| **Environment & Life Sciences Research Center** |
| --- |
| **Area Of Specialty** | **Staff Name** |
| Desertification and Land Degradation | Dr. Abdullah Alenezi |
| Seismology. |
| Natural Hazard Assessment |
| Crises Decision Support Tools |
| Medical Physiology | Dr. Tareq A. Al-Sabbagh |
| Immunity |
| Organic Waste Management |
| The effect of Heavy Metals Poisoning |
| Preserving Semen for Genetic Diversity |
| The Effect of Hormonal Stress on Performance |
| Poultry science | Dr. Hanan Sulaiman Al-Khalaifah |
| Effect of nutrition on immunity |
| Immunological techniques |
| Innovations in poultry production |
| Mobile sand & dust & its socioeconomic effect. | Dr. Ali Al-Dousari |
| Land rehabilitation & Land degradation. |
| Water harvesting & flash flood control |
| Desert land geomorphology |
| Sediment physical & chemical properties |
| Microbiology and microbial Biochemistry. | Dr. Qadreyah Ahmad AlmatawahDr. Qadreyah Ahmad Almatawah |
| Microbial identification. |
| Detection of airborne pathogen. |
| Utilization of beneficial microorganism in bioremediation. |
| Functional foods and human health | Dr. Jasim Ahmed |
| Sustainable Biodegradable Packaging | Dr. Jasim Ahmed |
| Engineering properties of food |
| Food Nanotechnology |
| Experimental Fluid Mechanics. | Dr. Ashraf A. Ramadan |
| Air Dispersion Modelling. |
| Air pollution monitoring. |
| Emission Control. |
| Coral Reef Ecology and Environment. | Dr. Shaker Alhazeem |
| Restoration and Rehabilitation of Coral Reef. |
| Marine Fisheries and Animals. |
| Plant Tissue Culture | Dr. Dalal Bader Al Baijan |
| Molecular biology |
| Plant-Environment Interactions | Dr. Anisul Islam |
| Restoration Ecology |
| Seedling Nutrition & Quality Improvement |
| Seed Biology |
| Environmental Metagenomics | Dr. Saja A. FakhraldeenDr. Saja A. Fakhraldeen |
| Cancer Biology |
| Cell and Molecular Biology |
| Biological Engineering |
| Food and Environmental Microbiology | Dr. Rita Rahmeh |
| Antimicrobial Resistance |
| Microbiome and Resistance |
| Discovery & Application of Natural Antimicrobials |
| Plant genetic engineering & biotechnology | Dr. Vinod Kumar |
| Algae production and applications |
| Molecular microbiology |
| Genomics and transcriptomic |
| Environmental monitoring of antimicrobial resistance (AMR) | Dr. Nazima Habibi |
| Risk assessment and mitigation of microbialinduced corrosion |
| Aerosol microbial diversity |
| Date palm Tissue Culture | Dr. Sudhersan Chellan |
| Seed potato production via Tissue Culture |
| Native plant production via Tissue Culture |
| Desert Truffle cultivation. |
| Ambient Air Quality. | Dr. Abdullah N. Al-Dabbous |
| Indoor Air Quality. | Dr. Abdullah N. Al-Dabbous |
| Radiation Monitoring. |
| Environmental Assessment. |
| Health Risk Assessment. |
| High Pressure Processing | Dr. Fatemah Alsalman |
| Checking food quality |
| Enhancing food quality |
| Waste management. | Dr. Abdulaziz Al-Shareedah |
| Recycling. |
| Air pollution control |
| Environmental Impact Assessment | Dr. Bassam N. Shuhaibar |
| Communicating Science |
| Human nutrition | Dr. Kazi Jamil |
| Prevention of non-communicable diseases |
| Wastewater based epidemiology |
| Air Quality | Dr. Mohamed F. Yassin |
| Noise Pollution |
| Health Risks |
| Numerical & physical simulation: CFD models & Wind Tunnel. |
| Fish Biology | Dr Abdullah Alzaid |
| Environmental Physiology |
| Molecular Biology |
| Evolution |
| Aquaculture |
| Waste Management and Plastic Waste | Dr. Sultan Al-Salem Dr. Sultan Al-Salem  |
| Fuels and Energy Recovery from Waste |
| Environmental Sustainability and Environmental Pollution |
| Life Cycle Assessment |
| Reactor Design and Reaction Engineering/ Mathematical Modelling |
| Microalgae isolation, cultivation in lab scale and large-scale outdoor facility for food and feed applications. | Dr. Vanitha V Kumar   |
| Extraction of bioactive compounds from microalgae and activity assessment in vitro/in vivo. |
| Live food production for aquaculture sector. |
| Food Composition Database | Dr. Sarah Fahad Al-Hamli |
| Starch Digestion and Health |
| Glycemic Index (GI) and Health |
| Food Consumption and Behavioral Patterns |
| Antimicrobial Resistance | Dr. Sarah Fahad Al-Hamli |
| Food Contaminates |
| Integrated Pest Management | Dr. Mustapha Jallow   |
| Conservation biological control and bio-pesticide development |
| Behavioral and chemical ecology/insect-plant interactions |
| Insecticide resistance mechanisms and management |
| Pesticide toxicology and monitoring of residues |
| Numerical modelling of coastal processes | Dr. Yousef Alosairi |
| Modelling of hydrodynamics and water quality |
| Pollutant dispersion and transport in coastal water |
| Numerical modelling of sediment transport |
| Real time monitoring systems |
| Forecast systems for decision support maker |
| Nuclear technology for peaceful applications. | Dr. Bader Jaser Almutairi |
| Design of small modular nuclear reactors (SMRs). |
| Nuclear cogeneration. |
| Body composition measurements. |
| Radiation detection and measurements |
| Aquaculture and Aquatic Animal Health | Dr. Azad Ismail Saheb |
| Disease Diagnostics and Preventive Care |
| Aquatic Animal Vaccines, Immunogens and Biologics |
| -Toxicological implications on Fish Health |
| Zooplankton Ecology | Dr. Gopikrishna Mantha |
| Meiofauna Ecology |
| Benthic Ecology | Dr. Gopikrishna Mantha |
| Live food culture for Aquaculture |
| Multivariate Statistics for Ecological Analysis |
| Date palm Tissue Culture. | Dr. Jibi Sudhersan |
| Seed Potato Production via Tissue Culture. |
| Germplasm Conservation Via Tissue Culture. |
| Epidemiological studies | Dr Ayyoub K. Taher |
| Nutrition and health related diseases. |
| Evaluation of the school food environment. |
| Policies and factors affecting adolescent’s health |
| Microbial molecular biotechnology. | Dr. Abrar Akbar  |
| Genomics and Proteomics |
| Camel milk microbial technology . | Dr. Abrar Akbar  |
| biodegradation and soil microbial restoration |
| Plant Cell and Tissue Culture. | Dr. Muhammad Hafizur Rahman |
| Plant Biotechnology. |
| Plant Genomics and Proteomics. |
| Molecular Markers and their utilization. |
| Plant Biotic and Abiotic Stress Tolerance |
| Investigating the impact of AHR ligands | Dr. Hana’a A. BurezqDr. Hana’a A. Burezq |
| Identifying distinct pro-inflammatory and anti-inflammatory |
| Quantifying the concentrations of various pro-inflammatory and anti-inflammatory cytokines. |
| Assessing the effects of environmental pollutants |
| Plant-microbe-soil interactions | Dr. ALI M. QUORESHI |
| Ecological/environmental monitoring | Dr. ALI M. QUORESHI |
| Reforestation and re-vegetation |
| Biofertilizers/Organic Agriculture |
| Carbon and nutrient cycling |
| Biological oceanography of the Arabian Gulf, ROPME sea area and the Indian Ocean. | Dr Igor Polikarpov |
| Ecology of the marine phytoplankton and microphytobenthos. |
| Long-term dynamics of the marine ecosystems. |
| Remote sensing of the aquatic environment. |
| Climate Smart Agriculture, Conservation Agriculture | Dr Shabbir Ahmad Shahid |
| Soil salinity management in agriculture farms and landscape |
| Sustainable soil management for crop production and ecosystem services |
| Climate change mitigation and adaptation |
| Soil analytical aspects | Dr Shabbir Ahmad Shahid |
| Marine Bioprospecting: Extraction and characterization of novel bioactive compounds from marine resources. | Dr. Sabeena Farvin Koduvayur Habeebullah |
| Biomedical evaluation of functional seafood components in animal models. |
| Nutrient and Carbon cycling in marine environment | Dr Amit Sarkar |
| Production and fluxes of climatically important gases |
| Environmental impact of anthropogenic perturbations |
| Marine Bioprospecting: Isolation and characterization of bioactive compounds from marine bacteria. | Dr. SURENDRARAJ ALAGARSAMY |
| Marine bacteria as a source of Omega 3 fatty acids |
| Physical Modeling of Coastal Structures | Eng. Altaf M. Taqi |
| Wave-Structure Interaction with Coastal Sediments |
| Innovative Hybrid Coastal Structures |
| Field Beach Profiling |
| Environmental Analysis of Water/Sediment Samples | Eng. Altaf M. Taqi |
| Atmospheric pollution and metal corrosion | Ms. Mariam Malek   |
| Indoor and outdoor air quality |
| Air quality analysis and modeling |
| Environmental and public health research |
| Ground water Hydro-Geo Chemistry | Ms. Lina Ali Talebi |
| Environmental Chemistry and Water Quality |
| GIS Mapping, Interpolation and Interpretation |
| Marine Zooplankton Taxonomy and Ecology. | Ms. Sarah Al-Jutaili |
| Marine Aquaculture: Water Quality And Disease |
| Decapoda Larval Stages Taxonomy. |
| Marine Toxicity Research. |
| Functional foods and human health | Mr. Hasan M. Al-Attar |
| Engineering properties of food |
| Hazard Analysis | Eng. Manar AlSaraf |
| Data Visualization |
| Food Safety and Nutrition Sciences | Mr. Muhammad AL-Foudari |
| Food Analysis of Components |
| Food Cereal Grains Technology |
| Coastal management | Ms. DanaBader Al-Houti |
| Coastal erosion/accretion rate |
| Epidemiological Investigation of Animal and Plant Diseases | Salwa Al-Mouqatea |
| Food security. |
| Global Healthy Cities Research. |
| Sustainability of resources. | Salwa Al-Mouqatea |
| Marine Biodiversity. | Mr. Nithyanandan ManickamMr. Nithyanandan Manickam |
| Benthic Ecology. |
| Larval Fish Ecology |
| Seagrass Ecology. |
| Marine Mammals. |
| Habitat Restoration |
| Air pollution | Eng. Haya Al-Saleem |
| Indoor environmental quality |
| Physical modeling and laboratory techniques in coastal engineering. | Eng. Faris Al-Amer |
| Methods of protecting coastlines from erosion. |
| Protecting infrastructure from damage due to waves. |
| Shrimp culture, larvae rearing and hatchery techniques. | Mrs. Lamya Saud Al-Musallam |
| Ocean acidification, and the effect of this phenomena on shrimp and microalgae. |
| Microalgae cultivation in lab scale and large-scale outdoor facility for food and feed applications. |
| Application of Analytical instruments for the analysis and study of environmental, hydrology and food samples. | Mr. Mohammad Ejaz Bhatti |
| Preparation and analysis of Food packaging and biodegradable packaging. |
| Analysis and study of Sludge and compost. |
| Vegetation Ecology & Vegetation Survey. | Ms. Sheena Jacob |
| Conservation and Restoration of Native Plants of Kuwait. |
| Germination and Mass Propagation of Native Plants. |
| Evaluation of Exotic Plants for Landscaping |
| Body composition assessment | Anwar Al-Mutairi |
| Food composition analysis |
| Basel metabolic rate and Energy Expenditure |
| Air Pollution | Ms. Alyaa A Al-Shatti |
| Air Quality |
| Atmospheric Measurements |
| Atmospheric Modeling |
| Atmospheric Meteorology & Climatology |
| Polymerase Chain Reaction | Salwa Khalid Almutairi |
| DNA, RNA Isolation & Purification |
| Gene Expression Analysis, Electrophoresis |
| Pathogenic Bacteria |
| Water microbiology |
| Radiochemistry | Montaha H. Behbehani |
| Radioecology and environmental toxicology | Montaha H. Behbehani |
| Environmental contaminants in marine and terrestrial ecosystems |
| Supervising the Kuwait National Seismic Network | Farah Homoud Al-Jeri |
| Earthquake analysis and seismic risk |
| reduction |
| Research in seismic studies |
| Plant production | Laila Abdulrazak Al-Mulla |
| Mangrove propagation and plantation |
| Soil studies |
| Native plants propagation and biodiversity conservation |
| Wildlife | Ouhoud Al-Ragam |
| Environment and Restoration |
| Breeding and mutation |
| Nuclear Experimental Spectroscopy | Abdulaziz Mansour Aba |
| Environmental Radioactivity Research |
| Radiation Protection and Nuclear Safety |
| Microbial Identification and Characterization | Mohamed Kishk |
| Bacterial Detection and Resistance Profiling |
| Antimicrobial Resistance |
| Probiotics and Bacteriocins |
| Environmental and Food Microbiology |
| Radiochemistry. | Hanadi F. Al-Shammari |
| Nuclear medicine studies. |
| Risk assessment of radioactivity hazard. |
| Food chemistry | Batool Salih Alfeili |
| Food composition |
| Food contaminants |
| Geology | Salim Al-Ateeqi |
| Marine Fish Fry Production | Mr. Shogo Kawahara |
| Fish Grow-out Culture. |
| Recirculation Aquaculture System |
| Commercialization of Aquaculture |
| Marine aquaculture | Salim El-Dakour |
| Marine hatchery management |
| Fish feed formulation |
| Programming | Eng. Naser Ali Alherz |
| Drone Utilization |
| Radio-analytical chemistry. | Aishah Alboloushi |
| Analysis of natural and anthropogenic radionuclides in different environmental samples. |
| Environmental monitoring (marine/terrestrial). |
| Radiation Dose and risk assessment. |
| Chemical analysis | Jameela Mohammed Al-GhanimJameela Mohammed Al-Ghanim |
| Sensory Evaluation Methodology |
| Baking Technology |
| Body Composition |
| Dietary Assessment Methods |
| Obesity and body composition research | Lulwa Abdullah Alolayan |
| Physical activity assessment research |
| Nutrition and food science field |
| Polymerase Chain Reaction | Tahani Al-Waalan |
| DNA Isolation & Purification |
| Gene Expression Analysis, Electrophoresis |
| Pathogenic Bacteria |
| Microbiology |
| Bioremediation using different methods | Ms. Tahani Al-Surrayai |
| Phytoremediation techniques |
| Isolation and characterization of microbial-strains |
| Research and development to enhance soil fertility |
| Desertification, rehabilitation of degraded desert land | Modi Mohammed Al-Farsi |
| Perennial native plant |
| Microbiology | Hanadi K. Al-Hashash |
| Genetic Engineering |
| Plant virology |
| Detection of GMO in food |
| Bio-waste Management. | Eng. Kawther Al-Muhanna |
| Micro-plastic Identification & Characterization. |
| Polymers Biodegradation & Identification. |
| Persistent Organic Pollutants Monitoring and Assessment. |
| Agricultural production system in a controlled environment | Amwaj Al-Roumi |
| Applications of analytical and physical chemistry | Aisha Abdullah Al-Rowayeh |
| Laboratory chemical analyses |
| Rehabilitation of degraded arid landsusing native plants. | Noor M. Al-Dousari |
| Implementation of natural measures toprotect the environment and reducedust and sand accumulation |
| Polymerase Chain Reaction | Nabilah Al-ShaijiNabilah Al-Shaiji |
| DNA Isolation & Purification |
| Gene Expression Analysis, Electrophoresis |
| Microbiology |
| DNA bioinformatics and protein sequence analysis |
| Fish health management. | Mr. Hashem Hussain Al-Gharabally |
| Fish diseases and treatment. |
| Motivating fish immunity |

| **Petroleum Research Center** |
| --- |
| **Area Of Specialty** | **Staff Name** |
| Petroleum research center management | Dr. Dawoud Bahzad |
| Center strategic alliances for regional and international |
|  Upgrading of heavy crude oil |
| Catalyst performance and evaluation specialist |
| Corrosion economics  | Dr. AbdulHameed Al-Hashem |
| Cavitation corrosion |
| Atmospheric corrosion |
| Marine corrosion |
| Oilfield chemical evaluation |
| Upgrading petroleum fractions by hydro treatment | Dr. Faisal Al-Humaidan |
| Upgrading petroleum fractions by thermal-cracking |
| Modeling reaction kinetics |
| Hydrogen storage in organic hydrides |
| Graphene synthesis from asphalting |
| Petroleum chemistry | Dr. Hassan Al-Rabiah |
| Crude oil assays characterization, and blend stability |
| Advanced molecular characterization techniques especially GCxGC |
| Additives testing and evaluation |
| Supercritical fluids interaction with crude oils |
| Petrochemical and polymer processing. | Dr. Salah Th. Al-Enezi |
| Health and environmental technology.  |
| Micro- and nano-technologies in biological appli. |
| Biodegradable polymers. |
| Medical and biological applications in polymer. |
| Upgrading of heavy oil processes and the quality of the products. | Dr. Hamza Al-Bazzaz |
| Hydro treatment of diesel process to produce clean fuel |
| Statistical process control methods for chemical processes |
| Polymer Nanocomposites | Dr. Mohammad A. Al-SalehDr. Mohammad A. Al-Saleh |
| Polymer Reaction Engineering |
| Microstructure Deconvolution |
| Modeling Olefin Polymerization  |
| Monte Carlo Simulation of Polymerization Reactors |
| Fluoropolymers | Dr. Salim Ok |
| Polymer Thin Films  |
| NMR Spectroscopy Applications |
| Confined Fluids |
| Gas separation in petroleum refining | Dr. Yousef Alqaheem |
| Preparation and testing of gas-separation membranes |
| Simulation of refinery units |
| Economic assessment of gas separation technologies |
| Nano-Structured Polymers & Nanomaterials | Dr. Firas Rasoul |
|  Biopolymers and Applications |
|  Photo & Radiation Chemistry |
|  Surface Modification of Materials  |
| Organometallic chemistry | Dr. Muhieddine A. Safa |
| Clean fuel production |
| Materials science and engineering |
| Corrosion of metal and alloys  | Dr. Abdulmuhsen A. Akbar |
| Oilfield chemicals, evaluations  |
| Materials selection |
| Hydrometallurgical leaching of metals from spent catalysts. | Dr. Ashish Pathak |
| Refinery spent catalyst management. |
| Hydro processing catalyst.  |
| Reuse of refinery spent catalysts |
| Corrosion in the petroleum industry | Dr. K. Ravindranath |
| Failure investigation |
| Corrosion of stainless steels |
| Structure-property correlations |
| Porous organic polymers for H2 & CO2 adsorption | Dr. Jacob Samuel |
| Transformation of petroleum asphaltenes | Dr. Jacob Samuel |
| Polymers for enhanced oil recovery |
| Polymer nanocomposites  |
| Polymer processing | Dr. Abdirahman A. Yussuf |
| Polymer nanocomposites |
| Polymer grafting and crosslinking |
| Conductive polymers |
| Biodegradable polymers |
| Developing heterogeneous catalysts and evaluating their hydro processing catalytic activities  | Dr. Mohan S. Rana |
| Refinery streams and their analysis. |
| Waste asphattene and their conversion into graphene. |
| Encompasses CO2 utilization into valuable chemicals using electrochemical catalysts |
| Carbon capture, utilization, and storage (CCUS) | Dr. Mari VinobaDr. Mari Vinoba |
|  CO2 capture ( aqueous amines and porous materials)  |
|  CO2 separation (Membrane process) |
|  CO2 utilization (Electrocatalytic process) |
|  Developing new catalysts for energy storage and hydroprocessing applications |
| Nuclear techniques research in industries application | Shaker M. A. Ebrahim |
| Graphical user interface designer in Matlab |
| Heavy crudes  | Latifa Al-Ostad |
| SARA fractionation |
| Evaluation of hydro treating catalysts  | Eng. Mohammed Al-Shemali |
| Detailed characterization of crude oil and petroleum fractions |
| Clean Fuel |
| Adsorption |
| Carbon Capture |
| Oilfield water chemistry  | Shabbir Tajuddin Mukadam |
| Enhanced oil recovery with a focus on scaling, corrosion, and microbial control |
|  Predicting scaling potential for mixing incompatible waters |
|  Water hardness reduction for clarifiers |
|  Screening of oilfield chemicals |
| Focal Point for external services in Petroleum research center | Rashed Y. Bouresli |
|  Petroleum chemistry |
|  Chromatography and elemental analysis of petroleum products |
| Emulsion evaluation of oilfield samples | Eng. Mohammad A. Al-Attar |
| Pilot plant | Eng. Mubarak M. Al-Mujaibel |
| Distillation lab |
| Core flooding | Saleh R. Saeed |

| **Energy & Building Research Center** |
| --- |
| **Area Of Specialty** | **Staff Name** |
| Corrosion Science & Engineering | Dr. Adel Hussain |
| Sustainable Energy Management | Dr. Ahmad Al-Mulla |
| Nanotechnology | Dr. Latifa A. Al-Hajji |
| CCUS: CO2 Capture, Utilize & Store |
| Water treatment research using Solar Radiation and Nanomaterials |
| Fuel cells | Dr. Ayman Al-Qattan |
| Solar energy |
| Renewable energy systems application |
| Advance process control |
| Thermochemical water splitting for hydrogen production. | Dr. Fotouh Al-RagomDr. Fotouh Al-Ragom |
| Energy policy and planning. |
| Energy auditing and energy conservation in buildings. |
| Refrigeration and air-conditioning and alternative refrigerants. |
| Energy Systems and Renewable Energy | Dr. Yahya Al-Hadban |
| Sustainable Energy Systems. | Dr. Osamah A. Al-Sayegh |
| Energy Policies. |
| Energy Economics. |
| Risk and reliability assessment of infrastructures. | Dr. Shaikha Abdulattef Al-Sanad |
| Structural health monitoring of various infrastructures. |
| Asset management. |
| Project management techniques to reduce carbon footprints, supply chain management. |
| Renewable Energy and Solar &Wind Resource Assessment | Dr. Majed Al-Rasheedi |
| Materials science. | Dr. Abdulsalam Al-Hazza |
| Nanotechnology. |
| Electron Microscopy. | Dr. Abdulsalam Al-Hazza |
| Chemical analysis of surfaces using SEM, TEM and other devices. |
| Electro-physics | Dr. Yaaqoub Malallah |
| Energy Efficiency Technologies |
| Renewable Energy Systems |
| Nanotechnology |
| Renewable energy & Energy Policy | Dr. Turki R. Al-AjmiDr. Turki R. Al-Ajmi |
| Solar Photovoltaic Applications |
| Building Energy Simulation & Energy Efficiency |
| Thermal Analysis of Buildings |
| Smart Grid Technologies |
| Heat and Mass Transfer | Dr. Mohammad Alwazzan |
| Fluid Dynamics | Dr. Mohammad Alwazzan |
| Thermodynamics |
| Dynamics |
| Energy systems modelling. | Dr. Yousef Mohammad Al-Abdullah |
| Power systems operations & planning. |
| Optimization |
| Energy statistics |
| Finite element analysis. | Dr. Jafarali Parol |
| Structural health monitoring. |
| Structural vibration. |
| Data driven analysis. |
| Assessment and Strengthening of Concrete Structures. | Dr. Zafer Sakka |
| Structural Ductility. | Dr. Zafer Sakka |
| Infrared Thermography |
| Structural Reliability of Buildings. |
| Renewable Energy. | Dr. Rashid Ali Al-Shatti |
| Energy Storage. |
| Computational Fluid Dynamics. |
| Air Conditioning & Refrigeration. |
| Renewable Energy Applications. | Dr. Mabrouk Adouane |
| Solar and Electronics Simulation Software. |
| Energy Conversation and Storage. |
| System Identifications and Control. |
| Air-Conditioning. | Dr. K. J. Sreekanth |
| Energy policy planning. | Dr. K. J. Sreekanth |
| Transportation planning. |
| Energy Management. |
| Material Chemist & Nanocomposites for Green Energy Production. | Dr. Antony Joseph |
| Eco-Friendly Nanomaterials for Sustainable Building Practices. |
| Characterization and Petrographic Analysis of Cementitious Materials. |
| Steam power plants. | Dr. Hussain Juma Hussain |
| Solar thermal systems. |
| Energy from waste. |
| Gas Turbine Power Plant Maintenance Optimization. | Dr. Suleiman M. Suleiman |
| Process Gas Compressors Modelling and Simulation. |
| Microturbine Modelling in Distributed Power Systems |
| Supercritical CO2 power cycles. | Dr. Suleiman M. Suleiman |
| Energy Conversion & Management. | Dr. Ali H. Abdulrahim |
| Design of Hybrid Thermal Systems. |
| Energy & Exergy Analysis |
| Green Hydrogen & Ammonia |
| Renewable Energy Storage | Dr. Bashar A. Al-Kandari |
| Scanning Electron Microscopy. | Dr. Mohammad F. Abdulsalam |
| Data Analysis. |
| Concrete. |
| Non-metallic inclusions in steel |
| Modeling, analyses, and optimization of buildings’ energy performance. | Dr. Baqer E. Ameer |
| Renewable energy integration within the buildings. |
| Designing and optimizing the distributed generation systems and renewable energy power plants. | Dr. Baqer E. Ameer |
| Impact of energy efficiency. |
| Modernist and Welfare Architecture Research | Dr. Zainab MurtadhawiDr. Zainab Murtadhawi |
| Heritage and Historical Building Conservation |
| Adoptive Re-Use and Sustainable Rehabilitation |
| Educational Architecture in Kuwait |
| Demand Side Management. | Dr. Rajeev Ramalloor Alasseri |
| Energy Efficiency in Buildings. |
| Heating Ventilation and Air conditioning. |
| Data management. |
| Energy efficiency using AI-based control systems | Eng. Fareed Al-Ghimlas |
| Green buildings and LEED building certification |
| Building energy codes and compliance |
| District energy systems |
| Mechanical and Aerospace engineering. | Eng. Waleed Khaled Al-Nassar |
| Renewable Energy Engineering Enterprise and Management. |
| Renewable Energy Feasibility and Economics. |
| Oil Well Drilling and Construction Specialist. |
| Concrete Technologies | Eng. Sharifa Bader Al-Fadala |
| Recycling and waste utilization |
| Masonry and precast concrete units |
| Sol-gel Chemistry. | Eng. Shorouq Abdul Jaleel |
| Photocatalytic chemistry. |
| Solar Chemistry. |
| Self-cleaning Applications. | Eng. Shorouq Abdul Jaleel |
| Environmental Remediation |
| Nanotechnology: Research in environmental applications. | Eng. Mariam Al-Saidi |
| Photocatalysis: Solar photodegradation studies. |
| Hydrogen Storage: Nanocomposite materials development. |
| Environmental Engineering |
| Low-carbon concrete structures. | Ali Khaled Saleh |
| Structural assessment of buildings and infrastructures. |
| Non-destructive evaluation of material. |
| Statistical validation and numerical modelling. |
| Energy Efficiency. | Naser Hussain |
| Energy Demand. |
| Carbon Capture. |
| Nuclear Energy. | Eng. Eissa Al-Nasrallah |
| Physics. |
| Nanotechnology. |
| Energy Planning. |
| Polymer matrix composites. | Eng. Abdullah Al-Kandary |
| Biodegradable polymers. |
| Mechanics of materials. |
| Sustainable materials. |
| Energy Efficiency in Building. | Eng. May Saber Al-Suwaidan |
| HVAC&R. |
| Renewable Energy. |
| Desalination. | Eng. May Saber Al-Suwaidan |
| Civil Engineering. | Areej Al-Banwan |
| Mega-Projects (Airport). |
| Construction Project Management. |
| Sustainability and Reliability of Infrastructure. |
| Sustainability of Concrete | Eng. Mohammad Mataqi |
| Graphene Concrete Composites |
| Plastic Materials Testing |
| Structural Health Monitoring. | Eng. Rahab Al-Behbehani |
| Cement Replacement Materials. |
| Sustainable Environment. |
| Concrete Durability and Sustainability. | Eng. Fatemah Al-Asfour |
| Pavements Design and Technologies. | Eng. Fatemah Al-Asfour |
| Utilization of Waste for Construction Purposes. |
| 3D Concrete Printing |
| Structural Engineering. | Eng. Abdullah S. Al-Foudari |
| Construction & Project Management. |
| Structural Health Monitoring Systems (SHM). |
| Reducing buildings power and energy requirements. | Eng. Rawan Al-Sammar |
| Technical viability of heating, ventilation and air conditioning. |
| Energy policy and planning. |
| Structural Health Monitoring | Eng. Rayan Husain |
| Infrastructure Asset Management |
| Sustainable Construction |
| Reducing buildings power and energy requirement. | Eng. Aisha Ismaeil |
| Technical viability of heating, ventilation and air conditioning systems and other energy-efficient technologies |
| Energy policy and planning. |
| Sustainable / Green buildings | Fatma Hassan Al-AlawiFatma Hassan Al-Alawi |
| Historic Building Conservation |
| Building Energy simulation |
| Energy Auditing |
| Solid Medium Hydrogen Storage and Hydrogen Storage Kinetics. | Eng. Mohammad Banyan |
| Coating with Nanomaterials Utilizing Cold Spraying. |
| Metal Treatment and Alloying. |
| Structural Evaluation. | Eng. Hasan Al-Muhnanna |
| Structural health monitoring. |
| Innovative construction methods |
| Solar Cell Technology | Ahmad Al-Duweesh |
| Solid State Hydrogen Materials |
| Applications on Self-Cleaning Glass |
| Transport infrastructure: Design and Construction | Eng. Zainab S. Awadh |
| Life Cycle Assessment |
| Use of Recycled Waste in Road Pavement |
| Geopolymers | Shaikhah Al-Zuwayed |
| Soil Stability |
| Microstructure Analysis |
| Building Materials Testing |
| Data Analysis and Visualization. | Eng. Dalal O. Al Attal |
| Quality Control. |
| Optimization. |
| Simulation Modeling. |
| Data Cleaning and Mining. |

| **Water Research Center** |
| --- |
| **Area Of Specialty** | **Staff Name** |
| Water Management | Dr. Khaled Hadi |
|  Hydrogeology |
| Water Quality |
| Ground water Geochemistry |
| Geology |
| Desalination Technologies | Dr. Yousef Al-Wazzan |
| Water Treatment and Reuse |
| Treatment of Polluted Water | Dr. Adel Al-Haddad |
| Evaluation of Groundwater Sources |
| Preparing the Database for Wastewater |
| Geology, Chemistry, Microbiology |
| Research on Surface Water and Treatment |
| Hydrogeology | Dr. Mohammad Al-Rashed |
| Groundwater Pollution Control and Management |
| Water Resources Management and Policies |
| Water Treatment and Desalination Technologies | Dr. Mansour Ahmad |
| Zero Liquid Discharge Technologies |
| Water Desalination Technologies using Renewable Energies |
| Water Desalination Technologies using Waste Energies |
| Assessment of drinking water quality | Dr. Jasem M. Al-Kandari  |
|  Application of GIS in water resources management |
|  Management of toxic disinfection byproduct compounds in drinking water |
|  Minimizing water loss in water distribution systems |
| Climate change | Dr Amjad Aliewi |
| Hydraulic and Hydrology Engineering |
| Groundwater flow and pollution modelling |
| Water resources planning, development and management  |
| Multiple Effect Desalination Processes |  Dr. Ghada Al-Nuwaibit  |
| Modeling of heat exchangers and evaporators |
| Water Desalination Using Renewable Energies |
| Zero liquid discharge processes |
| Fouling in heat exchangers  |
| Wastewater Treatment Technologies | Dr. Hussain M. SafarDr. Hussain M. Safar |
| Advanced Oxidation Processes |
| Analytical Chemistry Techniques using HPLC |
| Surface Morphology Analysis (XPS, SEM, ToF-SIMS and AFM) |
| Domestic and Industrial Wastewater treatment  | Dr. Abdullah Almatouq   |
| Sustainable Energy |
| Waste to Energy  |
| Microbial Fuel Cell  |
| Microbial Electrolysis Cell |
| Wastewater treatment | Dr. Mishari Khajah |
| Wastewater treatment technologies |
| Wetland treatment system |
| Microplastics in Wastewater Treatment Plants |
| Integrated Water Resources Management | Dr. M. Elmuntasir Ahmed |
| Industrial Wastewater Treatment |
| Wastewater Reuse Management |
| Environmental Assessment |
| Institutional Strengthening |
| Groundwater Chemistry & Hydro geochemistry | Dr. S.V.V. Dhanu Radha |
| Geochemical Modelling |
| Groundwater Pollution & Remediation  |
| Synthesis of Nano Particles for Bioremediation |
| Nano Particles Synthesis and Bioremediation  |
| GeoSopatial Modelling | Dr. Yogeesha Jayaramu |
| Digital Image processing |
| Integrated water resources management  |
| Solar Energy Utilization in Water Extraction from Air | Dr. Anwur Alenezi |
| Sustainable Water Resources |
| Nanotechnology |
| Water  | Dr. Abdallah Abusam |
| Wastewater  |
| Environmental  |
| Modeling  |
| Simulation  |
| Management and Applications of Wastewater Reuse | Dr. Sara Al-Haddad |
| Quantitative Analyses |
| Policy and Regulation Reform |
| Philosophies of Teaching, Training and Education & their Practical Application |
| Desalination | Dr. Rajesh K. Alambi   |
| Membrane Science and technology |
| Nano Technology |
| Renewable energy desalination technology |
| Mineral extraction from desalination brine |
|  Hydrogeochemistry | Dr. Sabarathinam ChidambaramDr. Sabarathinam Chidambaram |
|  Isotopes and Geochemical modeling |
|  Geostatistics |
|  Water Resources management |
| Wastewater treatment and management | Dr. Saleh Adel Al-Haddad |
| Resources recovery from wastewater | Dr. Saleh Adel Al-Haddad |
| Sustainable energy from wastewater |
| Improving and developing the environment |
| Desalination | Dr. Bhadrachari Garudachari   |
| Renewable energy desalination technology |
| Water pretreatment processes  |
| Nanotechnology for water treatment |
| Mineral extraction from desalination brine |
| Thermal, membrane, and hybrid desalination | Dr. Hassan K. Abdulrahim |
| Desalination and air conditioning |
| Simulation of desalination processes |
| Techno-economic evaluation of desalination |
| Groundwater Contamination and Remediation  | Adnan Akber   |
| Water Resources Management  |
| Water Quality Studies  |
| Groundwater Numerical Simulation and Modelling |
| Seawater Desalination by Reverse Osmosis Technology  | Mohammed A. Safar |
| Thermal Desalination |
| Water Treatment and Desalination Technologies | Mohammad Al-Tabtabaei |
|  Zero Liquid Discharge Technologies |
| Groundwater Hydrogeology | Mr. Tariq Rashid |
| Field investigations: geophysical and pump testing |
| Hydro-geochemical modeling |
| Laboratory testing and analysis of soil |
| Groundwater wells drilling, const., & development |
| Membrane Distillation | Yaqoub Al-Foudari |
| Desalination by Innovative Technologies |
| Seawater Desalination by Reverse Osmosis |
| Environmental microbiology | Mosab Al-Jeri |
| Data Processing and Modelling | Rashed Al-Yaseen |
| Anaerobic Treatment Systems |
| Resource Recovery |
| Hydrogeology | Bedour T. Alsabti |
| Management and assessment of groundwater quality |
| Analytical applications using GIS techniques |
| Remote sensing techniques |
| Geochemistry and sedimentary petrography | Amjad Al-Rashidi |
| Unmanned Aerial Vehicle (Drone) mapping |
| Analytical applications using GIS techniques |
| Sustainable management of Water Resources |
| Thermal Desalination | Eng. Ahmad A. Al-Sairafi |
| Reverse Osmosis |
| Forward Osmosis |
| Filter and Filtration |
| Desalination technologies: Pre and Post treatment. | Maha A. Salman |
| Predicting the quantity and types of scaling and fouling in desalination systems |
| Magnetic treatments for saline water. |
| Microbial desalination cell technology for  brine water and waste water |
| Sustainable Water Resources Management Assessment | Fatemah M. Dashti |
| Planning and Development of Water Resources  |
| Environmental and water resource engineering | Dalal Sadeqi |
| Aquifer hydraulic features analysis  |
| Water quality assessment and monitoring  |
| Evaluation of the chemical evolution of groundwater  |
| Artificial aquifer recharge assessments  |
| Sustainable Water Resources Management Assessment | Huda Al-Jabli   |
| Planning and Development Water Resources  |
| Water desalination (Freezing Technology) |
| Seawater Treatment and Desalination | Ali Al-Odwani  |
| Using Thermal and Membrane Technologies |
| Solving Scale and Corrosion problems |
| providing scientific solutions related to water transfer and storage systems  |
| Hydrogeochemistry | Harish Bhandary |
| Isotope Hydrology |
| Water Chemistry |
| Groundwater Hydrology |
| Geology  | Fajer A. Al-Otaibi |
| Hydrogeology  |
| GIS |
| Water Chemistry  | Mariam Al-Jumaa |
| Water Microbiology Isotopes |
| Water Management  | Norah Alayyadhi |
| Hydrology |
| Water Quality |
| Water Microbiology Isotope Analysis | Farah Al-Ajeel  |
| Water Chemistry | Fatma Marzouk |
| Water Testing Equipment's |
| Analyzing all types of water samples for all desalination  | Salah Taleb Al-Jazzaf |
|  Technology program projects |
| Groundwater Sampling  | Ahmed Shishter   |
| Isotope Sampling |
| Specialized groundwater Sampling |
| Data Storagel Management |
| Seawater Desalination by Reverse Osmosis Technology. | Mansour Al-Rughaib |
| Multiple Effect Desalination Processes |
| Multi effect water desalination | Abbas Al-Mesri |
| Reverse Osmosis water desalination |
| Filter and filtration |
| Groundwater Sampling  | Bandar Al-Salman |
| Isotope Sampling |
| Specialized groundwater Sampling |
| Data Storagel Management |

| **Science & Technology Sector** |
| --- |
| **Area Of Specialty** | **Staff Name** |
| Competition and Privatization Policies | Dr. AbdulHameed A. Hussain |
|  Financial Markets |
| Industrial Development |
|  Econometrics |
| Feasibility Studies and Projects Evaluations |
|  Industrial policy as a Strategy for Economic Development | Dr. Faten Al-Jabsheh |
|  Public Policy and Comparative Methods |
|  Privatization and Public Sector Management |
|  Marketing & Finance |
| Computer Engineering  | Eng. Noura Al-Ghurair |
|  Application Development  |
|  Assistive technologies for people with disability |
| Machine Learning | Dr. Mohammad Khajah |
|  Artificial Intelligence |
|  Educational Data Mining |
| Air Pollution Engineering & Mathematical Modelling | Dr. Mufreh S. Al-Rashidi |
|  Applied Optimization in Environmental Issues |
|  Machine learning algorithms |
|  Radiation Protection & Risk Assessment  |
|  Occupational Health & Safety Management |
| Project and Construction Management. | Dr. Haya Al-Bader |
|  Data Science and simulation. |
|  Digital Transformation. |
|  Knowledge Management. |
| Strategic Planning and Policy formulation and Decision-making  | Dr. Mohammed S. Al-Enezi |
|  Labor Economics and Demography |
|  Industrial Organization and Competition Policy |
|  Feasibility Studies and Projects Evaluations |
| Technology Parks and Business Incubators. |
| International Trade | Dr. Ahmad S. Al-Awadhi |
|  Empirical Macro-econometrics |
|  Empirical Micro-econometrics |
|  Economic Public Policy |
|  Energy Economics |
| Environmental monitoring & Damage Assessment | Dr. Massimiliano Porcelli |
|  Exposure Assessment |
|  Analytical Methods Development & Validation | Dr. Massimiliano Porcelli |
|  ISO certification/accreditation |
|  HSE Managemen |
| Audit and Achieve ISO standards’ compliance, | Dr. Mamdouh A. Hammouda |
| Supporting achievement of ISO 17025 Accreditation, |
| Quality control and Quality Assurance of Laboratories,  |
| Petrochemicals and Polymers fields, |
| Synthesis of biologically active Materials |
| Food Biochemistry and Microbiology  | Dr. Yesudhason Poulose |
|  Quality Assurance and Management |
|  Bio monitoring and Chemical Contaminants |
|  Chromatography and Mass Spectrometry Techniques |
|  Laboratory Certification and Accreditation | Dr. Yesudhason Poulose |
| Quality Assurance & Quality Control of Laboratories | Dr. Tariq M. Khokhar |
|  ISO 9001 Certification of Laboratories |
|  ISO/IEC 17025 Accreditation of Laboratories |
|  Internal Auditing of Laboratories for ISO 9001 and ISO 17025 compliance  |
|  Trainings on QA & QC, and ISO Standards |
| Macroeconomic Policy | Dr. Ayele U. Gelan |
|  Energy Policy |
|  Labor Market Policy |
|  Food Policy |
|  Trade Policy |
| Energy Transition  | Dr. Sulayman S. Al-Qudsi |
|  Digital Transformation for Sustainable Growth | Dr. Sulayman S. Al-Qudsi |
|  Labor-Education nexus for Human Resources Development. |
| National Innovation system | Dr. Husam Arman |
|  Technology and Innovation Management |
|  R&D Management |
|  SMEs development |
| Macroeconomic Policy Analysis | Dr. Siddig A. Salih |
|  Fiscal Policies |
|  Strategic Planning |
| Generative AI, Arabic Natural Language Processing | Dr. Hanaa H. Alostad |
| Automated Dataset Annotation, Social Network Mining. |
| Civil Engineering | Eng. Haneen J. Rajab |
| Waste Management | Eng. Haneen J. Rajab |
| IAQ |
| Safety and Occupational Health |
| AHA First Aid, CPR and AED |
| Occupational Health & Safety Management | Eng. Nour Al-Turkait |
|  Waste Management |
|  First Aid, CPR & AED |
| Engineering Designing & Manufacturing . | Eng. Mansour Al-Khaldi |
| Reverse Engineering |
| Preventive maintenance  |
| Maintenance contract  |
| Theory of Statistics | Ahmad F. AL-Khayat |
| Apply a random weighted average with random sample size.  |
| Risk Assessment Studies | Meshari A. Al-Qallaf |
| Safety and Occupational Health |
| Crises Management |
| Psychological Hazards Effects on Employees Performance.  |
| First Aid, CPR and AED |
| Risk Assessment Studies | Shaheen M. Al-Dashti   |
| Safety Management and Occupational Health |
| First Aid, CPR and AED |
| Solid Waste Management  |
| First Aid, CPR and AED |
| Engineering Designing & Manufacturing  | Eng. Fahad Alahmad |
| Manufacturing by 3D printers  | Eng. Fahad Alahmad |
| Reverse Engineering |
| Engineering Training for Students |
| Engineering Designing & Manufacturing  | Eng. Kadeja J. AlhossainiEng. Kadeja J. Alhossaini |
| Manufacturing by 3D printers  |
| Reverse Engineering |
| Engineering Training for Students |
| Preventive Maintenance  |
| Instrumentation Designing | Eng. Yaqoub Wael Alqattan |
| Electronic Maintenance |
| Maintenance Contracts  |
| Energy System Planning. | Yousef S. Al-Qattan |
| Power Electronic Systems. | Yousef S. Al-Qattan |
| Coding, Data Processing, Analysis, and Visualization |
| Human-Computer Interaction (HCI) and Assistive Technology | Shafeah Al-Merri |
| Environmental Health | Mohammad AL-Hijji |
| Health, Safety & Environment  |
| Industrial Health and Occupational Safety |
| Preventing Accidents at Work  |
| Studies and Statistics related to Work Accidents, Injuries, and Occupational Illnesses  |
| Marine Environment | Sharifa Barak Al-Yaseen |
| Safety and Occupational Health |
| First Aid, CPR and AED |