

Ramia Ajarmeh – Civil and Environmental Engineering

1. **Family name:** Ajarmeh
2. **First name:** Ramia
3. **Nationality:** Jordanian
4. **Education:**

Institution	Queen’s University of Belfast – Belfast/UK
Date: from (month/year) to (month/year)	11/2010 – 7/2014
Degree(s) or Diploma(s) obtained	PhD Environmental Engineering

Institution	University of Jordan – Amman/Jordan
Date: from (month/year) to (month/year)	2/2006 – 3/2009
Degree(s) or Diploma(s) obtained	MSc Civil Engineering (water & environment) Non-Thesis Track

Institution	University of Jordan – Amman/Jordan
Date: from (month/year) to (month/year)	9/1998 – 1/2003
Degree(s) or Diploma(s) obtained	BSc Civil Engineering

5. **Thesis description**

PhD Thesis Title: “*Generation of Daily Rainfall Time Series Using a Hybrid Stochastic Model*”

Rainfall occurrence and intensity are the most important drivers of the surface runoff process. The knowledge of the occurrence and intensity of rainfall events is a crucial concern for water resources planners and designers. Stochastic rainfall generators are considered a robust tool that can generate predictions of the rainfall intensity of any time length at the locations of interest. The validity of the stochastic daily rainfall generators for the Middle East in general and Jordan specifically has not been well researched. The aim of the thesis research is to estimate daily rainfall time series in different climates with particular focus on semiarid and arid regions. As an important result of the research, a hybrid single-site stochastic daily rainfall generator (the hybrid model) has been developed using both a two-state first-order Markov chain based model and enhancing the simulation of long dry series using a modified Serial approach. According to the research results of the comparative performance of the single-site stochastic daily rainfall generators, the hybrid model performance in both wet and semi arid regimes was superior. The stochastic hybrid daily rainfall generator developed in this research is also a basis as a climate change downscaling tool for semiarid and arid regime such as Jordanian hydrological regime.

6. **Language skills:** mark 1 (worst) to 5 (best) for competence:

Language	Reading	Speaking	Writing
Arabic	Mother tongue		
English	5	5	5

7. **Membership of professional bodies**

Member of Jordanian Engineers Association: 2003 – present
 Head of Specialty / Environmental Engineering - Jordanian Engineers Association: 2019 – present

8. Other skills

Computer skills: Microsoft Office (Word, Excel, PowerPoint), MATLAB and ArcGIS

9. Training

- Project Management Short Course – Queen’s University Belfast, Belfast – UK, 10-13/Jan/2011
- (20 Hours) Training Program on "Monitoring and Evaluation of Performance and Projects" at the National Institute for Training (NIT), Amman – Jordan, 2009
- (50 Hours) GIS Training Course conducted in Consultation, Studies and Training Center (CSTC) – Al-Balqa Applied University, Royal Jordanian Geographical Centre, Amman – Jordan, 2008
- (40 Hours) Pilot Training Program on "Logical Framework in the Context of Project Cycle Management "at the NEMTA National Training Unit in NIT, Amman – Jordan, 2004

10. Present position

- Assistant Professor of Environmental Engineering – Civil Engineering Department, University of Jordan
- Environmental & Social Expert

11. Key qualifications

- More than 17 years of professional experience
- Senior E&S Expert, EIA and Environmental Management Expert
- Senior E&S Auditor
- Senior Lecturer of Water and Environmental Engineering courses at University of Jordan – Civil Engineering Department
- Preparation of BSc and MSc / Water and Environmental Engineering program and courses curriculums, Civil Engineering Department, University of Jordan

12. Employment record

From [Year]: 2014 To [Year]: present

Employer: University of Jordan

Positions held: Assistant Professor / Environmental Engineering - Civil Engineering Department, School of Engineering

- Taught Courses: Statistics & Probability, Numerical Methods, Drinking Water Engineering, Wastewater Engineering, Environmental Engineering, Water Reuse and EIA courses
- Supervision: Supervising graduation projects for water distribution networks, sewer networks, water and wastewater treatment plants including E&S constraints and impact assessment
- Supervising MSc theses in the discipline of Environmental & Water Resources Engineering

From [Year]: 2010 To [Year]: present

Employer: Freelancing Consultant

Positions held: Water, Environmental and Social Expert

Job Description: Participating and/or leading a number of EIA/ESIA and Environmental Audit studies, Environmental & Social Due Diligence, Environmental & Social Focal Point, Follow up and Environmental Management & Monitoring programs for different projects (Mining, Cement plants, Recycling plants, Oil and Oil shale projects, Renewable energy projects, Water supply, Wastewater collection and treatment systems and water reuse, infrastructure projects) in Jordan and abroad. Tasks included:

- Preparing baseline, impact assessment and management studies as part of EIA/ESIA for water resources, socioeconomics, health and safety components
- Review of policies, legislations and institutional environmental requirements

- Developing Environmental and Social Management Plans (ESMP) and Waste Management Programs
- Preparing Environmental and Social Action Plan (ESAP)
- Developing Stakeholder Engagement Plan (SEP)
- Developing Resettlement Policy Framework (RPF) and Resettlement Action Plan (RAP)
- Supervise and monitor implementation of ESAP
- Supervise and monitor and support implementation of SEP
- Preparation of Land Acquisition and Compensation Framework (LACF)
- Support in preparation of AESR for IFIs.
- Preparing Environmental and Social Due Diligence including: Environmental and Social Audit, Environmental and Social Assessment, Gap analysis and IFIs Performance Requirements compliance assessment

From [Year]: 2003 To [Year]: 2010

Employer: Jordan Ministry of Agriculture

Positions held: Civil Engineer – Head of Tenders' Branch /Engineering Department/ Projects Directorate

Job Description: Processing and supervision of civil works tenders in the agricultural projects (rural roads, irrigation channels, gabions, and water harvesting).

13. Honors and awards

PhD scholarship from University of Jordan 2010 – 2014

14. Recent publications

Amer Alkloub, Rabab Allouzi, Haider Alkloub & **Ramia Al-Ajarmeh**, 2018, “*A Full 3-D Finite Element Analysis of Group Interaction Effect on Laterally Loaded Piles*”, Modern Applied Science, Vol: 12, No: 5, pp. 9-21, DOI: 10.5539/mas.v12n5p9

H. Naghawi, **R. Al-Ajarmeh**, R. Allouzi, A. AlKlub, K. Masarwah, A. AL-Quraini, M. Abu-Sarhan, 2018, “*Plastic Waste Utilization as Asphalt Binder Modifier in Asphalt Concrete Pavement*”, World Academy of Science, Engineering and Technology International Journal of Civil and Environmental Engineering, International Scholarly and Scientific Research & Innovation, Vol:12, No:5, pp. 566-571

Rabab Allouzi, Amer Alkloub, Hana Naghawi, **Ramia Al-Ajarmeh**, 2018, “*Fracture Modeling of Concrete in Plain and Reinforced Concrete Members*”, International Journal of Civil Engineering, Vol: 16, issue: 8, DOI:10.1007/s40999-018-0353-5

Ramia Al-Ajarmeh & Mahmoud Al-Alawneh, 2019, “*Decentralized Wastewater Treatment System Impact Assessment on Groundwater Resources: Case Study Dana Biosphere Reserve/ Jordan*”, Modern Applied Science, Vol: 13, No: 3, pp. 58-65 DOI: 10.5539/mas.v13n3p58

Ramia Al-Ajarmeh, 2020, “*Evaluating the Risk of Cement Kiln Dust Landfill on Groundwater Vulnerability to Pollution*”, Jordan Journal of Civil Engineering (under review)