CIM Program Welcomes A New Professor

In August of this year, we had the privilege of welcoming Dr. Mohamed A. Mahgoub, PhD, PE to our faculty. Prof. Mahgoub’s duties will be directed to CIM program where he will teach in the CIM curriculum and assist in our research efforts.

Dr. Mahgoub received his undergraduate degree in 1990 from the Civil Engineering Department of Al-Azhar University in Cairo, Egypt and completed his Masters degree in 1997 at McMaster University in Hamilton, Ontario, Canada. His Masters studies involved development of two innovative strengthening techniques for column base joints at the nuclear power station in Pickering, Ontario, Canada. In 2004, he was awarded his PhD from Carleton University in Ottawa, Ontario, Canada. His PhD contribution resulted in significant changes in the 2005 National Building Code of Canada, NBCC provisions addressing: (a) higher mode effect, (b) base shear and moment distribution on buildings, (c) torsional behavior of single and multistory buildings, and (d) the significance of P-delta effect in buildings. During his graduate studies, Dr. Mahgoub has teaching (continues on page 2)
Summer Intern Activities

The summer of 2009 found two of our senior CIM students involved in pursuing some real life experience in working as interns with two different employers, the Port Authority of New York and New Jersey (PANYNJ) and Sika Corporation, a member of our Patrons’ group.

Leann Orama spent his summer working for the PANYNJ with the laboratory and research groups. There he had the opportunity to work under the supervision of the PANYNJ’s lab technicians performing the standard tests that are normal in the regular operations of the Port Authority lab. However, the highlight of his summer was participating in the research into the design and construction of the Port Authority’s runway barrier systems modules.

Both of these students enjoyed their experiences this summer and gained a much better understanding of the application of the knowledge gained in the classroom and applying that knowledge in a real life situation.

A copy of each of these student’s presentations about their summer intern experiences will be posted on the NJIT CIM webpage.

Mark Hrubec, a senior in the CIM program, spent his summer productively in the laboratories of Sika Corporation. Mark learned all of the routine laboratory testing procedures employed at Sika as well as getting a great understanding of how Sika works as well as the various products, and the testing for all of those products, that Sika has as part of their inventory.

CIM Program Welcomes A New Professor - (Continued)

several courses including Engineering Mechanics, Surveying, Soil Mechanics, Dynamics, Finite Elements, Highway and Transportation, Bridge Design, and Properties of Material. Dr. Mahgoub’s experience in teaching gave him a solid background to carry out effective knowledge transfer. Some of his publications are educational in nature.

After receiving his Bachelors degree, Dr. Mahgoub worked as a structural engineer for the Engineering Consulting Office in Cairo, Egypt, where he gained experience in designing building structures and construction engineering. During his PhD studies, Dr. Mahgoub joined Alfred Benesch & Company, a consulting company based in Chicago, Illinois, working out of the Lansing, Michigan office as a lead bridge engineer.

He gained over seven years of bridge design experience with the Michigan Department of Transportation (MDOT). He has wide experience in bridge rehabilitation and design, and is knowledgeable in MDOT, American Association of State Highway and Transportation Officials (AASHTO), and Federal Highway Association (FHWA) policies and design standards. His personal experience includes highway bridge analysis and design, rehabilitation and construction, and scour analysis for bridges.

Dr. Mahgoub is interested in pursuing research in a variety of interrelated topics in engineering such as transportation, infrastructure, sustainability, green design, and structural modeling. He has participated in research throughout a significant portion of his academic and industrial career in collaboration with other colleagues, faculty, research entities, and personnel.

Interested in hosting a Social? .... A plant visit ?....... a guest speaker ? ... ... ....

It’s easy—just contact one of our staff and we’d be happy to schedule that with you.

Staff Directory

Prof. John Wiggins  wiggins@njit.edu
Prof. D. Washington  washD@admin.njit.edu
Prof. M. Mahgoub  mahgoub@njit.edu
Ms. Jewel Domino  domino@njit.edu

Leann Orama, referred to in the article to the left, is the brother of Anlee Orama, who graduated from our CIM Program in May. While I have had twins in the program, this is the first time in my experience that I have had the privilege of teaching 2 brothers so close in age.

One other interesting note about Leann Orama—he has been very involved in student government during his time at NJIT and was elected as the President of the NJIT Student Senate this year. This is the first time in my experience that a CIM student or an Engineering Technology Student has attained this honor and congratulations to him for this achievement.

It’s a Small World....
Interested in establishing your own scholarship fund to support CIM students? With the high cost of higher education, a scholarship opportunity for a CIM student can really go a long way to help a needy student to further their education. Scholarships are also a powerful recruitment tool for the NJIT CIM program.

If you would like to help a needy CIM student and the NJIT CIM program please feel free to contact: Colleen Vandervoot, vandervo@njit.edu or by phone at 973-596-8505.

CIM Internship / Co-Op Position

**Company:** Sika  
**Location:** Lyndhurst, NJ  
**Supervisor:** Ondrej Masek

**Broad Function and Purpose:** Internship/Co-op position designed to fulfill the CIM degree requirement. A minimum of 250 hrs of Lab practice required to be completed. As this is an internship/co-op position, registration must be accomplished through the NJIT Career Development Services. Course requirements include a short presentation and paper based on the experience during the internship/co-op.

**Specific Responsibilities:**
- Prepare and test mixes as designed by R&D Chemists/Engineers
- Test competitive products.
- Work on minor projects with minimum supervision.
- Maintain accurate and complete records of mix design, test methods and results of the tasks performed.
- Maintain lab as a safe and clean workplace following Sika Corporation Lab Safety guidelines.
- Support other departments in Sika as requested by Department Manager.

**Qualifications/Experience:** Approval of the Program Director and Career Development Services.

Although the position is open to all, Upper Classmen will be granted priority over lower classmen.

Interested in having an Intern or a Co-op Student?

**Contact John Wiggins, NJIT’s CIM Program Director at wiggins@njit.edu**

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**NJIT’s CIM program presents at ECC’s 2009 Annual Labor Market Career Seminar**

Mr. Anthony Culpepper, Assistant Director of NJIT’s Center for Pre-College Programs was kind enough to invite the CIM program to present at the 2009 Annual Labor Market Career Seminar. This program is sponsored on every year by Essex County College’s Department of Special Programs. The seminar itself was one of many that was given by the Talent Search Program and Newark Works—Newark Youth Experience Program. The main audience and focus was on the young adults whose grade levels ranged from 8th grade to recent high school graduates.

The program ran for 4 days, August 17 thru 20 and lasted from 9am until 12pm with a question and answer session that ended around 2pm. Ms. Jewel Domino, CIM specialist for NCE, presented on the last day. The audience was very inspired. They where intent listeners and asked tons of questions. By the time Ms. Domino finished presenting the CIM program to the participants, she had no materials or business cards left. Not only did the students take material but so did other presenters as well. They felt that what NJIT and the CIM program are doing for the students and the community is amazing! They promised to pass the word about the CIM program and also invited Ms. Domino to present at their upcoming events.

Just to name a few of the prestigious presenters: The Honorable Carlos M. Gonzalez-Councilman at Large, The Honorable Ronald Rice Jr.-West Ward Councilman, Glorious King Sau-Creative Consultant, Director of Communications & Performing Arts Center for “STREET WARRIORS INC.” and Akil Kokayi Khalifani, Ph.D.-Director of the ECC Africana Institute. Ms. Cheryl P. Wilkerson, ECC Associate Director of the Talent Search Program put this wonderful event together.

It was obvious that most came away with knowledge, education, understanding and most of all, a feeling of pride.

Want to get more involved or just know what’s going on?

If you’re a member of the Patrons group and wants to get more involved or just want to know what’s happening right now, there is a conference call for the Patrons and Program Director on the first Monday of each month at 3 P.M.

All are invited. Contact either Prof. John Wiggins or Patrons Chairman Bob Sells for the call in number.

Do you know what’s coming in February?

**Wine and Cheese.....**
2009-2010 Calendar of Upcoming Events

August 31, 2009 - First Day of Classes
September 7, 2009 - Labor Day - No classes
October, 2009 - National Board of Director’s Meeting, Arizona State University, Tempe, AZ.
   *(Tentative Date - Exact Date, Location to be provided)*
October, 2009 - Regional Board of Director’s Meeting
   *(Tentative Date - Exact Date, Location to be provided)*
November 9, 2009 - Registration begins for Spring 2010 Semester
December 9, 2009 - Last Day of Classes for Fall Semester
December 11 - 17, 2009 - Final Exam period
January 15, 2010 – Newsletter
February, 2010—World of Concrete
February, 2010—Wine Tasting Event
April 15, 2010 - Spring Newsletter
April, 2010—National Board of Director’s Meeting, Middle Tennessee State University, Murfreesboro, TN
April 2010—Construction Industry Career Day, Brookdale College,