

MARCH 12 & 13

HOLIDAY INN SOMERSET, NJ

OFFERING UP TO 12 PDH CREDITS FOR LICENSED
PROFESSIONAL ENGINEERS IN NJ, NY & PA



REGISTRATION DEADLINE:

MARCH 5, 2014

Register early to avoid being closed out.
Registration is ONLINE ONLY!

NOTE: Contributions and payments to 501(c)(6) organizations are not deductible as charitable contributions on federal income tax returns although they may be deductible as trade or business expenses.

REGISTRATION FEE INCLUDES:

Full Day Registrants: Continental breakfast, lunch & seminars. (6 PDHs)

Morning Session Registrants: Continental breakfast & the morning seminar

Afternoon Session Registrants: Lunch & the afternoon Seminars

MEMBER RATE: (NJSPE member or NJIT Alumni)

DATE	MAR. 12	MAR. 13
Full Day:	\$250	\$250
Morning Session:	\$100	\$130
Afternoon Session:	\$160	\$130

NON-MEMBER RATE:

DATE	MAR. 12	MAR. 13
Full Day:	\$290	\$290
Morning Session:	\$120	\$160
Afternoon Session:	\$180	\$160

WANT THE DISCOUNTED MEMBER RATE FOR THIS SEMINAR?

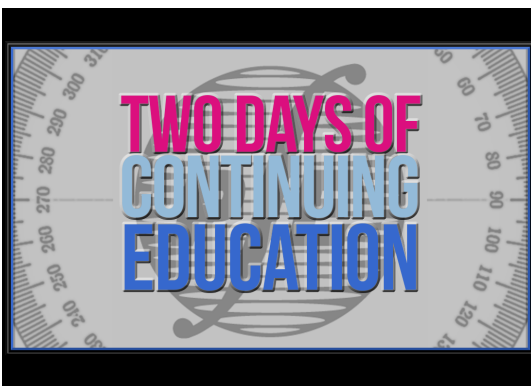
Join NJSPE today & take the member rate. Call NJSPE at (609) 393-0099 X1109 for additional details. Ask to speak to the Membership Director, Kelly Biddle.

REFUNDS:

If you register and cannot attend the seminar, please contact NJSPE in writing, prior to the event, by email to info@njspe.org or by fax to (609) 393-9891. NJSPE will accept cancellations with a refund through March 5, 2014. A cancellation fee of \$25 will apply. Refunds cannot be issued after March 5, but registration substitutions are permitted. See below.

SUBSTITUTIONS:

Notification of a registrant taking another registrants place must be sent in writing from the original registrant by email to info@njspe.org or by fax to (609) 393-9891. Include your name, your full contact information, the new person's name and the new person's full contact information and any instructions regarding payment.



TO REGISTER, GO TO:

<https://myprereg.com//Events/NJSPE14>

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WEDNESDAY, MARCH 12

9 — 10 AM Registration & Continental Breakfast

Title of Session: Professional Engineering Ethics 101

Accreditation: 2 PDH credit (NJ, NY & PA approved)

Time: 10—12 AM

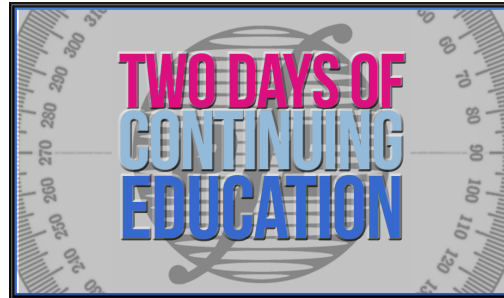
Description: The learning objective is to expose the seminar participants to various engineering related professional and statutory codes of ethics in order to inculcate ethics awareness and an understanding of ethical standards common to all jurisdictions, including those of the participants, so that the participants understand the boundaries of ethical engineering behavior.

Part I - This will be an introduction to common statutory and regulatory ethics rules, wherein the participants will be taught why they exist, how they govern their practice and what the practical implications of unethical behavior can be. Participants will be given examples of common ethics rules and some illustrative case studies to consider, followed by instruction on how violations of such ethics rules are commonly dealt with by the administrative agencies which have jurisdiction over their practice locales.

Part II - This will be an introduction to the National Society of Professional Engineers (NSPE) Code of Ethics, wherein the participants will be taught why they exist, how they were developed, how professional codes of ethics can affect their practice and what the practical implications of unethical behavior can be to members of professional engineering societies. Participants will be given examples of common ethics rules and some illustrative case studies to consider, followed by instruction on how violations of such ethics rules are commonly dealt with by NSPE and state engineering societies which have jurisdiction over their practice locales, with a particular emphasis on the similarities and differences between governmental and professional society sanctions.

Part III - This will be a discussion of the practical

reasons for ethical practice, with examples of how unethical practice can present professional liability and legal issues, licensure issues and moral issues based upon case studies where unethical practice has resulted in the impairment of the public health, safety and welfare. Participants will be challenged with using their new knowledge to suggest resolutions for hypothetical ethics problems posed by the instructor.



Speaker: Lawrence P. Powers is Partner and co-chair of the Construction Litigation Department at Hoagland, Longo, Moran, Dunst & Doukas, LLP. Larry's practice is focused on handling complex, multi-party construction related professional liability claims. He has tried numerous complex construction cases to a jury verdict. Admitted in 1984, he has over 25 years of experience in litigating, arbitrating and mediating construction disputes, regularly handling difficult loss prevention and risk management assignments for all of the major professional liability insurers. Larry serves as general counsel to AIA-New Jersey, the New Jersey Society of Professional Engineers and ASLA-New Jersey. He regularly represents design professionals in disciplinary matters before the New Jersey State Board of Architects and Landscape Architects and the New Jersey State Board of Engineers and Land Surveyors. Mr. Powers has achieved a peer review rating of "AV", the highest mark given by other members of the legal profession. He is admitted to practice in the state and federal courts of New Jersey. He was named "Lawyer of the Year 2012" in the Construction Litigation category by Best Lawyers® for the Woodbridge, NJ Metropolitan area. A 1980 graduate of Villanova University, Larry was employed in the general and mechanical contracting construction

industries and the heavy and specialized transportation industry before receiving his law degree as a night student from the Seton Hall University School of Law. He has been an invited lecturer on professional liability and land development issues at the Princeton University Graduate School of Architecture, the Pratt Institute School of Architecture and is a regular featured speaker at the Annual Conventions of AIA-New Jersey, ASLA-New Jersey, the New Jersey Society of Professional Engineers and the New Jersey Builders Association. His lectures have been certified as continuing education courses by the New Jersey State Boards of Architects and Landscape Architects and Engineers and Land Surveyors. Affiliations: Counsel, AIA-New Jersey, the New Jersey Society of Professional Engineers and ASLA-New Jersey; former counsel, Garwood Planning Board and Hopewell Borough Planning Board.

12 Noon – Certificates of Completion will be distributed to morning registrants.

You must be present in order to receive course documentation. Certificates of completion will not be e-mailed or mailed out.

12 Noon—1 PM – Buffet Lunch

Title of Session: Seismic Characterization of Recycled Aggregate Concrete

Accreditation: 4 PDH credit (NJ, NY & PA approved)

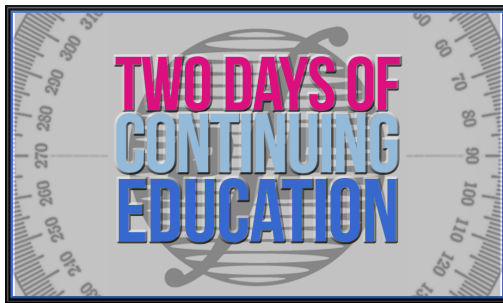
Time: 1 — 5 PM

Description: There are significant environmental benefits of recycling waste concrete and reusing it as aggregate for structural concrete, but the use of Recycled Aggregate Concrete (RAC) is yet limited to non-structural applications such as road sub-base. Widespread application of RAC in areas such as seismic design requires an improved knowledge of RAC behavior under multiaxial state of stresses. The main objective of this course is to investigate the characterization of seismic properties of RAC by developing a stress-strain model which can reasonably describe the behavior under both unconfined and confined conditions. An extensive experimental program, including testing of several plain RAC

cylinders as well as reinforced RAC columns, was conducted at NJIT. There are numerous variables influencing the behavior of confined RAC, creating unlimited experimental possibilities, so the tests parameters were chosen to be limited to square columns with normal strength RAC and rectilinear tie configurations. It was concluded that the compressive failure mode of RAC columns is not different from normal concrete columns. A discussion/Q&A period will be used to apply knowledge gained to real world examples.

Speaker: Mohamed Mahgoub, PhD and PE, is an NJIT Assistant Professor and Concrete Industry Management Program Director. 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 Bachelor's 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). Earlier, he was a structural engineer for an Egyptian engineering consulting firm where he gained experience in designing building structures and construction. 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 has served as a member in several concrete industry related organizations such as American Society of Civil Engineers (ASCE), Precast/Pre-stressed 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 a three-year term which runs through March, 2015. Dr. Mahgoub has been also an active member of the local New Jersey ACI Chapter and has been selected as a judge for their 49th 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 Na-

tional Science Foundation, NSF.

5 PM – Certificates of Completion will be distributed to full day and afternoon registrants.

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THURSDAY, MARCH 13

8–9 AM – Registration & Continental Breakfast

Title of Session: Seismic Design and Retrofitting of Structures

Accreditation: 3 PDH credits (NY, NY & PA approved)

Time: 9 AM – 12 Noon

Description: The course begins with an overview of structural vibration and how existing seismic analysis procedures - such as equivalent static force method - are established. Fundamental seismic design concepts and loading are then discussed with specific reference to both building and bridge design codes/specifications. The course will also provide an introduction to nonlinear structural response and the new seismic design approach known as pushover analysis. Various retrofitting concepts for buildings and bridges will also be presented. A discussion/Q&A period will be used to apply knowledge gained to real world examples.

Speaker: M. Ala Saadeghvaziri (pronounced: saw-dek-va-Z-ri) is a professor of Civil and Environmental Engineering at New Jersey Institute of Technology. He joined NJIT in 1988 as an assistant professor after receiving his BS (with high honors, 1981), MS (1983), and PhD (1988) degrees from University of Illinois @ Urbana-Champaign. His research interest is in the area of structural engineering with emphasis on nonlinear response of structural and mechanical systems under extreme events such as earthquake ground motion and effect of blast loads, serviceability of concrete structures, and application of finite element methods. Since starting his career at NJIT, he has served as principal investigator on many projects for federal and state agencies such as National Science Foundation

(NSF), Dept. of Defense (DoD), and New Jersey Department of Transportation. Among these are: Design for Deflection Control vs. Use of Specified Span to Depth Ratio Limitations: Project 2009-04," NJDOT; Protective Jackets to Blunt Blast on Buildings and Bridges (ProJack-B4), DoD; Seismic Design and Rehabilitation of Electric Power System: Application of Advanced Technology, NSF; Implementation of Recommended LRFD Guidelines for Seismic Design of Highway Bridges in New Jersey NJDOT; Controlled Composite Action (C2A) Connectors: An Innovative Design to Eliminate Deck Cracking, UTRC; Causes and Control of Transverse Cracking in Concrete Bridge Deck, NJDOT. Dr. Saadeghvaziri is a registered professional engineer in the state of New Jersey and a fellow of ASCE. He is extensively involved with professional service by serving as reviewer for various agencies such as NSF and many Journal publications. He was a member of ASCE Seismic Effects Committee, and is currently serving on Bridge Security Committee, and Blast Shock and Vibratory Effect Committee. He is also an ABET Program Evaluator.

12 Noon – Certificates of Completion will be distributed to morning registrants.

You must be present in order to receive course documentation. Certificates of completion will not be e-mailed or mailed out.

12 Noon—1 PM – Buffet Lunch

Title of Session: NJ / NY Environmental Regulations & Due Diligence

Accreditation: 3 PDH credits (NJ, NY & PA approved)

Time: 1—4 PM

Description: This course presents an overview of the current NJDEP wetlands, flood hazard, coastal zone and Highlands regulations as they pertain to site development and design. In addition, a brief review of NYSDEC regulations related to wetlands, SEQR (State Environmental Quality Review Act) and other environmental activities will be presented. A discussion of environmental liability and environmental due diligence as they relate to past use and contamination of sites will focus on the United States Environmental Protection Agency's All Appropriate

Inquiry (AAI) Rule, the New Jersey Technical Requirements for Site Remediation (TRSR) and ASTM's Standard E-1527-13. Several case studies will be presented from sites previously analyzed by the instructor. Time permitting, interactive web sites will be utilized in the class to allow familiarization with available online agency resources. A discussion/Q&A period will be used to apply knowledge gained to real world examples.

Speaker: Vincent Agovino, Ph.D., P.W.S., is an environmental professional with over 30 years of diversified experience in environmental science, ecological science, public, environmental and occupational health. His areas of technical expertise include; soils, wetlands, sewage disposal, contamination assessment, site remediation, environmental health program administration, project management, regulatory enforcement and technical training. He has extensive experience in working with federal, state and local environmental regulatory agencies throughout New Jersey, New York, Pennsylvania, North Carolina, Maine, Massachusetts, and Maryland, including the U.S. Army Corps of Engineers (USACOE), the United States Environmental Protection Agency (USEPA), United States Fish and Wildlife Service (USFWS), New Jersey Department of Environmental Protection (NJDEP), New York State Department of Environmental Conservation (NYSDEC) and others. Dr. Agovino is a licensed New Jersey Health Officer and Registered Environmental Health Specialist. He is also a certified Professional Wetland Scientist with the Society of Wetland Scientists and a Registered Sanitarian with the National Environmental Health Association. He holds certifications from the NJDEP as a Licensed Site Remediation Professional (LSRP), a Subsurface Evaluator and the New Jersey Department of Health and Senior Services as a Lead Inspector/Risk Assessor. Dr. Agovino holds a B.S. degree in Environmental Science/Public Health, a M.A. degree in Administration and a Ph.D. in Environmental Engineering.

5 PM – Certificates of Completion will be distributed to full day and afternoon registrants.

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