
SHORT CURRICULUM VITAE

DEMETRIOS T. VENETSANOS

Dr.-Ing. Mechanical Engineer, NTUA

Dipl.-Ing Mechanical Engineer, NTUA

Chartered Mechanical Engineer (Technical Chamber of Greece) - Fellow HEA

1. PERSONAL DATA

FIRST NAME:	DEMETRIOS
SURNAME:	VENETSANOS
FATHER'S NAME:	TIMOLEON
MOTHER'S NAME:	NAFSIKA
PROFESSION:	MECHANICAL ENGINEER (Chartered)
HOME ADDRESS:	59, WHITWORTH STR, MANCHESTER, M1 3AB
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2. SCIENTIFIC AREAS OF INTEREST

Design / Modelling / Analysis / Optimization of Structures; Computational and Solid Mechanics; Biomechanical Engineering; Computational orthopaedics, orthodontics and analysis of the human lens; Implants; Minimally Invasive Surgery; Soft Robotics; Medical Devices; Smart Textiles; Mechanisms, Dynamics & Vibrations; Steel Structures.

3. EDUCATION

10/2010	Dr-Ing in Mechanical Engineering , School of Mechanical Engineering, National Technical University of Athens (NTUA), Greece Grade: 'Excellent unanimously' (7/7)
09/1999	Dipl-Ing in Mechanical Engineering (a 5-year integrated curriculum equivalent to an Integrated Masters), School of Mechanical Engineering, National Technical University of Athens (NTUA), Greece Graduation Grade: 7.14/10.0
02/1990	South-Eastern College (SEC), Athens, Greece (3 semesters in Aerospace Engineering, Grade Point Average: 3.71/4.00 - Dean's List)
1988	Secondary studies at the Model School (Gymnasium and Lyceum) of Smyrna (Protipos Evangeliki Sxoli Smirnis - PESS), New Smirna, Athens-Greece Graduation Grade: 19 & 6/12 (max: 20)
1982	Primary school, Modern School of Maria Chourdaki, Palaio Faliro, Athens – Greece Graduation Grade: 10 (max: 10)

4. AWARDS / DISTINCTIONS / SCHOLARSHIPS DURING STUDIES

- Thomaidio Award for published paper, NTUA (five consecutive awards)
- Postgraduate Scholarship, NTUA (3-year scholarship)
- Dean's List SEC (1988 – 1989)
- All levels of secondary studies with a distinction award

5. NATIONAL MILITARY SERVICE (compulsory in Greece)

03.1997 – 09.1998: Reservist Sergeant in Infantry (Heavy Weapons)

6. WORKING EXPERIENCE

08.2024 – on going	Position type: Part-time, secondment Post: <i>Faculty Review Coordinator - Assessment and Feedback</i> , Faculty of Engineering Employer: Imperial College London, United Kingdom
11.2022 – on going	Position type: Full-time, permanent Post: <i>Principal Teaching Fellow & Director of Student Experience</i> , Department of Aeronautics Employer: Imperial College London, United Kingdom
09.2021 – 10.2022	Position type: Full-time, permanent Post: <i>Senior Lecturer in Engineering</i> , School of Computing and Engineering <i>Member</i> , Centre for Efficiency and Performance Engineering (CEPE) Employer: University of Huddersfield, United Kingdom
01.2019 – 08.2021	Position type: Full-time, permanent Post: <i>Assistant Professor in Engineering Design</i> , School of Mechanical, Aerospace and Automotive Engineering <i>Associate Member</i> , Institute for Future Transport and Cities Employer: Coventry University, United Kingdom
11.2017 – 01.2019	Position type: Full-time, permanent Post: Senior Lecturer in Engineering Design, School of Mechanical, Aerospace and Automotive Engineering Employer: Coventry University, United Kingdom
03.2015 – 08.2016	Position type: Fixed term Post: <i>Acting Deputy Head of School</i> (Education & Research), School of Mechanical and Automotive Engineering Employer: Kingston University London, United Kingdom
01.2013 – 11.2017	Position type: Full-time, permanent Post: Senior Lecturer, School of Mechanical and Automotive Engineering Employer: Kingston University London, United Kingdom
09.2007 – 01.2013	Position type: Full-time, open-ended contract Post: Research and Teaching, Laboratory of Dynamics and Structures, School of Mechanical Engineering Employer: National Technical University of Athens (NTUA), Greece
09.2009 – 01.2013	Position type: Freelance Post: Application Engineer / Simulation (FEA) Instructor Employer: AlfaSolid, Athens – Greece (VAR for SolidWorks in Greece)
09.2003 – 01.2013	Position type: Freelance Post: Mechanical Engineer Employer: 2π S.A., Athens, Greece
09.2001 – 01.2013	Position type: Fixed-term contracts (one per academic year since 2001) Post: Visiting Lecturer (as a Mechanical Engineer) / Department of Textiles Employer: Technical Educational Institute of Piraeus, Greece
02.1999 – 09.2007	Position type: Fixed-term contracts (21 contracts; Feb1999 - Sep2007) Post: Researcher / Senior Researcher in Mechanical Engineering Employer: National Technical University of Athens (NTUA), Greece
02.1999 – 01.2013	Position type: Owner Post: CEO Employer: BENAYTIDA Technical Office, Athens, Greece

04.1996 – 10.1996	Position type: Fixed-term (summer industrial placement) Post: Trainee (Mechanical Engineer) / Technical Base / Division II: Study and Maintenance of Aircraft Structure Employer: Olympic Airways S.A., Athens, Greece
05.1990 – 06.1990	Position type: Fixed-term (summer industrial placement) Post: Trainee (Mechanical Engineer) / Installation of COW (Crude Oil Washing) machines to the ULCC vessel “Aegean Mariner” Employer: Skaramangas S.A. Shipyards, Greece

7. PERSONAL DEVELOPMENT

7.1 CPD Workshops

- Applying Machine Learning to Engineering and Science, MIT Professional Education (2025)
- Machine Learning, Modeling, and Simulation Principles, MIT Professional Education (2025)
- No Code AI and Machine Learning: Building Data Science Solutions, MIT Professional Education (2023)
- Periprosthetic Fracture Course, University of Leeds, UK (15-16 Jan 2020)
- IM Nailing of Lower Extremity Fractures: State of the Art - Cadaveric Course, University of Leeds, UK (8-9 April 2019)
- Cellular Therapies for Bone Repair: Current Insights, University of Leeds, UK (2 April 2019)
- EPSRC Grant Workshop, Coventry University, UK, June 2018
- NI Training Course, 3-day course, Real -Time and FPGA modules using NI products, KU, April 2015.
- TSI Workshop: PowerSight Laser Doppler Velocimetry (LDV) and Phase Doppler Particle Analyzer Systems (PDPA), May 2014, 2-day workshop, TSI Instruments Ltd, UK.
- “*Intelligent Textile Structures – Application, Production and Testing II*”, Technical University of Liberec, Czech Republic, June 07-June 11, 2004, 40hs including laboratory workshops.
- “*Intelligent Textile Structures – Application, Production and Testing I*”, Technical University of Liberec, Czech Republic, June 09-June 13, 2003, 40hs including laboratory workshops.

7.2 Seminars related to Research

- From DICOM to Medical Guides and Additive Manufactured Implants (Synopsys & Kumovis), July 2020.
- Applicant Briefing: The Sustainable Innovation Fund Round 1, UKRI, July 2020.
- The power of 3D Bioprinting, Henry Royce Institute, June 2020.
- Bidding Workshop, IFTC, Coventry University, May 2020
- MSCA COFUND 2020: Submission and Evaluation, UKRI, May 2020.
- MSCA COFUND 2020: Overview and Eligibility, UKRI, May 2020.
- DSP19 - C5 Supporting writing and critical thinking, Coventry University, June 2020.
- DSP19 - C1 Supervising doctorates at Coventry University, Coventry University, May 2020.
- Research Impact, Coventry University, May 2019.
- REF Outputs: Towards 4* research & Writing, Coventry University, February 2019.
- EEC Building International Networks, Coventry University, February 2019.
- M8 Doctoral Examination (Blended mode), Coventry University, March 2019.
- M7 Monitoring progress, Coventry University, February 2019.
- Research Student Supervision: what should a student and supervisor expect, Coventry University, Jan2019.
- PhD Research Design October 2018/2019, Coventry University, October 2018.
- Chairing a Progress Review Panel, Workshop, Coventry University, June 2018.
- Faculty Research and Enterprise Away Day, Faculty of SEC, Kingston University London, May2014.

7.3 Seminars related to Management

- Recruitment and Selection Training, Imperial College London, April 2024.
- Leadership Series Webinar: Leader as Coach, Coventry University, April 2019.
- Recruiting International Staff - The Manager’s Role (managers only to complete), CU, July 2018.
- New Wizards Showcase, Coventry University, March 2019.

7.4 Seminars related to Teaching & Learning

- Introduction to Supervising PhD Students at Imperial, Imperial College London, November 2025
- Development for my team/department, Imperial College London, January 2024
- Active Learning, Imperial College London, April-May 2023.
- APG to designing effective assessment questions and marking rubrics, Imperial College London, Feb2023.
- Introduction to Team-Based Learning (TBL), Imperial College London, February 2023.

- A Practical Guide to Giving Effective Feedback, Imperial College London, January 2023.
- Introduction to Personal Tutoring at Imperial, Imperial College London, December 2022
- Imperial Insights, Imperial College London, November 2022.
- Collaborative Online International Learning (COIL) session, Coventry University, July 2020.
- Authentic assessment – 3-Steps Model for Implementation, Coventry University, June 2020.
- Formative Assessment, Coventry University, May 2020.
- Practical Tips on how to increase student engagement in teaching online, Coventry University, May 2020.
- Capability Framework Launch, Coventry University, October 2018.
- MAA Staff Personal Tutoring Introduction, Coventry University, September 2018.
- Data Protection, Workshop, Coventry University, June 2018.
- Inclusive, Cohesive and Safe Campuses, Workshop, Coventry University, June 2018
- Innovation and Taster Session, Light Bites: Google Drive, Coventry University, Nov2017.
- Innovation and Taster Session, Light Bites: Spark Page, Coventry University, Nov2017.
- Teaching for Excellence Programme, 4 day HEA Workshop, Kingston University London, Apr-Jun 2017.
- Inclusive Curriculum Workshop, Half Day Workshop, Kingston University London, November 2016.
- Unconscious Bias, Half Day Workshop, “*How to counteract the effect of unconscious bias in dealings with students and colleagues (equal opportunities)*”. Certificate after exam (score: 90% /15Oct2016), KUL.
- Course Directors Away Day, Faculty of SEC, Kingston University London, Sep2016.
- Enhancing Learning and Teaching Practice, Faculty of SEC, Kingston University London, Apr2016.
- Course Directors Away Day, Faculty of SEC, Kingston University, Sep2015.
- Appraisal Skills for Appraisees, Kingston University London, Jul2015, half-day workshop.
- “*Designing Blended Learning Courses: An introduction to BLENdT learning design tool*”, KU, 2015.
- Faculty Research and Enterprise Away Day, Faculty of SEC, Kingston University London, May2014.

7.5 WEBINARS (indicative and shown only from 2015 onwards)

- Webinar (2024) – ‘*Prompt Engineering LLMs on AWS Bedrock*’ – Great Learning
- Webinar (2023) – ‘*Reflecting on last year’s AI pilots*’ JISC – National Centre for A.I.
- Webinar (2023) – ‘*UK TNE in the EU*’
- Webinar (2023) – ‘*Coaching at scale*’
- Webinar (2023) – ‘*GlobalIndia*’
- Webinar (2023) – ‘*Applicant Briefing: Feasibility Studies 4*’
- Webinar (2020) - ‘*Spider*’ elements in FEA - why rigid and flexible types?, NAFEMS
- Webinar (2020) – *SCADE in Academia*, Ansys Inc.
- Webinar (2020) - *Accelerate Your Analysis Cycle Times by 5x*, Altair Inc.
- Webinar (2020) - *Joining techniques between shell and solid elements*, DYNAmore FEM
- Webinar (2019) - *Web Workshop - Introduction to Simpleware Software*
- Webinar (2019) - *Industrial Additive Manufacturing: New Solutions for CT-based Inspection & Simulation*
- Webinar (2018) - *Web Workshop: Introduction to Simpleware for Life Sciences*, Synopsys Simpleware
- Webinar (2016) - *Engaging students in materials with CES EduPack 2016*, Granta Education Team.
- Webinar (2016) - *The visa and immigration implications of Brexit*, UK NARIC.
- Webinar (2016) - *Guide to the UK Professional Standards for Doctoral Supervisors*, HEA Academy.
- Webinar (2016) - *Optimized Planning of Dynamic Construction Sequences*, Dassault Systèmes.
- Webinar (2015) – *Modeling of population ergonomics with AnyBody*, AnyBody Technology.
- Webinar (2015) - *How to submit an effective proposal*, UK-Centre for Defence Enterprise.
- Webinar (2015) – *ANSYS Academic CFD Teaching Material*, ANSYS Inc.
- Webinar (2015) – *ANSYS Academic FEA Teaching Material*, ANSYS Inc.
- Webinar (2015) – *GD&T*, EngineSoft.
- Webinar (2015) - *OptiStruct for Composite Analysis & Optimization*, Altair.

8. MEMBERSHIPS

- Chartered Mechanical Engineer, Technical Chamber of Greece (TEE), since 2000
- International Society for Structural and Multidisciplinary Optimization (ISSMO), member since 2003
- European Society of Biomechanics (ESB), member since 2017
- American Society of Mechanical Engineers (ASME), member since 2017
- Educator / Instructor for CPD courses, Manpower of Agency of Greece (since 2010)
- Educator / Instructor for CPD courses, Manpower of Agency of Cyprus (since 2010)
- Fellow HEA (Advance HE) (since 2022)
- American Institute of Aeronautics and Astronautics (AIAA), member (since 2025)
- Engineering Sciences Data Unit (ESDU) - Stress and Strength Committee, member (since 2025)
- European Society for Engineering Education (SEFI), Member (since 2026)

9. ACADEMIC EXPERIENCE

9.1 TEACHING

9.1.1 Imperial College London – UK (11.2022 – on going)

9.1.1.1 Undergraduate Modules

- 2022 – on going: Engineering Practice I
- 2023 – on going: Group Design Project
- 2023 – on going: Aerospace Vehicle Design

9.1.2 University of Huddersfield - UK (09.2021 – 10.2022)

9.1.2.1 Postgraduate Modules

- 2021 – 2022: Quality Systems & Measurements (*Module Leader*)
- 2021 – 2022: New Product Development (*Module Leader*)

9.1.2.2 Undergraduate Modules

- 2021 – 2022: Project Quality and Production Management
- 2021 – 2022: Design Analysis (*Module Leader*)
- 2022 – 2022: Manufacturing, Measurement and Diagnostics (*Module Leader*)

9.1.3 Coventry University - UK (11.2017 – 08.2021)

9.1.3.1 Postgraduate Modules (running twice per academic year)

- 2017 – 2021: Stress & Dynamics (*Module Leader*)
- 2019 – 2021: Integrated Design Project (*Module Leader*)

9.1.3.2 Undergraduate Modules (running twice per academic year)

- 2017 – 2019: Introduction to Mechanical Science
- 2017 – 2021: Engineering Application
- 2017 – 2020: Design
- 2017 – 2021: Design and Sustainability (*Module Leader*)
- 2017 – 2019: Solid Mechanics and Dynamics
- 2017 – 2019: Thermofluids & Mechanics
- 2017 – 2020: Product Evaluation (*Module Leader*)
- 2017 – 2018: Design for Manufacture
- 2017 – 2021: Professional Development and Project Planning
- 2017 – 2021: Individual Project
- 2017 – 2021: Group Project
- 2017 – 2021: Computer Aided Engineering (CAE) Support

9.1.4 Kingston University - UK (0.12013 – 10.2017)

9.1.4.1 Postgraduate Modules

- 2012 – 2013: Advanced Finite Element Analysis
- 2012 – 2013: Computer Aided Product Design.
- 2012 – 2013: Mechanical Motion & Control
- 2013 – 2017: Computer Integrated Product Design (*Module Leader*)
- 2013 – 2016: Engineering Projects & Risk Management
- 2013 – 2017: Advanced CAD/CAM Systems
- 2012 – 2017: Advanced Stress Analysis & Materials
- 2013 – 2014: Mechatronic Design and Automation
- 2013 – 2016: Vehicle Aerodynamics and Structural Analysis

9.1.4.2 Undergraduate Modules

- 2012 – 2013: Stress Analysis, Structures & Dynamics 1
- 2012 – 2013: Computer-Aided Engineering Fundamentals
- 2012 – 2013: Mechanical Science – Statics

- 2013 – 2017: Mechanical Group Project (**Module Leader**)
- 2013 – 2016: Engineering Design, Materials and Manufacture 1
- 2013 – 2016: Thermofluid & Mechanical Systems 2
- 2013 – 2017: Engineering Design, Materials and Manufacture 2
- 2013 – 2016: Solid Mechanics & Thermofluids
- 2013 – 2017: CAE with CFD and Mathematical Modelling
- 2013 – 2016: Racecar Design and Analysis
- 2014 – 2016: Vehicle Design and Analysis
- 2015 – 2016: Thermofluid and Mechanical Principles 1

9.1.5 National Technical University of Athens - Greece (2000 – 2013)

9.1.5.1 Postgraduate Modules

- 2004 – 2009: ‘Structural Optimization’, MSc ‘Computational Mechanics’.
- 2002 – 2003: ‘Computational Elastodynamics’, MSc ‘Computational Mechanics’.
- 2001 – 2003: Laboratorial support to the MSc ‘Biomedical Engineering’.

9.1.5.2 Undergraduate Modules

- 2012 – 2013: ‘Flight Dynamics’ (9th semester)
- 2011 – 2013: ‘Mechanisms & Introduction to Machine Design’ (4th semester)
- 2010 – 2013: ‘Machine Dynamics I’ (5th semester)
- 2010 – 2013: ‘Computer Methods in Structures’ (8th semester)
- 2010 – 2013: ‘Conveyors and Lifting Machinery’ (8th semester)
- 2004 – 2008: ‘Analysis of Structures I’ (6th semester, periodical)
- 2004 – 2008: ‘Analysis of Structures II’ (7th semester, periodical)
- 1999 – 2009: ‘Light Structures’ (8th semester, periodical)

9.1.6 Technological Educational Institute of Piraeus - Greece (2001 – 2013)

9.1.6.1 Undergraduate Modules

- 2001 – 2011: ‘Quality Control of Textile Fibres’ (3rd sem., theory & lab, fall & spring semester*)
 - 2011 – 2012: ‘Quality Control of Textile Fibres’ (1st sem., theory & lab, fall & spring semester*)
 - 2012 – 2013: ‘Smart Textile Products’ (8th semester, theory & laboratory)
- (*) Up to 2011, by law, all Technological Educational Institutes in Greece had their full curricula taught in both semesters (fall & spring).

9.1.7 Development and delivery of Continuing Professional Development (CPD) courses

- July 2012: Structural Analysis (FEA) using SolidWorks Simulation (10hrs, Athens), Self-funded seminar organized for AlfaSolid
- Feb 2012: Structural Analysis (FEA) using SolidWorks Simulation (30hrs, Athens), Self-funded seminar organized for AlfaSolid
- June 2011: Structural Analysis (FEA) using SolidWorks Simulation (30hrs, Athens), Self-funded seminar organized for AlfaSolid
- April 2010: Structural Analysis (FEA) using SolidWorks Simulation (24hrs, Thessaloniki), Self-funded seminar organized for AlfaSolid
- Sept 2009: Introduction to the integrated CAD/CAE environment of SolidWorks (40hrs, NTUA), Self-funded seminar organized in collaboration with NTUA and the Technical Chamber of Greece
- Nov 2009: Structural Analysis (FEA) using SolidWorks Simulation (30hrs, Athens), Self-funded seminar organized for AlfaSolid

9.2 PhD EXAMINATIONS (VIVAs & STAGE ASSESSMENT)

- 9.2.1 Pan, Y. (2023) “Online structural health monitoring of aluminum and composites under different environmental effects” (*Late-Stage Assessment Report - Imperial College London*)
- 9.2.2 Cheng, X. (2021) “The Modelling of Age in a Human Body Model and its Application in Trauma Predictions” (*VIVA - Coventry University*)

- 9.2.3 Apostolopoulos S.E. (2021) “Towards the Development of a Digital Twin for a CFRP Composite Sub-Element Used in Space Applications” (*Year-1 Progress Review / Coventry University*)
- 9.2.4 Gill, K. (2021) “Student retention in Higher Education” (*Return from Interruption Progress Review / Coventry University*)
- 9.2.5 Weeratunga S.U.W. (2021) “Microstructure feature influence on crack propagation in additively manufactured Inconel 718” (*Year-1 Progress Review / Coventry University*)
- 9.2.6 Papadopoulou, K. (2020) “Optimizing the nanoscale behavior of novel materials for energy applications” (*Year-1 Progress Review / Coventry University*)
- 9.2.7 Sharma, D. (2020) “Effects of Alloying Elements on Microstructures and Mechanical Properties of β -Ti Alloys” (*Year-2 Progress Review / Coventry University*)

9.3 SUPERVISION

9.3.1 Director of Studies (PhD supervision - First Supervisor)

1. Santana Artiles M.E. ‘Numerical and experimental investigation of optimal femoral bone augmentation’ (*Scholarship - funded PhD* by the Faculty of SEC, Kingston University, UK; **completed** - 2020)

9.3.2 Co-supervision of PhDs

5. Spanidis, P., ‘Design for Additive Manufacturing – Supporting and Applying the Substitution of Components in Series Products’ (*NTUA, GR – on going*)
4. Cloake, T., ‘Modelling Lower Limb Open Fracture from Road Traffic Collisions’ (*CU, UK; 2019; resigned from supervisory team upon joining the University of Huddersfield in 2021*)
3. Wang, K., ‘Mechanical Properties of Human Eyes’ (**completed** – *KU, UK; 2017*)
2. Nanayakkara, V.K., ‘A wearable robotic hand with power assist’ (**completed** - *KU, UK; 2017*)
1. Sedyono J., ‘Optimisation of Laminated Composite Structures’ (**completed** - *KU, UK; 2017*)

9.3.3 Imperial College London (2022 - ongoing)

9.3.3.1 Supervision of MEng / MSc Projects

9. Li, H. ‘Crashworthiness of impact attenuators of non-uniform thickness’ (2025)
8. Yan, Q. ‘Effect of Geometric and Dimensioning Tolerancing in the thermo-mechanical performance of additively manufactured strut-based lattice structures’ (2025)
7. Liu, Y. ‘AI-assisted prediction of parameters and boundary conditions of topology optimisation structures’ (2025)
6. Blaxall, B. ‘Design of Deformable Wing Solutions for Improved Aircraft Efficiency’ (2025)
5. Jaiswal, V. ‘Performance Optimisation in Race Car Design’ (2025)
4. Singh, R. ‘A.I.-driven Topology Optimisation of variable thickness sheets’ (2024)
3. Liu, B. ‘Crashworthiness of thin-walled tubular structures with non-uniform stiffeners’ (2024)
2. Pavlyuk, M. ‘Study of the effect of defects on the mechanical performance of additively manufactured strut-based lattice structures’ (2023)
1. Takeshi, O., ‘Axial crushing of 3D-printed thin-walled circular tubes reinforced with non-uniform longitudinal stiffeners’ (2023)

9.3.4 University of Huddersfield (2021 – 2022)

9.3.4.1 Supervision of MSc Projects

2. Nagarajan, N. ‘An Analytic Hierarchy Process scheme for the selection of an optimized solution’ (Sep2022)
1. Prajapati, D. ‘Study on the Crashworthiness of thin-walled circular tubes with non-uniform stiffeners under oblique loading’ (Sep2022)

9.3.4.2 Supervision of Final Year Individual Projects (BEng / MEng)

3. Talpur, S. ‘Study on the crashworthiness of thin-walled circular tubes with non-uniform stiffeners under axial loading’ (Apr2022)

2. Dickinson, M. 'Study on the crashworthiness of thin-walled square tubes with non-uniform stiffeners under axial loading' (Apr2022)
1. Rehman, G. 'Optimised Design of a racing wheelchair' (Apr2022)

9.3.5 Coventry University - UK (2017 – 2021)

9.3.5.1 Supervision of MSc Projects

34. McGeeny, L. 'On the optimisation of 2D skeletal structures' (Aug2021)
33. Quinn, B. 'Dynamic Buckling of Circular Tubes' (Aug2021)
32. Neaime, C. 'On the Crashworthiness Under Axial Loads of Aluminium Circular Tubes with Linear Functional Graded Thickness' (Aug2020)
31. Maaluf, E. 'Crashworthiness under axial loads of aluminium circular tubes with longitudinal stiffeners' (Aug2020)
30. Nujum, H.S. 'Bone Augmentation of osteoporotic femora under static loading' (Aug2020)
29. Xiong, H. 'Optimized design for Wheel Hub Bearing of Vehicle' (Aug2020)
28. Wan, K.L. 'Crashworthiness Design and Optimization of a Nonlinear Functional Graded thickness (FGT) Thin-Walled Circular Tube under Axial Load' (Aug2020)
27. Lei, K.L. 'On the crashworthiness under axial loads of aluminium circular tubes with longitudinal stiffeners' (Aug2020)
26. Essien, D. 'Effect of Erosion on the Pre-stress of Bolted Joints' (Aug2020)
25. Baltha, S. 'Bone Augmentation Of Osteoporotic Femora Under Impact Loading' (Aug2020)
24. Wang, Z. 'On the crashworthiness under axial loads of aluminium circular tubes with non-linear functional-graded thickness' (Aug2020)
23. Alhasan, I. 'Applied Structural Optimization Project: Optimum design of a vehicle protector against landmine blasts' (Sep2019)
22. Alhnaity, A. 'Numerical and experimental study of tubes under axial loading' (Sep2019)
21. Boni, F.M. 'Optimum design of a doubly-symmetric thin-walled impact attenuator of non-uniform thickness' (Sep2019)
20. Elkader, A. 'Numerical and experimental investigation of the mechanical behaviour of GLARE laminates for aircraft structures at various ambient temperatures' (Sep2019)
19. Obbineni, V. 'Topology optimization of lattice structures under stress constraints' (Sep2019)
18. Pasupuleti, R. 'Investigation of bolted joints in GFRP hybrid laminates' (Sep2019)
17. Prasad, K. 'Topology Optimization of 2D Continua under stress constraints' (Sep2019)
16. Suryajaya, M. 'Optimum design of a 3D-printable thin-walled impact attenuator (frustum) with a quadratic distribution of thickness' (Sep2019)
15. Timothy, I. 'Numerical and experimental study of tubes under oblique crushing' (Sep2019)
14. Papagiannopoulos, A. 'Optimal Design of an onshore wind farm', (2019)
13. Chebli, Y. 'Topology optimization of 3D continua', (2019)
12. Izneen, H. 'Topology optimization of lattice structures', (2019)
11. Lonnet, B. 'Minimum weight design of a morphing wing', (2019)
10. Sidhik, A.P.A.K. 'Investigation of bolted joints in hybrid CFRP laminates', (2019)
9. Liao, Q. 'Investigation of bolted joints in hybrid GFRP laminates', (2019)
8. Bhate, S 'Lattice Topology Optimization of 3D continua', (2019)
7. Cho, H. 'Topology optimization under a stress constraint', (2019)
6. Elfeki, H. 'On the fail-safe design of minimum weight trusses' (2019)
5. Zhang, W. 'Investigation of the Optimum Design of A 3D-printable Impact Attenuator for A Small Race Car' (2018)
4. Govinden, T. 'Minimum Weight Design Of 2d Elastic Continua Under A Compliance Constraint Using Global Interpolation Of Variable Nodal Thickness' (2018)
3. Rajasingh, S.S. 'Minimum weight design of 2D elastic continua under a displacement constraint using global interpolation of variable nodal thickness' (2018)
2. Hao, E.T.W. 'Minimum compliance design of 2D elastic continua with a volume fraction constraint using global interpolation of variable nodal thickness' (2018)

1. Digenis, N. 'Optimization of Lattice Structures under Compliance Constraint' (2017)

9.3.5.2 *Supervision of Final Year Individual Projects (BEng / MEng)*

32. Singh, G. 'Minimum weight design of a chassis for a Hydraulic Modular Trailer' (2021)
31. Yates, H. 'Crashworthiness Under Axial Loads of Seamless Steel Circular Tubes Reinforced with L-shaped Stiffeners', (2021)
30. Hill, F. 'Crashworthiness Under Axial Loads of Seamless Steel Circular Tubes Reinforced with Longitudinal Lambda-shaped Stiffeners' (2021)
29. Alqassab, H. 'Crashworthiness Under Axial Loads of Steel Circular Tubes with non-Linear Functional-Graded Thickness' (2021)
28. Hassan, M. 'Crashworthiness Under Axial Loads of Seamless Steel Conical Tubes Reinforced with Longitudinal Flat Stiffeners' (2021)
27. Smale, H. 'Crashworthiness Under Axial Loads of Seamless Steel Circular Tubes Reinforced with Longitudinal T-shaped Stiffeners' (2021)
26. Sutas, G. 'Crashworthiness Under Axial Loads of Circular Steel Tubes with Linear Functional-Graded Thickness Reinforced with uniform T-shaped stiffeners' (2021)
25. Ronayne, E. 'Crashworthiness Under Axial Loads of Steel Conical Tubes with non-Linear Functional-Graded Thickness' (2021) **IMechE Award, Best BEng Mechanical Engineering project**
24. Young, D. 'Design analysis and further development of a electronically deactivated brake for industrial use' (2020)
23. Al-Naimi, A. 'Crashworthiness Under Axial Loads of Circular Bi-tubular Steel Configurations' (2020)
22. Alhoussaini, R. 'Numerical study of residual stresses developed during machining using Finite Element Method' (Sep2019)
21. Assaf, A. 'A new Internet-of-things enabled traffic-calming device' (Sep2019)
20. Caliankara, A. 'Design of thin-walled tubes with origami patterns for optimum impact attenuation' (Sep2019)
19. Cooper, D. 'Design of Simplified Concentric Tube Robots used in Minimally Invasive Surgery' (Sep2019)
18. Elawamry, O. 'On the optimum fail-safe design of lattice wind turbine towers' (Sep2019)
17. Hemp, M. 'Optimum design of 3D printed grid-like tubes for crushing under oblique loads' (Sep2019)
16. Leo, C. 'Investigation of Simplified Concentric Tube Robots for Minimally Invasive Surgery purposes' (Sep2019)
15. Sinclair, O. 'Optimum design of 3D-printed tubes with longitudinal and circumferential stiffeners for crushing under axial loads' (Sep2019)
14. Singh, G. 'Design & Optimisation of a chassis for a Hydraulic Modular Trailer' (Sep2019)
13. Slater, L. 'Optimum design of 3D printed tubes of linear wall thickness distribution for crushing under axial loads' (Sep2019)
12. Thompson, M. 'Analysis of a hydraulic valve under a mechanical press using the Finite Element Method' (Sep2019)
11. Alaracu, A. 'Optimum design of 3D printed grid-like tubes' (Sep2019 – on going)
10. Ensor, N. 'Design of a Multi-Hinged Arm for use in Special Needs Schools' (2019)
9. Lumsden, R. 'Optimum design of a 3D printable impact attenuator for a small race car' (2019)
8. Castle, B. 'Investigation of the mechanical behavior of perforated CFRP hybrid laminates at different ambient temperatures' (2019)
7. Kuznetsov, A. 'Investigation of the mechanical behavior of perforated GFRP hybrid laminates at different ambient temperatures' (2019)
6. Coles, H. 'Investigation of Auxetic and Hybrid Honeycomb Structures in Impact Attenuation' (2019)
5. Wu, J. 'Hybrid honeycomb structure in frontal impact of racing car' (2019)
4. Xiang, X. 'Numerical and experimental investigation of optimized lattice structures' (2018)
3. Yang, L. 'Topology optimization of 2D elastic structures under a single displacement constraint using a nodal-wise Bézier interpolation approach' (2018)
2. Guan, S. 'Optimum design of a 3D-printed impact attenuator for a small race car' (2018)
1. Ahmed, J. 'Optimum design of an impact attenuator for a small race car' (2018)

9.3.5.3 Supervision of Final Year Group Projects (BEng / MEng)

11. Singh, A. *et al* 'EAV Solutions - Design new front-wheel mudguards that prevent water without impacting vehicle manoeuvrability' (2021)
10. Al-Daigami, M. *et al* 'EAV Solutions - Design a lightweight, folding and stowaway disabled access ramp' (2021)
9. Lourenco-Teixeira, G. *et al* 'EAV Solutions - Design a lightweight, folding and stowaway disabled access ramp' (2021)
8. Sheikh, H. *et al* 'EAV Solutions - Design a lightweight, folding and stowaway disabled access ramp' (2021)
7. Beck, D., Bharath, J., Ivanov, M., Little, M. 'Optimisation of Evora front steering knuckle' (2020)
6. Colson, O.W., Poglod, S., Pratt, B., Street De Campos, G.A. 'Optimisation of Evora front steering knuckle' (2020)
5. Bains, V., Mak, S., Mahmood, A. 'Design of a stairs-to-ramp convertible mechanism' (2018)
4. Maynard-Bligouras, M., Mortensson, E. 'Design of a vehicle modular battery rack and of the respective production line' (2018)
3. Ezquerro Frances, A., Graffin, A., McGeeney, L., Smeliov, D. 'Design of a non-toppling wheelbarrow based on Fred Lanchester's design' (2018)
2. Al-Tamimi, M., Gadani, H., Jin Rong Eugene, S., Titterton, S. 'Design of a non-toppling wheelbarrow based on Fred Lanchester's design' (2018)
1. Aderibigbe, B., Abiodun, T., Al Obeidani, M., Simon-Hart, D. 'Design of a non-toppling wheelbarrow based on Fred Lanchester's design' (2018)

9.3.6 Kingston University – UK (2013 – 2017)

9.3.6.1 Supervision of MSc Theses

18. Jackson, L., Design, development and testing of an active front wing package for a single seater race car (2017)
17. Ong, W., Design of a joss paper folding machine (2017)
16. Hamza, Y., Layout optimization of displacement constrained 3D continua considering a nodal-wise strain energy density distribution (2017)
15. Ali, M., Experimental investigation of the strength of composites from terpolyaramid fibres and nano-tube enhanced resins (2017)
14. Kalay, J., Optimized design of an impact attenuator from terpolyaramid fibres and nano-tube enhanced resins for a Formula Student race car (2017)
13. Katz, I. 'Design of an innovative system for securing lightweight travel luggage on bike riders' (2017) **(Bright Ideas 2016/7 competition: Runner-up)**
12. Rashid, A. 'Numerical Investigation of intramedullary nailing in typical middle femoral shaft fractures' (2016)
11. Paissidis, P. 'Stacking sequence optimization for laminated composite plates' (2016)
10. Hussaini-Kazemi, A., 'Numerical Investigation of Optimal Spine Bone Augmentation (Vertebroplasty)' (2016)
9. Papaioannou, C. 'Application of Smart Manufacturing Methods in SMEs in Greece' (2016)
8. Onamade, S. 'Smart self-service shopping trolley' (2016)
7. Santana Artiles, M. 'Optimal femoroplasty utilising FEA and stochastic optimisation techniques' (2016)
6. Alem, S. 'Optimising assembly line for KU 2E-racing car' (2015)
5. Ansoleaga De Santiago, C 'Design and analysis of a regenerative suspension system' (2015)
4. Okmen M 'Design and analysis of an automatic mechanical juicer' (2014)
3. Akie S, Ayanda Y, Henanouche I., Onyegbule P., 'Optimized Design of a Single Girder Overhead Crane on EuroCode' (Group Project) (2013)
2. Milliken W III, 'The Development of a Finite Element Model of a Paediatric Rib Cage' (2013)
1. Evans J, 'Weld Distortion Prediction Using FEA Analysis' (Industrial Individual Project) (2013)

9.3.6.2 *Co-Supervision of MSc Theses*

2. Ammar, A 'Optimization of gas turbine performance using fuzzy logic' (2014)
1. Heath M, 'Condition Assessment Of Overhead Line Insulators And Fittings' Work-based Project (2013)

9.3.6.3 *Supervision of Final Year Group Projects (MEng)*

3. Arachchige L.S., Burlinskas A., Jamal M.U., Lumbala J., Rutkauskas V., Samdany Z., 'Design and Analysis of contemporary systems for a Formula Student Class II Electric Racing Vehicle ' (2016)
2. Abdirahman, M., Hamied, A., O'Malley, P., 'Design Improvements of a Formula Student Class II Electric Racing Vehicle ' (2015)
1. Harman, A., Ahmad, U., Shone, H., Tidswell, M., Acquaviva, G., Charkhi, F., Handsaker, S., 'The Design of a Formula Student Class II Electric Racing Vehicle ' (2014)

9.3.6.4 *Supervision of Final Year Individual Projects*

31. Devin, K., 'Design of an Automated Core Rehabilitation Device' (2017)
30. deSousa, D., 'Design of a Universal Pushchair Platform (UP³)' (2017)
29. Dainty, A., 'Investigation of Intramedullary Nailing in Typical Middle Shaft Fractures Using the Finite Element Method' (2017)
28. Sklias, G., 'Analysis and Optimization of piston rings in marine diesel engines' (2017)
27. Murseli D., 'Design Optimization Of An Impact Attenuator' (2016)
26. Kalay J., 'The Optimisation Of A Bridge Crane Box-Girder Beam' (2016)
25. Alanso D., 'Design and Optimisation of Single Box Girder Overhang Crane Bridges by maximising plate thickness commonality' (2016)
24. Mohammed A., 'Optimisation of I-Beam and Box-Section of Single Girder Cranes' (2016)
23. Stokic L., 'Redesign, Analysis And Optimisation Of A Suspension System For Autonomous Vehicle' (2016)
22. Valencia-Rayes H, 'Alternative Methods Of Reinforcing Carbon Fibre Reinforced Polymer (CFRP) For Composite Structures (Comparative Testing)' (2016)
21. Lutterback Sauerbronn da Cunha, R 'Design and analysis of high pressure vessels' (2015)
20. Espindola De Oliveira, B 'Design of minimum cost steel storage tanks' (2015)
19. Morsy A, 'Effects of Wavelength and Amount of Light on a Solar Cell' (2015)
18. Edwards C, 'Design and manufacture of an adjustable cable management device' (2015)
17. Hussaini-Kazemi A. 'Energy Harvesting From Air in Railway Tunnels' (2015)
16. Nyarko F 'Minimum weight design of a single box girder electric overhand travelling crane' (2015)
15. Lumbala J, 'Minimum weight design of a double box girder electric overhand travelling crane' (2015)
14. Chan A., 'Design and analysis of Total Fixation Plate for a Proximal Tibia Fracture' (2014)
13. Charalambous A., 'Investigation of a typical human accommodating lens using the Finite Element Analysis' (2014)
12. Clements P. 'Design and manufacturing of a low cost Go-kart Chassis' (2014)
11. Georgiev D., 'Design and analysis of a rollator with mounted hydraulic mechanism with seat' (2014)
10. Grzebień K, 'Expandable accumulator design with modular cell connector, as a fuel tank of formula student project' (2014)
9. Huse S., 'Finite Element Analysis of a femur and femoral implant in a squat position after Total Hip Replacement' (2014)
8. Denney J, 'Design and Analysis of Formula student 2014' Chassis (2014)
7. Konnari C., 'Investigation of a Magnetically Expandable Hip Implant' (2014)
6. Nelson J., 'Redesign of the braking system of a four wheeled rollator and a tri-wheeled walker' (2014)
5. Ng A., 'Analysis and optimisation of the suspension system for the 2014 KU Formula Student car' (2014)
4. Okeke H., 'Investigation of a Total Knee Arthroplasty' (2014)

3. Osman A., 'Investigation of poor back posture from office chairs: physiological effects & alternative design' (2014)
2. Tariq S., 'Design and optimization of a double box girder crane bridge without longitudinal stiffeners' (2014)
1. Uddin J., 'Car body Designing and Manufacturing' (2014)

9.3.6.5 *Supervision of "Students Without Borders"*

2. Lutterback Sauerbronn da Cunha, R 'Design and analysis of high pressure vessels' (2015)
1. Espindola De Oliveira, B 'Design of minimum cost steel storage tanks' (2015)

9.3.7 *National Technical University of Athens - Greece (2000 – 2013)*

9.3.7.1 *Supervision of Postgraduate Dissertations*

7. Marougas S, 'Optimization of skeletal structures using advanced computational methods' (2009) (MSc Course 'Computational Mechanics').
6. Patsouras C, 'Weight minimization of a metallic chimney in accordance to the EC standards and using the Finite Element Method' (2009) (MSc Course 'Computational Mechanics').
5. Kapogiannis A, 'Weight minimization of a hangar in accordance to the EC standards and using the Finite Element Method' (2009) (MSc Course 'Computational Mechanics').
4. Spatharis E, 'Weight minimization of a solar tracker in accordance to the EC standards and using the Finite Element Method' (2009) (MSc Course 'Computational Mechanics').
3. Kaselouris E, 'Investigation of stress and deformations of a Fi-nail hip implant using the Finite Element Method' (2008) (Master's Programme 'Biomedical Engineering').
2. Moissiadou S, 'Optimal design of industrial rack systems in accordance to the EC standard' (2006) (MSc Course 'Computational Mechanics').
1. Kyriazi E, 'Optimal design of single and double bolted doublers using the Finite Element Method' (2006) (MSc Course 'Computational Mechanics').

9.3.7.2 *Supervision of Undergraduate Diploma Theses(*)*

(*)10th semester is exclusively dedicated to a (at least one) semester-long thesis

21. Kouli P, 'Investigation of the movement of elastically based human teeth using the Finite Element Method' (2008).
20. Exarchos O, 'Development of finite element tibia models using PQCT data' (2007).
19. Nikitakis I, 'Optimization of a rolled single girder crane bridge using the BS 5950 standard' (2007).
18. Magoula EA, 'Optimization of a welded single girder crane bridge using the EC standard' (2007).
17. Skarmas S, 'Optimization of a box double girder crane bridge using the EC standard' (2007).
16. Vassiliou A, 'Investigation of single-sided and double-sided plate reinforcement of a heel fracture using the Finite Element Method' (2006).
15. Linardos M, 'Analysis & optimization of welded oil tanks using the API650 standard' (2006).
14. Markos P, 'Optimization of skeletal structures using the Simulated Annealing Method' (2006).
13. Champilos S, 'Evaluation of the flexibility of an ellipsoidal Periodontal Ligament' (2006).
12. Kesimoglou N, 'Shape and topology optimization of thin plates in bending using the Finite Element Method' (2006).
11. Karagiannis S, 'Optimization of 2D continua using the Evolutionary Structural Optimization method' (2005).
10. Papageorgiou A, 'Investigation of Genetic Algorithm parameters in mathematical and structural optimization problems' (2006).
9. Apostolou D, '3D modeling of a heel fracture and investigation of plated implants using the Finite Element Method' (2003).
8. Vaonakis G, 'Shape optimization of 2D structures using the Boundary Element Method' (2003).
7. Tzanakakis E, 'Parametric investigation of a rolled single girder crane bridge using the Finite Element Method and development of nomographs' (2005).
6. Xionidis M, 'Optimization of 2D continua using the Fully Stressed Design' (2003).
5. Mitrakos D, 'Optimization of 2D skeletal structures using the Fully Stressed Design' (2003).

4. Alysandrtos T, 'Investigation of bolted plated structural reinforcements using the Finite Element Method' (2003).
3. Alevizakis V, 'Comparative study between analytical equations and the finite element method in the analysis of thin-walled structures' (2002).
2. Anastasiadou E, 'Analytical and numerical simulation of fabric microstructure' (2002).
1. Niaouris A. 'Shape optimization of 2D engineering structures' (2000).

9.3.7.3 Support of Postgraduate Dissertations

1. Simonides V, 'Numerical analysis of sandwich beams with homogeneous or FGM faces under three point bending' (2008).

9.3.7.4 Support of Undergraduate Dissertations

12. Venetsanos A, 'Frame and suspension design of a racing motorcycle' (2012).
11. Fountoulakis E, 'Design and analysis of a tubular steel space-frame automotive chassis' (2011).
10. Ioannou K, 'Elastostatic analysis of 2D structures using the method of global collocation' (2008).
9. Logothetis I, 'Estimation of sequential myocardial deformations using data from magnetic tomography' (2007).
8. Georgoulas D, 'Investigation of relaxation of Total Hip Arthroplasties using the Finite Element Method' (2003).
7. Koukos K, 'Fabric handling: theoretical and experimental investigation' (2003).
6. Argyros K, 'Optimization of square-sectioned silos' (2003).
5. Kalogiannis N, 'Development of a 3D finite element model of a Total Hip Arthroplasty with acrylic cement and reinforcement of carbon fibers' (2002).
4. Rellakis D, 'Evaluation of new optimization methods of metal structures' (2002).
3. Koufis I, '3D modeling of refinery piping system' (2002).
2. Balomenos E, '3D reconstruction of deformable bodies from 2D frames' (2000).
1. Tsigginos L, 'Modeling the weaving procedure of fabrics using the Finite Element Method' (2000).

9.3.7.5 Supervision of ERASMUS students

Two students (one from France, one from Germany).

9.3.8 Technological Educational Institute of Piraeus - Greece (2000 – 2013)

9.3.8.1 Supervision of Undergraduate Degree Theses

2. Peppas I, 'Fabric modeling and e-learning' (2010)
1. Tsilivarakos I, 'The internet in the service of Textiles' (2006).

9.3.8.2 Support of Undergraduate Degree Theses

3. Livaditi M, 'Experimental geometric measurements of fabric microstructures' (2003).
2. Campyli V, 'Thermal properties of textile materials' (2001).
1. Gerali PI – Zorzou N, 'Objective and subjective hand evaluation of fabrics' (2000).

9.3.8.3 Supervision of ERASMUS students

Two students (both from Slovenia)

9.4 AUTHOR'S WORK

9.4.1 Educational notes

- Author of educational notes for the postgraduate course 'MNM333: Computer Aided Product Design', School of Mechanical and Automotive Engineering, KUL (2013)
- Author of educational notes for the undergraduate course 'ME2181: Mechanical Science - Statics', School of Mechanical and Automotive Engineering, KUL (2013)
- Co-author of educational notes for the undergraduate course 'Mechanisms & Introduction to Machine Design' (4th semester), partially based on the lectures of Prof. I.A. Antoniadis, School of Mechanical Engineering, NTUA (2012).
- Author of educational notes for the undergraduate course 'Computer Methods in Structures' (8th semester), School of Mechanical Engineering, NTUA (2011), including:
 - 'Finite Element analysis of a cantilever using ANSYS'
 - 'Solving contact problems using ANSYS'
 - 'Eigenvalue analysis and frequency estimation of an aircraft wing using ANSYS'
 - 'Introduction to SolidWorks - Weldments'
 - 'Introduction to SolidWorks - Mates'
 - 'Introduction to SolidWorks – Simulation I'
 - 'Introduction to SolidWorks – Simulation II'
- Author of complementary educational notes for the undergraduate course 'Conveyors and Lifting Machinery' (8th semester), School of Mechanical Engineering, NTUA (2011), including:
 - 'Cranes & Crane bridges'
 - 'Trolley selection according to the FEM standards'
- Co-author of educational notes for the undergraduate course 'Machine Dynamics I' (5th semester) based on the lectures of Prof. I.A. Antoniadis, School of Mechanical Engineering, NTUA (2010).
- Author of complementary educational notes for the undergraduate course 'Analysis of Mechanical Structures II' (7th semester), School of Mechanical Engineering, NTUA (2008) including:
 - 'Elements from Coons' theory'
 - 'Finite element analysis using triangular elements'
- Author of complementary educational notes for the undergraduate course 'Analysis of Mechanical Structures I' (6th semester), School of Mechanical Engineering, NTUA (2005) including:
 - 'Analysis of 2D trusses using the Finite Element Method'
 - 'MatLab code with comments for the analysis of 2D trusses using the Finite Element Method'
- Author of complementary educational notes for the undergraduate course 'Quality Control of Textile Fibres' (3rd semester), Department of Textiles, TEI Piraeus (2004).

9.4.2 Technical support

Technical support to the following university books:

- Peppas A., Vassiliadis S. (2002), 'Fibres' (translation from the book series 'An Introduction to Textiles', 100 pages, EUROTEx, 1994).
- Peppas A., Vassiliadis S. (2002) 'Yarns' (translation from the book series 'An Introduction to Textiles', 110 pages, EUROTEx, 1994).
- Peppas A., Vassiliadis S. (2002) 'Fabrics' (translation from the book series 'An Introduction to Textiles', 170 pages, EUROTEx, 1994).
- Peppas A., Vassiliadis S. (2002) 'Wet Processing' (translation from the book series 'An Introduction to Textiles', 180 pages, EUROTEx, 1994).
- Kanarachos A., Provatidis C. (2000), 'Finite Element Method in Engineering', Papatotiriou,
- Kanarachos A., Provatidis C.(2000), 'Finite Element Method in Engineering - Exercises', Papatotiriou.

9.5 ACADEMIC ADVISORIES / RACE TEAMS

2013 – 2017: Academic Advisor, IMechE Design Challenge, School of Mechanical and Automotive Engineering, Kingston University London.

- 2013 – 2016: Academic Advisor, IMechE Formula Student Project – Class 2 race car, School of Mechanical and Automotive Engineering, Kingston University London.
- 2014 Academic Member, TT Bike Zero Emission: Ion Horse Team, School of Mechanical and Automotive Engineering, Kingston University London.
- 2013 – 2014: Academic Advisor, IMechE Formula Student Project – Class 1 race car, School of Mechanical and Automotive Engineering, Kingston University London.

9.6 JUDGE

- 2014 – 2015 Judge, Business Presentation, IMechE Formula Student Competition, Silverstone.
- 2013 – 2015 Judge, Competition ‘Bright Ideas’, Kingston University London.
- 2013 Judge, Institute of Engineering and Technology (IET), Competition ‘Present Around the World’, Kingston University London.

9.7 INSTITUTIONAL COMMITTEES

- 2022 – ongoing: Mitigating Circumstances Board, Member, Department of Aeronautics, ICL.
- 2022 – ongoing: Teaching Executive Committee, Member, Department of Aeronautics, ICL.
- 2022 – ongoing: Student-Staff Committee, Member, Department of Aeronautics, ICL.
- 2022 – ongoing: Teaching Committee, Member, Department of Aeronautics, ICL.
- 2014 – 2016: Faculty Undergraduate Education Committee, Member, School of Mechanical and Automotive Engineering, KUL.
- 2013 – 2017: IMechE liaison person for the Design Challenge competitions, School of Mechanical and Automotive Engineering, KUL.
- 2013 – 2017: Student Staff Consultative Committee, Member, School of MAE, KUL.
- 2013 – 2017: Board of Studies, Member, School of Mechanical and Automotive Engineering, KUL.
- 2011 – 2013: General Assembly of the School of Mechanical Engineering, NTUA, Substitute member, representing the Association of Open-Ended Contract Personnel, NTUA.
- 2011 – 2013: Board of the School of Mechanical Engineering, NTUA, Substitute member, representing the Association of the Open-Ended Contract Personnel, NTUA.
- 2010 – 2013: Senate Committee for Life Long Education, Member, representing the Association of the Open-Ended Contract Personnel, NTUA.

9.8 OTHER POSTS / DIRECTORSHIPS

- 2025 – ongoing: Y1/Y2 Senior Tutor, Department of Aeronautics, Imperial College London
- 2022 – ongoing: Director of Student Experience, Department of Aeronautics, Imperial College London
- 2022 – ongoing: GTA/UTA Coordinator, Department of Aeronautics, Imperial College London
- 2022 – ongoing: NSS Department Coordinator, Department of Aeronautics, Imperial College London
- 2021 – 2022: Centre for Efficiency and Performance Engineering, Member, University of Huddersfield
- 2018 - 2021: Institute for Future Transport and Cities, Associate Member, Coventry University
- 2018 - 2021: Line Manager, School of Mechanical, Aerospace and Automotive Engineering, CU.
- 2015 – 2016: Acting Deputy Head of School (Education and Research), Kingston University.
- 2014 – 2017: Member, IMechE Committee (Greater London Region) for the IMechE Design Challenge Competitions for Year-1 and Year-2 students.
- 2014 – 2017: Course Director, BSc Automotive Engineering, School of Mechanical and Automotive Engineering, Kingston University London
- 2014 – 2017: Course Director, BSc Motorsport Engineering, School of Mechanical and Automotive Engineering, Kingston University London
- 2013 – 2017: Course Director, BSc Mechanical Engineering, School of Mechanical and Automotive Engineering, Kingston University London
- 2013 – 2015: Course Director, HND Engineering, School of Mechanical and Automotive Engineering, Kingston University London

9.9 MODULE LEADERSHIP

- 2022 - 2022: Manufacturing, Measurement and Diagnostics (Level-4)– University of Huddersfield
- 2021 – 2022: Design Analysis (Level-6) – University of Huddersfield

- 2021 – 2022: Quality Systems & Measurements (Level-7) – University of Huddersfield
- 2021 – 2022: New Product Development (Level-7) – University of Huddersfield
- 2019 - 2021: 7054MAA: Stress And Dynamics (Level 7) – Coventry University.
- 2019 - 2021: 7100MAA: Integrated Design Project (Level 7) – Coventry University.
- 2018 – 2019: M22MAE: Stress And Dynamics (Level 7) – Coventry University.
- 2018 – 2021: 209MAE: Design and Sustainability (Level 4) – Coventry University.
- 2018 – 2020: 224MED: Product Evaluation (Level 4) – Coventry University.
- 2013 – 2017: ME7015: Mechanical Group Project (Level 7) – Kingston University London.
- 2013 – 2017: ME7721: Computer Integrated Product Design (Level 7) – Kingston University London.

9.10 DISTINCTIONS (as Academic supervisor / member)

- 2023: **Exceptional Performance Award**, Faculty of Engineering, Imperial College London.
- 2021: IMechE Award, Best BEng Mechanical Engineering project (Supervision of), Coventry University.
- 2021: **Award** in recognition of “*Dedication in improving the student experience at Coventry University*”, Coventry University
- 2018: Lanchester Trust Student Prize, Best student project (Supervision of), Coventry University.
- 2016: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering Team): - 1st prize for the poster competition.
- 2016: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering Team): - 1st prize for the presentation competition.
- 2015: **Nominated for ‘Student-led Learning and Teaching Award: Best Project/Dissertation Supervisor Award’**, Kingston University Students Union (KUSU) and Academic Development Centre (ADC), Kingston University London.
- 2015: Industrial Advisory Board, Runner-up Individual Project: ‘Effects of Wavelength and Amount of Light on a Solar Cell.’ (supervision of) across the School of Mechanical and Automotive Engineering and the School of Aerospace and Aircraft Engineering – KU London.
- 2015: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering Team): - 1st prize for the presentation competition.
- 2014: IMechE, Design Challenge Competition, National Finals (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering Team): - 2nd place.
- 2014: IMechE, Formula Student Competition, Class-2, 10th overall position, 3rd in the electric car category, 2nd amongst the UK electric car entries and 1st amongst the UK electric car entries in Greater London Region (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering, KU Green-Racing Team)
- 2014: Isle of Man race, category: TT-Bike zero emission, Best Endeavour TT Zero team award (jointly with Ohio University, USA)
- 2014: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering Team): - 1st prize for winning the main race competition.
- 2014: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of Mechanical and Automotive Engineering Team): - 1st prize for the best design by peer review.
- 2014: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of MAE): - 1st prize for the poster competition.
- 2014: IMechE, Design Challenge Competition, Greater London Region (Academic Advisor of Kingston University, School of MAE): - 1st prize for the presentation competition.
- 2014: Industrial Advisory Board, Second Prize Award - Individual Project ‘Investigation of a Magnetically Expandable Hip Implant’ (supervision of) across the School of Mechanical and Automotive Engineering and across the School of Aerospace and Aircraft Engineering – Kingston University London.

- 2013: **Nominated for ‘Student-led Learning and Teaching Award’,** Kingston University Students Union (KUSU) and Academic Development Centre (ADC), KUL.

9.11 EXPERIENCE IN ACADEMIC & QAA PROCEDURES

- 2023: External Panel Member, Substantive Review - Mechanical/Aero Engineering courses, Kingston University London.
- 2022/25: External Examiner – Sheffield Hallam University for the course: MSc Advanced Mechanical Engineering
- 2022: Problem-Based Learning Lead (for Year-1) – University of Huddersfield
- 2020/21: Liaison Tutor Coventry University – THK Egypt (with focus on the Mechanical Engineering curriculum).
- 2019: Preparation of two new modules (7054MAA and 7100MAA; both validated) for the new MSc course Advanced Mechanical Engineering, Coventry University.
- 2017: Validation Team (Member) for the new Integrated BEng(Hons) / MEng course with Industrial Experience, Kingston University.
- 2016: Preparation of two new courses (MEng in Automotive Engineering and MEng in Automotive Engineering (Motorsport)); both have been validated, Kingston University.
- 2016: Preparation of documents for the IET Monitoring visit for the BSc courses of which I was CD: BSc Mechanical Engineering/BSc Automotive Engineering/BSc Motorsport Engineering, KU.
- 2016: Preparation of documents for the IMechE Accreditation visit related to the BEng / MEng / MSc courses offered by the School of Mechanical and Automotive Engineering, Kingston University.
- 2016: Submitted report on an investigated case of academic misconduct that resulted in a modification of the academic regulations for academic misconduct, Kingston University.
- 2015/16: Development of Work Allocation Model for the School of MAE/KU;
Monitoring of Key Performance Indicators on a Module / Term / Year / Course level, across all courses offered by the School of MAE/KU;
Monitoring of resources used per delivered module towards cost minimization
- 2016/17: External Examiner – University of Brighton (01/10/2016 – 30/09/2020): Mechanical Engineering Portfolio including MEng/BEng/BSc courses in Aeronautical, Automotive and Mechanical Engineering (*terminated when I joined CU, as UoB already had EE from CU*).
- 2014/18: External Examiner - University of Greenwich (01/09/2014 – 31/12/2018) for the courses:
BEng H Engineering Management (Electrical) (Top Up)
BEng H Engineering Management (Mechanical Building Services) (Top Up)
FdE Building Services Engineering
FdE Electrical Engineering
- 2014/18: Member of the School NSS Task Force, Kingston University.
- 2014/17: Admissions Tutor for all BSc courses offered by the School of MAE, Kingston University.
- 2013/17: Attending regularly Boards of Study, Student-Staff Consulting Committees, School and Subject Group meetings, Kingston University.
- 2013/17: Preparation of Course Programme Specifications, Module Descriptors and Course Summary Reports (within the duties of a Course Director), Kingston University.

10. PROFESSIONAL EXPERIENCE

10.1 Applied Projects

- 2016 Investigation of the aerodynamic effects related to changes in canopy covering the main entrance of the Lancaster Hotel London
- 2014 Optimized design of an adjustable paralympian throwing chair
- 2014 Optimized design of a push rim for a paralympian racing wheelchair
- 2013 Development of an adjustable paralympian racing wheelchair
- 2013 Stress Analysis of Overhead Line Insulators And Fittings
- 2012 Investigation of severe wear of rails and wheels of Rail Mounted Gantry Cranes
- 2012 Optimization of a photovoltaic panel frame under the constraints imposed by the Eurocodes
- 2012 Analysis of super-market racks using the Finite Element Method
- 2012 Analysis of a life-jacket buckle using the Finite Element Method
- 2011 Analysis of a galley system for a modern civil aircraft using the Finite Element Method
- 2010 Investigation of the structural failure of a 50m mast used for recording wind data
- 2010 Investigation of the rail-wheel contact for a cargo train
- 2009 Modeling and finite element analysis of heavy truck rear bumpers under static and impact loading for protection against impactation from rear-end collision
- 2009 Investigation Of A Trochanteric Fi-Nail Intramedullary Implant Fixation Using The Finite Element Method
- 2008 Design and analysis of the crane bridge for the offshore platform ‘Delta-Vereniki’
- 2007 Reinforcement of an existing single girder crane bridge for increasing the service load by 25%
- 2006 Modeling and Finite Element Analysis of a piston replica
- 2005 Design and analysis of a special single girder crane bridge with a cantilever 50% of its span
- 2004 Design and analysis of a special double girder crane bridge carrying a greifer
- 2004 Investigation of fatigue cracks on a cylinder of a marine main engine
- 2004 Development and investigation of models in textiles using the Finite Element Method
- 2004 Investigation of bolted connected reinforcement plates for the 400T gantry crane in Elefsis Shipyards using the Finite Element Method
- 2004 Dynamic analysis of a metallic anti-seismic chamber using the Finite Element Method
- 2003-2004 Investigation of bolt connections in selected areas of the 400T gantry crane in Elefsis Shipyards using the Finite Element Method
- 2003 Static analysis of a metallic anti-seismic chamber using the Finite Element Method
- 2002 Investigation of local stresses in selected areas of the 400T gantry crane in Elefsis Shipyards using the Finite Element Method
- 2001 Stress investigation of the 400T gantry crane in Elefsis Shipyards using the Finite Element Method
- 2001 Finite Element Analysis of industrial rack systems
- 1996 Development of an integrated database for monitoring the maintenance of the Olympic Airways aircraft fleet
- 1990 Installation of COW (Crude Oil Washing) machines to the ULCC vessel “Aegean Mariner”, Skaramangas shipyards

10.2 Technical Software Development

- 1996 – Development of an integrated tool in AutoCAD for meshing 2D continua using Coon’s interpolation method, Laboratory of Dynamics and Structures, School of Mechanical Engineering, NTUA
- 2003 – Development of an integrated system for optimum crane design implementing Eurocodes 1&3, NTUA, Laboratory of Dynamics and Structures, School of Mechanical Engineering, NTUA

11. RESEARCH EXPERIENCE

11.1 FUNDED RESEARCH PROJECTS

- 2024 Artificial Intelligence Enriching Academic feedback: Utilization of speech-to-text and text-to-speech software for oral assessments/presentations – PI (awarded; £6,240)
- 2024 Artificial Intelligence Enriching Academic feedback: Analysis of graphs/plots submitted as a deliverable for assessment – PI (awarded; £6,240)
- 2024 Artificial Intelligence Enriching Academic feedback: Sentiment analysis of feedback provided by students – PI (awarded; £9,360)
- 2024 Educational Platform for Dynamic (modal) Analysis of structures using Virtual Reality (ViRSE) – PI (awarded; £6,240)
- 2023 Hybrid Artificial Intelligence Enriching Academic feedback for reports - Digital Innovation Fund, Imperial College London – PI (awarded £259k; option for additional £115k)
- 2023 Supporting the development of a virtual reality application on structural analysis - UROP WP Project – PI (awarded)
- 2023 Educational Platform for Beam and Truss Analysis using Virtual Reality (ViRSE) – PI (awarded; £8,760)
- 2020 Optimum Design of a Low-Cost High-Endurance Adjustable and Expandable Transtibial Passive-Foot Prosthetic (*GCRF Fully Funded Doctoral Studentship Scheme*) – PI (awarded)
- 2019 Analysis and Optimal Design of Vertical Axis Wind Turbines using Fluid-Structure Interaction and Multidisciplinary Optimisation (IECR2\192025, Royal Society); £12K (submitted)
- 2018 Development of collapse resistant liner (NIC, TWI); £75K (submitted)
- 2018 Self-Cleaning Solar Power System (QNRF, Energy & Environment Pillar; \$700K - to be submitted)
- 2018 Optimized Design and Manufacturing of engine components using composites from terpolyaramide fibres and nano-tube enhanced resins (budget: £700K; KTP- InnovateUK; under preparation)
- 2018 High Efficiency Low Emissions Operation of Diesel Engines (InnovateUK, Competition: innovation in infrastructure systems round 2, priority area: energy systems; £3.2M – to be submitted)
- 2017 Pullout strength of screw augmentation techniques in a severely osteoporotic spine, PI (£1200)
- 2017 EPSRC-Diagnostics, prosthetics and orthotics to tackle challenges in developing countries, PI (EOI)
- 2017 Optimal design of a 3D-printed impact attenuator for a Formula Student race car, PI (£1200)
- 2016 CENTRELINE (£7,945M) (Call: H2020-NMBP-2016-2017; Topic: NMBP-04-2017; Type of action: RIA - Two-stage proposal) (submitted)
- 2016 Experimental investigation of preventive spine and femoral bone augmentation (£4900, submitted)
- 2016 Pilot Study of the strength at different temperatures and endurance of composites from terpolyaramide fibres and nano-tube enhanced resins (£9000 - submitted)
- 2016 Investigation of the zonular angles of a human lens through axisymmetric modelling, PI, (1200£)
- 2016 Investigation of the aerodynamic effects related to changes in canopy covering the main entrance of the Lancaster Hotel London, Principal Investigator (20000£)
- 2015 Investigation of the human lens as a functionally graded medium, Principal Investigator (1200£)
- 2014 Enabling robust asset management through the understanding, quantification and prediction of high voltage insulator wear and aging, Principal Investigator, SSE (250000£ - submitted)
- 2014 Use of modern technology to reinforce employability and entrepreneurship of Political Science and International Relations graduates, partner (total budget: 200000Euros – KU:40000Euros-submitted)
- 2014 MobiBins Prototype Development: Integration of Internal Sorting and Protection Mechanism smart bin (10000£ - KTP - Principal Investigator, submitted)
- 2009/10 ‘Project for Supporting Research Work’, Principal Investigator, TEI Piraeus, Greece (3000euros)
- 2009 Research Engineer, Project ‘Leonardo’, Technological Educational Institute of Piraeus, Greece.
- 2007 Research Engineer, Project “Archimedes” Technological Educational Institute of Piraeus, Greece.

- 2004 – Research Engineer in Project PAVET-NE / Integrated system for crane design, NTUA, financed by
2006 the General Secretariat for Research and Technology (GSRT)
- 2003 – Research Engineer in Project “Numerical Analysis of the Structural Behavior of a Metallic Anti-
2004 seismic Chamber Under Static and Dynamic Loading”, NTUA in collaboration with the Institute of
Mechanics of Materials and Geodesy S.A.
- 2002 – Research Engineer in Project ‘Hellas-Slovenia Bilateral co-operation: Computational modeling and
2005 simulation of textile structures”, NTUA
- 2000 – Research Engineer in Project “Arcimedes-2002: Motion and shape reconstruction of moving rigid
2002 objects from 2D frames”, NTUA.
- 2000 – Mechanical Engineer / Lecturer in the TEMPUS-TACIS Joint European Project between the
2002 Departments of Textiles of the Technical Institute of Piraeus, the Ghent University and the Tashkent
Institute of Light Industry and Textiles (Greece – Belgium – Uzbekistan: 1999-2001).
- 2000 Research Engineer in Project PAVE ‘Reinforced Plastics’, NTUA, financed by the General
Secretariat for Research and Technology (GSRT).

12. RESEARCH EXPERIENCE

12.1 PUBLICATIONS FOR ACADEMIC TITLES

2. **D.T. Venetsanos (2010)**, Development of Methods for Topology and Shape Optimization of Mechanical Structures', Doctoral Dissertation, NTUA, Athens.
1. **D.T. Venetsanos (1999)**, Elastic foundation of a solid paraboloid body on a thin incompressible membrane, Diploma Thesis, NTUA, Athens.

12.2 JOURNAL PAPERS – Ready for Submission

2. **Venetsanos, D.T, et al.** “A Novel Automated Method for the Design of Resilient 2D trusses using Sequential Topology Refinement”
1. Mohammed, A.O. and **Venetsanos, D.T.** “Experimental Investigation of the Mechanical Behaviour of Aluminium-GFRP and Aluminium-CFRP Hybrid Laminates at Different Ambient Temperatures”

12.3 JOURNAL PAPERS - In preparation

5. **Venetsanos, D.T.** ‘Feedback for student reports: a three-level approach’
4. **Venetsanos, D.T. et al.** ‘A highly-interactive Virtual Reality application for the analysis of a beam’
3. **Venetsanos, D.T. et al.** ‘A highly-interactive Virtual Reality application for the analysis and optimization of a truss’
2. **Venetsanos, D.T.** ‘Educational Article: A Variable Elemental Thickness topology optimization code written in Matlab’
1. **Venetsanos, D.T.** ‘VETO: A new OC-based method for Topology Optimization using Variable Elemental Thickness’

12.4 PUBLICATIONS IN SCIENTIFIC JOURNALS

27. Kanarachos, S., Ramadhan, R., Kockelmann, W., **Venetsanos, D.**, Tremsin, A., Fitzpatrick, M. (2022) Strain Imaging of Corroded Steel Fasteners Using Neutron Transmission Imaging, Measurement, vol. 203, 111904, doi:10.1016/j.measurement.2022.111904.
26. Wang, L., Kolios, A., Liu, X., **Venetsanos, D.**, Rui, C. (2022) Reliability of offshore wind turbine support structures: A state-of-the-art review, Renewable and Sustainable Energy Reviews 161, 112250, doi:10.1016/j.rser.2022.112250.
25. Kulkarni, S.S., Wang, L., **Venetsanos, D.** (2022) Managing Technology Transfer Challenges in the Renewable Energy Sector within the European Union, Wind 2 (1), 150-174, doi:10.3390/wind2010009.
24. Wang, K., **Venetsanos, D.T.**, Hoshino, M., Uesugi, L., Yagi, N., and Pierscionek, B.K. (2019) A Modelling Approach for Investigating Opto-Mechanical Relationship in the Human Eye Lens, IEEE Transactions on Biomedical Engineering, doi: 10.1109/TBME.2019.2927390
23. Wang, K., **Venetsanos, D.T.**, Wang, J., Augousti, A., Pierscionek, B. K, (2018), Combined use of parallel-plate compression and finite element modeling to analyze the mechanical properties of intact porcine lens, J Mech Med Biol, Vol. 18, No. 5, doi: 10.1142/S0219519418310139
22. Santana Artiles M.E and **Venetsanos, D.T.**, (2018) Numerical investigation of the effect of bone cement porosity on osteoporotic femoral augmentation, International Journal for Numerical Methods in Biomedical Engineering, Vol. 34(8), e2989; doi: 10.1002/cnm.2989
21. Wang, K., **Venetsanos, D.T.**, Wang, J., Augousti, A., Pierscionek, B. K, (2017), The importance of parameter choice in modelling dynamics of the eye lens, Sci Rep. 7(1), 16688; doi: 10.1038/s41598-017-16854-9.
20. Santana Artiles M.E and **Venetsanos, D.T.**, (2017) A New Evolutionary Optimization Method for Osteoporotic Bone Augmentation, Computer Methods in Biomechanics and Biomedical Engineering, doi: 10.1080/10255842.2017.1291805.
19. Nanayakkara, V.K., Cotugno, G., Vitzilaios, N., **Venetsanos, D.**, Nanayakkara, T. and Sahinkaya, M.N. (2017) The Role of Morphology of the Thumb in Anthropomorphic Grasping: A Review. Front. Mech. Eng. doi: 10.3389/fmech.2017.00005.
18. Wang, K., **Venetsanos, D.T.**, Wang, J., Pierscionek, B. K, (2016) Gradient moduli lens models: how material properties and application of forces can affect deformation and distributions of stress, Sci. Rep. 6, 31171; doi: 10.1038/srep31171.

17. Santana Artiles M.E and **Venetsanos, D.T.** (2016) Heuristic optimization of bone cement distribution for prevention of osteoporotic hip fractures, *Lect Notes Eng Comp.* 2224, pp. 857-862.
16. Nanayakkara, V., Ataka, A., **Venetsanos, D.** Duran, O., Vitzilaios, N., Nanayakkara, T., Sahinkaya, M.N., (2016) Kinematic Analysis of the Human Thumb with Foldable Palm, *Lect Notes Comput Sc.* 9716, pp. 226-238.
15. Sedyono, J., Hadavinia, H., **Venetsanos, D.**, Marchant, D. (2015) Enumeration search method for optimisation of stacking sequence of laminated composite plates subjected to buckling, *Open Eng.* 2015; 5:190–204.
14. Antoniadis, I.A., **Venetsanos, D.T.**, Papaspyridis, F.G., (2014) Dynamic non-linear energy absorbers based on properly stretched in-plane elastomer structures, *Nonlinear Dyn.*, vol. 75, pp. 367-386.
13. Antoniadis, I.A., **Venetsanos, D.T.**, Papaspyridis, (2013) F.G.: DIESYS - Dynamically non-linear dielectric elastomer energy generating synergetic structures: perspectives and challenges. *Smart Mater. Struct.* doi:10.1088/0964-1726/22/10/104007
12. M. Manda, C. Galanis, **D. Venetsanos.**, C. Provatidis, P. Koidis (2011), The effect of select pulp cavity conditions on stress field development in distal abutments in two types of fixed dental prostheses, *Int J Prosthodont*, vol. 24(2), p.p.118-26.
11. F.N. Xypnitos, E. Kolliakou, **D.T. Venetsanos**, C.G. Provatidis, N.E. Efstathopoulos (2011), Mechanical behavior of the radiocarpal joint during the healing process of a scaphoid fracture, *J Bone Joint Surg Br*, vol.(93-B), SUPP III, p.p.340-341.
10. N.E. Efstathopoulos, F.N. Xypnitos, V. Nikolaou, J. Lazarettos, E.N. Kaselouris, **D.T. Venetsanos**, C.G. Provatidis (2011), Investigation of a trochanteric Fi-nail intramedullary implant fixation using the finite element method, *Orthopaedic Proceedings vol.93 (SUPP_III)*, pp.356
9. N. Efstathopoulos, V.S. Nikolaou, F.N. Xypnitos, D. Korres, I. Lazarettos, K. Panousis, E.N. Kaselouris, **D.T. Venetsanos**, C.G. Provatidis (2010), Investigation on the distal screw of a trochanteric intramedullary implant (Fi-nail) using a simplified finite element model”, *Injury, Int. J. Care Injured*, vol.41, pp. 259–265.
8. **D.T. Venetsanos** and C.G. Provatidis, (2010), On the layout optimization of 2D skeletal structures under α single displacement constraint, *Struct Multidisc Optim*, Vol. 42, pp.125–155.
7. F.N. Xypnitos, G.K. Papachristou, P. Chatzigrigoris, E. Chronopoulos, E.N. Kaselouris, **D.T. Venetsanos**, C.G. Provatidis, N.E. Efstathopoulos, (2009) 3D investigation of the radiocarpal joint using the finite element method (in Greek), *Orthopaedics*, vol.22(2), pp. 85-93.
6. E.N. Kaselouris, **D.T. Venetsanos**, C.G. Provatidis, F.N. Xypnitos, V. Nikolaou, J. Lazarettos, N. E. Efstathopoulos (2009), Investigation Of A Trochanteric Fi-Nail Intramedullary Implant Fixation Using The Finite Element Method, *J.Orthopaedics*;6(4)e1
5. P.A. Makris, C.G. Provatidis, **D.T. Venetsanos** (2006), Structural Optimisation of thin-walled tubular trusses using a virtual strain energy density approach, *Thin-Walled Structures*, vol. 44(2), pp.235-246.
4. C.G. Provatidis and **D.T. Venetsanos** (2006), Cost minimization of 2D continuum structures under stress constraints by increasing commonality in their skeletal equivalents, *Forschung im Ingenieurwesen vol.70 (3)*, pp. 159-169.
3. C.G. Provatidis and **D.T. Venetsanos** (2006), Shape and motion reconstruction of nonrigid objects from their 2D projections under uniform-expansion conditions, *Forschung im Ingenieurwesen*, vol.70 (3), pp.187-197.
2. S. Vassiliadis, **D. Venetsanos**, and C. Provatidis (2005), Optimization Aspects on the Hand of the Fabrics, *Textile Research Journal*, vol.75, pp. 653-661.
1. Ch.Provatidis, A. Kanarachos and **D. Venetsanos** (2000), Strength analysis of buried curved pipes due to blast explosions, *Structures and Materials*, vol.8, pp.3-12.

12.5 BOOK CHAPTERS

3. **Venetsanos D.** (2004) Chapter 5, in Manolaki M., Venetsanos D. et al, ‘Technology of Garment Production’ for vocational training (*in Greek*)
2. **Venetsanos D.** (2004) Chapter 7, in Manolaki M., Venetsanos D. et al, ‘Technology of Garment Production’ for vocational training (*in Greek*)
1. Ch.Provatidis, A. Kanarachos and **D. Venetsanos** (2000), Strength analysis of buried curved pipes due to blast explosions, *Structures under Shock & Impact VI*, Eds: C.A. Brebbia & N. Jones.

12.6 PUBLICATIONS IN PROCEEDINGS OF CONFERENCES

79. Blaxall, B., Di Fiore, F., **Venetsanos, D.**, and Mainini, L. A Multidisciplinary Optimisation Framework for Compliant Trailing-Edge Morphing Wings. AIAA AVIATION Forum 2026, June 2026, San Diego, USA (*to appear*)
78. Cloake T., Bastien C., Hardwicke J., **Venetsanos D.**, Neal-Sturgess C. A critique of the THUMS lower limb model for pedestrian impact applications. *13th European LS-DYNA Conference 2021, Ulm, Germany.*
77. Santana Artiles M.E. and **Venetsanos, D.T.** Osteoporotic Hip Augmentation with bone cement injected along curved canals. *SYMBIO-M, 2020, Turin, Italy*
76. Wang, K., **Venetsanos, D.T.**, Hoshino, M., Uesugi, L., Yagi, N., and Pierscionek, B.K. (2019), Contributions of gradient cortical moduli in the accommodation of ageing human eye lens, Asia-Pacific Academy of Ophthalmology 35th Annual Congress (35th APAO Congress), Xiamen China, April 22-26, 2020.
75. Nanayakkara, V.K., Sornkaran, N., Wegiriya, H., **Venetsanos, D.**, Vitzilaios, N., Sahinkaya, M.N. and Nanayakkara, T. A method to estimate the oblique arch folding axis for thumb assistive devices. 20th Towards Autonomous RObotic Systems Conference (TAROS 2019), London, UK (doi: [10.1007/978-3-030-23807-0_3](https://doi.org/10.1007/978-3-030-23807-0_3))
74. Santana Artiles M.E. and **Venetsanos, D.T.** Injection of bone cement into osteoporotic femora along curved canals. *SYMBIO-M, 2018, Stratford-upon-Avon, UK.*
73. Wang, K., **Venetsanos, D.T.**, Wang, J., Augousti, A. and Pierscionek, B.P. Numerical investigation of the contribution of zonules in the accommodation of the human lens using the Finite Element Method. *SYMBIO-M, 2018, Stratford-upon-Avon, UK.*
72. Santana Artiles M.E. and **Venetsanos, D.T.** Optimum design of curved drilled channels for bone augmentation of the proximal femur. *Symposium about Improving and Understanding Health, 2018, Liverpool, UK.*
71. Wang, K., **Venetsanos, D.T.**, Wang, J., Augousti, A. and Pierscionek, B.P., Combined use of parallel plate compression and Finite Element Modelling to analyse mechanical properties of intact porcine lens, *7th Int. Conference on Biomedical Engineering and Biotechnology, 2018, China.*
70. Santana Artiles M.E. and **Venetsanos, D.T.** Prophylactic augmentation of the proximal femur by injecting bone cement through curved drilled channels. *8th World Congress of Biomechanics, 8-12 July, 2018, Dublin, Ireland.*
69. Wang, K., **Venetsanos, D.T.**, Wang, J. and Pierscionek, B.P., The role of zonular angles in assessing physiological relevance of Finite Element lens models, *8th World Congress of Biomechanics, 8-12 July, 2018, Dublin, Ireland (accepted)*
68. Santana Artiles M.E and **Venetsanos, D.T.** Optimal osteoporotic femoral augmentation under multiple load cases. *23rd Congress of the European Society of Biomechanics, July 2-5, 2017, Seville, Spain.*
67. Wang, K., **Venetsanos, D.T.**, Wang, J. and Pierscionek, B.P., Finite Element Models of Human Crystalline Lens For The Investigation Of Presbyopia. *23rd Congress of the European Society of Biomechanics, July 2-5, 2017, Seville, Spain.*
66. Pierscionek, B.P., Wang, K., **Venetsanos, D.T.**, Wang, J. Finite Element modelling of the human lens for the investigation of accommodative theories. *STEM for Britain, House of Parliament, London, UK, Mar, 2017.*
65. Pierscionek, B.P., Wang, K., **Venetsanos, D.T.**, Wang, J. Modelling the physiological optics of the eye. *ARVO ASIA, Brisbane, Australia, February 2017.*
64. Pierscionek, B.P., Wang, K., **Venetsanos, D.T.**, Wang, J. Models of zonular forces for presbyopia correction. (*Keynote*) *International Society of Presbyopia. Copenhagen, Denmark, Sept 2016.*
63. Pierscionek, B.P., Wang, K., **Venetsanos, D.T.**, Wang, J. Modelling material properties in eye lenses: stress distributions and deformation. *EMPVOVIII Topical Meeting on Visual and Physiological Optics, Antwerp, Belgium, Aug 2016.*
62. Santana Artiles M.E and **Venetsanos, D.T.** Heuristic optimization of bone cement distribution for prevention of osteoporotic hip fractures. *24th World Congress on Engineering (WCE 2016), UK, June 2016 (nominated for best paper award).*

61. Nanayakkara, V., Ataka, A., Venetsanos, D. Duran, O., Vitzilaios, N., Nanayakkara, T., Sahinkaya, M.N., Kinematic Analysis of the Human Thumb with Foldable Palm, 17th Towards Autonomous Robotic Systems (TAROS-16), UK, June 2016.
60. Santana Artilles M.E and **Venetsanos, D.T.** A New Evolutionary Optimization Method for Osteoporotic Femoral Augmentation. *Inaugural Ceremony, "Centre for Engineering, Environment and Society Research (CEESR)"*, UK, February 2016.
59. Konnari, C. and **Venetsanos, D.T.** Design and Analysis of a New Expandable Hip Implant Endoprosthesis. *Inaugural Ceremony, "Centre for Engineering, Environment and Society Research (CEESR)"*, UK, February 2016.
58. Wang, K., **Venetsanos, D.T.**, Wang, J. and Pierscionek, B.P. *Inaugural Ceremony, "Centre for Engineering, Environment and Society Research (CEESR)"*, UK, February 2016.
57. Nanayakkara, V.K., **Venetsanos, D.**, Duran, O., Nanayakkara, T. and Sahinkaya, M.N. Role of Human Thumb with Foldable in Grasp Affordances. *Inaugural Ceremony, "Centre for Engineering, Environment and Society Research (CEESR)"*, UK, February 2016.
56. D. Howard, G. Hunter, O. Duran, D. Venetsanos, Progress Towards an Intelligent Beehive : Building an Intelligent Environment to promote the Well-being of Honeybees, 12th Int Conf Intel Envir, UK, Sep 2016.
55. Nanayakkara, V.K., **Venetsanos, D.**, Duran, O., Nanayakkara, T. and Sahinkaya, M.N. Kinematic Analysis of the Human Thumb with Foldable Palm to Understand its Role in Grasp Affordances. *IROS2015 workshop on "Learning Object Affordances: a fundamental step to allow prediction, planning and tool use?"*, Hamburg, Germany, Sep2015.
54. Wang, K., **Venetsanos, D.T.**, Wang, J. and Pierscionek, B.P. The Application of Finite Element Analysis (FEA) in the Study of Human Lens Accommodation, *Interdisciplinary Hub for the Study of Health and Age-related conditions (IhSHA) Conference, UK, 2015.*
52. Yiakopoulos, C., Bardaklis, S, **Venetsanos, D.**, Antoniadis, I, Gryllias, K. The effect of mode shapes on the performance of Blind Source Separation methods. *Surveillance 8, Roanne, France, October 2015.*
51. I. Antoniadis, **D. Venetsanos**, F. Papaspyridis, 2013, Dynamic properties of a class of planar prestressed tensegrity elastomer structures, EuroEAP 2013: Third international conference on Electromechanically Active Polymer (EAP) transducers & artificial muscles, *Dübendorf (Zürich), Switzerland, 25-26 June 2013.*
50. I.A. Antoniadis, **D.T. Venetsanos**, F.G. Papaspyridis, I.E. Sapountzakis, Dynamic non-linear energy absorbers based on properly stretched in-plane asymmetric elastomer structures, 10th HSTAM International Congress on Mechanics, *Crete, Greece, 25-27 May, 2013.*
49. F. Papaspyridis, **D. Venetsanos**, I. Antoniadis, Dynamic non-linear energy absorbers based on dielectric elastomers, EuroEAP 2012: Second international conference on Electromechanically Active Polymer (EAP) transducers & artificial muscles, *Potsdam, 29-30 May, 2012.*
48. Xypnitos F.N., Kolliakou E., Papachristou G.C., Grigoris P., Chronopoulos E., **Venetsanos D.T.**, Provatidis C.G., Efstathopoulos N.E., Carpal scaphoid fracture healing - a finite element analysis", *11th EFORT Congress, Madrid, Spain, 2 – 5 June 2011.*
47. Spatharis, E.F., **Venetsanos, D.T.** and Provatidis, C.G., Layout optimization of a dual-axis solar tracker according to the Eurocode standards, *3rd International Conference on Experiments/Process/System Modeling/Simulation & Optimization (3rd IC-EpsMsO), Athens, 8-11 July, 2009.*
46. Kapogiannis, A.K., **Venetsanos, D.T.** and Provatidis, C.G., Weight minimization of a steel hangar using a new heuristic optimization procedure and according to the Eurocode standards, *3rd International Conference on Experiments/Process/System Modeling/Simulation & Optimization (3rd IC-EpsMsO), Athens, 8-11 July, 2009.*
45. Xypnitos, F.N., Papachristou, G.C., Grigoris, P., Chronopoulos, E., Kaselouris, E.N., **Venetsanos, D.T.**, Provatidis, C.G., Kollialou, E., Efstathopoulos, N.E., A Preliminary three dimensional investigation of the radiocarpal joint using the finite element method, *3rd International Conference on Experiments/Process/System Modeling/Simulation & Optimization (3rd IC-EpsMsO), Athens, 8-11 July, 2009.*

44. Xypnitos F.N., Kolliakou E., **Venetsanos D.**, Provatidis C., Efstathopoulos N.E., Mechanical behavior of the radiocarpal joint during the healing process of a Herbert B2 and B3 scaphoid fracture, *20^o Pancyprian Orthopaedic Conference, Paphos, Cyprus, 2009.*
43. Efstathopoulos N.E., Xypnitos F.N., Nikolaou V., Lasaretos I., Kolliakou E., Kaselouris E., **Venetsanos D.**, Provatidis C., Use of proximal or distal screw in a trochanteric Fi-nail for intramedullary fracture fixation, *20^o Pancyprian Orthopaedic Conference, Paphos, Cyprus, 2009.*
42. Efstathopoulos N.E., Xypnitos F.N., Nikolaou V., Lazaretos J., Kaselouris E.N., **Venetsanos D.T.**, Provatidis C.G., Investigation of a trochanteric Fi-nail intramedullary implant fixation using finite elements, *65th Panhellenic Orthopaedics Conference, Thessaloniki, 2009.*
41. Xypnitos F.N., Kolliakou E., **Venetsanos D.**, Provatidis C., Efstathopoulos N.E., Biomechanical behavior of the radiocarpal joint during the healing process of a scaphoid fracture, *65th Panhellenic Orthopaedics Conference, Thessaloniki, 2009.*
40. Xypnitos F.N., Kolliakou E., Tsiolis P., **Venetsanos D.**, Efstathopoulos N.E., Investigation of the healing process of scaphoid fractures using the finite element method, *Scientific Symposium on Treating Multi-injured and Multi-fractured patients, Kefalonia, 2009.*
39. Xypnitos F.N., Papachristou G.K., Xatzigrigoris P., Chronopoulos E., Kaselouris E.N., **Venetsanos D.T.**, Provatidis C.G., Efstathopoulos N.E., 3D investigation of the radiocarpal joint using the finite element method, *28^o Annual OTEMATH Conference, Thessaloniki, 2009.*
38. Xypnitos, F.N., Papachristou, G.C., Efstathopoulos, N.E., Kaselouris, E.N., **Venetsanos, D.T.**, Provatidis, C.G., Investigation of the mechanical behavior of typical scaphoid fractures during their healing process using the finite element method, *SEECM 2009 (2nd South-East European Conference on Computational Mechanics), Rhodes, Greece, 22–24 June 2009.*
37. **Venetsanos, D.T.**, Provatidis, C.G., Minimum weight designs for single displacement constrained 2D continua using variable element-wise thickness, *8th World Congress on Structural and Multidisciplinary Optimization (WCSMO8), Lisboa, Portugal, June 1- 5, 2009.*
36. Efstathopoulos N., Xypnitos F., Nikolaou V., Lazaretos J., Brilakis E., Kaselouris E., **Venetsanos D.**, Provatidis C., Investigation on the distal screw of a trochanteric FI-Nail intramedullary implant using a simplified finite element model, *P1944, 10th EFORT Congress, Vienna, Austria, 3 – 6 June, 2009.*
35. Kaselouris E.N., **Venetsanos, D.T.** and Provatidis, C.G., Lazaretos, J., Nikolaou, V.S., Xypnitos, F.N. and Efstathopoulos, N.E., Investigation on the distal screw of a trochanteric fi-nail intramedullary implant in a healed femur, *Third Conference of Greek Society of Biomechanics (ELEMBIO), 26-28 September, 2008, Athens, Greece.*
34. Kouli P.I., **Venetsanos, D.T.**, Georgiopoulos, B.Ch. and Provatidis C.G., An inverse engineering procedure for the estimation of the locus of the centres of resistance of a human tooth, *Third Conference of Greek Society of Biomechanics (ELEMBIO) , 26-28 September, 2008, Athens, Greece.*
33. **Venetsanos D.**, Magoula E. and Provatidis C., “Performance-based optimization of the welded box of a single girder overhead travelling crane according to EC3 and EC1, *8th. World Congress on Computational Mechanics (WCCM8), 5th. European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2008), June 30–July 4, 2008, Venice, Italy.*
32. **Venetsanos D.** and Provatidis C., “Performance-based optimization of a welded open cross section runway beam according to EC3 and EC1”, *8th. World Congress on Computational Mechanics (WCCM8), 5th. European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2008), June 30–July 4, 2008, Venice, Italy.*
31. **Venetsanos D.**, Magoula E. and Provatidis C., “Layout Optimization of Stressed Constrained 2D Continua Using Finite Elements of Variable Thickness”, *6th International Congress on Computational Mechanics (GRACM), Thessaloniki, Greece, 19-21 June 2008.*
30. **Venetsanos D.** and Provatidis C., “Layout Optimization of Single Displacement Constrained 2D Continua Using Finite Elements of Variable Thickness”, *6th International Congress on Computational Mechanics (GRACM), Thessaloniki, Greece, 19-21 June 2008.*
29. **D.T. Venetsanos**, C.G. Provatidis, S.G. Skarmneas, “Optimal Design Of A Box Cross Section Of A Double Girder Crane In Accordance With EC1 AND EC3”, *2nd International Conference on Experiments/Process/System Modelling/Simulation & Optimization, Athens, 4-7 July, 2007.*
28. **D.T. Venetsanos**, C.G. Provatidis, E-A.T. Magoula, “Optimal design of a welded open cross-section crane runway beam in accordance with EC1 and EC3”, *2nd International Conference on Experiments/Process/System Modelling/Simulation & Optimization Athens, 4-7 July, 2007.*

27. C.G. Provatidis, **D.T. Venetsanos**, E.G. Theodorou, "The effect of osteoporosis in the strain field of a total hip arthroplasty", *2nd International Conference on Experiments/Process/System Modelling/Simulation & Optimization, Athens, 4-7 July, 2007.*
26. C.G. Provatidis, **D.T. Venetsanos**, S.S. Champilos, "Estimation of the flexibilities of tooth support of an ellipsoidal shape", *2nd International Conference on Experiments/Process/System Modelling/Simulation & Optimization, Athens, 4-7 July, 2007.*
25. O.S. Exarchos, **D.T. Venetsanos** and C.G. Provatidis, "A new image processing approach for developing 3-D finite element models for long bones from pQ-CTs", *2nd International Conference on Experiments/Process/System Modelling/Simulation & Optimization, Athens, 4-7 July, 2007.*
24. C.G. Provatidis, **D.T. Venetsanos**, N.C. Kesimoglou, "Layout Optimization Of A Stress-Constrained Plate Under Out-Of-Plane Loading", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
23. C.G. Provatidis, **D.T. Venetsanos**, M.D. Linardos, "Cost Minimization Of Welded Steel Tanks For Oil Storage According To API Standards", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
22. C.G. Provatidis, **D.T. Venetsanos**, S.D. Champilos "Weight Minimization Of 3D Continuum Structures Under Stress Constraints", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
21. C.G. Provatidis, **D.T. Venetsanos**, S.K. Moissiadou, "Optimum Design Of Racking Systems According To The Eurocode Standards", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
20. C.G. Provatidis, **D.T. Venetsanos**, E.A. Kyriazi, "Optimum Design Of Single-Sided And Double-Sided Bolted Reinforcement Of A Plate Under Axial Loading According To Eurocode-3", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
19. C.G. Provatidis, **D.T. Venetsanos**, A.N. Vassiliou, "Description And Cancellation Of The Collapse Mode Of A Typical Calcaneal Fracture", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
18. C.G. Provatidis, **D.T. Venetsanos**, P.A. Markos, "Investigation Of Hybrid Optimization Schemes With A Deterministic Search Direction And A Stochastic Step Size", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
17. A.A. Papageorgiou, **D.T. Venetsanos** and C.G. Provatidis, "Investigating The Influence Of Typical Genetic Algorithm Parameters On The Optimization Of Benchmark Mathematical Functions", *2nd International Conference "From Scientific Computing to Computational Engineering", Athens, 5-8 July, 2006.*
16. C.G. Provatidis, E.D. Tzanakakis, and **D.T. Venetsanos**, "Optimum selection of doubly symmetric rolled beams for single-girder overhead travelling cranes using finite element plate models", *1st IC-EpsMsO, 6-9 July 2005, Athens, Greece.*
15. C.G. Provatidis, and **D.T. Venetsanos**, "The influence of normalizing the virtual strain energy density on the shape optimization of 2D continua", *1st IC-EpsMsO, 6-9 July 2005, Athens, Greece.*
14. **D.T. Venetsanos** and C.G. Provatidis, "Fully stressed 2D continua formed by applying the stress-ratio technique to finite elements of variable thickness", *1st IC-EpsMsO, 6-9 July 2005, Athens, Greece.*
13. C. Provatidis, **D. Venetsanos** and K. Spentzas, "Parametric investigation of car suspension design", *MVM XIII, International Scientific Meeting Motor Vehicle & Engines, 4-6 October 2004, Kragujevac, Serbia.*
12. C.G. Provatidis, C.G. Vossou and **D.T. Venetsanos**, "Verification of popular deterministic and stochastic optimization methods using benchmark mathematical functions", *1st International Conference "From Specific Computing to Computational Engineering", 2004, Athens, Greece.*
11. C.G. Provatidis, **D.T. Venetsanos** and C.G. Vossou, "A comparative study on deterministic and stochastic optimization algorithms applied to truss design", *1st International Conference "From Specific Computing to Computational Engineering", 8-10 September, 2004, Athens, Greece.*
10. C.G. Provatidis, P.A. Makris and **D.T. Venetsanos**, "Size optimization of tubular trusses using a virtual strain energy density approach", In: D. Tsahalidis (ed.), *CD Proc. 1st International Conference "From Specific Computing to Computational Engineering", 8-10 September, 2004, Athens, Greece.*

9. C. Provatidis, G. Paradeisis, **D. Venetsanos** and Th. Karachalios, "A Finite Element Model to Investigate the Influence of Material Properties in THR Bone Remodeling", *10th FEM Workshop, The Finite Element Method in Biomedical Engineering, Biomechanics and Related Fields, Ulm, Germany, 17-18 July 2003*.
8. C. Provatidis and **D. Venetsanos**, "Shape, motion and material characteristics identification for elastically deformable vibrating structures from orthographic projections", *VIII International Conference on Recent Advances in Structural Dynamics, Southampton, 14-16 July 2003*.
7. Ch. Provatidis, **D. Venetsanos** and Th. Karachalios, "A study on the design and placement of plates for the fixation of calcaneal fractures", *Hellenic Foot and Ankle Meeting, 27-29 June, 2003, Alonnisos, Greece*.
6. **D.T. Venetsanos**, Th. Alysandratos and C.G. Provatidis, "Investigation of symmetric reinforcement of metal plates under tension using the finite element analysis", *1st International Conference on Information Technology and Quality, 5-6 June 2004, Athens, Greece*.
5. **D. T. Venetsanos**, D. Mitrakos and C. G. Provatidis, "Layout optimization of 2D skeletal structures using the fully stressed design", *1st Int. Conf. on Information Technology and Quality, 5-6 June 2004, Athens, Gr.*
4. C.G. Provatidis and **D.T. Venetsanos**, "Performance of the FSD in shape and topology optimization of two-dimensional structures using continuous and truss-like models", In: C. Cinquini, M. Rovati, P. Venini and R. Nascimbene (eds.), *Proceedings 5th World Congress of Structural and Multidisciplinary Optimization, May 19-23, 2003, Lido di Jesolo, Italy, pp. 385-386, (ISBN 88-88412-18-2)*.
3. P. A. Makris, C. G. Provatidis, D. A. Rellakis and **D. T. Venetsanos**, "Size optimization of two-dimensional T-shaped frames using a virtual energy method", In: C. Cinquini, M. Rovati, P. Venini and R. Nascimbene (eds.), *Proceedings 5th World Congress of Structural and Multidisciplinary Optimization, May 19-23, 2003, Lido di Jesolo, Italy, pp. 387-389, (ISBN 88-88412-18-2)*.
2. C.Provatidis, B. Georgiopoulos, **D. Venetsanos**, A. Kotinas, P. Diamantopoulos, "A procedure for handling stl data to develop 3D FEM models: application on a human skull", *Third Symposium on Biomedical Engineering & Medical Physics, 28-30 August 2002, Patras, Greece*.
1. **D. Venetsanos**, "Finite Element Analysis in Textile Engineering", *International Conference "Textile 2000", 24-26 May 2000, Tashkent, Uzbekistan*.

12.7 REVIEW EDITOR

- Computational Methods in Structural Engineering
- Clinical Biomechanics

12.8 REVIEWER FOR RESEARCH GRANTS

- The Dunhill Medical Trust

12.9 REVIEWER FOR SCIENTIFIC JOURNALS

- Materials and Design
- Engineering Fracture Mechanics
- Nonlinear Dynamics
- Investigative Ophthalmology & Visual Science
- Journal of Biomechanics
- International Journal for Numerical Methods in Biomedical Engineering
- Facta Universitatis: Mechanical Engineering
- International Journal of Steel Structures
- Computer & Structures

12.10 CITATIONS

Google Scholar: 475 citations, h-index: 11; i10-index: 11

Scopus: 320 citations, h-index: 9

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Loop profile: 507782

12.11 INVITED SPEAKER (indicative)

D. Venetsanos, “Computational Orthopaedics”, *Research Workshop on Biomedical Engineering and Bio-robotics, October 2016, Abu Dhabi, United Arab Emirates (AFTER COMPETITION, funded by the British Council)*.

D. Venetsanos, “Nurturing student satisfaction through personalised assessment and feedback”, **Invited Speaker and panelist**, *Webinar ID 820 6562 1376*.

D. Venetsanos, “How do planes fly?”, *Fun Kids Radio: Science Weekly podcast, October, 2025*

13. TECHNICAL REPORTS

21. **Venetsanos D.T.** and Heidari A. (2016), ‘Investigation of the aerodynamic effects related to changes in canopy covering Hotel main entrance’ for Lancaster Hotel London.
20. **Venetsanos D.T.** and Bromfield R. (2014) ‘Optimized design of an adjustable paralympian throwing chair’ for Weir-Archer Academy
19. **Venetsanos D.T.** and Bromfield R. (2014) ‘Optimized design of a push rim for a paralympian racing wheelchair’ for Weir-Archer Academy
18. **Venetsanos D.T.** and Bromfield R. (2014) ‘Development of an adjustable paralympian racing wheelchair’, Weir-Archer Academy
17. **Venetsanos D.T.** and Benhadj-Djilali R. (2013) ‘Stress Analysis of Overhead Line Insulators’, SSE
16. **Venetsanos D.T.** (2012), ‘Stress analysis of revolte joints for a packaging system’ for Nouris M. O.E.
15. **Venetsanos D.T.** (2012), ‘Finite Element Analysis of a Knuckle Boom Crane’, GAL S.A.
14. Antoniadis I.A. and **Venetsanos D.T.** (2011), Detailed Technical Benchmarking Analysis: analysis of a galley system for a modern civil aircraft (Report: DyS – BA-2011-01) IST S.A.
13. **Venetsanos D.T.** (2010), ‘Finite Element Analysis of a photovoltaic space frame’, Doppler S.A.
12. **Venetsanos D.T.** (2009), ‘Finite Element Analysis of a dual axis solar tracker’, D.T.S. S.A..
11. **Venetsanos D.T.** (2009), ‘Design of heavy truck rear bumpers for protection against impaction from rear-end collision’, Kioleides S.A.
10. **Venetsanos D.T.** (2008), ‘Study of a Single Girder Crane for a commercial aircraft hangar’, for 2π SA.
9. Makris P., **Venetsanos D.** (2008), “Design and analysis of the crane bridge of the offshore platform ‘Delta-Vereniki’ (‘NESTOR’, National Observatory of Athens, Institute of Astroparticle Physics).
8. Makris P, **Venetsanos D** (2007), “Design and analysis of a single girder crane bridge for the Hellenic Air Force. 2π SA.
7. **Venetsanos D.**, (2006), ‘Finite Element Analysis and evaluation of the stress field of a piston replica’, for the ‘Demenagas SA’, General Ship Repairs, Piraeus, Greece.
6. Makris P., **Venetsanos D**, (2005), ‘Design and analysis of a single girder crane bridge for the Greek Public Electricity Company. 2π SA.
5. Makris P, Provatidis C. and **Venetsanos D**, (2004), ‘Design and analysis of a double girder crane bridge for the Aluminium of Greece’. 2π SA.
4. **Venetsanos D**, (2003), Preliminary results of the Structural Behavior of a Metallic Anti-seismic Chamber Under Dynamic Loading’, for the Institute of Mechanics of Materials and Geodesy S.A..
3. **Venetsanos D**, (2003), ‘Preliminary results of the Structural Behavior of a Metallic Anti-seismic Chamber Under Static Loading’, for the Institute of Mechanics of Materials and Geodesy S.A.
2. Makris P., Provatidis C. and **Venetsanos D** (2004), ‘Investigation of the failure of the No.1 cylinder of the main engine of the vessel “Atalanti I”, for the MENTOR Marine Consultants.
1. **Venetsanos D** (2001), ‘Strength analysis of industrial rack systems’

14. LANGUAGES

Greek	Native language
English	Proficiency in English: University of Cambridge (1999) Proficiency in English, University of Michigan (1999)
French & German	Beginner’s level

15. PROGRAMMING LANGUAGE / TECHNICAL SOFTWARE

Programming language:	Turbo Pascal, Fortran, AutoLisp, Visual Basic, C.
Technical software:	MatLab (programming), MathCAD.
CAD software:	SolidWorks, AutoCAD.
FEA software:	ANSYS (Workbench + Mechanical + programming in APDL), SolidWorks (Simulation Premium + Motion), Abaqus, Siemens NX, LS-Dyna, Algor.
