

Dr. SAJJAD ALI

Address: House No. B-2, Sector 5H, North Karachi.

E-mail: sajjad.ali@neduet.edu.pk
sajjad.ali@cloud.neduet.edu.pk

Cell: 0092345-2303174



Professional Engineering (PE - Transportation Engineering)

Thesis Publication

- **Ph.D. in Civil and Petroleum Engineering**
 - Doctor of Philosophy (PhD) in “Civil and Petroleum Engineering” thesis titled “*Impact Assessment of Roadway Traffic on Urban Air Quality*” from “*NED University of Engineering and Technology, Karachi*”.
- **Master of Engineering in Civil Engineering (Transportation Engineering)**
 - Master of Engineering – “*Civil Engineering specialization in Transportation Engineering*” with the thesis titled “*Statistical Model for Effect of Polymer Modified Asphalt on Rutting Potential of Asphalt Concrete Road*”.

Publications in Scientific Research Journal

- **Ali, S.**, Beg, T., Farrukh, M., Siddiqui, M. O. R., & Sun, D. (2024). Enhancement of hot mix asphalt (HMA) properties using waste polypropylene. *Environmental Engineering and Management Journal*.
- **Ali, S.**, Siddiqui, M. O. R., & Ali, H. (2024). Performance evaluation of flexible pavement using polyethylene terephthalate (PET). *Mehran University Research Journal of Engineering and Technology*, 43(3), 126-135.
- Ahmed, A., **Ali, S.**, Ahmed, A., & Khan, F. (2024). Investigating the Impact of Domestic Sewage on Asphalt Concrete Pavement Strength. *Engineering, Technology & Applied Science Research*, 14(2), 13617-13623.
- **Ali, S.**, Siddiqui, M. O. R., Noman, S. M., Beg, T., & Sun, D. (2022). Class C fly ash as a substitute for mineral fillers in asphalt mixtures. *Polimery*, 67(9), 438-449.
- **Ali, S.**, Siddiqui, M. O. R., Ahmed, A., Iqbal, K., Noorani, M. U., Sun, D., & Iqbal, W. (2021). Performance evaluation of hot mix asphalt using textile waste. *Industria Textilă*.
- Khan, S., Ahmed, A., **Ali, S.**, et al (2020). Use of Scrapped Rubber Tires for Sustainable Construction of Manhole Covers. *Journal of renewable Material*.

- Memon, R. M., Khiani, R. K., **Ali, S.**, Mustafa, T., & Pasha, Y. N. (2020). Traffic Congestion Issues, Perceptions, Experience and Satisfaction of Car Drivers/Owners on Urban Roads. Mehran University Research Journal of Engineering and Technology, 39(3), 489- 505.
- **Ali, S.**, Mehdi, R., & Noman, S. M. (2019). Comparison of Carbon Monoxide for Metropolitan City at Traffic Stressed Sites – A Case Study of Karachi 2002 – 2018. Journal of Mechanics of Continua and Mathematical Sciences., 14(6), 190-204.
- Qadir, A., Gazder, U., & **Ali, S.** (2018). Comparison of SBS and PP fibre asphalt modifications for rutting potential and life cycle costs of flexible pavements. Road Materials and Pavement Design, 19(2), 484-493.
- Rafi, M. M., Qadir, A., **Ali, S.**, & Siddiqui, S. H. (2014). Performance of hot mix asphalt mixtures made of recycled aggregates. Journal of Testing and Evaluation, 42(2), 357-367.

Publications in Scientific Research Journal – In pipeline

- Hussain, E., Ali, S., Hussain, M., Newnam, S., & Yasmin, S. Assessing Key Factors Contributing to Fatigue Occurrence Among Ride-Hailing Drivers and Riders. Available at SSRN 4425537.

Publications in Scientific Conferences

- **Ali, S.**, & Ejaz, A. (2024). Effect of Recycled Concrete Aggregates (RCA) for Rutting Susceptibility in Flexible Pavement. Construction Technologies and Architecture, 13, 41- 48.
- **Ali, S.**, “*Economic Framework for Public Mass Migration Towards Gwadar: A Prospect Port-City*” in fifth International Conference on Infrastructure in Developing Countries (IEDC-2017), Karachi, Pakistan - 2017.
- Zaidi, M., **Ali, S.** & Ahmed, M, “*Development of Aggregate Source Information*” in “Pakistan Urban Forum, Lahore, Pakistan presented on Dec 2016.
- Rafi, M. M., Qadir, A., Siddiqui, S. H., & **Ali, S.** (2012). Use of Recycled Aggregates in Hot Mix Asphalt Mixture. in Third International Conference on Construction in Developing Countries (ICCIDC-III) -Advancing Civil, Architectural and Construction Engineering & Management, Bangkok, Thailand.

Professional Experiences - Jan 2011 to till date

- **Assistant Professor– March 2018 - till date**

Currently I am working as Assistant Professor in Department of Civil Engineering. Before that, I worked as **Lecturer** and **Laboratory Engineer** in Department of Urban & Infrastructure

Engineering – 17th Jan, 2011 to 5th May 2016 and 5th May 2016 to 13th March, 2018 respectively.

I have taught many courses, designing of university manual and supervised many other construction projects within and outside the university premises. Commercialization of laboratories were also taking place under my job credentials.

○ **Teaching and Supervision Experience – Undergraduate, Post Graduate and PhD**

Course Taught - Doctorate (PhD) Level:

- Urban Environment and Ecological Systems (UE-702) – Department of Urban and Infrastructure Engineering.
- Decision Making and Analysis Techniques for Infrastructure Management (UE-604) – Department of Earthquake Engineering.
- Probability and Statistics (CE-603) – Department of Urban and Infrastructure Engineering.

Course Taught - Master Level:

- Pavement Analysis and Design (CE-569) – Department of Civil Engineering.

Master of Engineering Research Supervision:

Supervised Master ISP titled;

- Impact Assessment of Roadway Traffic on Urban Noise Pollution – Department of Civil Engineering.
- Behavior of Hot Mix Asphalt (HMA) Using Recycled Asphalt Pavement (RAP) – Department of Civil Engineering.
- Analysis of Driving Fatigue in Intercity Commercial Drivers – Department of Civil Engineering.
- Effects of Spatio-Temporal Variations in Land-Use Patterns and Segregated Traffic Mix on Noise Levels (Continue) – Department of Environmental Engineering.

Construction Materials, Transportation Engineering-I, Introduction to Transportation Planning & Operations, Engineering Drawing, Urban Mass transportation & Currently Teaching Transportation engineering, Soil Mech. Traffic Engineering and Management. I have also design the work book for steel structures for B.E Urban Engineering along with numerous Final Year Design Projects.

Laboratory Engineer/Site Engineer/Material Consultant:

Worked as “Laboratory Engineer” in “NED University of Engineering & Technology”; with a job responsibility of Management, Commercialization of Laboratories and also having a command on all types of construction materials testing. Worked as Site Engineer in many

roads within NED University. Materials testing and site supervision along with the management of men and materials. I also work as Highway Quality inspector on the highway connecting Mubarak Village, Paradise and Hub River Road.

Worked & Organized Seminars & Funded Projects

- Helped the project member to complete successfully one research funded project sponsored by FWO in due course of time and is currently working for timely completion of another research project for PAK-HY oil limited.
- Collected field and laboratory data for Construction Material Research Group (CMRG) to develop and Launch Aggregate Information system(AIS) map, the first of its kind in the region.
- UN-HABITAT project “Preparation of Disaster Risk Management Plan for Gadap Town”. Traffic Congestion Quantification and Estimation of Congestion Economic Cost.

Academic Qualifications

- PhD – Civil and Petroleum Engineering - 2022
NED University of Engineering and Technology, Karachi.
- Master of Engineering – Civil Engineering – Transportation Engineering - 2013
NED University of Engineering and Technology, Karachi.
- Bachelor of Engineering – Civil Engineering – 2010.
NED University of Engineering and Technology, Karachi.

Certifications

- **Creative Writing** – completed the certificate course of creative writing under “Digiskill.pk” under “Virtual University” – Batch February 2020 to April 2020.
- **Freelancing** – completed the certificate course of creative writing under “Digiskill.pk” under “Virtual University” – Batch February 2020 to April 2020.
- **Water Law** - five (05) days training on “Water Law” conducted by NED University of Engineering and Technology and Panjwani-Hisaar Water Institutes – September 2019.
- **Dispersion Modelling** - five (05) days training on “Atmosphere Emission and Near field dispersion Modelling” conducted by National Center for remote Sensing and Geo-informatics (NCRG) SUPARCO HQs, Karachi – February 2018.
- **Occupational Health and Safety** – Two days training on “Managing Safely” by certified trainer of “Institute of Occupational health and safety (**IOSH**) – certified by IOSH UK – November 2016.
- **Communication, Personal Grooming and Business Management** – Three months course to enhance the communication capability and organizational behavior. The course was conducted by Ensign Commuque under kind supervision of “NEVTAC (Govt. of Pakistan)” entitled “Effective communication and Personal Grooming”- 2008
- Distance Learning course entitled “**Business Management**” with the duration of “two months” from “The Institute Publication Internationals”, Karachi.

- Having a training session of determining rutting behavior of asphalt pavement through rutting depth machine of “cooper technology” – NED UET, Karachi.
- **Petrographic Studies** of Rock-Specialty Sedimentary Rock -2012, ten days’ course, Geological Survey of Pakistan - Karachi.
- Training of Arc GIS -2012 Three Days Course, NED University of Engineering & Technology.

Invited Lecture and Trainings

- **Invited Lecture** “fifth International Conference on “Infrastructure Engineering in Developing Countries IEDC (*1.5 CPD, NED UET 2017*)
- Road Safety Analysis and Modeling (*1.0 CPD, NED UET 2015*)
- Changing life style – Our Turn to lead (*0.5 CPD, IEP 2015*)
- Traffic Microsimulation Modeling (*1.0 CPD, NED UET 2015*)
- Professional development of Engineer (*0.5 CPD, IEP 2014*)
- Invited Lecture “fifth International Conference on “Infrastructure Development of developing Countries IEDC (*1.5 CPD, NED UET 2017*)
- Occupational Health and safety (*2014 and 2016, NED UET*)
- Some other training related to use of Latex, use of Plastic, Entrepreneurship, leadership skill etc. has also in my credentials.

Community Services

Al-Momin Welfare” – 2011- till now: Intend to provide student loans and coffins to needy and poor people. We also manage to give food (occasionally) in deserving areas.

Languages Skills

Proficient in English & Urdu. A little knowledge of Arabic, Mandarin, and Hindi.

Co-Curricular Responsibility

Faculty In-charge of NED University Debating Society (DS) the oldest student society of the university) & was previously looking as faculty head of Literature and Publication Society (LPS) as well.

Personal Data

Father’s Name	:	Naseem Arfat
Date of Birth	:	21 st -April-1989