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EDUCATION

Ph.D. Applied Fluid Dynamics Bio-Physics & System Modelling -1989-	von Karman Institute for Fluid Dynamics Rhode-St-Genese, Belgium
M.Sc. Education, Innovation & Creativity in Education Curriculum Design, Special Ed. - 1990 -	University of Toronto, Ontario Institute for Studies in Education Toronto, Ontario
M.Sc. Mechanical & Civil Eng. Renewable Energy Technologies - 1984 -	Queen's University Department of Mechanical Engineering Kingston, Ontario
B.Ed. Intermediate/Senior Education Mathematics, Physics, Computer Sci. Outdoor & Experiential Education - 1982-	Queen's University Faculty of Education Kingston, Ontario
B.Sc. Engineering Physics Environmental & Mechanical Options - 1981-	Queen's University Faculty of Applied Science Kingston, Ontario
UBC Residential Program for Executive Development May 5 – 24, 1996	University of British Columbia, Faculty of Commerce and Business Administration Vancouver, BC.
AutoCAD Technician Course	Jan – June 1991
Courses in Epidemiology Statistics, Community Health - 1978-1982	Queen's University Faculty of Medicine, Dept of Epidemiology Kingston, Ontario

SOME RELEVANT RECENT PROFESSIONAL ACTIVITIES:

CEO Tinari Energy Management Services Inc.
 Consultant Engineer: Design & Implementation of Sustainable Communities to the governments of PRC, Ecuador, Vietnam and the EEC.
 Chief Envelope Structural Engineer: More than 500 successfully completed projects
 Project Director of the **Megalodon** Large-Scale 3D Concrete House Printing Project
 Project Director in Portable Potable Water Production for Developing Nations Project
 Project Director for Ocean Current & Tidal Power for the Arctic Project
 Author of several books including "**The JOOM Destiny**" on the future of 3D Printing
 Engineering Consultant - 3D Printing, Scanning & Design Technologies
 Adjunct Professor Simon Fraser University 3D Printing & Scanning Department
 Member of the Canadian National Advisory Committee on New Air Technologies

Appointed to the AIBC Board by Lt. Gov. of BC to Investigate the Leaky Condo Situation
 Consultant to **NASA** on Applications of Social Media
 Advisor to the **US Joint Chiefs** on New Technologies for Fleet Defence
 Consultant in Computational Epidemiology
 Consultant in Climate Change, Greenhouse Gas Reduction & Renewable Energies
 Project Evaluator - Sustainable Development Technologies Canada
 Alternate Energy Project Evaluator for National Research Council Canada
 Consultant Engineer in Sustainable Development Technologies & Green Buildings
 Providing Energy Policy Consulting Services to Governments
 Member of the Architectural Institute of BC Advisory Committee on Alternate Energy Technologies
 Commercialization of numerous new innovative technologies

PATENTS

Filing No.	Jurisdiction	Description	Status
Appl. No. 139,275 Oct. 18, 1993	US	Method and apparatus for exercising the lower back and for improving swimming, walking and running	Patent Awarded #5,389,058 Feb. 14, 1995
No. 3,055,845 2019	CAN	Systems and Methods for Producing Concrete Structures	Patent Awarded August 22, 2022
US 62/570,023 Oct. 18, 2017	US	Systems and Methods for Rapidly Producing Concrete Structures	Patent Awarded #11,213,973
US App. No. 16575292 Sept. 18, 2019	US	Systems and Methods for Producing Concrete Structures	Patent Awarded #11,254,027

RECENT WORK EXPERIENCE

PACIFIC INSTITUTE FOR ADVANCED STUDY - Established 1990, Director.

A contract R & D facility networked with researchers around the world to parallel-process the solutions of the most difficult problems facing society and our planet. Some recent projects include: Work in 3D Scanning & Printing Technologies, Research into new Green Building technologies, design and construction of Small Hydro Systems, Development of social media applications for businesses. Development of Computational Epidemiological Models, Research into ecosystem impacts, climate change modeling and analysis, development of new greenhouse gas reduction technologies, alternate energy research & development, biomass energy development, development of geothermal heat pumps and district heating systems, cogeneration, sustainable development consulting, fluid dynamics modelling of advanced fuel-cell designs, wind turbines, complex flow systems and heat and mass transfer processes. Development of advanced distance education materials designed for delivery over the Internet, study of advanced methods of bioremediation, the biomechanics of lower back pain relief, development of air pollution dispersion models, development of high efficiency heat transport systems, study of the biodiversity within urban wilderness areas, seeking solutions to the problem of "sick-building syndrome", air quality management using biofiltration and software development.

TINARI ENERGY MANAGEMENT SERVICES INC. - Established 1983, President
 Providing consulting services in all aspects of Sustainable Community Design, 3D Design, 3D Scanning, 3D Printing, energy management, environmental engineering and sustainable building design and analysis. Involved with advanced level research into green buildings, alternate energy technology, biomass energy systems, ground source heat pumps, biofiltration, bioremediation, environmental engineering, environmental physics, process & systems engineering, computer modeling of complex systems, thermo-hydraulics, software development, alternate energy technologies, energy conservation, biodiversity research, integrated energy systems, waste reprocessing, energy management, policy analysis, integrated waste management, appropriate technology, contract research, corporate training programs and technical translation services.

SIMON FRASER UNIVERSITY, VANCOUVER (2015-Present) Project Manager – Development of a 3D scanning, printing and design department including curriculum & course development, equipment selection and purchase and design of a maker space.

PRIVATE CLIENT: West Vancouver, BC (2009) Engineering Project Manager - Development of a 45 kW small hydro system

AGRICULTURE CANADA, Ottawa, ON (2009) Research Team Leader

Project Director of a comprehensive research project on the probable impacts that climate change will have on all aspects of future Canadian agriculture

DURHAM COLLEGE, Whitby ON (2008) Sustainability Consultant

Design and development of renewable energy technologies (wind, solar, biomass and geothermal heat pumps), design of LEED Platinum level buildings and helping to establish a campus sustainability culture

SHELL CANADA ENERGY, Alberta Oil Sands (2007) Process Fluid Dynamics Consultant

Detailed analysis of every component of a pilot *Non-Segregating Tailings* Pilot Plant. Numerous process problems and inefficiencies were identified and corrected. Algorithms were developed to exactly calculate all of parameters of the process flows in each sub-system of the plant including laminar two phase flows of NSTs. The ultimate goal was to generate all of background engineering information necessary for the eventual design and operation of a full-scale 10,000 t/hr commercial plant capable of producing stable non-segregating tailings.

SUSTAINABLE DEVELOPMENT TECHNOLOGY CANADA (SDTC) (2001 – Present) Expert Evaluator of funding proposals in renewable energy, biomass energy, greenhouse gas reduction and environmental technologies.

NAVAL WAR COLLEGE - PROVIDENCE RHODE ISLAND (2005 - Present) Consultant to Director Adm. Hogg on the development of new technologies for the protection of aircraft carrier battle groups from swarm attacks of hypersonic drones.

NATIONAL RESEARCH COUNCIL CANADA (2007 – Present) Expert Evaluator of funding proposals in all areas of alternate energy technology

SWANSEA INDIAN BAND (2006) Consultant – In charge of the development of a complete, self-sustaining community using solar, wind and biomass energy.

WEST COAST COLLEGE OF MASSAGE THERAPY (2006-2008) Director of Education
 Instructor of Medical Ethics, Business & Philosophy

SIMON FRASER UNIVERSITY, Burnaby, BC (2004 - 2005)
 Instructor of Future Studies and Co-Founder of the Applied Foresight Network

SONIC ENVIRONMENTAL SOLUTIONS INC., Vancouver (2003 – 2008) Chief Technology Officer, Development of *sonification* as a viable technology for the remediation of soil and wastewater contaminated with PCBs, MTBE and other organic contaminants. Development of all technical aspects of the business plan and supervision of experimental work. Result was the development of a viable technology that was successful commercialized.

PAX ENVIRONMENTAL, San Francisco, USA (Sept. 2002 – 2003) Chief Fluid Dynamics Expert. Computational Fluid Dynamics analysis of new energy efficient propeller and turbine blades. CFD analysis of new wind turbine blade concepts for a new generation of small-scale wind turbines.

GOVERNMENT OF VIETNAM, Ho Chi Minh City (2001) Foreign Consultant. Development of a Net-Zero, Sustainable Community for foreign workers.

GOVERNMENT OF CHINA, Beijing (2000 - 2001) Foreign Consultant, work on the development of the Environmental Plan for the 2008 Beijing Olympic Bid. Development of a Net-Zero, Sustainable Community for foreign workers.

ADVANCE TECHNOLOGIES, Hong Kong (Dec. 1999 – 2001) Director, Research and Development and Chief Idea, Innovation and Intelligence Officer. Invention, experimentation and commercialization of new scientific innovations for the global market. Provision of environmental and energy consulting services throughout Asia.

DOUGLAS COLLEGE - (Jan 2001 – June 2001) Faculty member in the Physics Department. Responsible for teaching college-level (engineering mechanics) physics and AutoCAD.

SUSSEX INSURANCE.COM - (June 2001) Chief Information Officer. Responsible for helping to set up and debug corporate computer network, installing software, configuring laptops, helping to design the corporate Web site and managing corporate knowledge and information.

BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY - (Jan. 1997 – Feb. 1999) Faculty member in the Environmental Engineering Program. Responsible for teaching courses in Contaminated Site Remediation, Finite Elements in Engineering, Risk Management, Groundwater Modeling, Physical Hydrogeology and Computer Modelling. Also in charge of developing the new *Distance Education Program*, where all of the Institute's courses will be offered to students throughout the world via the Internet. Coordinator of student projects and of *Information Technology* research and development for the implementation of distance education program.

WORLD ENVIROTECH SERVICES & TECHNOLOGIES - (Oct. 1993 -1996) VP for R & D Research into advanced concepts in biofiltration & bioremediation of chlorinated hydrocarbons

PENDRAGON TECHNOLOGIES INC. - (1994 - PRESENT), Senior Environmental Advisor Consultant in bioremediation, biofiltration, site characterization, engineering design.

NORECOL ENVIRONMENTAL MANAGEMENT LTD. (1992), OH&S Consultant Development of an occupational health & safety protocol for environmental field personnel. Prepared a safety protocol manual, conducted site surveys, environmental audits, wrote environmental proposals, conducted research into site remediation.

CITY OF YELLOWKNIFE (1990) Consultant – Development of a heat recovery system to extract hot water from a deep mine (>6000 ft) and use the energy for a District Heating System for a new suburban housing development.

EEC BRUSSELS (1986-89) Consultant – aiding in the development of the next generation of biomass energy systems for the developing world. Development of all of the alternate energy technologies necessary to create Net-Zero, Sustainable Communities.

von KARMAN INSTITUTE FOR FLUID DYNAMICS - (1985 - 90). Research Engineer Environmental and Applied Fluid Mechanics, computer simulation & modeling, research into advanced concepts in alternate energy technologies, heat transfer, biomass energy, combustion and in the thermo-hydraulics of multiphase flows in industrial fluid mechanics. Worked on contracts solving problems in advanced fluid mechanics including fluidized bed combustion, cogeneration, toxic gas spills analysis, environmental modeling, contaminant hydrogeology, groundwater/porous media flows and transport modeling.

GOVERNMENT OF ECUADOR, Quito (1990 - 91) Consulting Engineer, Development of a Net-Zero, Sustainable Community in the high altitude regions of Ecuador.

NATIONAL ENERGY INSTITUTE OF ECUADOR - 1983,90 - 91, Director, Alternate Energy Research Group. Headed a research team investigating innovative concepts in alternate energy technology and national development. Research into alternate & appropriate energy including energy efficient housing concepts, passive & active solar energy, geothermal energy, wind power, wave energy, ground source heat pumps, biomass energy systems and bio-fuels. Also worked as a consultant to the government of Ecuador in national energy policy and environmental issues. Worked on projects in low cost bioremediation of contaminated sites, wastewater treatment, advanced heat transfer, thermo-fluids analysis.

OFFICE OF THE MINISTER OF STATE FOR EXTERNAL AFFAIRS (1980) Technology advisor to Flora MacDonald, MP for Kingston and the Islands

CANADIAN EARTH DAY FEDERATION - Founder and chief organizer of the first Canadian Earth Day in 1979. Organization of recycling and waste reduction programs, collection and processing of recyclables, liaison with government, the public and with contractors, and design and delivery of education programs to staff & public.

HARWELL ATOMIC ENERGY RESEARCH ESTABLISHMENT, Oxfordshire, U.K (1978) Worked as a research assistant in projects relating to alternate energy technologies and in the use of laser anemometry to improve the efficiency of internal combustion engines.

DEPARTMENT OF EPIDEMIOLOGY, FACULTY OF MEDICINE, Queen's University, Kingston, ON (1978 – 1983) Worked as a Statistical Analyst & Computational Epidemiologist to create statistical models of the emerging AIDS epidemic in North America, Ebola in West Africa & Cholera in South America.

TEACHING EXPERIENCE

SIMON FRASER UNIVERSITY DEPARTMENT OF PHYSICS (2013) Sessional Instructor of Physics 346 (Environmental Physics)

WEST COAST COLLEGE OF MASSAGE THERAPY (2006-07) Director of Education
Instructor of Medical Ethics & Philosophy, applications of social media

SIMON FRASER UNIVERSITY, Burnaby, BC (2004 - 2005) Instructor of Future Studies
Teaching courses in Future Studies in the Department of Humanities, internet applications.

DOUGLAS COLLEGE (Jan. 2000 - June 2001)
Instructor of Physics, Engineering Physics, Engineering Design Graphics (AutoCAD 2000)

BCIT ENVIRONMENTAL ENGINEERING TECHNOLOGY (Jan. 1997 - Feb. 1999)

Instructor of Sustainable Energy Management, Risk Management, Groundwater Hydrogeology, Groundwater Modeling, Finite Elements. Coordinator of Distance Education/Internet Program.
Instructor in the School of Construction Technology, new construction technologies, alternate energy technology, solar engineering.

UNIVERSITY OF TORONTO CONTINUING EDUCATION (1995 - 2002) - Visiting Professor:
 Advanced Concepts in Innovation and Creativity for Engineering Professionals

UNIVERSITY OF BRITISH COLUMBIA CONTINUING EDUCATION (1995 - 2002) - Visiting Professor in Continuing Education Department and in the Residential Program for Executive Development:

- Advanced Concepts in Innovation and Creativity for Business Professionals
- Business Strategies for E-Commerce
- Information Security for Business Professionals

CANADA TRAINING GROUP (1994-1995) - Corporate Trainer
 Developed specialized training courses for various companies.

COQUITLAM CONTINUING EDUCATION: (1993 - 1996), Night School Instructor
 Senior Physics Instructor, Senior Mathematics Instructor

UNIVERSITY COLLEGE OF THE FRASER VALLEY - 1991, Physics Instructor.

TORONTO BOARD OF EDUCATION - (1982 - 99), Summer School Instructor
 Senior Mathematics & Calculus

von KARMAN INSTITUTE FOR FLUID DYNAMICS -(1986-1990), Graduate Student Instructor
 Taught environmental engineering, advanced laboratory methods, instrumentation, measurement techniques and fluid mechanics to graduate students.

QUEEN'S UNIVERSITY DEPT. OF EPIDEMIOLOGY, FACULTY OF MEDICINE (1978 – 1983)
 Research Assistant, teaching courses in Intro to Epidemiology, Community Medicine, Infection Control, New Methods of Treating Antibiotic Resistant Bacteria, the Statistics of Epidemiology.

COMPUTER EXPERIENCE

- Experience with 3D Modeling with AutoCAD, Fusion 360, Solid Works, ProEngineer
- Certified AutoCAD Technician (Burnaby College 1994).
- Experienced with a wide variety of engineering software packages including ANSYS, CFX, FLUENT, TRNSYS, ABACUS, AIRFLOW-SVE, MODFLOW, SEWERCAD and with the development of custom software using finite differences, finite elements and finite volumes.
- More than 25 years experience in scientific, business and educational computing, with extensive *INTERNET* experience including e-commerce, web site design and site development.
- In charge of the Distance Education Program for the British Columbia Institute of Technology faculty of Environmental Engineering Technology. Responsible for setting up all components of on-line courses including course notes, tests, laboratories, bulletin boards and on-line lectures with interactive chat-lines and white boards.
- Experienced with Office 2020, Fusion 360, AutoCAD 2020, Solid Works 2020, Sketchup 2021, 123D
- Experience with the development of complex computer modeling and real time simulations.
- Programming in HTML 5, DHTML, XML, Javascript, JAVA, ActiveX, ASP, to design advanced educational and E-Commerce WEB pages.

RESEARCH GRANTS

- Private Investors, Burnaby, BC (2019 - Present)** **\$1.3 Million**
"Development of the next generation 3D Concrete House Printing Technology"
 Dr. Paul Tinari Ph.D., P.Eng., Project Director
- Durham College, Whitby, ON (2008)** **\$50,000**
"Implementation of Renewable Energy Technologies and Establishing a Sustainability Culture at Durham College"
 Dr. Paul D. Tinari Ph.D., P.Eng., Consultant and Project Director
- Shell Environmental Fund (2004)** **\$5,000**
"The Ecosystems in Urban Wilderness Areas"
 Book Written by: Dr. Paul D. Tinari
- BC Environmental Fund (1996 - 1997)** **\$40,000**
"Ecological & Restoration Work in Mundy Park"
 Awarded to the Friends of Mundy Park Heritage Society
 Dr. Paul D. Tinari Ph.D., P.Eng. Project Director
- BC 21 Power Smart Special Projects (Oct. 1995 - March 1996)** **\$115,000**
"Demonstration of an Advanced Bed Concept Biofilter"
 Awarded to Tinari Energy Management Services Inc.
 Dr. Paul Tinari Ph.D., P.Eng., Principal Investigator
- U.S. Air Force Contract No. F08637-94-C-6018 (1994)** **\$57,000**
"Bioremediation Augmentation by Catalytic Augmentation"
 Awarded to World Envirotech Services & Technologies Inc.
 Dr. Paul Tinari Ph.D., P.Eng., Principal Investigator
- National Research Council - IRAP Grant #41619W (1994)** **\$10,000**
"Research and Development of the Tinari V-Fin Concept for the Treatment of Chronic Lower Back Pain."
 Awarded to Torrington Capital Inc.,
 Dr. Paul Tinari Ph.D., P.Eng., Principal Investigator
- Environment Canada - Environmental Partners Fund (1994 - 1996)** **\$10,000**
 Project #BCE418, *"Research and Development of an Interpretive Nature Trail in Mundy Park."*
 Awarded to Friends of Mundy Park Heritage Society,
 Dr. Paul Tinari Ph.D., P.Eng., Principal Investigator
- von Karman Institute for Fluid Dynamics (1985 – 90)** **>\$2.5 Million**
"Development of a Capillary Pumped, Two-Phase Heat Transport System for the NASA Space Station" Awarded to Paul Tinari, Ph.D. student, by NASA and the US Air Force
- Queen's University Dept. of Epidemiology, Faculty of Medicine (1981)** **\$30,000**
"Creation of a Statistical Model for the Spread of GRID in Urban Areas," Awarded to Paul Tinari, Research Assistant & Statistical Analyst.

CONTAMINATED SITE REMEDIATION EXPERIENCE

- E-FRAC INDUSTRIAL SERVICES INC. - Vancouver, BC (2012)**
 Design of a comprehensive contaminated water treatment system to remediate Fracking Solutions and ground-water contaminated with compounds resistant to bio-remediation such as MTBE etc.

SERVICE STATION, City of Richmond (2004 – 2005)

Design and construction of a pump and treat remediation system

CITY OF PRINCE GEORGE. Works Yard (2002)

Design of a soil vapour extraction system to clean a gasoline contaminated site

PEOPLE'S REPUBLIC OF CHINA, Beijing, PRC (2000 - 2001)

Consulting work with the City of Beijing on the preparation of the Environmental Plan for the City's official bid for the 2008 Olympic Games

GOVERNMENT OF VIETNAM, Ho Chi Min City, Vietnam (2000)

Design of a wastewater remediation system to clean tanker rinse water

VALLEY PROCESSING INC., Vancouver Island, BC (2000)

Design and installation of an advanced technology biological odour control system for a chicken rendering plant. The unit has maintained a removal efficiency of 98% in all weather conditions since it went into operation.

CANASIA LTD. , Vancouver, BC (1998)

Remediation of a gasoline contaminated site in Downtown Vancouver. Several unsuccessful attempts were made by one of the large environmental firms to remediate the site. Eventually, they abandoned the site and the Pacific Institute was contacted. Complete remediation of the site was completed in four months.

BRITISH COLUMBIA BUILDING CORPORATION, Vancouver, BC (BCBC)

Mt. Thurston Prison Site (1995): Cleanup of an aquifer contaminated with gasoline that had penetrated under several buildings and under a forest.

Houston Works Yard (1996): Cleanup of a diesel plume in a shallow aquifer and remediation of soil contaminated with oil and grease.

Smithers Works Yard (1997): Cleanup of a diesel plume in a low permeability vadose zone by use of bioremediation enhanced with specially adapted Soil Vapour Extraction.

INTERNATIONAL BIO-RECOVERY CORPORATION INC., Vancouver, BC (IBR)

Design and installation of an odour control biofilter (1997)

MOORE-CLARK FISH FEED PLANT, Vancouver, B.C.

Design and installation of a new bed for the company biofilter (1999)

GOVERNMENT OF ECUADOR, Quito Ecuador (1983)

Bio-remediation of oil and hydrocarbon contaminated soils surrounding various oil wells.

OTHER WORK EXPERIENCE**CANADIAN EXECUTIVE SERVICE ORGANIZATION - (1990-91), Int. Development Expert**

Sent to Ecuador as an expert in energy & environment to aid in the development of new sources of energy, improvements in the efficiency of energy use, the improvement of national energy policy, natural resources management, wildlife & fisheries preservation.

DOMINION TRANSLATION INC. - (1985-90), Translator

Simultaneous translator of French/English in courtrooms, business conferences etc.
Translation of technical, commercial and government documents.

EEC DEPARTMENT OF SCIENCE & TECHNOLOGY - Brussels - (1986-90), Technical

Translator - Translation of technical documents from French into English.

SCHOOL OF GRADUATE STUDIES AND RESEARCH - Queen's University - 1984

Writer for Perspectives Magazine.

FACULTY OF EDUCATION - Queen's University - 1984

Research into computer applications in education.

DEPARTMENT OF COMPUTING & INFORMATION SCIENCE - Queen's University - 1981-82

Terminal coordinator and systems programmer.

CANADIAN INSTITUTE OF GUIDED GROUND TRANSPORT - Kingston, Ontario - 1981

Research assistant working in computer simulation and engineering design.

DEPARTMENT OF EPIDEMIOLOGY, FACULTY OF MEDICINE, Queen's University - 1980

Research assistant working in computer simulations, occupational health & safety.

HARWELL ATOMIC ENERGY RESEARCH ESTABLISHMENT - Oxfordshire, U.K. -1978

Research assistant working in laser anemometry, alternate energy, holography, electronics and energy policy.

VOYAGER WILDERNESS INC. - Atikokan, Ontario - 1977

Interpretive naturalist, wilderness guide, environmental study and analysis, fisheries and wildlife preservation.

MONTREAL OLYMPIC GAMES - Montreal, Quebec - 1976

Work in the Olympic Stadium installing & removing equipment for all Track & Field events and bringing selected athletes to the medical clinic for their drug tests.

PROFESSIONAL SPEAKING INVITATIONS

TEDx Talk - Creative Mornings, Vancouver, BC, June 5, 2015, *"Long Term Impacts of 3D Printing on the Lives of Ordinary Canadians,"* Held at SFU Downtown Campus

Emily Carr University, Vancouver, BC, Aug 13, 2014, *"How 3D Printing Will Revolutionize Our World"* Presentation as part of the "Material Matters" distinguished speakers series

World Future Society Conference, Orlando, July 11, 2014, *"Impacts the 3D Printing and Related Technologies Will Have on Society,"* Preconference course

World Future Society Conference, Chicago, July 19, 2013, *"Introduction to 3D Printing, Scanning and Modeling for Futurists,"* Preconference course

Simon Fraser University, Burnaby, BC, November 26, 2013, *"Trends & Impacts of 3D Printing,"* Open lecture delivered to students & staff.

World Future Society Conference, Vancouver, July 2011, *"The Future of India,"* and *"Impacts that Social Media Will Have on Indian National Development."*

NASA Langley, VA, April 2009, *"The Future of Virtual Worlds and Applications to the US Space Program."*

World Future Society Conference, Chicago, July 2009, *"Systems Thinking and Organizational Creativity," "Future of Haptics," "Future of the Nation's Infrastructure," "The Future of China."*

World Future Society Conference, Washington DC, July 2008, *"Introduction to Forecasting," "The Future of Virtual Worlds."*

Chief of Naval Operations Strategic Studies Group, December 2007, *"Applications of Systems Thinking to Future Military Command, Control, Communications, Computers and Intelligence."* Newport, RI.

World Future Society Conference, Minneapolis, July 2007, *"Advanced Systems Thinking," "Future of the Earth's Water," "Future of RFID."*

World Future Society Conference, Toronto, ON, July 2006, *"Intro to Systems Thinking," "Future Technologies against Terror," "Future Housing for the 21st century."*

Chief of Naval Operations Strategic Studies Group, October 2005, *"The Convergence of New Brain Enhancement, Nanotechnology, Wireless and 3D Printing Technologies for Enhancing Combat Preparedness."* Newport, RI.

Canadian Mortgage and Housing Corporation, May 2005, *"Integrated Design Workshop – Green Housing,"* Yellowknife, NWT.

World Future Society Conference, Washington DC, July 2004, *"Advanced Systems Thinking for Professionals," "The Future of the Earth's Water," The Future of the University"*

World Future Society Conference, Mexico City, November, 2003, *"Future Impacts of the Human Genome Project on Mexico"*

World Future Society Conference, San Francisco, July, 2003, *"Introduction to Systems Thinking for Professionals"*

British Columbia Business Educational Association, April 2002, *"The Future of Business Technologies in the 21st Century,"* Conference held in Vancouver, BC.

World Future Society Conference, Philadelphia, July, 2002, *"Future Impacts of the Human Genome Project," "Future Trends in Nano-technology," "Future Trends in Alternate Energy Technology"*.

Goepel-McDermid Conference on Leading Canadian Manufacturers in Alternate Energy, November 27, 2000, *"Future Trends in Alternate Energy"*, Toronto, Ontario.

University of British Columbia, Faculty of Applied Science, November 22, 2000 *"Future Trends in Engineering"*, U.B.C., British Columbia

Solid Waste Council of Victoria, November 17, 2000, *"Future Trends in Waste Management"* Victoria, British Columbia

Coquitlam School Board, Harbour View School, May 15, 2000, *"Teaching Creative Thinking Skills in the Classroom"*, Coquitlam, B.C.

Solid Waste Federation of British Columbia, April 14, 2000, *"Future Trends in Solid Waste Management"*, Vancouver, B.C.

Seminar on the Future of Manufacturing, March 23, 2000, *"The Future of Pulp & Paper Mills"*, Edmonton, Alberta

Minerva Seminar, April 6, 2000, "*Creative Thinking Skills for Senior Citizens*", Edmonton, Alberta
 B.C. Business Education Association, February 18, 2000

1) Morning: "*Future Trends in E-Commerce*"

2) Afternoon "*Future Trends in Education*"

Vancouver, BC

Association of Professional Engineers & Geo-scientists of BC, January 20, 2000, Keynote
 Speaker at the AGM, "*Future Trends in the Engineering Profession*", Vancouver, BC

Presentation to Employees of the Government of Alberta, January 4, 2000. "The Future of the
 Professions and the Creativity Imperative", Edmonton, Alberta

Certified Management Accountants of British Columbia, October 16, 1998
 "*The Future of the Corporation*"

Faculty of Applied Science, University of British Columbia, October 30, 1997
 "*Future Shock & the Professional*"

Association of Professional Engineers & Geoscientists of B.C., Sept. 1997,
 Invited Keynote Speaker at Annual Conference: "*The Future of Engineering*"

Faculty of Commerce & Business Admin. , University of British Columbia, May 15, 1997
 "*Creative Thinking for Senior Business Executives*"

Canadian Society of Association Executives, June 10, 1997
 "*The Future of the Professions*"

Surrey Chamber of Commerce, October 16, 1996
 "*Leading Edge Environmental Technologies for Site Remediation*"

The Conference Board of Canada, May 1996
 "*Creativity, Innovation and the 21st Century Professional*"

The Greater Vancouver Regional District, March 1995
 "*The Use of Third-Generation Biofilters for Odour Control in Urban Areas*"

Queen's University Dept. of Epidemiology, Faculty of Medicine (1982)
 "*Results of a Statistical Model for Predicting the Spread of GRID in Canada,*" Paul Tinari,
 Research Assistant & Statistical Analyst.

JOURNALISTIC EXPERIENCE

Talk Show Host: "Future Talk," **CJSF Radio**

Science & Internet Columnist - **The Vancouver Sun**

Contributor to **BC Business** Magazine

Writer for **TREK** Magazine, Vancouver

New Pacific Magazine, Vancouver

Aviation & Aerospace Magazine, Toronto

The Whig Standard, Kingston, Ont. - Contributing Columnist

The Queen's Journal, Science & Political Columnist

The Lictor, Kingston Ont. - Political & Science Writer

PROFESSIONAL MEMBERSHIPS

Association of Professional Engineers of Ontario

Association of Engineers and Geophysicists of British Columbia

Professional Member of the World Future Society

Ontario Institute for Studies in Education

Canadian Association of Physicists

Canadian Institute of Strategic Studies

AWARDS AND RECOGNITIONS

Finalist, Canadian Astronaut Selection Process - 1992

Nomination for Nobel Prize in Physics by the Soviet Academy of Physics - 1991

Ph.D. in Fluid Dynamics with Very Great Distinction - 1990

Ontario Marathon Running Champion - 1988

Diploma with Honours - von Karman Institute - 1986

Wrote and passed the Canadian Foreign Service Exam - 1983

Founder of the Canadian Earth Day Federation - 1981

The Queen's Professor's Prize for Natural Philosophy - 1979

Queen's University Physics Colloquium Guest Lecturer - 1978

The 1977 Association of Professional Engineers of Ontario
Self-Sustaining Family Habitation Design Competition Winner

Queen's University Anniversary Scholarship - 1976

Canadian High School Debating Champion - 1976

Graduated First in Senior Class - 1976

Canadian Armed Forces Marksman 1st Class - 1975

Quebec High-School Cross-Country Running Champion - 1973

BOOKS, PUBLICATIONS & RESEARCH WORK

Tinari, P.D. (2014) *"The JOOM Destiny – Just On Order Making – How 3D Printing Will Revolutionize Your World,"* Friesen Press, Victoria, BC

Tinari, P.D. (2014) *"Acoustic Criteria for Green Buildings,"* Published in the book: *"High-Performance Buildings, Chapter 7,"* Edited By; Tony Robinson, The Fairmount Press Inc.

Tinari, P.D. (2014) *"On-Site Distributed Power,"* Published in the book: *"High-Performance Buildings, Chapter 8,"* Edited By; Tony Robinson, The Fairmount Press Inc.

Guy, R.W., Tinari, P.D. (2006) "Sustainable Technologies for Overview of Prototype Green-Built House Design," *Journal of Green Building*, Vol. 1, No. 2, Spring 2006

Tinari, P.D. (2005) *"Urban Forest Guidebook – A Comprehensive Guide to our Community's Natural Treasures"* Published by the Friends of Mundy Park Heritage Society.

Tinari, P.D. (2004) *"The Art & Science of Systems Thinking,"* World Future Society Books

Tinari, P.D. (2001) *"Boxing Outside the Think – Advanced Concepts in Innovation & Creativity for Professionals,"* World Future Society Books.

"Cultivating Creativity: The Innovator-Engineer in the 21st Century", *Innovation*, Journal of the Association of Professional Engineers & Geoscientists of BC, December 1999.

"Second Generation Air-Stream Biofilters are Approaching Commercialization" by: Dr. Paul D. Tinari Ph.D., P.Eng., Environmental Science & Engineering, March 1994

"Bioremediation Augmentation By Catalytic Oxidation", Contract No. F08637-94-C-6018, U.S. Air Force Armstrong Laboratory, Tyndall Air Force Base, Florida. Principal Investigator: Dr. Paul D. Tinari. Research Conducted at the Oregon Graduate Institute, Beaverton, OR., (1994)

"Bioremediation of a Site Contaminated with Greater Than 60,000 ppm Bunker C", Report on the successful bioremediation of the Fraser River Power Plant Site, by Dr. Paul D. Tinari, Oct. 1994.

"Design of a Large Capacity Biofilter for the Effective Treatment of Composting Odours", Work done for International Bio-recovery Inc., North Vancouver (1994).

"The Riverview Lands - Western Canada's First Botanical Garden." Edited by V. Adolph & B. Gillespie. Chapter 3, "Ecology of Riverview Lands" Written by P. Tinari (1994)
Published By: The Riverview Horticultural Centre Society
P.O. Box 31005, Port Moody, BC, V3H-4T4

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"Design of a Laser Anemometry Calibration Device"
Harwell Atomic Energy Research Establishment Oxfordshire, U.K. - 1978

"Design of a Self-Sustaining Family Habitation"
Association of Professional Engineers of Ontario - 1977

LANGUAGE FLUENCY

English, French, Spanish (Plus Limited German, Russian)

USEFUL SKILLS

SCUBA certified, Private Pilot's License, Certified in Industrial First Aid.

EXTRACURRICULAR INTERESTS

Marathon Running, SCUBA diving, Flying, Political Philosophy, Strategy, Developmental Economics, Elementary Particle Physics, Construction of Computer Models, Conducting Research on the Internet.