

Seventh Joint Engineering Society Conference

January 23 & 24, at the Holiday Inn Holidome, Lafayette, LA

THURSDAY, JANUARY 23, 2003

9:00 – 10:00am

“Project Owner Insurance” or “Application of Engineering and Environmental Geophysics in the Built Environment: *Daran Rehmeier, P.E. (1 PDH)*

Many different types of insurance are available for the owner of a construction project. They are purchased to protect the owner from contingencies typically out of their control. During the construction process, there are usually problems that occur and that the owner must bear the full burden of the subsequent cost. These unforeseen problems mean change orders. Change orders come from many directions and if an owner could eliminate even a small portion of them, the dollar savings could be substantial. The application of geophysical tools during the different stages of the construction process can help reduce where at least some of these change orders are coming from. The new field of Subsurface Utility Engineering when applied in a timely fashion can identify conflicts with existing utilities or subsurface infrastructure early in the design phase of a project. Environmental geophysical surveys can identify areas of potential liability to the owner. Structural geophysics when applied during construction is a good QA/AC tool (when applied after a failure it is a good forensic tool). This presentation will highlight many of the applications of engineering and environmental geophysics in the built environment.

Daran Rehmeier was first introduced to geophysics in the oil field while performing open-hole well logging in the gulf. His introduction to near-surface geophysics began in the late eighties while developing an ultra low frequency ground penetrating radar system for mapping shallow stratigraphy. Subsequent work focused on application of radar to civil structures. Educated at Virginia Tech (BS) and LSU (MS), currently he is the managing partner of an engineering and environmental geophysical service company that operates nationwide.

THURSDAY, JANUARY 23, 2003

9:00 – 10:00am

LPDES Phase II Stormwater Regulations: *Darlene Bernard (1PDH)*

This seminar will be an overview of Stormwater Regulations Phase II.

Darlene Bernard has been employed with LDEQ for twelve years. Darlene works in Group 2 Level 2 Minor industrial permits.

THURSDAY, JANUARY 23, 2003

10:30am – 12:30am

Understanding the Dynamics of Risks in the A/E Industry: *By Richard Moeller & Wyatt Sanders (2 PDH's)*

The objectives of this presentation are to demonstrate how the Architect and Engineering professions and professional liability insurance industries interrelate and to provide insight into A/E risks and the origins of A/E professional liability claims.

Pt. 1 will provide a general overview of insurance and the insurance industry as it exists today. We will provide a snapshot of the industry from the A/E's perspective as well as from the insurance company's prospective.

Pt. 2 will look at Risk Drivers and statistics identifying where the risks lie. We will examine what is driving claims from a non-technical perspective as well as some interesting behavioral differences between firms with no losses and firms with higher-than-expected losses. We will also be looking at a more traditional claims analysis by examining such things as “Who Sues” and “Elements Most Often Involved” in claims.

Richard Moeller is an account executive for the firm of Alexander & Sanders Insurance Agency, Inc. in Baton Rouge, LA. The firm specializes in the placement of property & casualty insurance coverage for engineering, surveying, environmental, architectural, accounting, and law firms across Louisiana. Prior to joining the firm in 1999, Richard compiled over 15 years of project management experience working with engineering professionals for CH2M Hill, Inc. in Montgomery, Alabama and West Paine Laboratories, Inc. in Baton Rouge, Louisiana.

Wyatt Sanders is a principal in the firm of Alexander & Sanders Insurance Agency, Inc. in Baton Rouge. Wyatt has had the opportunity to conduct and be a guest speaker for various professional societies such as Louisiana Engineering Society, La DOTD and Facility Planning & Control, Consulting Engineers Council, Construction Specification Institute, American Society of Civil Engineers, and American Institute of Architects on a wide range of risk management and insurance topics.

THURSDAY, JANUARY 23, 2003

10:30am – 12:30am

Using Geogrids to Bridge Over Soft Soils and Improve Pavement Performance:

Sean Wakasien (2 PDH's)

This presentation will cover how geogrids enable designers to overcome site challenges with soft soils. The use of geogrids for roadway base reinforcement will also be discussed. It will also cover how geogrids are more efficient than geotextiles for subgrade improvement and base reinforcement.

Mr. Wakasien has a BSCE and MSCE from West Virginia University. Worked at Tensar from September, 1994 to present time. He has worked as design engineer, then direct sales manager, then Mesa Returning Wall System – License Area Manager, and currently Regional Sales Manager, Southeast.

THURSDAY, JANUARY 23, 2003

3:00pm – 5:30pm

How to Write Grants and Where to Find Funding: *Sheri Lezare (2 PDH's)* (with a 30 minute break at 4:00pm)

This seminar will cover how to organize yourself when grant writing is not your only job in order to produce the most effective proposals in the shortest amount of time, as well as the different parts of a grant and the best sources to use when searching for funding and how to know how much to ask for from each source.

Sheri Lazare is currently working at the University of Louisiana as their Advancement Research Officer. Sheri came to the university after working in the legal industry assisting with Lafayette Volunteer Lawyers and with Lafayette Parish Bar Association and Foundation and the medical industry. She received her BA in English, History and Criminal Justice, and her MA in English, both from the University of Louisiana. She has spoken at Louisiana CASE, APRA-SW, and Louisiana Association of Alumni, and spoke at the Association of Professional Researchers for Advancement International Conference in August in Washington D.C. Sheri is currently serving on the APRA-SW board as the Secretary/Treasurer. She lives in Lafayette, LA with her three dogs and her cat.

THURSDAY, JANUARY 23, 2003

4:30pm – 5:30pm

Engineering Solutions to Maritime Disasters/Safety Considerations:

By Hector V. Pazos, P.E. (1 PDH)

This seminar is an audiovisual presentation incorporating 140 slides that can be presented in 50 minutes, or 280 slides if the Planning Committee chooses to assign two 50 minute sessions. I will be making comments and answering questions regarding each slide, as well as summarizing the background of the “disaster” being presented and pinpointing at the engineering approach and safety considerations that were adopted for each case.

Hector V. Pazos is a Naval Architect, Marine Engineer and Mechanical Engineer. He has been very active for some 30 years in the investigation of many types of marine and offshore oil field accidents, as well as a Salvage Engineer developing salvage plans and assisting to supervise salvage operations (more than 200 major marine oil field mishaps). He has investigated several hundred personal injury

accidents in marine and oil fields. He is also an amateur artist and can make sketches on an easel very quickly, when sketches are necessary to answer certain questions.

THURSDAY, JANUARY 23, 2003

4:30pm – 5:30pm

Advances in Flowrate Measurement: *By Daniel C. Cadwallader, P.E. (1 PDH)*

This session is an overview of recent technical advances in the measurement of liquid and gas flowrates including Coriolis mass flowmeters, magnetic flowmeters, vortex flowmeters, open channel, and orifice plate with Multivaciable transmitters.

Daniel C. Cadwallader graduated from Georgia Institute of Technology in Chemical Engineering. Mr. Cadwallader was an Instrument Engineer with The Foxboro Company for 25 years. He is Senior Application Engineer with ANDON Specialties, Inc. since 1999 for measurement and control applications in Louisiana and Texas.

FRIDAY, JANUARY 24, 2003

8:00am – 9:00am

Re-Thinking What Works in Information Technology: *John H. Stinson, P.E. (1 PDH)*

With its cost increasing at an unrelenting rate, many engineering firms are re-thinking what technologies are important to their firms success.

Mr. Stinson is a licensed professional engineer with over 25 years of experience. He is currently President of Technology Engineers, Inc. of Baton Rouge. His experiences include time spent with Boos, Allen, & Hamilton, Inc. in Bethesda, MD; Turner, Collie & Braden in Houston, TX; and IT Director for the Louisiana DOTD.

FRIDAY, JANUARY 24, 2003

8:00am – 9:00am

Thrust Restraint Design for Ductile Iron Pipe Systems: *Jeffery A. Rash (1 PDH)*

Internal hydrostatic pressure results in unbalanced forces at various locations in a piping system. These unbalanced forces are known as thrust forces and these locations must be provided with sufficient thrust restraint. Thrust Restraint Design for Ductile Iron Pipe Systems will review solutions to thrust force problems and the design procedures for thrust blocks and restrained joints.

Mr. Rash received his Bachelor of Science Degree in Mechanical Engineering from Lamar University. His previous experience includes the positions of Project Engineer, Project Manager, and System Design Engineer for a Pumping System Manufacturer in Texas. Mr. Rash joined The Ductile Iron Pipe Research Association (AWWA), NACE International, Water Environment Federation (WEF), National Society of Professional Engineers (NSPE), and the Texas Society of Professional Engineers (TSPE).

FRIDAY, JANUARY 24, 2003

8:00am – 10:30am

Engineering Ethics – How to be a Professional Engineer:

(with a 30 minute break at 4:00pm)

Robert B. Fisher, Ph.D. (2 PHD's)

Pt. 1: Modern Moral Dilemmas; Ethics such as A. Right vs. Wrong and B. Right vs. Right.
Pt. 2: Engineering Ethical Issues: Discussion of practical issues in business and engineering.

Dr. Fisher was educated in the USA and in Europe. Dr. Fisher has international experience in research, Pasturing, and teaching on the college level in the USA, the Philippines and in Ghana. Dr. Fisher taught at Xavier University in New Orleans for nine years and at Prairie View (Texas) A&M University for three years. Dr. Fisher is presently pastor at St. Anthony's, Lafayette, LA. Dr. Fisher is the author of many articles and of *West African Religious Traditions: Focus on the Akan of Ghana* (Maryknoll, NY: Orbis Books, 1998).

FRIDAY, JANUARY 24, 2003

9:30am – 10:30am

Membrane Treatment of Industrial Water and Wastewater: *By John C. McArdle, P.E. (1 PDH)*

Membrane products have been very rapidly introduced over the past decade for use in large-scale municipal water and wastewater treatment applications. Municipal applications include treatment of surface water for production of potable water, desalination of brackish water and seawater, and recovery of municipal wastewater for reuse in various industrial water applications. Primary advantages of membrane products in these water treatment applications are the reduction of chemical costs and associated waste production, automated operation, smaller footprint, and more consistent and higher water quality compared to conventional water treatment operations.

John C. McArdle is a registered professional engineer who graduated from Manhattan College with a Chemical Engineering degree in 1976 and an MBA in Finance from the University of Chicago in 1986. He worked as a Process Engineer and Technical Service Engineer at UOP Process Division, Sales and Marketing Manager at Allied Chemical Corporation, and is currently Business Manager of Koch Membrane Systems.

FRIDAY, JANUARY 24, 2003

11:00am – 12:00pm

Warranties and Indemnification/Express and Implied: *Steven B. Loeb (1 PDH)*

The source of a warranty or obligation to indemnify can either be through a contract or imposed by law. This seminar will explore both and discuss the advantages and pitfalls. What you don't know can really hurt.

Steven Loeb was born in New Orleans, Louisiana. His education includes The Lawrenceville School, Lawrenceville, NJ (1974); Tulane University, B. Architecture (1982); Loyola University (J.D., 1988). Mr. Loeb is a member of General Counsel American Institute of Architects – LA, American Society of Civil Engineers LA, and National Council of Architectural Review Boards. President Baton Rouge Chapter Construction Specifications Institute. Associate Member, American Institute of Architects. Member of the Attorney Panel to the American Institute of Architects National Documents Committee for the 1997 edition of AIA documents. Member: Baton Rouge, Louisiana State and American Bar Associates and ADA Architectural Barriers Mediator. Area of Concentration: Construction Law, Mediation, Arbitration and Public Contract Law. Telephone: (225) 381-8050; Fax: (225) 387-5397; Email: sbl@bswllp.com or attyarch@aol.com.

FRIDAY, JANUARY 24, 2003

11:00am – 12:00pm

Principles of Project Specifications – An Overview: *Wayne P. Domingue, AIA, CSI, CCS (1PDH)*

Specifications have been essential to construction process and procedures since people first learned to build and use tools. The modern form of specifications came into being in this country along with competitive bidding and the need for contract documents. Our modern processes have mandated the need for various types of specifications. It is also important that the various disciplines are properly arranged and coordinated to form a single clear, concise, complete, and correct document that will become part of the contract for construction.

Wayne P. Domingue is a licensed architect in Louisiana and also holds NCARB certification. Mr. Domingue is currently chief specification writer for Architects Southeast, a Lafayette based architectural corporation. Mr. Domingue is a member of the American Institute of Architects and the Construction Specifications Institute. He has held offices at all levels of the local chapters of both organizations and has also served as Vice President of AIA Louisiana. He has also received recognition as a Certified Document Technologist and most recently as a Certified Construction Specifier by the Construction Specialist Institute and has received a Merit Award by the Gulf States Region of CSI for preparation of project manuals.

FRIDAY, JANUARY 24, 2003

1:30pm – 2:30pm

Fire Safety and Life Safety Issues in Attics of Type V Wood Frame Construction:

Raymond J. Battalora, P.E. (1 PDH)

There are many fire safety and life safety details that are overlooked in the design, plan review,

construction, and inspection of attics in Type V wood frame buildings. This presentation will provide examples of deficiencies relative to egress, fire walls, fire blocking, draft stops, stairway enclosure and elevator enclosure fire-resistive construction for the walls and the top, and other issues in the attic.

Ray Battalora, is a native of Louisiana. He grew up in Covington and earned the BS degree in Civil Engineering at LSU, and the MS degree in Fire Protection Engineering from Worcester Polytechnic Institute. He is a Senior Fire Protection Engineer with Schirmer Engineering Corporation in its Dallas Regional Office. He has managed and performed over 250 fire safety and life safety surveys and plan reviews of occupancies including apartments, assembly, business, day-care, dormitories, industrial, mercantile, and storage. He is a Professional Engineer by examination in Civil Engineering and in Fire Protection Engineering.

FRIDAY, JANUARY 24, 2003

1:30pm – 2:30pm

Dewatering Made Simple – Container Filter Technology: *Gary Skinner (1 PDH)*

A Power Point Video will cover the types of Container Filters available, how they are used in the municipal and industrial market. This presentation shows a simpler way of dewatering sludge, slurries, grits screening materials, thus eliminating drying beds, lagoons, or settling basins.

Mr. Skinner has been associated with the water and wastewater industries for more than 25 years. Flo Trend Systems has been in the solids and liquids separation business for more than 21 years. During that time we have been successful in applying and receiving several patent for his technology.

FRIDAY, JANUARY 24, 2003

3:00pm – 5:00pm

Licensure as a PE versus Discipline: *Bobby E. Price, Ph.D., P.E. (2 PDH's)*

A panel discussion with Louisiana Professional Engineers and Land Surveyors Board members to Discuss licensure as a P.E. versus discipline. Following this presentation, several LAPELS Board members will participate in a question and answer session.

Bobby E. Price retired from Louisiana Tech University in May 1999 after 32 years of service with the rank of Professor Emeritus of Civil Engineering. He serves as Chairman on the Louisiana Professional Engineering and Land Surveying Board, served as President of the Louisiana Engineering Foundation, served as Vice President for the Southwestern Region of the National Society of Professional Engineers, and served as Chairman of the NSPE Licensure and Qualifications for Practice Committee. Dr. Price is currently the President-Elect nominee for the National Society of Professional Engineers.