## CURRICULUM VITAE

George C. Govatos, PhD, PE

Govatos Consulting, Inc. Forensic Engineering - Accident Reconstruction / Highway Design & Safety

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Provide engineering analysis for attorneys, both plaintiff and defense; and engineering design/analysis for public and private clients. Forensic work has included vehicular accident reconstruction, investigation of alleged product defects, structural failures including both large-scale structures as well as small components, building code analysis, drainage and flooding, and construction claims. Other design and analysis has included road design, traffic analysis structural design, design of sanitary and storm water pipelines and pumping stations, hydraulic network distribution analysis, building inspections, and environmental studies. More than 30 years practice as professional engineer.

## PROFESSIONAL REGISTRATIONS

Professional Engineer:

- Delaware
- Maryland

Accreditation Commission for Accident Reconstruction (ACTAR) Registration Number: 245 Status valid for period: 1994-1999.

### COURT AND TESTIMONY EXPERIENCE

Accepted as an expert in the following courts:

**Superior Court** State of Delaware (Or comparable) State of New Jersey

Commonwealth of Pennsylvania

Commonwealth of Massachusetts

Federal Court State of Delaware

George C. Govatos, Ph.D., PE

State of New Jersey Commonwealth of Pennsylvania State of Illinois

#### **EDUCATION**

PH.D., University of Pennsylvania, Graduate School of Arts & Science, Towne School Of Civil & Mechanical Engineering.

Master of Science in Engineering, University of Pennsylvania, Towne School of Civil & Mechanical Engineering.

Bachelor of Civil Engineering, University of Delaware.

#### OTHER COURSE WORK & SEMINARS

## 2017 Topics in Accident Reconstruction

Joint Conference NATARI, NAPARS, NJAAR, MdTAI, NYSTARS, August 9-11; Rowan University, Glassboro, New Jersey.

#### 2010 Trailer Underride Collision Reconstruction

Courses work included calculation severity of underride collisions including 1 day of staged crash tests.

### 2009 Heavy Vehicle Crash Reconstruction

Course work included tractor-trailer braking, impacts, analysis of engine control modules, and other factors associated with tractor trailers. Combined annual conference of accident reconstructionists October 7-9, 2009 Ocean City, Maryland

## 2009 Special Problems in Accident Reconstruction

Institute of PoliceTtechnology and Management, University of North Florida. 5 day seminar including topics on commercial vehicle foundation brakes, pedestrian impacts, damage profile analysis, collision simulation and crash data recorders.

#### 2008 Accident Reconstruction

Joint Conference NJ Association of Accident Reconstructionists Atlantic City, New Jersey, October 15-17, 2008

## 2004 Crash Data Retrieval

2 Day Seminar given by CSI on Crash Data Retrieval (CDR). Update on CDR Course taken in 2001. October 2004, Ocean City, Maryland.

#### 2002 McHenry Software

3 Day Seminar on use of SMAC software developed by Raymond McHenry for NHTSA. Seminar included special problems in accident reconstruction and how to address these topics using simulation software.

#### 2001 Crash Data Recorder

2 Day Seminar given jointly by General Motors, Vetronix Corp. and the Texas Engineering Extension Service. Fundamentals of the crash data recording system, instruction in use of the recorder for downloading crash data. Interpretation of results. June 28-29, 2001, Santa Barbara, California.

## 2000 Advanced Topics in Accident Reconstruction

3 Day Seminar given by McHenry Engineering, author of the original CRASH and SMAC computer programs developed for the NHTSA.

### 1998 The Maryland Association of Traffic Accident Investigators. Inc.

The National Association of Professional Accident Reconstruction Specialists Inc., The National Association of Traffic Accident Reconstructionists and Investigators. Inc., The New Jersey Association of Accident Reconstructionists. Inc., The New York Statewide Traffic Accident Reconstruction Society. Inc. Seminar: Advanced Motorcycle Accident Reconstruction & Testing.

### 1997 The Maryland Association of Traffic Accident Investigators

The National Association of Professional Reconstruction Specialists, The National Association of Traffic Accident Reconstructionists and Investigators, and The New Jersey Association of Accident Reconstructionists. Seminar: Forensic Tire Examination, Low Speed Crash Analysis.

## 1991 National Association of Traffic Accident Reconstructionists and Investigators

Annual Meeting, Atlantic City, New Jersey. Seminar: Accident Reconstruction Methods and Techniques included testing of standard and anti-lock brake systems in yaw skids.

## 1989 National Association of Traffic Accident Reconstructionists and Investigators

Annual Meeting, Baltimore, Maryland. Seminar: Accident Reconstruction Methods and Techniques.

## 1988 IPTM - Institute of Police Technology & Management

University of North Florida. Course Title: Special Problems In Traffic Accident Reconstruction (28 Hour Workshop).

# 1988 National Association of Traffic Accident Reconstructionists and Investigators

Annual Meeting, Atlantic City, New Jersey. Seminar: Accident Reconstruction Methods and Techniques.

## 1987 National Association of Traffic Accident Reconstructionists and Investigators

Annual Meeting, Valley Forge, Pennsylvania. Seminar: Accident Reconstruction Methods and Techniques.

### 1986 Society of Automotive Engineers

Conference: The Engineering Resource for Advancing Mobility, San Diego, California. Course Title: Biomechanics and Human Tolerance. Course taught by Jeffery Pike.

## 1986 Society of Automotive Engineers

Conference: The Engineering Resource for Advancing Mobility, San Diego, California. Course Title: Analytical Reconstruction of Automobile Crashes Using a 3-D Simulator to model and simulate occupant kinematics in crashes.

## 1980 American Institute of Chemical Engineers

Course Title: The Expert Witness in an Adversarial Proceeding.

## 1980 National Society of Professional Engineers

Course Title: Forensic Engineering, The Professional Engineer as an Expert Witness.

#### 1976 University of Delaware

Course Title: Design of Solar Heating Systems.

#### 1975 American Society of Civil Engineers

Course Title: How to Operate and Manage a Consulting Firm.

#### TEACHING EXPERIENCE

#### 1971 University of Pennsylvania

Lecturer: Towne School of Civil and Mechanical Engineering.

## 1981 Pipeline Educational Resources Center

Co-Chairman and Lecturer: Three days Intensive Course on Hydraulic Transport of Solids by Pipeline. Presentations in: San Francisco, Houston, Philadelphia and Atlantic City.

#### 1973 Center for Professional Advancement

Lecturer: Hydraulic transport of solids by Pipeline.

## 1970 University of Pennsylvania

Laboratory Assistant, Undergraduate Classes in Fluid Mechanics.

#### **EDITORIAL EXPERIENCE**

1974-1971, **Journal of Transportation Engineering** - Pipeline Division, ASCE, Editor.

1969, Pipeline Division Newsletter, ASCE, Assistant Editor.

#### COMMITTEES

1991 The County Executive's Environmental Advisory Committee for New Castle County, Delaware.

1981-1983 **Board of Directors**, University of Pennsylvania Engineering Alumni.

#### **PUBLISHED WORKS**

"Data Collection in Vehicular Accident Reconstruction", <u>Advocate</u>, Delaware Trial Lawyers, v28, No.3, summer 2003.

"Crash Data Recorders: The New Eyewitness in Vehicular Accidents", <u>Advocate</u>, Delaware Trial Lawyers, v26, No.3, summer 2001.

<u>Defense of Speeding, Reckless Driving and Vehicular Homicide</u>, 1987 Supplement, "Accident Reconstruction" Matthew Bender, New York, New York, Original Publication, 1984.

"The Slurry Jet Pump", <u>Journal of Pipelines</u>, Elsevier Publishing Co., The Netherlands, June 1981.

"Social Responsibility Within The Present Code of Ethics", <u>Engineering Issues</u>, American Society of Civil Engineers, July 1975.

"Jet Pump In Slurry Transport", <u>Proc. of the International Conference on Hydraulic Transport of Solids in Pipes</u>, The British Hydrodynamics Research Association, Bedford, England, 1970, with I. Zandi.

"Beach Nourishment from Offshore Sources", <u>Journal of American Shore and Beach Preservation Assoc.</u>, Vol. 37, No. 2, pp. 40:49, October, 1969, with I. Zandi.

"Heterogeneous Flow of Solids in Pipelines", <u>Proc. ASCE, Journal Hyd. Division</u>, HY3, Vol. 93, pp. 145-159, May, 1969 with I. Zandi.

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#### **PRESENTATIONS**

#### "Accident Reconstruction"

Allstate Capital Attorney Conference, Rocky Gap Resort, Flinstone, MD November 4, 2016

### **Rodney Inn Of Courts Delaware Bar Association**

Use of Daubert motions in limiting forensic testimony, University of Delaware, Arsht Hall, November 20, 2013

## **Truck Accident Litigation from Start to Finish**

Instructor in full day seminar in continuing education for lawyers organized by the National Business Institute. November 18, 2010, Wilmington, Delaware.

"Black Box Technology Crash Data Recorders & Computer Animation, Presentation and talk given for DE Claims Association, Newark, Delaware, January 10, 2006.

"Topics In Accident Reconstruction, Including Methods, Preservation of Evidence, Roadway Defects, Utility Poles and Animations", Presentation given as part of the 22<sup>nd</sup> Annual Insurance Law Seminar for the Pennsylvania Trial Lawyers Association, Pittsburgh, Pennsylvania, April 22, 2004; Harrisburg, Pennsylvania, May 11, 2004; Philadelphia, Pennsylvania, June 2, 2004.

"Using Automobile Crash Data Recorders in Litigation, Understanding 'Black Box Technology", presentation given as part of the 20<sup>th</sup> Annual Insurance Law Seminar for the Pennsylvania Trial Lawyers Association, Pittsburgh, Pennsylvania, April 23, 2002; Harrisburg, Pennsylvania, May 23, 2002; Philadelphia, Pennsylvania, June 25, 2002.

"Mastering the MIST (Minor Injury Soft Tissue) case", presentation and talk given to the DE Trial Lawyers Association, Wilmington, Delaware, November 17, 2000.

"Demonstrative Evidence - Forensic Animations", presentation and talk given to the Delaware Trial Lawyers Association, Wilmington, Delaware, September 25, 1998.

"Masters in Trial Seminar", sponsored by the Foundation of the American Board of Trial Advocates, participated in the Philadelphia Masters in Trial Seminar as a Defendant's Expert, Philadelphia, Pennsylvania, April 2, 1998.

- "Whiplash in Low Speed Rear End Collisions", Insurance Fraud Claims Seminar, Marks, O'Neill, Reilly, O'Brien & Courtney, P.C., Philadelphia, Pennsylvania, May, 1996.
- "Whiplash in Low Speed Rear End Collisions", Delaware Automobile Insurance Law Seminar 1996, Geico, White & Williams, Fredericksburg, Virginia, May 1996,
- "Whiplash in Low Speed Rear End Collisions", Bell Atlantic Regional Claims Seminar, Bell Atlantic Regional Claims, Baltimore, Maryland, June 1996.
- "Rate of Impact and Level of Injury", Continuing Medical Education, Pain Conference, Columbus, Ohio, October 1993.
- "How Rate of Impact Affects Trauma", Keynote Address, American Academy of Pain Management, Annual Meeting, Albuquerque, New Mexico, October, 1992
- "The Commonwealth on Trial Engineering Perspective", Pennsylvania Trial Lawyers Association, Continuing Educational Series, Scranton, Pennsylvania, Philadelphia, Pennsylvania, and Pittsburgh, Pennsylvania, 1992.
- "Auto Accident Investigation and Reconstruction", Bell Atlantic Claims Workshop I, Valley Forge, Pennsylvania, May 1990.
- "Mechanics of Whiplash", Delaware Pain Clinic and Delaware Safety Council, The Delaware Academy of Medicine, Wilmington, Delaware, April 1990.
- "Accident Reconstruction", A.T. & T., Nynex, Southern Bell, Etc., Ninth Annual Claims Seminar, Tampa, Florida, March 1990.
- "Eyewitness Testimony, Smoking Gun or Fantasy", 42<sup>nd</sup> Annual Meeting of the American Academy of Forensic Science", Cincinnati, Ohio, February 1990.
- "Stopping Distances Speed from Skid Marks Use of Decelerometers", NATARI Seminar, Atlantic City, New Jersey, October 1988.
- "Sources of Technical Information for Accident Reconstruction", NATARI Seminar, Valley Forge, Pennsylvania, October 1987.
- "The Accident Reconstruction Expert", presented as part of a Symposium entitled, "Trying an Auto Collision Case", Delaware Trial Lawyers Annual Convention, Dover, Delaware, June 1987.
- "Vehicular Accident Reconstruction", presented before the Ministry of Public Security, Peoples Republic of China, Liaoning Province, Chenyang, Peoples Republic of China, July 1986.
- "Criminal Negligence in Catastrophic Structural Collapse", presented before the Ministry of Public Security, Peoples Republic of China, Liaoning Province,

- Chenyang, Peoples Republic of China, July 1986.
- "Engineering Analysis in a Litigation", presented before the Delaware Trial Lawyers Association, Dover, Delaware, May 1986.
- "Engineering Analysis as Applied to Product Liability and Accident Reconstruction", presentation before the Delaware Claims Association, Wilmington, Delaware, October 1983.
- "Vehicle Accident Reconstruction Techniques", presentation before Delaware Trial Lawyers Association, Wilmington, Delaware, December 1982.
- "Use of an Expert Witness in Product Liability Litigation", mock trial given in conjunction with continuing education for the Delaware County Trial Lawyers Association, Wilmington, Delaware, October 1982.
- "Engineering Aspects of Product Liability", seminar presented as part of a course on product liability, University of Delaware, Wilmington, Delaware, April 1982.
- "Role of Forensic Engineers in Product Liability & Accident Cases", Delaware Bar Association, monthly meeting, Wilmington, Delaware, March 1981.
- "State of Art for Highway Joint Sealing", film produced by Hercules, Inc., Wilmington, Delaware, 1981.
- "Ozonation System for the Town of Newport Delaware", presented at a special meeting of the New England Water Works Association, Boston, Massachusetts, 1979.
- **"Pumping Solid Liquid Mixtures by Jet Pump"**, presented at the Symposium on Solids Transport in Slurries, 17<sup>th</sup> Annual Meeting A.I.Ch.E., Atlantic City, New Jersey, August 12-September 1, 1979.
- "The Jet Pump in Beach Nourishment Operations", presented at the 12<sup>th</sup> International Conference on Coastal Engineering, Washington, D.C., September 1970.
- "Beach Nourishment from Offshore Sources", presented at the Annual Meeting of the American Shore and Beach Preservation Society. Atlantic City, New Jersey, September, 1969.
- "Heterogeneous Flow of Solids in Pipelines", presented at a special meeting of the Hydraulics Division of the American Society of Civil Engineers, Madison, Wisconsin, August 1966.
- "Flow of Solid Liquid Mixtures in Pipelines", 2<sup>nd</sup> Annual Eastern Regional

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Student Paper Contest sponsored by the American Society of Civil Engineers at Swarthmore College, Swarthmore, Pennsylvania. First prize awarded.

#### **EMPLOYMENT HISTORY**

1981-Present, George C. Govatos, Ph.D., Professional Engineer, P.C., President

1976-1981, Govatos and Paraskewich, Inc., Consulting Engineers, Montchanin, Delaware, President

Responsible for all engineering work performed by this firm. Staff levels normally included 3 engineers, 9-12 technicians and I-3 administrative personnel in two offices located in Wilmington, Delaware and Elkton, Maryland. The firm engaged in the design of land development projects, road design and roadway rehabilitation, traffic engineering, structural design, storm water and sanitary design and environmental studies.

1973-1976, Karins and Associates, Inc., Consulting Engineers, Wilmington, Delaware, Vice President

Supervised engineering of projects involving design of roads, sanitary sewers, storm sewers, and structures with special studies in water quality management and traffic impact.

1971-1973, Delaware Department of Highways and Transportation, Dover, Delaware, Research Engineer

Principal responsibility with the Department was to implement the 1969 Environmental Policy Act for highway corridor projects. I developed the calculation procedures to quantify the effects of highway related noise, air, and water pollution. In addition, I developed the format for preparation of an environmental impact statement which was used as a model for other states in the preparation of similar studies. I was also responsible for the dissemination of all types highway research engineering within the department, and participated in management studies.

1968-1971, Corps of Engineers, Philadelphia, Pennsylvania, Research Fellow-District Research Engineer

Responsible for developing a method for retrieving offshore sand deposits in the ocean environment for use in beach replenishment projects along the New Jersey coastline. My work included a conceptual design of the proposed method and the design, fabrication and testing of a solids handling pump. All work on this project was done under my direct supervision.

Participated in the Hopper Dredge Improvement Program, the goal of which was to George C. Govatos, Ph.D., PE 9 August 11, 2017

increase the fluid density of dredge spoils in the maintenance dredging of the Delaware River. Assisted in the design of a dredge ladder and pump that would allow the pump to be placed under water.

1966-1968, University of Pennsylvania, Philadelphia, Pennsylvania, Research Assistant

Participated in a federally sponsored research program for collection and disposal of solid waste from cities. I shared responsibility for design of the grinding process, monitoring and control systems and construction of the pilot plant. The proposed concept was to grind the waste into a heterogeneous mass suitable for pipeline transit, and then pump the material to locations away from urbanized areas using water as the carrying medium.

#### **AWARDS**

Literacy Award, National Association of Traffic Accident Reconstructionists and Investigators, Awarded for promoting and advancing knowledge and techniques in the field of accident reconstruction.

**Daniel W. Meade Prize in Civil Engineering**, American Society of Civil Engineers, Zone II.

First Prize, Student Paper Contest for the University of Delaware and regional competition.

Outstanding Student Award, University of Delaware.

**Distinguished Military Student Award**, University of Delaware.

**Reserve Officers Award**, University of Delaware.

Sons of the American Revolution Award, University of Delaware

#### PROFESSIONAL & HONORARY SOCIETIES

Fellow, American Society of Civil Engineers, past Vice President and Member of Board of Directors, Delaware Section.

Member, American Traffic Safety Services Association

Member, National Association of Traffic Accident Reconstructionists & Investigators

Member, Delaware Association of Professional Engineers.

Member, Sigma XI, National Society for Academic Research.

Member, Society of Automotive Engineers, Professional Automotive Consultants.

Member, Tau Beta Pi, National Academic Engineering Honor Society.

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