

## ***INSTRUCTORS***



**Michelle L. Wilson**, FACI, is Director of Concrete Technology at the Portland Cement Association (PCA), Skokie, IL. She has over 20 years of experience relating to concrete materials, specifications, performance, troubleshooting, and repair. She is responsible for the development, content, and delivery of PCA's educational programs and products covering the entire spectrum of concrete technology, and is co-author of PCA's *Design and Control of Concrete Mixtures*. She has given numerous workshops and presentations around North America including the World of Concrete, International Builder's Show, and CONAGG/CON-EXPO.

Wilson, a member of ACI's Board of Direction, is Chair of ACI Committee 301, Specifications for Structural Concrete, and a voting member of ACI Committees TAC Construction Standards Committee, 201, Durability; 329, Performance Testing Requirements; and E707 Specification Education; and serves as a consulting member on 117 Tolerances and 311 Inspection of Concrete.

She received the 2008 ACI Young Member Award for Professional Achievement and became a Fellow of the Institute in 2010. Wilson is a member of ASTM International Committee C09, Concrete and Concrete Aggregates, and serves on the C09 Executive Committee.

Prior to joining PCA in 1999, she worked for Construction Technology Laboratories, PCA's sole subsidiary, specializing in concrete evaluation and troubleshooting on various projects throughout the United States. Wilson has also worked as a field inspector performing quality control for STS Consultants, Ltd. in Milwaukee, WI.

Wilson received her BS in architectural engineering from Milwaukee School of Engineering, Milwaukee, WI, with an emphasis in structural engineering and concrete materials.



**George Seegebrecht**, PE, FACI, is a Principal with Concrete Consulting Engineers, LLC. Mr. Seegebrecht has more than 30 years of experience in the construction industry. For the past 30+ years his primary work has been troubleshooting concrete construction problems concerning design, materials and workmanship issues.

Mr. Seegebrecht holds a B.S. in Civil Engineering from Valparaiso University and is a licensed professional engineer in multiple states. He has provided litigation support and/or testimony in the U.S. and Canada on various issues of construction design, materials and workmanship.

He is a frequent seminar speaker on numerous programs for the Portland Cement Association (PCA) and the University of Wisconsin. He has developed custom educational sessions for clients such as USACE, various contractors and Owners.

Before starting Concrete Consulting Engineers, George worked for 25 years with the Portland Cement Association (PCA) and its subsidiary CTLGroup, Inc. He is a member of the American Concrete Institute (ACI) and is an active voting member on numerous committees. He is also a member of the American Shotcrete Association (ASA), and the International Concrete Repair Institute (ICRI). Mr. Seegebrecht currently serves as Examiner of Record for the ACI-Illinois Certification Program.



**John Gajda** is a Principal with MJ2 Consulting, PLLC. Mr. Gajda's expertise is in the areas of mass concrete, and thermal properties of concrete. With over 25 year experience at CTLGroup, he has helped countless contractors, owners, engineers, and others with mass concrete issues in more than 800 structures throughout the world.

For these projects, Mr. Gajda works with clients to reduce the cost of construction, optimize concrete mixtures for temperature control in mass concrete placements; understand and work within project specifications; manage temperatures and temperature differences, and develop project-specific thermal and crack management plans based on thermal modeling of mass concrete. Modeling is based on software that he developed, enhanced, and refined over the past twenty years. He has also assisted clients in writing and getting changes made to specifications dealing with mass concrete.

Mr. Gajda is a Fellow of the American Concrete Institute, a licensed PE in 27 states, and a PEng in 4 Canadian provinces. He routinely gives presentations about mass concrete and has written many articles and publications, including PCA's Mass Concrete for Buildings and Bridges.

Mr. Gajda holds a B.S. in Ceramic Engineering and a M.S. in Material Science Engineering from Iowa State University. He is a voting member and past chair of the American Concrete Institute (ACI) Committee 207 Mass and Thermally Controlled Concrete, and is a voting member and subcommittee chair for ACI Committee 301 Specifications for Structural Concrete.



**Scott Tarr** is a Consulting Engineer and President of North S.Tarr Concrete Consulting, P.C. With PE licenses in multiple states, his primary expertise is in design, construction, and repair of concrete slabs on ground (interior and exterior) and evaluating flooring failures throughout the United States and internationally.

Over the past 25 years, Mr. Tarr was a Partner with Concrete Engineering Specialists (CES), a Principal Structural Evaluation Engineer for CTLGroup.

Mr. Tarr holds a Master of Science Degree in Civil Engineering from the University of New Hampshire, specializing in Pavements and Constructed Systems.

As a Fellow of ACI, he serves on several committees including 301, Structural Concrete Specifications, 302, Construction of Concrete Floors, 360, Design of Slabs on Ground, and 330 Concrete Parking Lots. In addition to ACI, he is a member of ICRI, ASCC, ASCE, ASTM, and ACPA and has more than 50 publications including *Concrete Floors on Ground* for the Portland Cement Association.



**Matthew D'Ambrosia**, PhD, PE, is a Principal with MJ2 Consulting, PLLC, where he specializes in solving difficult problems for the construction industry. His interests include materials optimization for specialized applications, durability-related mechanisms such as volume change and cracking, as well as new approaches to prediction and verification of service life, durability, and sustainability. He has expertise with large infrastructure and energy projects throughout the US, such as bridges, highways, dams, and power plants. Dr. D'Ambrosia has 18 years of experience in concrete materials behavior and research, including characterization of mechanical properties, development of new experiments, numerical modeling, and mixture optimization.

His areas of expertise include early age volume stability, creep and shrinkage of high performance materials, self-consolidating concrete (SCC), fiber-reinforced concrete, shrinkage reducing admixtures (SRA) and internal relative humidity. He also has experience instrumenting and monitoring structural and material behavior in concrete bridges.

Dr. D'Ambrosia teaches numerous instructional courses for the industry and currently serves as Adjunct Professor in the Department of Civil and Environmental Engineering at Northwestern University. He received his B.S. in Civil and Environmental Engineering from the University of Iowa, Iowa City and his M.S. and Ph.D. in Civil and Environmental Engineering from the University of Illinois at Urbana-Champaign. He is a Licensed Professional Engineer in Illinois, Indiana, and Georgia

Dr. D'Ambrosia is a member of the American Concrete Institute (ACI), the American Ceramics Society (ACerS) Cements Division, and the American Society of Civil Engineers (ASCE). He is the Current Division Chair of the ACerS Cements Division Executive Committee. He is a member of ACI 349 (Nuclear Structures), 231 (Early Age Properties), 209 (Creep and Shrinkage), 236 (Materials Science), 329 (Performance Based Specifications) and 237 (Self Consolidating Concrete). He is the current Chair of ACI 209-C on Model Applicability and Uncertainty and he is the past Chair of Committee 07 Awards for Papers Subcommittee for Wason Medal for Materials Research.



**Nicholas J. Carino** is a concrete technology consultant specializing in the area of nondestructive testing. He retired in 2004 from the National Institute of Standards and Technology (NIST) after 25 years of service.

At NIST, Dr. Carino was involved in research on nondestructive and in-place test methods as well as high-performance concrete. He is best known for his work on the maturity method and the pioneering research that led to the impact-echo method. He participated in NIST failure investigations and structural assessments, including the investigation of the World Trade Center disaster.

He is actively involved in the technical committees of ACI and ASTM, having served as Chair of several committees including the ACI and ASTM committees on nondestructive testing. He is past Chair of ASTM Committee C09 on Concrete and Concrete Aggregates.

Dr. Carino is an Honorary Member of ACI and a Fellow of ASTM. He is a four-time winner of the ACI Wason Medal for Materials Research and has received other awards for his contributions to research and standard development. He is co-editor of the *Handbook on Nondestructive Testing of Concrete* published by CRC press and ASTM.

Dr. Carino received his undergraduate and graduate degrees from Cornell University.



**Claus Germann Petersen** is President of the Germann Instruments companies, and is active in the development, marketing and implementation of GI's test systems for concrete and reinforced concrete, in particular the LOK-TEST and CAPO-TEST pullout systems for in-place compressive strength, the BOND-TEST for tensile and adhesion strength, the Proove'it for Rapid Chloride Permeability, the MERLIN for bulk conductivity, GWT for water permeation, RCT for chloride testing, Profile Grinder for service life estimation, GalvaPulse for corrosion rate, sensors for electrochemical activity (ERE probe and CorroWatch), Auto-Shrink for autogenous shrinkage, ICAR Rheometer for workability, AVA Air Void Analyzer for fresh concrete and stress wave methods for integrity of structures such as the DOCTer Impact-Echo, the s'MASH Impulse Response and the MIRA 3D Tomographer.

Mr. Petersen holds a B.S. in mechanical engineering from the Danish Engineering Academy and a M.S. from the Copenhagen Business School (CBS). He founded in 1974 the Copenhagen Business School's 2-year post-graduate course in Entrepreneurship and Start-Up of High-Tech Small Businesses, and was its professor from 1974 to 1985. He established in 1978 the testing company "In-Situ Testing of Copenhagen", headed it for 20 years, and has extensive experience in the practical application of the test systems spanning over a wide range of structures from major infrastructure projects, nuclear plants, tunnels, sea structures, pavements to high rise structures and residential buildings.

He is frequently lecturing on NDT methods at universities and government or private institutions in Europe, Asia, Middle East and North America and has, during the past 30 years regularly been conducting training courses and workshops in the implementation of the systems on a worldwide basis. Mr. Petersen has authored many papers and books on NDT of reinforced concrete structures and has received a number of awards for his work in the NDT field, e.g. Professor Ostenfeld's Gold Medal from the Danish Society for Structural Science and Engineering.

He is a member of ACI committee 228 on Non-Destructive Testing and ASTM C09.64 Non-Destructive and In-Place Testing, as well as the European RILEM Technical Committee on Non-Destructive Testing.



**Victoria A. Jennings** is a Senior Petrographer with CTLGroup. Ms. Jennings joined CTLGroup in June 1997 as an Assistant Engineer and has gained experience on a variety of structural design, analysis, and evaluation projects. Her educational background in structural engineering enhanced her involvement in projects including the design and analysis of structural steel and reinforced concrete members. Ms. Jennings performed several field investigations, helped prepare contract documents for repair projects, and served as an onsite engineer for concrete facade and garage rehabilitation projects where she gained experience with common deterioration mechanisms in concrete.

Beginning in 2000, Ms. Jennings has performed microscopical examinations of concrete, mortar, stucco, flooring systems, and other construction materials to evaluate condition, quality, and composition.

Her duties have included the use of optical microscopy for the analysis of materials and material-related distress. She has also evaluated rock and stone samples for their suitability as aggregates in concrete and performed analysis of the air-void system in hardened concrete to evaluate resistance to damage in cyclic freezing and thawing environments.

Ms. Jennings holds B.Sc. and M.Sc. degrees in Civil Engineering from the University of Illinois at Urbana-Champaign and is a licensed Professional Engineer in the state of Illinois. She is a member of ASTM Subcommittee C09.65 on Petrography.