

Mohamed Mahgoub, PhD and PE, is an NJIT Associate Professor and Concrete Industry Management Program Director. He is also a Fellow of American Concrete Institute (ACI). He is an expert in bridge rehabilitation, inspection, rating, design and analysis. He is very familiar with the policies and design standards of the American Association of State Highway and Transportation Officials and the Federal Highway Association.

After receiving his Bachelors degree, Dr. Mahgoub received his Master's Degree from McMaster University in Hamilton, Ontario, Canada and his doctorate from Carleton University, Ottawa, Canada. As a doctoral student in Canada, he contributed significant changes to the 2005 National Building Code of Canada (NBCC). His contributions focused on higher mode effect; base shear and moment distribution on building; torsional behavior of single and multistory buildings; and the significance of P-delta effect on high-rise buildings.

Prior to joining NJIT, he was the lead bridge engineer for the Chicago consulting firm Alfred Benesch & Company, working out of Lansing, Michigan on bridge design for the Michigan Department of Transportation (MDOT). His personal experience includes: highway bridge analysis and design, rehabilitation and construction, and scour analysis. He was responsible for performing the design and analysis for bridges. Dr. Mahgoub is knowledgeable in the use of the following manuals and guides: AASHTO Standard Specifications for Highway Bridges, several DOT Bridge Design Manuals and Guides, several DOT Bridge Standard Plans, and Pay Item Code and Specification Books and Task Manuals. Dr. Mahgoub has designed several bridges in Michigan, Illinois, Wisconsin and Pennsylvania. He has also performed several bridge inspection and load rating in several big cities in Michigan such as Detroit, Grand Rapids, Lansing and Flint. He was in charge of performing annual scour analyses of all primary and secondary bridges in Calhoun County, MI.

After joining NJIT, Dr. Mahgoub was involved in research of several construction material projects for several associations, companies, and state institutions. Different topics were investigated such as concrete strength, pervious pavements, fiber reinforced concrete, whitetopping pavements, and high performance concrete. He was also involved in Recycled Aggregate Concrete (RAC) research. He has been supervising several graduate and undergraduate research projects. He has been the co-advisor for MS and PhD degrees. Dr. Mahgoub has also filed a patent by NJIT titled "A Proposed Test Method for Rapid Measurement of Fines Content in Soil". This patent will allow enhanced soil classification by determining fines content in 5 to 15 minutes depending on soil type instead of the 48 hour method currently used.

Dr. Mahgoub is a Professional Engineer and has served as a member in several concrete industry related organizations such as American Society of Civil Engineers (ASCE), Precast/Prestressed Concrete Institute (PCI), International Concrete Repair Institute (ICRI), and American Concrete Institute (ACI). For ACI, he has participated in activities since 2003. These activities include special publication chapter authoring, committee presentations, session moderation, and served as a member of five committees. Because of this, he has been appointed by ACI as the Chair of Committee 555 (Concrete with Recycled Materials) for two three-year terms which ran through March, 2018. Dr. Mahgoub has been also appointed as the vice president of the local New Jersey ACI Chapter and has been selected as a judge for their annual award. He is also the advisor of

NJIT ACI Student Chapter. Dr. Mahgoub is a member of NJIT Strategic Planning for Graduate Research and doctoral Studies Committee.

Dr. Mahgoub has more than 20 technical and scientific publications and presentations to his credit. In addition, he has been selected to be a reviewer for several reputable journals such as ACI Materials and Structural Journals, ASCE Bridge Journal, PCI Journal, and American Society for Testing and Materials (ASTM) International Journal. Dr. Mahgoub has been also serving as a panelist for the National Science Foundation, NSF and National Research Council, NRC.