

# Umme Amina Mannan

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## EDUCATION

### PHD IN CIVIL ENGINEERING

University of New Mexico

Albuquerque, NM

May 2017

GPA 4.03/4.00

### MS IN CIVIL ENGINEERING

University of Akron

Akron, OH

August 2012

GPA 3.953/4.00

### BSC IN CIVIL ENGINEERING

Bangladesh University of Engineering  
& Technology

Dhaka, Bangladesh

August 2012

GPA 3.64/4.00

## LINKS

Google Scholar:// [Amina](#)

LinkedIn:// [AminaEI](#)

## GRADUATE COURSEWORK

Foundation Engineering I

Soil Improvement

Advance Soil Mechanics

Applied Numerical Methods I

Geographic Information Systems

## PAVEMENT SOFTWARE

AASHTOWare • WinJULEA • KENPAVE

• GIS • LTPP

## SOFTWARE

ABAQUS • ANSYS • STAAD • AutoCAD

• ArcGIS • SPSS • Microsoft Office • MS

Project • OriginLab

## PROGRAMMING

Matlab •  $\text{\LaTeX}$  • R • C • JAVA

## REVIEWING SERVICES

• Applied Rheology • Journal of Testing  
and Evaluation • Transportation Research  
Board

## WORKSHOPS

• Introduction To Rheology with  
Anton-Paar • Asphalt Binder Extraction  
and Recovery (Rotavapor) for NMDOT  
• DSR Testing for NMDOT

## RESEARCH EXPERIENCE

ASPHALT BINDER LAB | University of New Mexico & University of Akron

2012–Present & 2010–2012 | Albuquerque, NM & Akron, OH

- Conducted experiments on asphalt binders using RTFO, PAV, DSR, BBR and Rotational Viscometer
- Supervised and trained undergraduate, masters and new PhD students
- Coordinated communication between professors and suppliers

PAVEMENT LAB | University of New Mexico

2012–Present | Albuquerque, NM

- HMA mix design and volumetric properties of mixture
- Dynamic Modulus Test, Low-Temperature Thermal Cracking Test, Four-point Bending Beam Test, Hamburg Wheel Tracking (HWT) Test, Moisture Induced Sensitivity Test (MIST).

CHEMICAL TESTING | University of New Mexico & University of Akron

2010–Present | Albuquerque, NM & Akron, OH

- Experience on FTIR, GPC, DSC, TGA, SEM

## TEACHING EXPERIENCE

MECHANICS OF MATERIALS | Instructor

Spring 2015 | University of New Mexico, NM

Developed course syllabus, assignments and exams; handled teaching and grading with full responsibility; advised students during office hours

SOLID MECHANICS | Teaching Assistant

Fall 2011 & Spring 2010 | University of Akron, OH

Graded the assignments; gave lectures while professor was out of town; advised students during office hours

SOIL MECHANICS & SOIL MECHANICS LAB | Teaching Assistant

Fall 2010 & Spring 2012 | University of Akron, OH

Graded the assignments; advised students during office hours

Supervised undergraduate students during the lab; graded lab reports

## CERTIFICATIONS

ENGINEER INTERN (E.I.) | Ohio Board of Registration for Professional Engineers and Surveyors

May 2012 | OH

## AWARDS

2017	\$1,000	APANM Best Poster Award
2017	\$1,000	UNM Civil Engineering Scholarship
2016	\$2,000	APANM Asphalt Industry Scholarship
2016 & 2015	\$500	UNM Civil Engineering Travel Grant
2015	\$1,000	Elvidio V. Diniz, P.E. UNM Water Resources Scholarship, ASCE.
2014	\$500	Student Research Grant (SRG), GPSA, UNM

## PROFESSIONAL AFFILIATIONS

- University of New Mexico-Future Leaders in Pavement and Transportation (UNM-FLPT)
- Society of Women Engineers (SWE)
- New Mexico Section of American Society of Civil Engineers (ASCE)
- Engineers Without Borders UNM (EWB-UNM)
- American Society of Civil Engineers (ASCE)