

JOHN V. CIGNATTA, Ph.D, PE

Datanet Engineering, Inc.

Principal – President

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AREAS OF QUALIFICATION:

- Civil-Environmental Engineering: Maryland P.E. #13556
- Civil-Environmental Engineering: Virginia P.E. #0402040459
- NACE Accredited Corrosion Specialist #3304
- NACE Accredited Cathodic Protection Specialist #3304
- API (American Petroleum Institute) 653 Accredited Aboveground Storage Tank Inspector #21623
- MDE Certified Underground Storage Tank Inspector – MDIC 2007-0025
- STI (Steel Tank Institute) SP-001 Accredited Aboveground Storage Tank Inspector #001-06
- Level II NDT Ultrasonic Thickness Evaluation under SNT-TC-1A
- Project Management - Systems Management
- MDE Instructor Cathodic Protection Testing Buried Fuel Tanks
- STI Instructor Aboveground Storage Tanks Installation - Shop Fabricated
- MDE Instructor Underground Storage Tanks Installation
- MDE Instructor UST Certified Tank Remover

PROFESSIONAL EXPERIENCE:

Dr. Cignatta has three post graduate degrees in Environmental Engineering and Systems Management. He has practiced engineering on a full time basis since 1976 within the disciplines of environmental and corrosion engineering while working for the Air Force, private engineering firms and as president of Datanet Engineering, Inc. since 1983. Dr. Cignatta was awarded his doctorate in Environmental Engineering in September 2004 by Kennedy-Western University.*

President, Datanet Engineering, Inc., Baltimore, MD, (1983 to Present)

- Manages and directs corrosion and environmental engineering projects including protective coatings for steel and concrete structures, cathodic protection systems for buried and submerged steel structures, all aspects of design, installation and protection of underground and aboveground storage tanks, and water treatment for industrial and potable applications.
- An ever greater portion of his workload is assisting various courts with expert testimony. Some of his clientele span from the EPA and OSHA to insurance companies, commercial concerns and even private citizens. His more noteworthy cases have included: Exxon gasoline release in Jacksonville, MD, OSHA Three Rivers Stadium, EPA Euclid Oil, the Tarentum Bridge OSHA case, the Philadelphia Flyers arena ice making equipment failure, and the CSX Tunnel-Fire Incident in Baltimore.

- Provides specialty investigations for corrosion monitoring and control of unusual items spanning from engine sprockets to Civil War artifacts.
- Developed and created the complete Steel Tank Institute Level 1 and Level 2 Aboveground Storage Tank Inspector courses. Continues to present the certified aboveground tank inspection one week course for the Steel Tank Institute and the five day underground storage tank (UST) inspection course for the Maryland Department of the Environment. Dr. Cignatta routinely conducts the STI class on shop fabricated fuel tank inspection across the country. He has taught the fuel system training courses at a variety of the Community Colleges in the Maryland area over the past twenty years on UST installation, UST removal, cathodic protection testing and other topics.
- Has accomplished computer simulation of abrasive blasting enclosures and other complex ventilation systems for support of both worker and environmental protection requirements at industrial painting projects.
- Manages environmental projects including site assessments, hazardous waste remediation, sick building evaluations/remediations, regulatory compliance and expert testimony for industrial, governmental and commercial clients.
- Invited speaker in "Expert-In-Industry" series at the Alice Hamilton Laboratory of NIOSH. Provided a one-day symposium on state-of-the-art procedures and equipment for lead paint removal on bridges and water tanks. Similar symposia presented by invitation at OSHA Headquarters and Maryland Occupational Safety and Health Administration.
- Provides expert consulting services to several branches of the military, state governments and major national corporations on corrosion and coatings related projects. Presented seminars and mini-symposia for governmental and corporate clients on innovative lead paint removal technologies.
- Primary author of guide specification on corrosion control of buried fuel piping; incorporated by reference into the Maryland Underground Tank regulations. Also, recommended to other states by the U.S. Environmental Protection Agency, Office of Underground Storage Tanks, as a model for guide specification.
- Featured conference speaker on corrosion control and protection of the environment and workers for underground storage tanks, elevated water tanks and bridges for NISTM, STI, NACE, SSPC, AWWA, and American Shipyard Association.
- Conference chairman for 1991 Lead Paint Removal Conference of SSPC.

Project Engineer, Mueller Associates, Inc., , Baltimore, MD, (1978 to 1983)

- Provided systems analysis and engineering services in the fields of pollution abatement, water treatment and analysis, energy conservation, and wastewater management. Managed field investigations, hardware designs, systems studies and site development projects.
- Project Manager for several U.S. Navy projects on water analysis, protective coating evaluations, ultrasonic scanning assessments, cathodic activity surveys and industrial water treatment enhancements.

Student, Pilot and Environmental Engineer, US Air Force , (1968 to 1978)

- Attended US Air Force Academy through Congressional competitive appointment
- Graduated from undergraduate pilot training and served as combat crew member on a B-52G in the Strategic Air Command
- Served as Base Environmental Coordinator in Civil Engineering Squadron for several years responsible for environmental regulatory compliance and system upgrades at large bulk fuels facilities in several states, cross-country pipeline facilities including pumping stations, and water/wastewater treatment plants and distribution systems. Received US Air Force Meritorious Service Medal for work in fuel and water storage system emergency repairs.

EDUCATION:

- B.S., General, *U.S. Air Force Academy*, 1972
- M.S., Systems Management, *University of Southern California*, 1976
- M.S., Environmental Engineering, *Johns Hopkins University*, 1982
- Ph.D., Environmental Engineering, *Kennedy Western*, 2004 (Note: *On-Line University Licensed and Authorized by the State of Wyoming.*) *

REGISTRATION:

- Professional Engineering Registration, Maryland, Civil #13556
- Professional Engineering Registration, Virginia, Civil #0402040459
- National Association of Corrosion Engineers, Corrosion Specialist #3304
- National Association of Corrosion Engineers, Cathodic Protection Specialist #3304

PROFESSIONAL SOCIETIES:

- National Association of Corrosion Engineers (NACE)
- Painting and Decorating Contractors Association (PDCA)
- Steel Structures Painting Council (SSPC)

RECENT PUBLICATIONS

- More Concerns for AST Owners/Operators, presented at NISTM 2007, May 2007.
- Problems and Failures with Shop-Fabricated ASTs, presented at National Institute for Storage Tank Management, May 23, 2006, Orlando, FL.
- Problems with Overfill Valves on Shop Fabricated AST Inspections, presented at National Institute for Storage Tank Management, May 2005, Orlando, FL.
- Rust Never Sleeps- Controlling Environmental Deterioration of Florida's Civil War Artifacts, Dissertation in Partial Fulfillment of the Requirements for Degree of Doctor of Philosophy in Environmental Engineering at Kennedy- Western University, 2004. Research for this major study was funded and supported in part by Florida Department of Parks, Florida Department of Cultural Preservation, Florida Department of Cultural Preservation, General Electric, and Datamet Engineering, Inc.
- Recent Discoveries During Routine Shop Fabricated AST Inspections, presented at National Institute for Storage Tank Management, May 2004, Orlando, FL.
- Rude Awakening to AST Owners, presented at Steel Tank Institute's Member's Conference, January 2004, Bonita Springs, FL.
- Liner Creates "Double Wall" Fuel Tank System at Washington, D.C. Building, Co-Author, presented at Environmental Management and Regulation of Petroleum Storage Facilities Conference and Exhibition, October 2002, Kingston, Jamaica.
- API 653 Inspections. Integral Components of AST Mechanical Integrity Programs, Co-Author, presented at Environmental Management and Regulation of Petroleum Storage Facilities Conference and Exhibition, October 2002, Kingston, Jamaica.
- Gaining Greater Acceptance of CFD Analyses by Engineers, presented at the 1997 PHOENICS Conference, April 20, 1997 Atlanta, GA.
- Computer Aided Engineering for Design of Ventilation Systems at Industrial Painting Projects, accepted for presentation at the NACE International Annual Convention, March 14, 1997 at New Orleans, LA.
- The Significance of the \$2.3 Million OSHA Adjudicated Fine for Painting at the Tarentum Bridge to Other Industrial Painting Projects, accepted for presentation at the NACE International Annual Convention, March 14, 1997 at New Orleans, LA.

- The Anne Arundel County Tank Painting Program, presented with Mr. Ken Dinnis at the American Water Works Association, Chesapeake Chapter Annual Convention, September 6, 1996 at Ocean City, MD.
- Setting up a Project Site for Abrasive Blasting Including Computer Modeling of Worker Exposure, Best Poster Presentation with Mr. Timothy Duffy at American Industrial Hygiene Association Annual Conference, May 20, 1996 in Washington, DC.
- Visualization of CFD Data, presented at the PHOENICS Users Conference, March 17, 1996 at Atlanta, GA.
- Engineering Controls Key to \$5 Million OSHA Case, ***Painting & Wallcovering Contractor***, August 1995 issue.
- Prepares monthly column entitled: "Reg Alert", for the journal - ***Painting & Wallcovering Contractor***, publication of the Painting and Decorating Contractors Association, by Finan Publishing, Mr. Jeffery Beckner editor, (314) 961-6644
- Recycling Lead Paint while Protecting Workers and the Environment at the Ferndale Tank, presented at the North Atlantic Water Works Symposium December 5, 1994 Atlantic City, New Jersey.
- Hazardous Wastes for Painters a Simple Topic? ***Painting & Wallcovering Contractor***, Jan/Feb 1995 issues
- Gang of Four: A Review of the Lead, Cadmium, Arsenic and Hexavalent Chromium Standards: ***Painting & Wallcovering Contractor***, Sept/October, November/December 1994 issues.
- Why is every Painter Affected by The New OSHA Heavy Metal Regulations?; presented at the SSPC National Conference November 1994 Atlanta, GA.
- How Are You Affected By the OSHA Lead Standard?; ***Painting & Wallcovering Contractor***, May/June and July/August 1994 issues.
- Monitoring Breathing Air at Lead Paint Removal Projects; ***Journal of Protective Coatings & Linings***; February 1994 issue; Coauthor.
- Use of Robotics for Replacing Blasters at Industrial Painting Projects; Proceedings of the 1993 Steel Structures Painting Conference in New Orleans, LA.
- Review of the New OSHA Lead in Construction Standard; Published in the June, 1993 edition of ***Pb Bulletin*** of the Steel Structures Painting Council.

- Protecting the Environment and Workers at Industrial Lead Paint Project; Presented at the 1993 SSPC Lead Paint Removal Conference in Cincinnati, OH.
- Removal of Lead Paint from the Legs of the Conowingo Water Tank While Protecting the Environment and Construction Workers; Published In De-Leading Magazine in June, 1993.
- Technical and Regulatory Problems with Bridge Coating Projects in the 90's; Presented at the 1990 SSPC Lead Paint Removal Conference Nashville, TN
- Use of Mini-Enclosures for Protecting the Environment and Construction Workers at Industrial Painting Projects; Presented at the 1992 SSPC National Conference, Nashville, TN
- Problems in Painting Water Treatment and Storage Facilities; Presented at the 1991 SSPC Lead Paint Removal Conference, Charlotte, NC
- Protecting the Environment and Construction Workers at the Old Mill Tank Painting Project; Presented at the 1991 SSPC Lead Paint Removal Conference, Long Beach, CA
- Removing Lead Paint; American Water Works Association Journal, Vol. 83, No. 11, November 1991; Coauthor.
- Mini-Enclosure Demonstration Project at the Amberly Water Tank; Presented at the 1990 SSPC National Conference, 1990.

** Kennedy-Western University is a distance learning, on-line University begun in 1984, and licensed by the State of Wyoming under Statutes W.S. 21-2-401 to 407. The Wyoming State Department of Education reviews the university's standards, programs, policies; verifies faculty credentials, evidence of financial stability, and maintenance of a \$100,000.00 state required bond. Kennedy-Western University has declined to seek accreditation, to avoid any limitations on the range of its well established degrees and class offerings over two decades later.*