

**DR. JOHN C. NEMETH**

**President**

**CGJC Enterprises—Research and Education Consultants**

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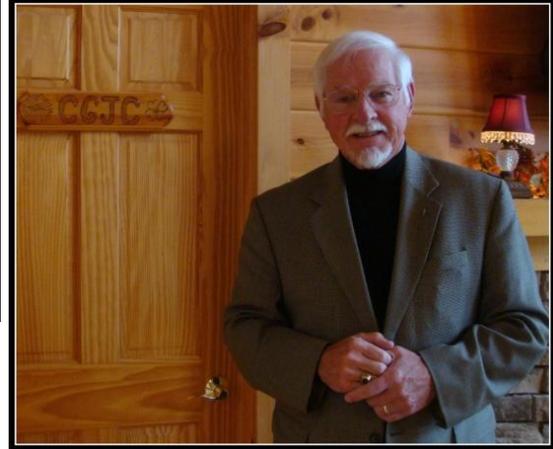
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***Education***

**Ph.D. Ecology, North Carolina State University—1971**

**MS Botany and Zoology, North Carolina State University—1968**

**BS Biology, Appalachian State University—1964**

***Employment History***

**CGJC Enterprises**

President

9/09-Present

**Oak Ridge Associated Universities**

Vice President, University Partnerships

7/98-9/09

**Georgia Institute of Technology, Georgia Tech Research Institute (GTRI)**

1983-7/98

Executive Staff of Director of GTRI for Environmental Science & Technology,  
State Programs & Special Projects

1996-7/98

Associate Director, GTRI, Electro-Optics, Environment & Material Laboratory

1996-7/98

Director, GTRI Environmental Science & Technology Program

1993-7/98

Director, Environmental Science and Technology Laboratory

1983-1993

Joint Professor: School of Civil and Environmental Engineering

1991-7/98

Joint Professor: School of Applied Biology

1991-7/98

Joint Professor: School of Earth and Atmospheric Sciences

1991-7/98

**CH2MHILL**

Director, Environmental Science, Eastern District

1981-83

**Law Environmental**

Chief Scientist & Corporate Environmental Sciences Consultant

1975-81

**Coastal Zone Resources Corporation, Senior Ecologist**

1973-75

**Erskine College, Assistant Professor of Biology**

1972-73

**North Carolina State University, Visiting Assistant Professor of Ecology**

1971-72

## **Experience Summary**

**CGJC ENTERPRISES**—Dr. John C. Nemeth established the research and education consulting firm in September 2009. Along with a cadre of over 200 Associates, he and his Principal Associate, Dr. Grace Toney Edwards, work with universities here and abroad, scores of Federal and State agencies and departments, and numerous firms in private industry. He is active in many organizations such as AAAS National Association of Environmental Professionals, and serves on boards including the Scientists and Engineers for America, The Scottish Foundation of the Virginia Highlands, The Edith Bolling Wilson Birthplace and Museum, The Konnarock Retreat House, and he currently serves on the National Academies' Committee on Under-represented Groups and the Expansion of the Science and Engineering Pipeline. A one-page description which details the firm's capabilities is appended below along with supplemental background on his work at Oak Ridge Associated Universities, as well as consulting experience in environmental sciences and waste management. Dr. Nemeth is also a Senior Associate with the executive search Firm Harris / IIC Partners where he works primarily on attracting Candidates for academic leadership positions.

**Oak Ridge Associated Universities**—Dr. John C. Nemeth served as Vice President for University Partnerships at Oak Ridge Associated Universities (ORAU)—[www.ora.u.org](http://www.ora.u.org)—for over eleven years. During his tenure, he established and developed ORAU's University Partnerships enterprise into the nation's largest science and technology university consortium consisting of 118 university and college campuses, including 99 major research institutions. Nemeth's expanded research and education opportunities for ORAU's member institutions, thus strengthening universities' global leadership in science, technology, engineering, and math disciplines. He dedicated himself over the years:

- To champion the objectives and capabilities of the consortium members, providing them with value-added programs and opportunities sponsored by ORAU and by a myriad of public and private organizations.
- By spending many months each year —on the road making campus visits to our member institutions, meeting with chief research officers and faculty and learning of the tremendous assets, partnering opportunities, and faculty and student needs at each. He has used this knowledge to enhance and expand ORAU's support for its members and sponsored research.
- To be the —face of ORAU's university partnerships and membership advocate, directing programs to promote and create collaborative research and education partnerships, providing leadership in the pursuit of new initiatives and cooperative programs with federal agencies, national laboratories, and industry, and a host of professional organizations such as AAAS, APLU, CGS, AAU, and Federal Laboratory Consortium nurturing collaborative research opportunities for university faculty and students with these entities.
- To lead the pursuit of new initiatives and cooperative programs that add value to the efforts of ORAU's consortium membership, and facilitating interactions among member universities, federal laboratories, and industry to advance science, education, and technology. He established mutually beneficial partnerships between university researchers from across the country not only

*8-25-2009...We took on tough challenges together and achieved some great things.*

*You were instrumental in creating and nurturing relationships with ORAU's member universities. In many cases, you were the face of ORAU. Your leadership was crucial in helping us create a new relationship with UT-Battelle that led to initiatives such as the summer faculty program, high performance computing grants, joint appointments, expanded graduate student opportunities, collaboration in high speed networking, leadership class computing at ORNL, collaboration with Imperial College and many more. Your efforts to expand K-12 STEM education yielded equally impressive results. And the junior faculty awards reached new highs of prestige under your guidance and direction.*

*Dr. Ronald D. Townsend  
Past president of ORAU  
Executive Vice President, Global Laboratory  
Operations  
BATTELLE*

with the Oak Ridge National Laboratory, but with many other organizations. Some of these accomplishments include:

- Leading literally hundreds of partnership projects valuing in the hundreds of millions of dollars in research endeavors and education. These projects have included the full array of science and technology
- Sustaining the tradition of launching research careers of hundreds of promising young faculty through the Ralph E. Powe Junior Faculty Enhancement awards. Since inception, the program awarded 398 grants totaling more than \$1.9 m
- Leading the program that provided member institutions with valuable access to ORNL's leadership class computing resources through the High Performance Computing grant program. The first awards were made last year to four universities and totaled \$300,000.
- Leading the effort to establish the framework for a very successful energy science education program designed to attract funds from the private sector to supplement existing Workforce Development Teachers of Science programs operated within the US Dept. of Energy's Office of Science.
- Being responsible for putting in place a structure to facilitate ORAU's interactions with ORNL and Y-12 and other national laboratories. He recruited and attracted the UT-Battelle partner Core universities to the team, a major factor in winning the ORNL management contract, and his efforts led to helping the Y-12 National Security Complex launch a large program to interact with university researchers. His office also partnered with ORNL on a highly successful summer research program for faculty from Historically Black Colleges and Universities and other Minority Education Institutions.
- Contributing directly to national security by engaging university experts with the U.S. Department of Homeland Security in specific disciplines—the ORAU National Security Experts Team (ONSET), composed of nearly 200 academic experts whose expertise encompasses a full range of science and technology critical to the nation's competitiveness and security. Individuals from this cadre have completed important tasks for the US Department of Homeland Security, and are on standby for US Department of Defense projects. Dr. Nemeth is a Fellow of the George Washington University Homeland Security Policy Institute.

**Georgia Institute of Technology**—At Georgia Tech, Dr. Nemeth was Director of the Environmental Science and Technology Laboratory and Head of the Environmental Science and Technology Program of GTRI, both of which centered on applied environmental sciences and engineering projects totaling nearly \$15 million per year and a staff of over 100. He was jointly appointed as professor in of the Schools of Applied Biology, Civil & Environmental Engineering, and Earth & Atmospheric Sciences. Prior to this, he was Chief of the Environmental Health and Safety Division and was also Program Manager of Hazardous and Industrial Waste. He has served on numerous committees and councils and is an officer in a variety of professional organizations. Examples of Nemeth's technical and management leadership include:

- GIT, LSU, and Rice University from one of the *US EPA Hazardous Substance Research Centers S&SW*, a \$1 million-plus/year for a 10-year period, Proposal co-author and the co-director for technology transfer and training. In this US EPA program, which includes four other university-based centers (29 major research institutions); he was the national coordinator for a \$1-million/year, community support project-- *Technical Outreach Services for Communities*.
- National pilot program in on-site consultation for small-quantity generators of hazardous waste. The objective was to develop a voluntary compliance method based on technical assistance and educational modes. He personally attracted a Congressional appropriation with

the consent of the US EPA to start the nation's first university-based pollution prevention program, at long-term, state-funded, industrial technical assistance program.

Reporting to Adm. Richard Truly, the Director of GTRI, Dr. Nemeth was also a member of the GTRI senior staff that carried out the strategic planning and operations of this approximately \$100 million per year research organization. He also monitored the annual GTRI state line-item budget and coordinated GTRI's State Programs and Special Projects, economic development activities and interactions with the GIT Economic Development Institute and various arms of state government including the Governor's Office and Legislature.

- Dr. Nemeth was a part of the team working for Governor Zell Miller that designed and started the highly successful Georgia Research Alliance program, now a model for such state-university technology research/economic development programs nation-wide.
- He was also started Georgia Tech's largest (\$2 Million/yr) continuing education program, with courses specializing in asbestos removal, hazardous waste/materials management, an emergency response school, environmental assessment, and occupational safety and health,

Before joining Georgia Tech, Dr. Nemeth was Director of Environmental Sciences-Eastern District and Senior Waste Management Specialist for CH2MHILL. Earlier, Dr. Nemeth was Chief Scientist and Corporate Environmental Sciences Consultant for Law Engineering Testing Company (Law Environmental, now a part of MARTEC); where for 6 years he was responsible for business and project development. Dr. Nemeth provided the primary quality assurance, technical input, design, and interpretation for disciplines common to environmental science and engineering projects, and multidisciplinary teams of professionals. As Senior Ecologist for Coastal Zone Resources Corporation, he managed numerous environmental assessment projects. His project experience, national in scope, spans both the public and private sectors, including the complete spectrum of hazardous, industrial, and domestic waste management, environmental services and assessment work, baseline ecological and water resources management, environmental audit, land treatment of waste materials, and adjudicatory and expert witness consultation. Some of the project management experience included:

- Hazardous waste management projects for a variety of industrial clients and REM/FIT for U.S. EPA. Preparation of Part B hazardous waste permits, remedial field investigations, and corrective actions plans.
- Municipal wastewater land-treatment system feasibility and design studies. Representative clients included cities throughout the Southeast.
- Evaluation, design consultation, and expert testimony regarding existing industrial waste land treatment systems for firms such as Lubrizol Corporation, Hercules, Sunoco, American Petrofina, Rollins Environmental Services, Chem-Nuclear, and PCA International.
- Environmental impairment liability insurance surveys and audits for industry and risk assessment firms, nationally.
- Baseline environmental and/or ecological assessments and studies across the entire country for a variety of private sector clients and governmental agencies.
- Specialized studies for agencies such as the Corps of Engineers: nationwide study to develop criteria for artificial wetland-habitat creation using dredged materials; upland succession on old dredged material disposal areas; and baseline biology and water quality studies, nationwide.
- Environmental impact statement preparation for a variety of projects nationwide on behalf of Federal agencies such as the Corps of Engineers, Soil Conservation Service, and Department of

Energy; several municipalities; and numerous private industrial and developer clients and prepared environmental evaluations and related expert testimony on behalf of various client types. Issues addressed included wetland determinations, channelization and impoundment of streams, sedimentation effects, effluent discharge effects, atmospheric emissions, ground-water and surface-water contamination, and toxic/hazardous substances issues.

He also taught ecology at NC State University and an array of biology courses at Erskine College.

### ***Fields of Technical Interest***

Energy and environmental research and development, STEM education, international security, Broad-spectrum applied environmental and workplace sciences and engineering; and specific areas include hazardous & industrial waste management and emergency response; land treatment of hazardous & industrial wastes; environmental policy; environmental audit; ecology, soil science, and wetland determinations.

### ***Certifications, Registrations, and Memberships***

National Association of Environmental Professionals	1994-Present
Certified Environmental Professional -Certificate #735	
Review Board of the Academy of Certified Environmental Professionals	1994-Present
American Association for the Advancement of Science (3 sections)	1969 - Present
Georgia Tech Research Advisory Council	1985-1998
GTRI Senior Technology Guidance Council	1987-1989
Occupational Health and Safety, Editorial Review Board--	1985
Environmental Management News Editorial Review Board—	1985
ASTM (D-34.09.03), Waste Disposal Committee	1981
American Registry of Certified Professionals in	
Agronomy, Crops, and Soils Soil Scientist (Certificate #1488)	1980 to 1999
TAPPI, Water Quality, Environmental, and Solid Waste Committees	1980
Ecological Society of America	1966 -1998
Hazardous Materials Control Research Institute Charter Member	1978
Society of the Sigma X	1972-Present
British Ecological Society	1971 to 1999
American Institute of Biological Sciences	1968-Present

### ***Appointments and Special Honors***

- Board of Advisors of Scientists and Engineers for America 10-2009-Present
- National Academies' Committee on Under-represented Groups and the Expansion of the Science and Engineering Pipeline, National Research Council, National Academies of Science and Engineering 2008-Present
- Appointed Fellow to The George Washington University Homeland Security Policy Institute 2004-Present
- Academy of Board Certified Environmental Professionals 1994-Present  
    Past Board of Trustees & Current Certification Review Board Member
- Board of Directors of the Scottish Foundation of the Virginia Highlands 2010-Present
- Advisory board of the Edith Bolling Wilson Birthplace and Museum, Wytheville, VA 2010-Present
- Advisory board of the Konnarock Retreat House, Konnarock, VA 2010-Present
- Oak Ridge National Laboratory, Science and Technology Committee 2002-2007
- National Coordinator for the Technical Outreach Services for Communities 1997-1998
- Program of the Five, US EPA Hazardous Substance Research Centers  
    Trustee and Executive Board (1992), the Georgia Conservancy 1991-1998
- Executive Board of the Georgia Environmental Technology Consortium of the Georgia Research Alliance 1991-1998
- Georgia Planning Advisory Board, Appointed By Commissioner Jim Higdon, Dept. of Community Affairs 1994-1998

- Georgia Joint Study Committee on Hazardous Waste Management  
Appointed by Governor Joe Frank Harris 1990-1998
- Georgia Hazardous Materials Emergency Response Advisory  
Council and Chairman of the Subcommittee on Preparation and Training  
Appointed by Governor Harris 1986-1988
- Georgia State Emergency Response Commission  
Appointed by Governor Zell Miller 1990-1998
- Chairman of the State of Georgia Chemical Hazards Advisory Committee  
Appointed by Georgia Dept. of Labor Commissioner Tanner,  
Reappointed by Commissioner David Poythress-1993 1988-1998
- State of Georgia Hazardous Materials Right to Know  
Committee (SARA Title III) Appointed by Governor Joe Frank Harris 1987-1989
- Georgia Tech Research Institute Award:  
Outstanding Performance in Management 1986  
Chairman, GTRI United Way Campaign 1986
- Chairman, Vice Chairman Forest Resources Committee of TAPPI 1985-1991
- Board of Directors: National Association of Environmental Professionals 1982
- American Clean Water Association 1980s
- National Science Foundation Academic Year Institute  
Fellowship, North Carolina State University 1966-67
- National Science Foundation Summer Fellowship, Duke University 1965

### ***Selected Publications and Presentations***

Dr. Nemeth is the senior author of well over 300 technical reports prepared for industry and government. He also writes invited columns and is a frequent speaker at professional meetings and community functions and media appearances.

Advisory Board Member: Expanding Minority Participation: America's Science and Technology Talent at the Crossroads, Committee on Underrepresented Groups and the Expansion of the Science and Engineering Workforce Pipeline, Committee on Science, Engineering, and Public Policy, Policy and Global Affairs National Research Council, The National Academies Press, Washington, D.C., pp. 278, Sept. 30, 2010.

1."The Hazardous Substance Research Centers: Innovative Research and Cost-Effective Cleanup," Proceedings of the 22nd Annual Conference, National Assoc. of Environmental Professionals. Orlando, FL., pp. 631-637, May 18-23, 1997.

2."Technical Outreach Services for Communities: The Role of the HSRC's, WERC and HSRC '97 Joint Conference on the Environment, Albuquerque, NM, pp. 134-137, April 1997.

Technical Outreach Services for Communities: The Role of the HSRC's 1997 National Site Assessment Conference, San Francisco, CA, June 1997.

3. The Hazardous Substance Research Centers: Innovative Research and Cost-effective Clean-up. International Symposium on Soil Protection: Prevention and Remediation, Metatechnies 96, Bordeaux, France, Sept. 1996.

4. Environmental Applications Research and Future Plans in Plasma Arc Technology at the Georgia Institute of Technology@ (An Invited paper), Cairo International Conference on Energy and Environment, Cairo, Egypt, Vol. 2: 767-776, June 1996.

5. Environmental Applications Research and Future Plans in Plasma Arc Technology at the Georgia Institute of Technology, Proceedings of the 20th Anniversary, Club EDF High Temperatures Conference, Clamart, France, June, 1995.
6. "A Pollution Prevention Model: On-Site Technical Assistance, Training, and Technology Transfer in Central and Eastern Europe," Proc. Internat'l Symposium on Environmental Contamination in Central and Eastern Europe," Budapest, pp. 304-307, October 1992.
7. "Professional Training for TRADOC Environmental and Natural Resource Professionals: A Feasibility Study and Concept Plan for a "University Without Walls, USACERL Technical Report N-91/25, May 1991.
8. "The Georgia Tech Hazardous Waste Technical Assistance Program," J. Amer. Poll. Control Assoc., (1989).
9. "An Innovative Educational Approach in Georgia (Part B Hazardous Waste Permit)," Proceedings - Third Annual HAZMAT Conference, pp. 278-280, June 1985.
10. "A Summary of the Legislative Environment: Hazardous Materials Handling," Occup. Health & Safety, July 1985.
11. "Land Treatment of Forest Products Industry Wastes," Proceedings of the Southeast Biomass Energy Expo, Atlanta, Georgia, U.S. D.O.E., November 1984.
12. "The Economics of Biogeochemical Cycles," National Association of Environmental Professionals, Annual Conference, Detroit, Michigan, April 1983.
13. "Land Treatment of Forest Products Industry Wastes," Proceedings of the Asheville, NC TAPPI Research and Development Division Conference, pp. 105-109, August 1982.
14. "Concept and Design-Parameter Considerations in Land Treatment of Industrial Wastes," Proceedings of the 14th Mid-Atlantic Industrial Waste Conference, pp. 45-52, June 1982.
15. "Pre-Operational Baseline Aquatic Biology Studies," paper published in the TAPPI Env. Conf. Proc., New Orleans, LA, pp. 279-284, and TAPPI Journal 65(5): 171-175, May 1982.
16. "Practical Aspects of Land Treating Hazardous Waste," in T.L. Sweeney, H.G. Bhatt and O.J. Sproul (eds.), Hazardous Waste Management for the 80's, Ohio Environmental Engineering Conference, pp. 421-429, March 1982.
17. "Landfarming: A Viable and Successful Method of Treating Petroleum Industry Wastes," with H.S. Arora and R. Cantor, Environment International, 1982.
18. "Land Treatment of Hazardous Wastes: Why Not?" South Carolina Engineer 32(1):11, 1982.
19. "Current Hazardous Waste Disposal/Treatment Technology," paper presented at the University of Georgia Hazardous Waste Disposal Conference on Legislation, Technology, and Role of Local Government, Macon, GA, May 1981.
20. "Land Treatment--An Alternative to Disposal of Industrial Hazardous Wastes," presentation to the ASCE Convention and Expositions, Atlanta, GA 1981, with M.O. Overcash and G.L. Taylor.
21. "Coal Gasification Waste Detoxification via Land Treatment," proceedings of the ASCE Environmental Engineering Division, Specialty Conference, Atlanta, GA, pp. 468-478, 1981, with M.O. Overcash and W.L. Nutter.
22. "Land Treatment of Industrial Wastes: Approach and Concept," paper presented to the Governor's Task Force on Waste Management, Raleigh, NC, November 1980.

23. "Land Treatment of Wastewaters: Investigative Rationale and Methods," paper presented at the 10th Annual Composting and Waste Recycling Conference, Los Angeles, CA, May 1980.

24. "Alternative Approaches to Hazardous Waste Management," paper presented at Federal Water Quality Association Annual Conference--Seminar sponsored by the American Clean Water Association, Silver Springs, MD, March 1980.

25. "A Cost-Effective Method for the Quantification of Aquatic and Wetland Macrophytes, paper presented at the Amer. Soc. of Limnol. and Oceanogr. Corpus Christi, TX, January 1979.

26. "The Consultant's Role in Environmental Assessment," Environmental Professional, 1(2): 233-236, 1979.

27. "Thermal Impacts on a Fossil-Fueled Electric Power Plant Discharge: An 'Older Unit' 316 (a) Demonstration," *Civil Engineering Design* 1(1): 43-68, 1979.
28. "Site Factors and the Net Primary Productivity of Young Loblolly and Slash Pine Plantations," *Soil Science Society of America Proceedings*, 38:968-70, 1975.
29. "The Impact of Scientists on Development," paper presented to the General Session of the North Carolina Academy of Science, Inc., Annual Meeting, Appalachian State University, Boone, 4/74.
30. "Forest Biomass Estimation: Permanent Plots and Regression Techniques," pp. 78-88 in *Statistics in Forestry Research, Proceedings, International Union of Forest Research Organizations, Subject Group S6, 02, Vancouver, B.C., Canada, August 1973*.
31. "Dry-Matter Production in Young Loblolly (*Pinus taeda* L.) and Slash Pine (*Pinus elliottii* Engelm) Plantations," *Ecological Monographs* 43:21-41, 1973.
32. "A Mountain Disjunct Hemlock Stand in the Piedmont of Virginia," *Castanea* 38:171-174, 1973.
33. "Dry Matter Production in Young Loblolly and Slash Pine Plantations: Estimation of Root Biomass," paper presented at the Assoc. Southeastern Biologists Annual Meeting, April 1971.
34. "The Summer Chlorophyceae and Cyanophyceae of the Delmarva Peninsula, VA," *Castanea* 34:81-86, 1969.
35. "The Hardwood Vegetation and Soils of Hill Demonstration Forest, Durham County, NC," *Journal Elisha Mitchell Science Society* 84(4): 482-491, 1968.

## **Supplemental Background Information:**

- 1- CGJC Enterprises—*Research & Education Consultants*
- 2- Oak Ridge Associated Universities
- 3- Environmental Sciences
- 4- Waste Management

## ***1-CGJC Enterprises—Research & Education Consultants***

### **The Principals**

CGJC'S Principals combine 90 years of experience in University-based research and education and private-sector consulting, including hundreds of peer-reviewed articles, and technical reports, as well as media publications and presentations.

#### **Dr. John C. Nemeth—Science & Technology**

- University consortium management—Oak Ridge Associated Universities (11 yrs)
- University Research Administration & Teaching—Georgia Tech (15yrs)
- S&T Consulting—Law Env., CH2MHill, & individual projects (36yrs)

#### **Dr. Grace Toney Edwards—Culture & Humanities**

- University Professor ---Radford U. & Appalachian State U. (44 years)
- Director of Radford U's Appalachian Regional Studies Center (15yrs)
- Consultant to colleges/universities, communities, public schools, & The media (25yrs)

### **Client Experience**

- US Departments of Energy, Defense, Homeland Security, Interior, Agriculture, Labor; US EPA; Appalachian Regional Commission; US Dept. of Labor; and other government agencies including: ---NSF, NOAA, US Army COE, USGS, NIOSH, NIH, NNSA, NASA, FLC, USEPA, NRC...
- State governments—ex. SC, GA, NC, TN, MS, FL, VA & Municipal governments
- Industry—ex. Glacier Environmental Fund, Hercules, SUNOCO, Shell, American Petrofina, Reynolds Metals, Exxon Mobile, International Paper, Southeast Paper, The Southern Company, TI...

### **Discriminators/Achievements**

- Successful marketing and business development in \$Millions in hundreds of grants and contracts ranging from the social and cultural to energy, environment, and international security.
- Assembling scores of teams of technical experts & scholars
- Excellence in execution & management of hundreds of projects
- Direct access to the nation's university research and education enterprise, as well as industry through the extensive CGJC Associates Network including over 200 experts in:
  - Energy, environment, & STEM Education
  - National Security, Emergency Management & Risk Management Planning & Evaluation
  - Technology Solutions
  - Review & Evaluation of Scientific & Technology

### **Services**

- Networking & Partnering
- Project Management
- Convening & facilitating workshops/symposia/meetings in:  
business development, strategic planning, and program operations
- Business development and marketing

## **2-Oak Ridge Associated Universities**

Dr. Nemeth was responsible for a host of successful initiatives that brought sponsored funding and highly positive reputational benefits to all with whom he interacted, particularly the ORAU university membership. The following are examples of those efforts.

### **General Promotional Activities:**

• ORAU University member school visits and programs—formal presentations about university-based programs were made on visits to member universities. Dr. Nemeth personally visited the member schools, including the ORAU HBCU&MEI schools. Many of these schools were visited multiple times, depending upon their engagement in ORAU-supported activities. He provided ORAU member universities information about sponsored funding and ORAU funded opportunities including:

- Program announcements of university-oriented programs (workshops, national laboratory user facility planning meetings, user facility announcements, all special conferences and events from a host of public and private potential sponsors to the ORAU Council and Chief Research Officers followed with reminders.

- Sponsor and university member promotion and support by ORAU of partnership opportunities were highlighted in published promotional pieces, and were described whenever he spoke at regional, national, and international events, such as the Annual Meetings of the Federal Laboratory Consortium; HBCU&MEI White House Initiatives and Congressional Forums; AAAS Annual Meetings; Appalachian Regional Commission Workshops and Conferences; and contacts with over 125 private-sector companies. Two examples of workshops organized by Nemeth's office include conducting workshops:

- **“Accelerating the Transformation of the Nuclear Weapons Complex Through Collaborative Research” May 20-21, 2008 hosted by Y-12 NSC in Oak Ridge, TN**
- **“Transforming the Nuclear Weapons Complex to Address 21<sup>st</sup> Century Security Threats”, 3/30-31/09, hosted by Georgia Tech in Atlanta, GA**

- ORAU University Partnership Program Funds for student research—examples; The New Mexico State University Annual Environmental Design Contest, Annual ORAU-ORNL Graduate Fair, and travel grants. Funding for faculty research included for example The Ralph E. Powe Junior Faculty Award Program, the ORAU-ORNL High-performance Computing Grants, Visiting Industrial Scholars Program, travel grants.

• **Examples of Special Initiatives**—these are ORAU initiatives that were promoted by and/or sponsored/cosponsored through Nemeth's efforts.

- Attracting top-flight researchers to become involved in program funding initiatives. He initiated and helped plan and implement numerous workshops and conferences nationally important technical areas to expand partnerships between sponsors and universities, even to the point of developing multifaceted proposal and project teams. Similar events resulted in funding for an array of contracts and approval of major facility instrumentation.

- Dr. Nemeth highlighted member and sponsor initiatives at the ORAU Annual Meeting of the Council of Sponsoring Institutions attended by each member university's ORAU representatives, usually the VP for Research

- He recruited the university partners that became the Core Universities in the UT-Battelle partnership that now operates Oak Ridge National Laboratory. He also was responsible for putting together the partnership focused on the Uranium Center of Excellence between several major universities and the Y-12 National Security Complex in Oak Ridge.

- Advancing HBCU/MEI research and education opportunities such as the interactions ORAU-ORNL Summer Faculty Research Program and through the Kauffman Foundation promoting technology transfer projects between federal sponsors, majority schools, and HBCU&MEIs.

- Supporting the ORNL University Day of Science for universities and/or K-12, and Global Venture Challenge, as well as DOE's Real World Design Challenge

- Identifying and having access to long-term faculty joint appointments with ORNL or short-term—consulting- type relationships.
- Implementing Broad-scale promotion of National laboratory User Facilities and research opportunities
- Examples of USER-FACILITY Proposal calls done for national labs like ORNL include:
  - Neutron Science, HFIR-SNS Users, CNMS Call for User Proposals: High-Impact Nanoscience Research
  - A few samples of USER-FACILITY Announcements:
    - Neutron Sciences at ORNL; ORNL Users Week; Request for Review Assistance for ORNL's Neutron Sciences Directorate—2007; Needs for post doctoral and post masters candidates; Instrument Development Fellowships: Novel Concepts for Neutron Instrumentation
- Examples of successful ORAU-ORNL Funding Initiatives
  - A beamline (MaNDI) at SNS to be opened in 2012 & a continuing Bioimaging Research Facility Project
  - DOE Leadership Class Computing Facility
  - NSF Teragrid award
  - NSF High Performance Computing Track 1 and 2 initiatives
  - ORAU-ORNL High Performance Computing Grants
- Examples of Joint projects involving ORNL and partner universities
  - DARPA Social systems simulation project
  - ARC-funded Energy Blueprint for Appalachia Project
  - National Earthquake Engineering Simulation (NEES) proposal—brokered a major partnership between ORAU several major universities, and ORNL-HPC to assume the management of the NSF multi-million dollar NEES effort. \$90 million short-listed.

### **3-Environmental Sciences Consulting**

Dr. Nemeth has a broad background of experience related to the acquisition and interpretation of environmental data and assessment of multidisciplinary situations in man-dominated as well as terrestrial, aquatic, estuarine, and marine ecosystems. He has prepared environmental assessments and impact statements for a variety of projects nationwide on behalf of municipalities such as the 201 Facilities Plan for Cities of Dalton, Georgia and Newport News, Virginia and federal agencies such as the following for the Corps of Engineers: Mobile District's Edinburg, Dam and Lake, MS; Wilmington District's Thoroughfare Swamp Reservoir, NC; Nashville District's Big South Fork National Recreation Area in KY-TN; and the Philadelphia District's Delmarva Waterway; Soil Conservation Services' Clover Creek Watershed, TN, and Department of Energy Gulf Coast Salt Domes high-level nuclear waste repository studies in Texas, Mississippi, and Louisiana. He managed the environmental portions of numerous other environmental assessments and environmental impact statements, such as dredging maintenance projects in South Carolina at Port Royal Sound, Village Creek, Georgetown, and the Waccamaw River, for the Charleston Corps of Engineers.

Of particular note is Dr. Nemeth's experience in studies of aquatic and marine benthos, fisheries, freshwater and salt marshes and seagrass beds, physical and chemical properties of sediments, and research related to dredged materials. He conducted a Corps of Engineers nationwide study that reviewed every dredging project in the Coastal United States for the purpose of developing artificial habitat creation criteria. Ten sites were selected for development, several of which are active, successful projects, such as the Galveston Bay, Texas site, which he selected. In addition, he conducted upland succession studies of old dredged material disposal areas in New England, the Mid- and South Atlantic States, the Gulf of Mexico, and the Pacific States; and baseline biology and water quality studies of Corps of Engineer reservoirs, including Lake Allatoona and Carters Lake, Georgia. In addition, he has managed other studies such as marine sediment, water quality, and biological baseline evaluations for the Wilmington District Corps on the Cape Fear River Ocean Bar.

Dr. Nemeth's experience in water and sediment studies and aquatic ecology includes nearly every type of aquatic, estuarine, and wetland ecosystem in the Southeast. In addition to those mentioned elsewhere, he has been responsible for work related to discharge permits and waste-load allocations on the following which are representative of the Southeast Rivers and Estuaries\*: Oconee River, GA; Saluda River, SC; Savannah River, GASC\*; Ocmulgee River, GA; Chattahoochee River, GA; Conasauga River, GA; Etowah, GA; Oostanuala River, GA; Flint River, GA; Neuss River, NC; Broad River, NC/SC; Roanoke River, NC; Catawba River, NC; Pamlico Sound, NC\*; Albemarle Sound, NC\*; Chesapeake Bay, VA\*; St. Johns River, FL; Hillsborough Bay, FL\*; Key West, FL\*; St. Andrew Bay, FL; Carters Lake, GA; Lake Allatoona, GA; Lake Blackshear, GA; Logan Martin Reservoir, AL; Lake Ponchartrain, LA\*; Pearl River, MS; Atchafalaya River, LA\*; nation-wide on such streams as the Knot River, CT; James River, VA\*; and the Columbia River, WA\*.

Dr. Nemeth has prepared baseline environmental, water quality and, ecological assessments and studies for a variety of manufacturing companies, pulp and paper firms, power industry, agricultural interests, mining, and the petroleum/chemical industry. One very successful study involved the pre-operational baseline water quality and aquatic ecology assessment of a 30-mile reach of the Oconee River below the Southeast Paper Manufacturing Co. discharge near Dublin, GA.

For Gulf Power Company, he prepared two environmental impact statements for transmission corridors on U.S. Air Force property. Air Force EIS Regulation 19-2 guideline was used.

Also, for Gulf Power, Dr. Nemeth directed seagrass-bed studies and impingement/entrainment studies at their Lansing-Smith plant near Panama City, FL. He was lead scientist for the City of Key West, FL Electric Utility in their effort to define NPDES permit conditions relative to hydrogen sulfide discharges in the cooling water of the Stock Island and Key West power plants.

For Gardinier, Inc., Tampa, FL, a large phosphate fertilizer manufacturing company, he managed a project which evaluated the cost-effectiveness and permit potential for plant expansion in three locations--

an adjacent Hillsborough Bay site, a wetlands site, and a terrestrial site. The biologic, soils, geology, water quality, and socioeconomic aspects of the project were included. Other evaluations on this project included development of artificial habitat construction alternatives.

Private development experience includes numerous site selection and planning projects. This work entailed site evaluation, plan layout of facilities, and permitting studies. Resort, urban, and natural-area projects include areas such as the Outer Banks of North Carolina, Kiawah Island, SC, Bald Head Island, NC, Detroit, MI, an eastern Tennessee and Kentucky Corps of Engineers recreation area, agricultural superfarm developments in North Carolina, pre-impoundment studies, and commercial property development in Florida, Georgia, South Carolina, and North Carolina.

Dr. Nemeth has prepared environmental evaluations and related expert testimony for both public and private sector clients. Specific areas have included jurisdictional wetland determination, channelization and impoundment of streams, stream waste-load allocation studies, sedimentation and effluent discharge effects, atmospheric emissions, and groundwater and surface-water contamination. For instance, his case testimony preparation was key to the significant lessening of the settlement of a sedimentation suit against the city of Charlotte, NC. His presentation work in public hearings on behalf of the TN-SCS Watershed Section's Clover Creek Watershed project led to a significant educational program for landscape management.

Dr. Nemeth has performed several jurisdictional wetland determinations under the varying guidance offered in recent decades.

#### ***4-Waste Management Consulting***

Dr. Nemeth's experience and expertise in the waste management area includes the overall assessment of specific problems and the development of solutions. He has provided consulting services and expert witness testimony to a variety of private and public clients.

Dr. Nemeth has had industrial, municipal, and hazardous waste management project involvement relative to study design, contaminant transport pathways, attenuation evaluation, and remedial method design for a variety of public and private clients and major U.S. EPA Superfund REM/FIT contracts. On the latter, he has served as quality assurance reviewer on site work plans and remedial action management plans. He has, for instance, worked on projects such as the Love Canal, NY; Fields Brook, OH; and Dade County, FL, and he made major contributions to the development of quality assurance procedures and health and safety programs. As an example of projects involving hazardous waste management and clean-up, Dr. Nemeth provided overview consultation on the ENSCO hazardous waste facility for the City of Dalton, GA by assisting with the review, monitoring, and overview of the Part B hazardous waste management permit and remedial field investigation process. He has also written three successful Part B permit applications: a large TSD in the Southeast; a solvent recycle firm; and a storage/transporter company. Dr. Nemeth taught a graduate level course in hazardous waste management in the Georgia Tech School of Civil Engineering.

Formerly a Certified Professional Soil Scientist, Dr. Nemeth is or has been active in a number of professional societies and organizations. He is currently a member of the American Society for Testing and Materials land-treatment subcommittee. In these connections, Dr. Nemeth has been frequently asked to make presentations and publish papers on a variety of environmental management issues. A number of these are in the area of municipal/domestic and industrial/hazardous waste land treatment. For instance, he chaired the session on Management of Paper Mill Sludges at the TAPPI 1982 Environmental Conference and later that year presented a paper on land treatment of forest products industry waste at the TAPPI R&D Conference.

Having been directly involved in more than 40 land-treatment projects, both industrial and municipal, Dr. Nemeth has actively participated in the development of this technology and the regulation of its application. For instance, he was principal author on a critical review sponsored by the American Petroleum Institute of the U.S. EPA's Technical Resource Document Draft entitled "Hazardous Waste

Land Treatment." In addition, Dr. Nemeth has prepared guideline review and comment on land treatment of wastes for various governmental agencies, such as the Georgia Environmental Protection Division and the State of North Carolina Workshop on Proposed Guidelines for Land Application Systems (May, 1983).

Land treatment of industrial wastes is a particular area of strength. Dr. Nemeth has performed feasibility evaluation, and design basis consultation and provided expert testimony regarding existing and new industrial waste land-treatment systems for firms such as Lubrizol Corporation (TX), Hercules (VA), Sunoco (PA), Reynolds Metals (P.R.), Canton Mills (GA), Rollins Environmental Services (LA), Chem-Security Systems (OR), Southeast Paper Manufacturing Company (GA), Chateau Elan Winery (GA), and PCA, International (NC).

Municipal wastewater and sludge Land-Treatment system feasibility and design studies in Dr. Nemeth's experience are indicated by representative clients including the Cities of Venice, Fort Myers, Lakeland, Lake Wales, and Manatee County Utility System, FL; Dalton and Waycross, GA; and City of Cayce, Town of Summerton, Grand Strand Water Authority, and Kiawah Island Company, South Carolina; City of Fayetteville, AK; and Mississippi Gulf Coast Regional Wastewater Authority in Ocean Springs and Pascagoula/Moss Point.

Conduct of audit and risk assessment such as environmental impairment liability insurance surveys and related evaluations is also an area with which Dr. Nemeth has experience. The work initially involved development of survey procedures to assess potential for long-term pollution problems and subsequently actual surveys of petrochemical plants and manufacturing companies, such as International Paper, Denka-USA, and Chicago Pneumatic done on behalf of Environmental Risk Assessment Systems of Boston. He is also familiar with and trained in RCRA Part B application development and evaluation. He has written successful Part B permit applications for a major hazardous waste TSD in the Southeast, a solvent recycling firm, and a storage/transporter company.

In the area of nuclear facilities and waste management, Dr. Nemeth prepared the Environmental Report for a low-level nuclear waste disposal facility at Sheffield, Illinois. In that project, he modified Nuclear Regulatory Commission Guideline 3.8 to address low-level waste disposal facilities. In other related projects, he has worked on power plants including the Clinch River Breeder Reactor Plant, TN and the St. Rosalie and Waterford Studies in Louisiana. More recently, he was responsible for the preparation of environmental assessment reports for the development of high-level nuclear waste repositories in nine Gulf Coast salt domes throughout Texas, Mississippi, and Louisiana.