Starch Nanocomposite membranes incorporating g-C ₃ N ₄	Arshad Hussain	J Polym Environ
	Synthesis and effect of metal-organic frameworks on CO ₂ adsorption capacity at various pressures: A contemplating review	Arshad Hussain	Energy & Environment
	Quantitative Analysis of Product Quality of Naphtha Reforming Process under Uncertain Process Conditions	Arshad Hussain	Chemical Engineering Communications
	A computational fluid dynamics approach for the modelling of gas separation in membrane modules	Arshad Hussain	Processes
	Mechanical characterization of Fiber glass Composites with Nano silica	Arshad Hussain	International Journal of Chemical Separation Technology
	Slow-release urea fertilizer from sulfur, gypsum, and starch-coated formulations	Arshad Hussain	Journal of Plant Nutrition
	To explore the effect of polyethylene glycol additive on mechanical and gas permeation properties of polyvinyl alcohol membranes	Arshad Hussain	Journal of polymer & Composites
	Effect Analysis of nickel ferrite (NiFe ₂ O ₄) and titanium dioxide (TiO ₂) nanoparticles on CH ₄ /CO ₂ gas permeation properties of cellulose acetate based mixed matrix membranes	Arshad Hussain	Journal of Polymers and the Environment
	Effect of ultra-violet cross-linking on the properties of boric acid and glycerol coplasticized thermoplastic starch films	Arshad Hussain	Food Packaging and Shelf Life
Improving Gas Barrier Properties with Boron Nitride Nanosheets in Polymer-Composites	Arshad Hussain	Results in Physics	

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2019	Fabrication of Cellulose acetate/Polyaziridine Blended Flat Sheet Membranes for Dialysis Application	Arshad Hussain	Journal of BioNanoScienc
	Synergistic effect on co-pyrolysis of rice husk and sewage sludge by thermal behavior, kinetics, thermodynamic parameters and artificial neural network	Arshad Hussain	Waste Management
	Fabrication and analysis of HNBR-Silica / Carbon Phenolic ablative composites as an effective thermal protection system (TPS)	Arshad Hussain	Materials Science and Engineering
	Effect of Polyvinyl Pyrolidone on Morphology and Performance of Cellulose Acetate Based dialysis Membranes	Arshad Hussain	Engineering Technology & Applied Science Research
	Synthesis and Effect of Metal-Organic Frame Works (MOF's) on CO2 adsorption capacity at various pressures: A contemplating review	Arshad Hussain	Energy & Environment
	Electrochemical Study of Magnetic Nanogel Designed For Controlled Release of Chlorhexidine Gluconate	Arshad Hussain	Electrochimica Acta
2018	Effect of adding Geldart group A particles on the collapse of fluidized bed of hydrophilic nanoparticles	Syed Sadiq Ali	Powder Technology
	Experimental Investigation of Multiphase Flow Behaviour in Drilling Annuli using High Speed Visualization Technique	S. Rushd	Frontiers in Energy
	Terminal settling velocity of a single sphere in a drilling fluid	S. Rushd	Journal of Particulate Science and Technology
	Validation of CFD Simulation Model with Multiphase Fluid Flow through Pipeline and Annular Geometry	S. Rushd	Journal of Particulate Science and Technology
	Evaluation of Pd nanoparticles decorated CeO ₂ -MWCNT nanocomposite as electrocatalyst for formic acid fuel cells	SK Safdar Hossain	Journal of Electronic Materials
	Effect of pre-ignition heating cycle method, air injection flux, and reservoir viscosity on the THAI heavy oil recovery process	Muhammad Rabiou Ado	Journal of Petroleum Science and Engineering
2017	Dynamic modeling of the isoamyl acetate reactive distillation process	Syed Sadiq Ali	Polish Journal of Chemical Technology
	Effect of particle mixing on the hydrodynamics of fluidized bed of nanoparticles	Syed Sadiq Ali	Powder Technology
	A CFD methodology to determine the hydrodynamic roughness of a surface with application to viscous oil coatings	S. Rushd	Journal of Hydraulic Engineering
	A study on friction loss and holdup ratio in the water lubricated pipeline transportation of heavy oil	S. Rushd	Journal of Pipeline Engineering
	A parametric study of the hydrodynamic roughness produced by a wall-coating layer of oil during the pipeline transportation of heavy oil-water mixtures	S. Rushd	Petroleum Science

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2017	Integration a design of experiment in the mass transfer laboratory to investigate the effect of temperature change on diffusion coefficient of Acetone in Air	Mohammad.Y. Younes	IJEAIS Journal
	Dynamic Modeling of Iso-amyl acetate Reactive Distillation Column,	Safdar Hossain	Polish Journal of Chemical Technology
	Restoration of liquid effluent from oil palm agroindustry in Malaysia using UV/TiO ₂ and UV/ZnO photocatalytic systems: A comparative study	Sk Safdar Hossain	Journal of Environmental Management
	Catalytic Ethylene Production from Ethanol Dehydration Over Non-modified and phosphoric acid modified Zeolite H-Y(80)	SK Safdar Hossain	Fuel Processing Technology
	Dynamic simulation of the toe-to-heel air injection heavy oil recovery process	Muhammad Rabiun Ado	Energy & Fuels
2016	Effect of Frequency on Pulsed Fluidized Beds of Ultrafine Powders	Syed Sadiq Ali	Journal of Nanomaterials
	Landfill area estimation based on integrated waste disposal options and solid waste forecasting using modified ANFIS model	Mohammed Y.Younes	Waste Management
	Implementation of Dynamic Regulation Impact Assessment, Case Study of Plastic Bags in Jordan	Mohammed Y.Younes	Wulfenia Journal
	Modelling and optimization of syngas production by methane dry reforming over samarium oxide supported cobalt catalyst: Response Surface Methodology and Artificial Neural Networks Approach,	S. S. Hossain	Clean Technologies and Environmental Policy
	Syngas production from CO ₂ reforming of methane over neodymium sesquioxide supported cobalt catalyst	S. S. Hossain	Journal of Natural Gas Science and Engineering
	Preparation and Evaluation of Nickel Oxide-Carbon Nanotube Supported Palladium as Anode Electrocatalyst for Formic Acid Fuel Cells,	SK Safdar Hossain	International Journal of Electrochemical Sciences,
2015	In Situ Monitoring of Dispersion Dynamics of Carbon Nanotubes during Sonication Using Electrical Conductivity Measurements	Syed Sadiq Ali	Journal of Nanomaterials
	SnO ₂ /MWCNT catalysts for electrochemical reduction of CO ₂ ,	SK Safdar Hossain	Journal of CO ₂ utilization
	Influence of CeO ₂ modification on Pt-Pd/CeO ₂ -OMC catalysts for formic acid oxidation,	SK Safdar Hossain	Electrocatalysis
	NiO/MWCNT catalysts for electrochemical reduction of CO ₂	SK Safdar Hossain	Electrocatalysis
	WO ₃ modification effects on Pt-Pd/WO ₃ -OMC electrocatalysts for formic acid oxidation,	SK Safdar Hossain	Applied Catalysis A:General,
	Improving Monte Carlo and Molecular Dynamics Simulation Outcomes Using Temperature-Dependent Interaction Parameters: The Case of Pure LJ Fluid	Majdi Adel Al-Faiad	International Journal of Computational Methods
	Experimental and Numerical Modeling of Arsenic Adsorption in fixed bed dynamic column packed with Atlantic Cod fish scales,	Avijit Basu	Canadian Journal of chemical engineering
	Effect of Water Salinity on Surfactant-Stabilized Water-Oil Flow Characteristics	M. Al-Yaari	Experimental Thermal and Fluid Science

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2014	Bed Collapse Behavior of Pulsed Fluidized beds of Nano-powder	Syed Sadiq Ali	Advanced Powder Technology
	Application of a capacitance sensor for monitoring water lubricated pipeline flows	S. Rushd	Canadian Journal of Chemical Engineering
	Electrochemical Reduction of Carbon Dioxide over CNT-Supported Nanoscale Copper Electrocatalysts	Safdar Hossain SK	Journal of Nanomaterials,
	Pressure Drop Reduction of Stabilized Water-in-Oil Emulsions using Organoclays	M. Al-Yaari	Applied Clay Science
	Flow Characteristics of Surfactant Stabilized Water-in-Oil Emulsions	M. Al-Yaari	Chemical Engineering Research & Design
2013	Bed Collapse Dynamics of Fluidized beds of Nano-powder	Syed Sadiq Ali	Advanced Powder Technology
	Application of Titanium Dioxide (TiO ₂) Based Photocatalytic Nanomaterials in Solar and Hydrogen Energy: A Short Review	SK Safdar Hossain	Material Science Forum
	Pressure Drop Reduction of Stable Water-in-Oil Emulsion using Organoclays	M. Al-Yaari	2013 AIChE Annual Meeting , San Francisco, United States
	Effect of Drag Reducing Polymers on Surfactant Stabilized Emulsion Flow Characteristics	M. Al-Yaari	Experimental Thermal and Fluid Science
	Pressure Drop Reduction of Stable Emulsions: Role of the Aqueous Phase Salinity	M. Al-Yaari	Annual Technical Symposium & Exhibition, Al-Khobar, Saudi Arabia
	Pressure Drop Reduction of Stable Water-in-Oil Emulsion Flow: Role of Water Fraction and Pipe Diameter	M. Al-Yaari	the 6th International Petroleum Technology Conference, Beijing, China
	Effect of Water Fraction on Surfactant Stabilized Water-in-Oil Emulsion Flow Characteristics	M. Al-Yaari	18th Middle East Oil and Gas Show and Exhibition, Manama, Bahrain
2012	Fluidization of nano-powders: Effect of flow pulsation	Syed Sadiq Ali	Powder Technology
	Mathematical Analysis of effects on electrostatic double layer of nanoscale surfaces in microfluidic channels	Avijit Basu	Canadian Journal of chemical engineering
	Effect of Drag Reducing Polymers on Water Holdup in an Oil-Water Horizontal Flow	M. Al-Yaari	International Journal of Multiphase Flow
2011	Fluidization of nano-powders: Effect of sound vibration and pre-mixing with group A particles	Syed Sadiq Ali	Powder Technology
	Extension of the pore diffusion approach for modeling binary adsorption of lead and arsenic ions in a fixed bed column packed with Atlantic Cod fish scales,	Avijit Basu	Canadian Journal of chemical engineering
	CFD Prediction of Oil-Water Phase Separation in 180o Bend	M. Al-Yaari	Asian Transactions on Engineering
	CFD Prediction of Stratified Oil-Water Flow in a Horizontal Pipe	M. Al-Yaari	Asian Transactions on Engineering
	Paraffin Wax Deposition: Mitigation & Removal Techniques	M. Al-Yaari	2011 SPE- Young Professionals Technical Symposium, Dhahran, Saudi Arabia
2010	Experimental and numerical analysis of biological regeneration of perchlorate laden ion exchange resins in batch reactors	Avijit Basu	Environmental Engineering Science

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2009	Modeling of Non-Isothermal Batch Reactor Using Fuzzy Logic	Syed Sadiq Ali	IChE
	Scaling up of chemical injection experiments	Avijit Basu	Journal of petroleum Science and Technology
	Effect of Drag Reducing Polymers on Oil-Water Flow in a Horizontal Pipe	M. Al-Yaari	International Journal of Multiphase Flow
	Effect of Polymer Drag Reducing Agent on Immiscible Oil-Water Horizontal Flow	M. Al-Yaari	6th North American Conference on Multiphase Technology, Banaff, Canada
	Evaluation of Kinetic Parameters of the Catalytic Pyrolysis of High Density Polyethylene (HDPE)	I. Dubdub	International Conference on Environment
	Optimization of the Reaction Parameters of the Cracking of High Density Polyethylene over HZSM-5 Catalyst using Thermal Gravimetric Analysis	I. Dubdub	SOMChE in conjunction with 2nd International Conference on Chemical & Bioprocess Engineering