Muhammad Sanaullah

Institute of Geology, University of the Punjab, Lahore +923336919691 • +924299230467• sana.ullah.geo@pu.edu.pk

Skype: saani100



Personal Statement

I am a Pakistani Hydrogeologist having tent years of experience in teaching, research and Industry. Previously, I have worked as Hydro-geologist and Jr. Geologist, currently working as a lecturer at University of the Punjab, Lahore. Presently I am a Ph. D scholar at university of the Punjab. I have Received Silver medal in M.Sc. 1st Position in Diploma (IT applications) and several merit scholarships. Good hand over **Arc hydro GIS**, **SPSS**, **Fee Flow, Dips, IX1D, Aqua Pack, GMS** (Ground water Modelling system), **FEFLOW** and Visual **MODFLOW®**. More the 30 research theses students are supervised by me in the field of hydrogeology. I have **14** research publications and have presented eight research papers in international conferences. I am the member editorial of "Bulletin of Environmental studies" and "Geological Bulletin of the Punjab University".

Want to utilise my current analytical skills and knowledge and also help me to further develop these skills in a practical and fast-paced environment. My eventual career goal is to assume responsibility for the analysis and implementation of all scientific data and actively contribute to the overall success of the organization I belong.

Education

Institute of Geology, University of the Punjab

(2013 – **Present**)

Ph. D.

Key Skills gained:

- Ground water Modelling
- Multiple GIS applications
- Understanding of Soil water Interaction and age dynamics of water

Notable Modules - Geomorphology, Mineralogy, Petroleum Geology and Soil mechanics

College of Earth and Environmental Sciences, University of the Punjab

(2009 - 2011)

M. Phil. Earth Sciences

Key Skills gained:

- Hydrological Modelling
- GIS dataset applications and interpretation
- Proficiency in visual MODFLOW and Fee Flow soft wares

Notable Modules - Ground water modelling, Aquifers in hard rock systems, Reginal Tectonics and Petrology

Institute of Geology, University of the Punjab

(2005 - 2007)

M. Sc. Applied Geology

Key Skills gained:

• Geo-technical projects and site management

- Dams and reservoir dynamics
- Geological and reserve estimation mapping
- Assessment of Construction materials for road and buildings

Notable Modules - Engineering Geology, Hydrogeology, Rock mechanics and Soil mechanics

Institute of Geology, University of the Punjab

(2001 - 2004)

B. Sc. (Hons) Applied Geology

Key Skills gained:

- Geological Mapping
- Identification of geological structures
- Microscopic Analysis of rocks of different origins

Notable Modules - Geomorphology, Mineralogy, Petroleum Geology and Soil mechanics

Work Experience

Institute of Geology, University of the Punjab, Lahore

(**Jan 2011 – Present**)

Duties and Key results:

- Thesis Supervision of sixteen undergraduate and three of M.Phil. students
- Seven Publications in national and international Journals
- Paper presentation in five international conferences
- Significantly improved negotiation skills

Water and Power Development Authority (WAPDA), Lahore

(2007 - 2010)

Duties and Key results:

- Grooming of technical report writing skills
- Site work management
- Helping train new team members in key competencies
- Demonstrating an in-depth knowledge of key health and safety standards used within the industry.

Research Publications

- Waqas, M., Luqman, M., Sanaullah, M. (2017). "Assessment And Extraction Of Hydrological Parameters Of Munda Dam Watershed – A Geospatial Approach". Sci. Int.(Lahore), Vol.(29(4). pp. 867-873
- Sanaullah, M., Ahmad, S.R., Yousaf, Z., Abbas, Z., Akhtar, Z. H., Zaheer, M. and Hamza, A. (2017)."Effect of Course Aggregate and Slag Type on the Mechanical Behavior of High and Normal Weight Concrete Used at Barrage Structure". Int. J. Econ. Environ. Geol. Vol. 8(2).pp. 21-27
- Sanaullah, M., Zaman, N., Ahmad, S.R. and Khan, A.J. (2017). "Fluoride Mobilization Mechanism and Its Influence on Groundwater Quality Parameters for Deltaic Plain, District Of Lower Indus Basin". 2nd IWA Regional Symposium on water, Wastewater and Environment, March 22-24, 2017, Cesme-Izmir, Turkey

- Iman, S. and Sanaullah, M. (2017). "Investigating Alluvial Aquifer for Groundwater Management in Khanewal District, South Punjab, Pakistan., 1st Int. Conference on Emerging Trends in Earth and Environmental Sciences (ETEES), March 9-10, 2017, Lahore, Pakistan
- Sanaullah, M., Ahmad, S.R., Yousaf, Z., Abbas, Z., Akhtar, Z. H., Abbas, M., Mustafa, J., Zaheer, M. and Hamza, A. (2017). "Suitability Assessment of Concrete Mix Designs for New Khanki barrage, Gujranwala Pakistan. Int. Conference on New Challenges in Geotechnical Engineering (ICNCGE), Jan 23, 2017, Lahore, Pakistan
- Anjum, W. A., Ahmad, S. R., Sanaullah, M., Majid, Z. and Mirza, K. (2016). "Geographic Information System and Modeling Approach For Groundwater Systems Of Rechna Doab, Pakistan, Pakistan Journal of Science. Vol. 68(4).pp. 470-476
- Sanaullah, M., Akram, M. and Dawood, B. (2016). "Post Flood Water Quality Discrepancies in Physicochemical Scenarios, Sialkot, Pakistan, Int'l Journal of Advances in Agricultural & Environmental Engg. (IJAAEE) Vol. 3, Issue 1 (2016) ISSN 2349-1523 EISSN 2349-1531
- Sanaullah, M., Mehmood, Q, Ahmad, S.R. Ahmad and Rehman, H (2015). "Arsenic Contamination Trends of Abandoned River Banks: A Case Study at the Left Bank of River Ravi, Lahore. Int. j. econ. environ. geol. Vol:6(1).pp.21-24
- Sanaullah, M. Ahmad, S.R. and Kamran. M. (2015). "Water balance assessment of river bounded aquifer using visual Mod flow applications, Eastern Punjab Pakistan., Wageningen Soil Conference, August 23-27, 2015, wageningen, Netherlands
- Rahman, H., Sanaullah, M. and Bashir, W. (2014). Suitability Studies of Kirana Hills Aggregate as Sub Base Material at Lahore Ring Road, Northern Phase, Pakistan, International Conference on Earth Science Pakistan 2014, Baragali, University of Peshawar, August 29-31, 2014, conf. Proceedings .pp. 107
- Naeem, M, Khalid .P, Sanaullah, M., Zia, D., (2014). Physio-mechanical and aggregate properties of limestones from Pakistan. Acta Geod Geophys. DOI 10.1007/s40328-014-0054-8 [I.F 0.52]
- Sanaullah, M. and Malik, M. A. (2014). "Relative Impact of Land use Intensity on water quality degradation in Northern Districts of KPK, Pakistan, 3rd annual international conference on Geological and Earth sciences, September, 22-23, 2014, Singapore
- Sanaullah, M. and Ahmad. A. (2013). "Morphometric relation to the geological structures of Haro River drainage basin, northern Pakistan" at 10th meeting of Saudi society for Geosciences, 15-17 April 2013, Damam, Saudi Arabia
- Sanaullah, M. (2013). Arsenic contamination in prospect of depth variation: A case study in Sabzazar Housing Scheme, Lahore, Pakistan. International conference on water, Mineral and Energy Resources, Oct, 5-8, 2013, Karachi

Research Projects

- Punjab University Research project 2011-12 -(Research Grant- 0.125 Million): Geochemical and Geo-Electrical Studies in Faisalabad District, Pakistan
- Punjab University Research project 2013-14-(Research Grant- 0.125 Million): Physico-chemical studies of ground water in Sialkot district, Pakistan

- Punjab University Research project 2014-15-(Research Grant- 0.125 Million): Evaluation of Jhelum River Aggregate a suitable construction Material for Normal weight Concrete
- Punjab University Research project 2015-16-(Research Grant- 0.125 Million): Soil Liquefaction Susceptibility Mapping of Rawalpindi City, Pakistan

Conferences, Workshops and Trainings

		7. 10.12.2011
Certificate of Participation	"National Training workshop on Instrumental Techniques for Monitoring of Hydro-Pollutants	May 10-12, 2016
	in Environment "PINSTECH, Islamabad	
Certificate of Participation	"World quality Day"	April 5 , 2016
Certificate of Participation	"Preparation of Geological Maps in GIS	Jan 25-29 , 2016
Continuate of Farticipation	Environment "	ŕ
Certificate of Attendance	" IACEEE International conference, UAE "	Jan 10-11, 2016
and Presentation		
Certificate of Attendance	"Wageningen Soil Conference, Netherlands"	August 23-27, 2015
and Presentation		
Certificate of Participation	" Quality Assurance in Education "	April 3, 2015
Certificate of Attendance	" Annual International Conference GEOS 2014,	August 23-27, 2015
and Presentation	Singapore "	
Certificate of Participation	" Aggregates and Concrete Awareness"	October16, 2014
Certificate of Participation	" Advance Seismic Workshop"	April 10-11, 2014
Certificate of Attendance	"3rd Annual International Conference on	Sep 22-23, 2014
	Geological and Earth sciences, Singapore"	
Certificate of Participation	"Mineral and Energy Resources of Pakistan with special Emphases on Punjab"	December 5, 2013
Certificate of Participation	" Baluchistan Earthquake and Emergence of New Isands"	October 2, 2013
Certificate of Attendance	"Sustainable Water Management"	Oct 28-30, 2013
Certificate of Participation	"Faculty Training Program for core Module"	June 19-20, 2013
Certificate of Attendance	"10th meeting of Saudi society for Geosciences,	April 15-17, 2013
and Presentation	Damam, Saudi Arabia"	
Certificate of Participation	" Quantitative Data Analysis using SPSS "	Jan 12,2013
Graduate assessment Test	(GAT)- Subject Applied Geology	2013
Certificate of Participation	"Teaching as a profession &Communication"-	2013
Certificate of Participation	" Annual prize distribution ceremony"-	Dec 13, 2012
Certificate of Participation	"Research Ethics, Endnote and Turnitin"	Oct 2-3, 2012
Certificate of Participation	" Disaster Risk Management"	April 11-12, 2011
Certificate of Participation	" Global Positioning System"	March 16-17, 2010
Certificate of Participation	"Climatic change and water issues of Pakistan"	Dec 15, 2007
Certificate of Participation	" Global Water Scarcity and Pakistan"	Jan 24-25, 2007
Certificate of Participation	"Tunneling Techniques"	Sep 19-21, 2006
Diploma	" Diploma in Windows Applications"	2004

Projects and Professional Assignments

- Geo-electrical investigations of Nai Gaj Dam Site (Dadu, Sindh)
- Groundwater Modelling of Lahore Aquifer
- Geo-technical design and investigations of Wuch Tangi Dam (FATA, Pakistan)
- Geo-technical design and investigations of Ganai Dam (FATA, Pakistan)
- Geological Mapping and Geophysical studies for Gabral –Kalam Hydropower Project
- Big Bird Hydrological investigation (Riwind, Lahore)
- Technical Report writing of Darwat Dam Project
- Construction materials testing for Pakistan Motorway (Islamabad to Peshawar)
- Hydrological investigations of Mangla- Marala Link canal
- Ground water quality and Geo-electrical investigations of FDA, Faisalabad
- Secant piling for construction of SERENA HOTEL in Islamabad for MUGHALS, Islamabad
- Concrete work by means of TRIMIE for CMPAK for construction of Monopole tower in Data Town,
 Lahore

Professional Associations

- The International Association of Hydrogeologists (IAH)
- Punjab Geological Society (PGS)
- Society of Economic Geologists and Mineral Technologists (SEGMITE)
- Association of Geoscientists for International Development (AGID)
- South Asian Free Media Association (SAFMA)
- Pakistan Association of Petroleum Geoscientists (PAPG)

Hobbies & Interests

I have a keen interest in event management and program hosting. I was the member editorial of magazine "PHOOL- "and "FARAN" during my time at college and during this period I organised a number of very successful exhibitions and events both on and off campus. I am Editor in Chief of magazine "AL-ARZ – الر فنال " of Institute of Geology, university of the Punjab. Program hosting, Poetry and games are at good grade. One of my travelogue "به اب بمال یما" is in press. I even have the collection of my poem about 55 in number.

Personal Summary

Date of Birth: 21-01-1979

Father's Name: Ghulam Muhammad Language known: English, Urdu, Punjabi

References

References will be furnished when required.	