GJU | الجامعة الألمانية الأردنية German Jordanian University

SNREM SCHOOL OF NATURAL RESOURCES ENGINEERING AND MANAGEMENT

SCHOOL OF NATURAL RESOURCES ENGINEERING AND MANAGEMENT

INDUSTRY LINKS CAPABILITIES AND COMPETENCIES

Water resources engineering and management
- Water availability studies
- Water balance and budget analysis
- Watershed hydrology modeling and management
- Groundwater flow and well hydraulics modeling
- River hydraulics
- Irrigation system design and operation

Groundwater modeling and management
- Analysis of ground water resources
- Groundwater availability models
- Groundwater modeling, quality and quantity

Surface water modeling and management
- Analysis of surface water resources
- Lake and stream modeling, quality and quantity

Pipe networks
- Potable water network design and analysis
- Strom and sewer network design and analysis

Environmental Engineering
- Treatment processes (Design and operation)
- Environmental remediation and attenuation techniques
- Water quality evaluations, remote sensing
- Physical, chemical and biological treatment of wastewater
- Chemical processes design

Environmental and water data analysis
- Statistical analysis and summarization of environmental data
- Data quality control

Geology and Geochemistry
- Geochemical prospecting
- Water quality
- Surficial processes
- Mineralogy
- Groundwater
- Geochemical modelling
- Isotopic studies

Environment
- Radiological hazards
- Environmental assessment and planning
- Geomorphology
- Landscape studies
- Environmental hazards
- Environmental and climate change

Heritage studies
- Archaeological landscapes
- Archaeometry

Environmental Management
- Environmental compliance auditing for industrial organizations
- Environmental Management system auditing for the industrial organizations.

Water Quality Engineering and Management
- Reservoir water quality prediction and management modeling
- Point source and nonpoint source pollution modeling
- Groundwater quality modeling and protection
- Industrial and domestic wastewater management
- Treated wastewater recycling and reuse
- Gray water reuse

Waste Engineering and Management
- Characterization and generation rates of waste analysis
- Routing analysis and optimizing for Solid Waste collection
- Landfill Engineering design and operation
- Heat content analysis for solid waste
- Landfill Biogass generation rates analysis and collection system design
- Leachate collection system design and leachate management
- Medical waste and Hazardous waste management

Climate Change
- Downscaling Modeling of Climate Change impacts on water resources on the basins
- Evaluation of mitigation and adaptation options to the impacts of climate change
- Policy and strategy formulation on climate change for different sectors

Hydrology and Water Resources
- Hydrologic modeling
- GIS applications in water resources
- Integrated water resources management
- Basin rehabilitation
- Flood modeling
- Meteorological analysis
- Climate change impact on land and water resources
- Water resources best management practices
- Low impact urban development
- Drought analysis

Chemistry
- Water quality analysis
- Air quality analysis
- Organic chemistry

Renewable Energy (PV, Solar thermal, Wind, Geothermal, Biogass, Biomass)
- Project development
- Consultation
- Design
- Supervision
- Tender document preparation
- Tender document evaluation
- Owner representative

Energy Audit
- Energy auditing consultation
- Energy efficacy measure
- Energy solution
- Energy economics study and analysis

Power Transmission and Distribution
- Consultation
- Design and development
- Supervision

Energy Storage
- Consultation
- Design
- Supervision

Pump and Lift Stations
- Consultation
- Design
- Supervision

Power Electronics for Energy Applications
- Design
- Prototyping
- Testing and validation
- Integration and control

CONTACT INFO

School of Natural Resources Engineering and Management
German Jordanian University
P.O.Box 35247
11180 Amman – Jordan

Dr. Zakariya Dalala
Assistant Dean / Energy Engineering Department
Zakariya.dalalah@gju.edu.jo
+962 6 429 4215