1. Personal Information

Nationality/Passport:	Hellenic/Hellenic
Date/Place of birth:	16th February 1982/ Athens, Hellas
Languages:	Greek, English, German
Marital Status:	Married, (1) daughter, (1) son
Employer:	NTUA – National Technical University of Athens
Address (work):	9 Heroon Polytechniou Str., 15780 Zografou-Attica, Hellas
Address (living):	1 Sarantaporou Str., 15561 Cholargos-Attica, Hellas
E-mail/Tel:	chasalevris@mail.ntua.gr / +302107723681
URL:	www.mech.ntua.gr/en/chasalevris

2. Professional Experience

A. University Positions

- (Oct. 2025 – today) **3 months**

NTUA – National Technical University of Athens (Athens 15780, Hellas)
Position: **Associate Professor** of Analysis and Design of Mechanical Structures
Faculty: School of Mechanical Engineering – Dept. of Mechanic. Design & Automatic Control
Director of the Laboratory of Machine Dynamics (since December 2025)

- (Sep. 2018 – Sep 2025) **7 years**

NTUA – National Technical University of Athens (Athens 15780, Hellas)
Position: **Assistant Professor** of Analysis and Design of Mechanical Structures
Faculty: School of Mechanical Engineering – Dept. of Mechanic. Design & Automatic Control

- (Sep. 2012 – Aug. 2013) **1 year**

TUD - Technische Universität Darmstadt (Darmstadt 64287, Germany)
Position: **Postdoctoral Research Associate**
Faculty: Institute for Dynamics of Structures, Faculty of Mechanical Engineering

- (May 2010 – Aug. 2012) **2 years, 3 months**

TUD - Technische Universität Darmstadt (Darmstadt 64287, Germany)
Position: ***Alexander von Humboldt*** **Postdoctoral Researcher**
Faculty: Institute for Dynamics of Structures, Faculty of Mechanical Engineering

B. Positions in Industry

- (Nov. 2015 – Sep. 2018) **2 years, 10 months**

GENERAL ELECTRIC Co. / GE Oil & Gas Marine & Industrial UK Ltd (Rugby, UK)
Position and roles: **Team Leader Rotordynamics**, **Senior Engineer Mechanical Component**, **Product Owner (bearings)**
Business: Industrial Power Solutions / Turbine Power Systems
Objective: R&D and Execution Engineering of Industrial Steam Turbines

- (Feb. 2015 – Oct. 2015) **8 months**

ALSTOM / ALSTOM Power UK Ltd (Rugby CV212NH, United Kingdom)
Position: **Rotodynamic & Mechanical Integrity Engineer**
Business: Industrial Power Generation/ Steam
Objective: R&D and Execution Engineering of Industrial Steam Turbines

- (Sep. 2013 – Jan. 2015) **1 year, 4 months**

BORGWARNER Inc. / BorgWarner Turbosystems Engineering GmbH
Position: **Rotodynamic Engineer** (Kirchheimbolanden 67292, Germany)
Business: Core Science-Bearings-Preventive Acoustics & Dynamics
Objective: R&D Engineering of Turbosystem Dynamics for Diesel/Otto engines of passenger cars, lorries, and marine diesel engines

C. Sabbatical leave

- (Jun. 16 - Aug. 13 2024) **2 months**

CSU – Cleveland State University (Cleveland OH 44115, United States)
Position: **Short Term Research Scholar (J1)**
Faculty: Washkewicz College of Engineering, Center for Rotating Machinery Dynamics and Control

• (26-30 Sep. 2022)
1 week

CUT – Cyprus University of Technology (Limassol 3041, Cyprus)
Position: **Visiting Scientist** (Bilateral Program in Educational Exchange – GR Ministry of Education). Faculty: Dept. of Mechanical and Materials Science and Engineering

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3. Education

• (July 2004–July 2009)
5 years

Ph.D. - University of Patras
Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics / ***Dept. of Design and Manufacturing***, School of Engineering, Patras 26504, Hellas
Ph.D. Thesis: Vibration analysis of nonlinear-dynamic rotor-bearing systems and defect detection, (In English). Supervisor: Prof. Chris A. Papadopoulos†

• (Sep. 1999–July 2004)
4 years, 10 months

Dipl. Mechanical & Aeronautical Engineer (MEng) - **University of Patras** (7.47/10, 6th of 160)
Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics / ***Dept. of Design and Manufacturing***, School of Engineering, Patras 26504, Hellas
Dipl. Thesis: Cross–Coupled vertical and horizontal bending vibrations of a cracked rotor with two cracks (In Greek). Supervisor: Prof. Chris A. Papadopoulos†

• (Sep. 1996–June 1999)
Lyceum Certificate (17.8/20) - **4th General Lyceum of Ioannina**, Ioannina 45332, Hellas

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4. Research Interests

• **Machine Dynamics and Control**: linear & nonlinear dynamics of machines, turbomachines, and mechanisms; dynamic design; periodic, quasi periodic and chaotic solutions; bifurcation analysis and bifurcation control in machine dynamics; active oil/gas bearings with mechatronic elements; active magnetic Bearings; cyberphysical rotor-bearing systems.

• **Tribology**: analysis and design of hydro/aero- dynamic journal bearings (oil/gas), and ball bearings, for turbines, turbochargers, jet engines. Multi-physical modelling (coupled thermo-elasto-hydro/aerodynamic problems in lubrication)

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5. Collaborations (ongoing)

• (since 2024) **CSU-Cleveland State University (US):** Smart bearings in turbomachines, dynamic design of turbomachines

• (since 2019) **FHV-Vorarlberg Univ. of Applied Sciences (AT)**: Parametric excitation in mechanical systems

• (since 2021) **RPI-Rensselaer Polytechnic Institute (US)**: Application of Operational Modal Analysis (OMA) in rotating machines

• (since 2021) **MTU Aero engines (DE)/Jet Engine Dynamics div.**: Squeeze film damper models, rotor-stator contact models, surrogate dynamic models in aircraft engines

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6. Teaching Work

A. Postgraduate

➢ **At Joint Postgraduate Studies Program in Computational Mechanics, NTUA – National Technical University of Athens**

• (Feb. 2025 – today) *Computational Methods for Dynamic Systems Analysis* (2nd semester), **teaching 2/3**
• (from Sep. 2025) *Continuum Mechanics* (1st semester), **full time teaching**

B. Undergraduate

➢ **At the School of Mechanical Engineering, NTUA – National Technical University of Athens, Greece**

• (Feb. 2025 – today) *Vibrations of Mechanical Systems* (8th semester-elective), **full time teaching**
• (Sep. 2020 – today) *Dynamics of Rotating Machines* (7th semester-elective), **full time teaching**
• (Sep. 2020 – 2023) *Dynamics and Vibrations* (4th semester-basic), **teaching 2/3**.
• (Feb. 2020 – today) *Kinematics and Dynamics of Mechanisms* (3rd semester-basic), **full time teaching**
• (Feb. 2018 – 2020) *Mechanisms and Introduction to Design of Machines* (4th semester-basic), **full time teaching**
• (Sep. 2018 – 2022) *Machine Elements I* (3rd semester-basic), **teaching 2/3, and full-time teaching in 2019-2020**

➢ **At the Faculty of Mechanical Engineering, TUD – Technical University Darmstadt, Germany**

- (Sep. 2012 – 2013) Teaching assistant in tutorials on rigid body dynamics (Dynamik starrer Körper) (4th semester) and on structural mechanics (Strukturmechanik) (6th semester of studies), at the Institute for Dynamics of Structures, Faculty of Mechanical Engineering, TU Darmstadt

➢ **At the Department of Mechanical Engineering & Aeronautics, UoP – University of Patras, Greece**

- (Sep. 2004 – 2007) Teaching assistant in undergraduate courses in Machine Design (Critical speeds of Rotors, Balancing, Fatigue Failure) (5th and 6th semester)
- (Sep. 2004 – 2007) Teaching assistant in undergraduate courses in Computational methods in Engineering Design using Computer (CAD) (10th semester)

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7. Supervision[1]

- **PhD Theses (ongoing)**

[1] 01/04/2022 – Today | **Ioannis Gavalas** | NTUA – School of Mech. Eng. | Neuro-Adaptive Control of Nonlinear Dynamics in Oil-Free Rotor Systems.

[2] 01/10/2025 – Today | **Konstantinos Kavvadas** | NTUA – School of Mech. Eng. | Analysis, Design, and Implementation of Cyberphysical Systems in Dynamics of Power Generation Machines.

[3] 10/12/2025 – Today | **Nikolaos Athinaios** | NTUA – School of Mech. Eng. | Analysis, Design, and Implementation of Cyberphysical Systems in Dynamics of Machine Tools.

- **MSc Theses (ongoing)**

[D25] 11/2025 – today | **Dimitra Stathoglou** | NTUA – School of Mech. Eng. and SCANIA AB (co-supervision) | Test Method Development for Wire Spring Force Measurement in Truck Gear Box Synchronizers.

[D24] 10/2025 – today | **Nikolaos Koutsogiannis** | NTUA – School of Mech. Eng. | Design and Control Strategy of Active Mass Dampers in Skyscrapers Subjected to Seismic Excitation

[D23] 09/2025 – today | **Lambros Alexakis** | NTUA – School of Mech. Eng. | Reliability and Maintenance Data Processing in Marine Engine Auxiliary Systems.

[D22] 06/2025 – today | **Maximos Skepetaris** | NTUA – School of Mech. Eng. | Real-Time Performance-Aware Optimization of Power Generation Shaft-Trains Using Extremum Seeking Control and Machine Learning Surrogate Models.

[D21] 02/2025 – today | **Natalia Chatjichristodoulou** | NTUA – School of Mech. Eng. | Aircraft Dynamic Performance Implementing Model Reference Adaptive Controllers.

[D20] 06/2025 – today | **Ioannis Tychalas** | *NTUA – Computational Mechanics MSc Program* | Whole Dual-Spool Jet Engine Nonlinear Dynamics: Quality of Motion, Solution Branches, and Test for Chaos

[D19] 06/2025 – today | **Georgios Kountouriotis** | *NTUA – Computational Mechanics MSc Program* | Development of Surrogate Models for Accelerated Computational Nonlinear Dynamics of Jet Engines in Quasi-Periodic Motion

[D18] 07/2025 – today | **Quoc Thinh Mai** | Cleveland State University – Washkewicz College of Eng. (US) and NTUA – School of Mech. Eng. (co-supervision) | Physics-Informed Neural Networks for Thermo-Hydrodynamic Analysis and Adaptive Modeling of Oil Journal Bearings.

[D17] 06/2025 – today | **Nicholas Kunst** | Cleveland State University – Washkewicz College of Eng. (US) and NTUA – School of Mech. Eng. (co-supervision) | Simulation and Performance Prediction of Gas Foil Bearings Using AI-Augmented Models.

[D16] 02/2024 – today | **Iakovos Remoundos** | NTUA – School of Mech. Eng. and MTU Aeroengines AG (co-supervision) | Simulation of the Blade-Casing Contact Forces and the Influence in Jet Engine Dynamics.

- **MSc Theses (finalized)**

[D15] 11/2024 – 07/2024 | **Konstantinos Rozakos** | NTUA – School of Mech. Eng. | Exploring Energy Harvesting in Rotating Systems with Magnetic Bearings and Piezoelectric Elements.

[D14] 10/2023 – 07/2024 | **Nantia Ibrahim** | NTUA – School of Mech. Eng. | Active Magnetic Support of a Milling Tool for Chatter-Free Manufacturing Process.

[D13] 07/2023 – 07/2024 | **Alvertos Reitan** | NTUA – School of Mech. Eng. | Dynamic Modelling and Control of Active Magnetic Bearings applying PID and Model Predictive Controllers.

[1] Since the appointment in NTUA (23 September 2018)

[D12] 07/2023 – 10/2024 | **Odysseas Tsoutsanis** | NTUA – School of Mech. Eng. | System Identification in Power Generation Turbomachines for the Adjustment of Dynamic Characteristics in Real Time Operation.

[D11] 07/2023 –10/2024 | **Konstantinos Kavvadas** | NTUA – School of Mech. Eng. | Computation of Quasi-Periodic Oscillations of Dual Spool Jet Engines by Solution of the Invariant Manifold in Parallel Flow.

[D10] 01/2023 – 07/2024 | **Filippos Milionis** | NTUA – School of Mech. Eng. | A novel Mechanical Layout for Continuous Variable Transmission with Gyroscopic Torque Converter – Multiphysical Analysis.

[D9] 07/2022 – 02/2024 | **Vasilios Veloudis** | NTUA – School of Mech. Eng. and MTU Aero Engines AG (DE) (co-supervision) | Dynamic Analysis of Jet Engine Rotors including Nonlinearities by Advanced Squeeze Film Damper and Ball Bearing Models utilizing Harmonic Balance Method.

[D8] 05/2022 – 02/2024 | **Ino Stylianopoulou** | NTUA – School of Mech. Eng. and MTU Aero Engines AG (DE) (co-supervision) | Speed and Load Dependent Ball Bearing Dynamics in EHD Lubrication Regime and Application in Jet Engines.

[D7] 03/2022 – 10/2022 | **Anastasios Papadopoulos** | NTUA – School of Mech. Eng. | Controlling bifurcations of fixed point and limit cycle equilibria of high-speed rotors utilizing active gas foil bearings.

[D6] 10/2021 – 10/2022 | **Georgios Mitsos** | NTUA – School of Mech. Eng. and MTU Aero Engines AG (DE) (co-supervision) | Multi-harmonic unbalance response of aircraft jet engine rotors on squeeze film dampers.

[D5] 03/2021 – 06/2022 | **Alexios Chatzistavris** | NTUA – School of Mech. Eng. | Dynamic Design Optimization and Statistical Analysis in Virtual Prototyping of Wire Mesh Dampers in Turbocharger Rotors.

[D4] 03/2021 – 06/2022 | **Emmanouil Dimou** | NTUA – School of Mech. Eng. | Parametric Excitation and Antiresonance in Rotating Systems with Gas Bearings.

[D3] 03/2021 – 03/2022 | **Ioannis Gavalas** | NTUA – School of Mech. Eng. | Nonlinear Rotordynamic Design of Turbine-Generator Shaft Trains Applying Numerical Continuation.

[D2] 03/2021 – 03/2022 | **Panagiotis Papafragkos** | NTUA – School of Mech. Eng. | Bifurcation Elimination in Rotor Gas Bearing Systems Applying Numerical Continuation with Embedded Design Optimization Scheme.

[D1] 03/2020 – 03/2021 | **Ioannis Raptopoulos** | NTUA – School of Mech. Eng. | Stability, Bifurcations, and Energy Flow in Dynamic Systems of Elastic Rotors on Gas Foil Bearings

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- **Internships**[2]

[4] 02/05/2023 – 31/07/2023 | **Lilian Prezeau** | Université de Toulon (F) | Computational Fluid Dynamics in Gas Bearings with Complex (Variable) Geometry.

[3] 02/05/2023 – 31/07/2023 | **Jérémie Wagner** | Université de Toulon (F) | Structural Analysis of a Slider-Crank Mechanism with Nonlinear Joints in Internal Combustion Engine – Application to MSC ADAMS.

[2] 05/05/2021 – 27/07/2021 | **Baptiste Simon** | Université de Toulon (F) | Evaluation of Dynamic Properties of Foil Structures and Implementation in Gas Foil Bearing Dynamics.

[1] 27/04/2019 – 27/07/2019 | **Jean Charles Louis** | Université de Toulon (F) | Application of Bearing Database Method on the Rotor Dynamic Design of Turbosystems

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8. **Projects for Research and Development,** and **bearing product qualification**[3]

1) As **Assistant Professor** in NTUA (Principal Investigator) – **Total fund: 352.4 k€**

[3] **Title:** Cyber-Physical Rotating Systems in Power Conversion and Manufacturing – CYROPMAN | **Source:** Hellenic Foundation for Research and Innovation (Greece) | **Fund: 272.5 k€** | **Call:** HFRI 3rd Call to Support Faculty Members and Researchers | **Duration:** 03/2025-03/2029

[2] **Title:** Neuro-Adaptive Control of Nonlinear Dynamics in Oil-Free Rotor Systems | **Source:** Hellenic Foundation for Research and Innovation (Greece) | **Fund: 32.4 k€** | **Call:** HFRI PhD Fellowship | **Duration:** 01/03/2023 – 01/03/2026

[1] **Title:** Nonlinear Dynamics of Rotor Systems on Adjustable Bearings | **Source:** Alexander von Humboldt Foundation (Germany) | **Fund: 55 k€** total – **47 k€** for NTUA | **Call:** Research Group Linkage Program with Karlsruhe Institute of Technology (KIT) | **Duration:** 03/2020 – 12/2023

[2]Supervision of interns hosted by Laboratory of Dynamics and Acoustics in NTUA
[3]During the employment in General Electric Co.

2) As **Senior Engineer - Rotordynamics** and **Product Owner** at **GE Oil & Gas** and **ALSTOM Power** participated in the following projects concerning rotordynamic assessment for a) R&D engineering in industrial turbines, b) Execution engineering in project specific turbines. The projects for basic research on the development of industrial turbomachinery may be found in (c). As product owner, participated on the projects (d) for the qualification of bearing products.

a) <u>R&D Engineering Projects</u>

- (Oct. 2015 – Dec. 2015) *Geothermal Steam Turbine GST55N 30MW*
- (Dec. 2015 – Dec. 2016) *Geared Reaction Turbine GRT25E18 30MW (Condensing & HP Extraction versions)*
- (Jan. 2016 – Dec. 2016) *Geared Reaction Turbine GRT35E22 60MW (Condensing & IP Extraction versions)*
- (Jan. 2016 – Aug. 2016) *Geared Reaction Turbine GRT55E35 100MW (Condensing & Extraction Versions)*
- (May. 2017 – Sep. 2018) *Geared Reaction Turbine GRT65F44 135MW (Condensing & Extraction Versions)*

b) <u>Execution Engineering Projects</u>

- (Mar. 2018 – Sep. 2018) *Oyka (Turkey) – Rotordynamic Assessment of **35MW** Steam Turbine-Gen*
- (Apr. 2018 – Sep. 2018) *Yinchun, Wuhan, Kangbao (China) – Rotordynamic Assessment of 3X**45MW** ST-Gen*
- (Dec. 2016 – Feb. 2017) *Damhead Creek (England) – Rotordynamic Assessment of **490MW** Steam Turbine-Gen*
- (Oct. 2017 – Sep. 2018) *Gardabani (Georgia) – Rotordynamic Assessment of **83MW** Steam Turbine-Gen*
- (Jan. 2016 – Sep. 2018) *Takhiatash (Uzbekistan) – Rotordynamic Assessment of **95MW** Steam Turbine -Gen*
- (Mar. 2017 – Sep. 2018) *Iernut (Romania) – Rotordynamic Assessment of **85MW** Steam Turbine-Gen*
- (Feb. 2015 – Sep. 2015) *ThermaVisayas (Philippines) - Rotordynamic Assessment of **169MW** Steam Turb.-Gen*
- (Jun. 2015 – Oct. 2015) *BP Grangemouth (Scotland) – Rotordynamic Assessment for high-speed balancing*
- (Oct. 2015 – Feb. 2016) *Karaha (Indonesia) – Rotordynamic Assessment of **33MW** Steam Turbine-Gen*
- (Mar. 2016 – Sep. 2016) *Dunhuang (China) – Rotordynamic Assessment of **100MW** Steam Turbine-Gen*
- (Aug. 2016 – Nov. 2016) *Yerevan (Armenia) – Rotordynamic Assessment of **76MW** Steam Turbine-Gen*

c) <u>Basic Research Projects</u> on the dynamics of turbomachinery

- (Jan. 2018 – Sep. 2018) *Nonlinear Stability assessment of large steam turbine Generator Shaft Trains. Identification of super-critical and sub-critical bifurcations and periodic solution stability.*
- (Jun. 2015 – Sep. 2018) *Development of innovative journal bearings of variable geometry for real time alignment and optimization of operation of turbine-generator shaft trains*
- (Aug. 2015 – Sep. 2018) *Introducing parametric excitation and modal interaction in turbine-generator shaft trains for the suppression/elimination of resonance amplitude and extension of instability margins in higher speeds*

d) <u>Projects in product ownership</u> (bearings)

- (July. 2018 – Sep. 2018) *Product qualification of Steam Turbine bearings from **Osborne Engineering Limited-OEL** (Newcastle (UK)), with onsite inspection of manufacturing, babbitting, adhesion, and testing methodologies*
- (June. 2018 – Sep. 2018) *Product qualification of Steam Turbine bearings from **GTW** (Brno (CZ))*
- (Nov. 2016 – Sep. 2018) *Product qualification of turbine bearings from **White Metal Industria e Comércio Ltda** (Sao Paolo (BR)), with onsite inspection of manufacturing, babbitting, adhesion, and testing methodologies*
- (Nov. 2016 – Sep. 2018) *Product qualification of turbine bearings from **Lufkin RMT** (Lufkin Industries, LLC) (Florence (I), and Wellsville NY (US))*

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3) As **Rotordynamic Engineer** at **BorgWarner Inc.** participated in the following projects for the rotor dynamic development of Turbo-Charging systems for internal combustion engines of passenger cars and commercial vehicles:

- (Sep. 2013 – Feb. 2015) *Basic Development – Methodology Bearing Development* R&D-Nr.: EB 0.86.051
- (Sep. 2013 – Feb. 2015) *Basic Development – Rotordynamics* R&D-Nr.: EB 0.86.009
- (Feb. 2014 – Feb. 2015) *JAGUAR LAND ROVER R2S 2.0L Diesel* R&D-Nr.: BF 1.49.002
- (Mar. 2014 – Feb. 2015) *BMW B53 TU1 1.5L 3cyl. Gasoline* R&D-Nr.: RZ 1.02.001
- (Mar. 2014 – Feb. 2015) *RENAULT K9K Gen7 Eu6C VTG (Variable Turbine Geometry)* R&D-Nr.: OR 1.14.018
- (Sep. 2014 – Feb. 2015) *VOLKSWAGEN 2.0L CR 140/147kW MDB laengs (TiAl)* R&D-Nr.: KI 1.15.027

- (Sep. 2014 – Feb. 2015) *FORD Advanced Development - Vorentwicklungzusammenarbeit* R&D-Nr.: EA 0.83.080
- (Nov. 2014 – Feb. 2015) *DAIMLER AG – OM654DE20LA R2S EU6 160kW (BV35/B03)* R&D-Nr.: KI 1.09.032

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4) As postdoctoral researcher in **Technische Universität Darmstadt** applied for funding, and executed the following projects for basic research:

- (Sep. 2012 – Jul. 2013) *Simulation-design-construction of a journal bearing with variable geometry for the reduction of vibrations in rotating machinery.* Project co-funded from the **BMWi** *(German Federal Ministry of Economics and Energy/SIGNO)* and the **TU Darmstadt**
  (Supervision: Prof. Dr.-Ing. Richard Markert, estimated budget over 100.000€)
- (May 2010 – Aug. 2012) *The transient vibratory behavior of a rotor mounted on worn fluid film bearings passing through resonance.* Project funded from the **Alexander von Humboldt Foundation** (50.000€)

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9. Further Scientific Activities

- **Associate Editor** in the following international scientific journals:
  1) ASME Journal of Tribology (since 2024)
  2) ASME Journal of Engineering for Gas Turbines and Power (2019-2021, since 2025)
  3) Frontiers in Mechanical Engineering, Editorial Board of Tribology, (since 2022)
- **Reviewing Editor** in Springer Nature (since 10/2025)
- **Guest Editor** for special issues in the following international scientific journals:
  1) Machine Dynamics: Active Bearings, Smart Transmissions, and Control Strategies, Discover Applied Sciences (former SN Applied Sciences), Springer (2025)
  2) Rotordynamics in Automotive Engineering, Vehicles – MDPI (2022)
  3) Design and Optimization of Rotor Dynamics in Applications, Applied Sciences, MDPI (2021)
  4) Dynamic Analysis and Control Applied in Nonlinear Rotor Systems, Shock and Vibration, Hindawi (2021)
  5) Advances in research and dynamic analysis of high-speed rotating machines, Shock and Vibration, Hindawi (2020)
  6) Rotordynamics in Automotive Engineering, Vehicles, MDPI (2019)
  7) International Journal of Rotating Machinery, Hindawi (2017)

- **Conference/Workshop/Session/Minisymposium Organizer**:
  1) Session Co-Organizer ''Methods in Rotordynamics'',” Rotordynamic Design and Applications”,” Rotordynamic Testing and Rotor Bow”,” Malfunctions and Diagnostic Techniques” in ASME Turbo Expo (Online 2020, Online 2021, Rotterdam 2022, Boston MA 2023, London 2024, Memphis 2025)
  2) Session Co-Organizer “Dynamics and control of time-periodic systems” in Int. Conf. on Recent Advances in Structural Dynamics RASD 2024, Southampton (UK)
  3) Chair and Organizer of the 1st Workshop on Active Bearings in Rotating Machinery – ABROM 2022, Athens
  4) Minisimposium Co-organizer ''Recent Advances in Rotordynamics'' in Int. Conf. on Vib. Problems ICOVP 2019, Crete

- **Conference related activities**
  1) **Session Chair** in the following conferences:
     a) 11th IFToMM International Conference on Rotordynamics 2023, Beijing (PRC)
     b) ASME Turbo Expo, London 2024, Boston MA 2023, Rotterdam 2022, Online 2022, Online 2021.
     c) COMADEM 2019 – Int. Congress and Exhib. on Cond. Monitoring and Diagnostic Eng. Management, Huddersfield (UK)
     d) ICOVP 2019 - 14th International Conference on Vibration Problems, Crete (GR)
     e) SIRM 2019 - European Conference on Rotor Dynamics, Copenhagen (DK)
     f) MOVIC & RASD 2016 - Int. Conf. on Recent Advances in Structural Dynamics, Southampton (UK)
  2) **Member** of the **Scientific Committee** in the following conferences:
     a) 8th ICTD International Congress on Technical Diagnostics, 2026 Gdansk (PL)
     b) 2nd IFToMM Mechanical Engineering Solutions Conference, 2025, Yerevan (AM)
     c) 9th, 10th, and 11th IFToMM International Conference on Rotordynamics (2014 Milan, 2018 Rio de Janeiro, 2023 Beijing)
     d) SIRM – European Conference on Rotordynamics, permanent member of the committee.

- **Invited Talks**

1) Invited **online Keynote Lecture** in "2nd Global Webinar on Mechanical and Mechatronics Engineering - GWMMEC-2022", *Inovscitech* (14.05.2022)
   - **Title:** On the role of Oil and Gas Bearings in Generation of Bifurcations in Rotating Systems
2) Invited **online** talk in "International Conf. on Materials, Energy and Mech. Eng. - ICME2021", (18.12.2021)
   Madanapalle Institute of Technology and Science, Madanapalle (IN)
   - **Title:** Nonlinear Stability and Dynamic Design of Shaft-Trains in Power Generation
3) Invited **online** talk in "Workshop on Analytical and Numerical methods for Nonlinear Vibrations", (23.09.2021)
   SRM Institute of Science and Technology, Tamilnadu (IN)
   - **Title:** Application of Numerical Continuation in the Dynamic Design of Nonlinear Rotor Systems
4) Invited **online** talk in "Rotor Bearing System Workshop RBS-2020", (24.11.2020)
   Indian Institute of Technology (IIT), Guwahati (IN)
   - **Title:** Nonlinear Dynamic Design of Rotor Systems in Turbomachines
5) Invited overview talk in "31st International Congress and Exhibition on Condition Monitoring and (05.09.2019)
   Diagnostic Engineering Management - COMADEM 2019", *University of Huddersfield*, Huddersfield (UK)
   - **Title:** Challenges in Rotor Dynamic Design of Turbosystems
6) Invited talk in "Institute of Sound and Vibration Research", University of Southampton (SOTON) (28.11.2017)
   - **Title:** Turbomachinery Rotordynamics - Current research activity and future trends

- **Reviewer** in the following international scientific journals:

1) *International Journal of Solids and Structures*, Elsevier
2) *Tribology International,* Elsevier,
3) *Journal of Sound and Vibration*, Elsevier
4) *Nonlinear Dynamics*, Springer
5) *Communications in Nonlinear Science and Num. Simulations*, Elsevier
6) *Journal of Vibration& Acoustics*, ASME
7) *Mechanical Systems and Signal Processing,* Elsevier
8) *Journal of Vibration & Control*, SAGE
9) *International Journal of Bifurcation and Chaos*, World Scientific
10) *Advances in Fuzzy Systems*, Hindawi
11) *Mechanics Research Communications*, Elsevier
12) *Measurement*, Elsevier
13) *International Journal of Structural Integrity*, Emerald
14) *Lubrication Science*, Wiley
15) *Journal of Mechanics Engineering and Automation*, David Publishing
16) *Lubricants*, MDPI
17) *Journal of the Brazilian Society of Mech. Sciences and Eng.*, Springer
18) *Acta Mechanica*, Springer
19) *Official Journal of the Brazilian Academy of Sciences*
20) *Shock & Vibration*, Hindawi
21) *Nature Communications,* Springer
22) *Applied Mathematical Model.*, Elsevier
23) *Aircraft Engineering and Aerospace Technology*, Emerald
24) *Int. Journal of Mech. Sciences*, Elsevier
25) *Simulation Modelling Practice and Theory*, Elsevier
26) *Actuators*, MDPI
27) *Industrial Lubrication and Tribology*, Emerald
28) STLE Tribology Trans., Taylor & Francis
29) *IMechE, Part C: Journal of Mechanical Engineering Science*, SAGE
30) *Energies*, MDPI
31) *IMechE, Part E: Journal of Process Mechanical Engineering*, SAGE
32) *Vehicles*, MDPI
33) *IMechE, Part J: Journal of Engineering Tribology*, SAGE
34) *Computation*, MDPI
35) *IMechE, Part M*: *J. of Eng. for the Maritime Environment*, SAGE
36) *Micromachines*, MDPI
37) *SN Applied Sciences*, Springer Nature
38) *Journal of Tribology*, ASME
39) *ASME Letters in Dynamic Systems and Control*, ASME
40) *Applied Sciences*, MDPI
41) *Aircraft Engineering and Aerospace Technology*, Emerald
42) *Scientia Iranica*, Elsevier
43) *Journal of Vibration Engineering and Technologies*, Springer
44) *Aerospace*, MDPI
45) *Mathematical Biosciences and Engineering*, AIMS Press
46) *Encyclopedia*, MDPI
47) *Bulletin of the Polish Academy of Sciences*, PAN Publications
48) *Electrical Engineering*, Springer
49) *Engineering Applications of Artificial Intelligence,* IFAC
50) *Journal of Cleaner Production*, Elsevier
51) *Engineered Science*, Engineered Science Publisher
52) *Bull. of the Polish Acad. Sciences*, PAN
53) *AIMS Mathematics*, AIMS Press
54) *Complexity*, Wiley
55) *International Journal of Mechanical Systems Dynamics*, Springer
56) *Propulsion and Power Research*, KeAi
57) *International Journal of Mechanical Sciences*, Elsevier
58) *Sensors Journal*, IEEE
59) *International Journal of Hydrogen Energy*, Elsevier
60) *Scientific Reports*, Nature
61) *Engineering Applications of Artificial Intelligence*, IFAC
62) *Nature Communications*, Nature
63) *Transactions on Automation Science and Engineering*, IEEE

• **Reviewer** in the following international scientific conferences (partial list):

1) 9th, 10th, 11th IFToMM ICORD - Int. Conference on Rotor Dynamics (Milan 2014, Rio de Janeiro 2018, Beijing 2023)
2) 13th MOVIC - Int. Conf. on Motion and Vibration Control, joint with the 12th RASD - Int. Conf. on Recent Advances in Structural Dynamics (Southampton 2016)
3) 62th to 70th ASME Turbo Expo (Charlotte NC 2017, Oslo 2018, Phoenix AZ 2019, Virtual 2020, Virtual 2021, Rotterdam 2022, Boston MA 2023, London 2024, Memphis TN 2025)
4) 31st COMADEM – Int. Congr. and Exhibition on Condition Monitoring and Diagnostic Eng. Management (Huddersfield 2019)
5) 13th, 14th, 15th SIRM - European Conference on Rotor Dynamics (Copenhagen 2019, Gdansk 2021, Darmstadt 2023)

• **Reviewer** in the following editors:

1) Springer/Springer Brief series, NY, USA 2) CRC Press/Engineering-Environmental Sciences, New Delhi, India.

• **Evaluator** in the following Research organizations and Awards:

1) **NSC –** National Science Centre, Poland, (Panel member), 2023, 2025
2) **FCT -** Portuguese public funding agency for R&D **-** Civil and Mech. Eng. and Eng. Systems (panel member), 2021, 2025
3) **CSF** Czech Science Foundation, 2025
4) **UKRI-EPSRC** UK Research & Innovation – Eng. & Phys. Sciences Research Council, Assoc. Review College, 2017
5) **HFRI** – Hellenic Foundation for Research and Innovation (ΕΛΙΔΕΚ), since 2022
6) **GSRI** – General Secretariat for Research and Innovation (ΓΓΕΚ), since 2025

• **PhD Thesis advisor and examiner**

- Member of the advisory committee: (2) in NTUA - Greece, (1) in University of Patras - Greece, (1) in TU Darmstadt - Germany, (2) in NIT Rourkela - India.
- Member of the examining committee: (4) in NTUA – Greece, (1) in AUTh – Greece, (1) in University of Campinas – Brazil, (1) in Politecnico di Milano – Italy.

• **Judge in Competitions**:

1) **NASA** Space Apps Challenge (2025)
2) **BEST** (Board of European Students of Technology) Engineering Competition (EBEC), NTUA, 2021 to 2024

• **Other Academic Activities**:

1) Member of the Center for Rotating Machinery Dynamics and Control RoMaDyC, Mechanical Engineering Department, CSU
2) Representative of NTUA (deputy president) in the Technical Council of Hellenic Ministry of Education-**ΥΠΑΙΘ**, since 2023
3) Evaluator for the Selection of Education Consultants in the Hellenic Ministry of Education - **ΥΠΑΙΘ**, since 2022
4) Evaluator (Academic Advisor of the School of Mechanical Engineering NTUA) of the equivalence of Mechanical Engineering Diplomas obtained abroad, in **ΔΟΑΤΑΠ -** Hellenic National Academic Recognition and Information Center, since 2021
5) **BEST** (Board of European Students of Technology), BEST Course in Spring 2026 – Topic partner

• **Member (subscribed)** of:

1) **IEEE** – *Institute of Electrical and Electronics Engineers*
2) **ASME** – *American Society of Mechanical Engineers*
3) **EUROMECH** – *European Mechanics Society*
4) **IFToMM** – *Technical Committee for Rotordynamics*

10. Awards and Distinctions

- (Aug. 2025) Top 2% scientist in Updated science-wide author databases of standardized citation indicators.
- (Aug. 2024) Top 2% scientist in Updated science-wide author databases of standardized citation indicators.
- (Oct. 2023) Top 2% scientist in Updated science-wide author databases of standardized citation indicators.
- (Jun. 2017) Award '*Learn and Adapt to Win*', **General Electric Co.**
- (Apr. 2010) Research fellowship award for postdoctoral researchers, **Alexander Von Humboldt Foundation**
- (Jun. 2004) Award for the excellence of studies in Mechanical Engineering, **Technical Chamber of Greece (TEE)**

11. Courses and Training Seminars

- (05.09.2016 – 09.09.2016) **Course on Time-Periodic Systems: Theory and Application** in **CISM-16** (International Centre for Mechanical Sciences, Udine, I-33100)

- (Nov. 2015 - Today) **Training Seminars** in **GE Oil & Gas** (Rugby, UK-CV212NH) and **GE Power** (Baden, CH-5401) on the following objectives:

a) 24.08.2016 – Turbine Supervisory Systems
b) 11.08.2016 – Lube Oil Systems
c) 20.01.2016 – Bearing Design and Failure Mechanisms
d) 18.11.2015 – Turbine Overview
e) 02.03.2016 – Control and Determination of Steam Turbine Clearance
f) 18.02.2016 – Steam Turbine Material Selection and Specifications
g) 17.03.2016 – Steam Turbine Awareness (power Plant basics, thermodynamics, steam cycles, turbine architecture, main components, turbine auxiliaries and control)
h) 16.03.2016 – Last Stage Low Pressure Blade Lifetime Assessment

- (Feb. 2015 – Oct. 2015) **Training Seminars** in **ASLTOM Power UK** (Rugby, UK-CV212NH) and **ALSTOM Power (Schweiz) Ltd** (Baden CH-5401) on the following objectives:

a) 28.10.2015 – Mechanical Integrity Aspects of Last Stage Blades
b) 10.07.2015 – Gas Turbine Rotor Lifetime Ass.
c) 03.07.2015 – Retrofit Case Study
d) 03.06.2015 – Understanding Vibration Jumps
e) 29.04.2015 – Shaft Line Dynamics Measurement
f) 23.04.2015 – Mechanical Fatigue Data for Sub-Synchronous Vibration Protection of Nuclear Steam Turbine
g) 20.04.2015 to 30.04.2015 – Industrial Steam Turbine Dynamics
h) 08.04.2015 – Turbine Supervisory Systems

- (Sep. 2013 - Feb. 2015) **Training Seminars** in **BorgWarner Turbo Systems Engineering GmbH** (Kirchheimbolanden DE-67292) on the following objectives:

a) Introduction to Product Development
b) Development of Machine Balancing
c) Introduction to Advanced Engineering
d) Introduction Controlling
e) Introduction to Basic Develop. Performance
f) Introduction Testing
g) Intellectual Property (Patents)
h) Introduction to Noise and Vibration Harshness and Prev.Acoustics
i) Introduction to Materials Development and Structural Mechanics
j) Introduction Basic Components Turbosystems
k) Talent Management System - Introduction
l) Introduction to Application Performance/Validation and Simulation

12. Further Training/Studies/Education

- (18 May 2009 – 18 Mar. 2010) Corporal of the Hellenic Army/Engineer Corps, spec.: minesweeper (3ΛΜΧ Orestiada - GR)
- (01 Sep. 2006 – 30 Jun. 2008) Music studies on drums, Municipal Conservatory of Patras, Patras GR-26221
- (01 Jul. 2002 – 31 Aug. 2002) Trainee Mech. Eng. in Agricultural Dairy Ind. of Epirus DODONI SA. Ioannina GR-45110

13. Publications, Reports, and Further Written Work (2006-2025)

(Citations: **882**, ***h*** index: **18** – Excluding self-citations of all authors, Source: SCOPUS)

(Citations: **1509**, ***h*** index: **21**, Source: GOOGLE SCHOLAR)

- ***Books***

[B2] **Editors: A. Chasalevris** and **Carsten Proppe**, Advances in Active Bearings in Rotating Machinery - Proceedings of the 1st Workshop on Active Bearings in Rotating Machinery (ABROM 2022), June 29-30, 2022, Athens, Greece. Springer Nature Switzerland AG (2023) https://doi.org/10.1007/978-3-031-32394-2

[B1][4] **A. Chasalevris**, Nonlinear Simulation of Defected Rotor-Bearing Systems - Methods for Detection of Rotor Crack and Bearing Wear. LAP Lambert Academic Publishing, Saarbrücken, Germany (2011) ISBN-10: 3844385975

[4] Book [B1] is PhD dissertation

- ***International Journals*** **(Total Impact Factor[5] : 161.9 | Average Impact Factor: 4.2 per article)**

[J39] **M.S. Fasih**, **M. Ramírez-Barrios**, **A. Chasalevris** and **F. Dohnal**, Analytical Estimation of Maximum Amplitude During Passage Through Resonance of a Flexible Rotor. **Journal of Vibration Engineering & Technologies** (IF: **2.5** **Q2**), 2025, https://doi.org/10.1007/s42417-025-02233-6

[J38] **I. Gavalas**, and **A. Chasalevris**, Active Adaptation of a Gas Foil Bearing System for High-Speed Rotor Dynamics Control. **Journal of Vibration and Control** (IF: **2.4** **Q1**), 2025, https://doi.org/10.1177/10775463251409130

[J37] **A. Chasalevris, I. Gavalas**, and **J. T. Sawicki**, Robust Rotor Dynamic Design Evaluation of Turbine-Generators Integrating Sensitivity, Uncertainty, and Optimization. **ASME Journal of Engineering for Gas Turbine and Power** (IF: **2.1** **Q2**), 2025, https://doi.org/10.1115/1.4069253

[J36] **E. Dimou, K. Kavvadas, I. Stylianopoulou, V. Veloudis,** and **A. Chasalevris**, Evaluation of Quasi-Periodic Oscillations for the Dynamic Design of Dual Spool Jet Engines Utilizing a Solution of the Invariant Manifold. **ASME Journal of Engineering for Gas Turbine and Power** (IF: **2.1** **Q2**), 2025, https://doi.org/10.1115/1.4069457

[J35] **I. Gavalas, A. Chasalevris**, and **J. T. Sawicki**, Control of Seismic Excitation in Power Generation Turbomachines Utilizing Active Oil Film Bearings. **ASME Journal of Engineering for Gas Turbine and Power** (IF: **2.1** **Q2**), 2025, https://doi.org/10.1115/1.4069147

[J34] **V. Veloudis, I. Stylianopoulou, K. Kavvadas,** and **A. Chasalevris,** Computation of Jet Engine Dynamics Including Nonlinearities by Squeeze Film Damper and Ball Bearing Models, utilizing an Enhanced Harmonic Balance Method with Integrated Dynamic Condensation. **IMechE Part C: Journal of Mechanical Engineering Science** (IF: **1.7** **Q2**), 2025, https://doi.org/10.1177/09544062251352664

[J33] **I. Polyzos,** and **A. Chasalevris,** Controlling Chaos in Rotating Systems Applying the Ott-Grebogi-Yorke Control Method in Active Sliding Bearing Configurations. **ASME Journal of Computational and Nonlinear Dynamics** (IF: **2.1** **Q2**), 2025, https://doi.org/10.1115/1.4068698

[J32] **I. Gavalas, O. Tsoutsanis, A. Chasalevris** and **J. Sawicki,** Adaptive Turbine-Generator Dynamics and Alignment utilizing Active Journal Bearings: An Analytical Investigation on System Modelling and Control. **Tribology International** (IF: **6.9** **Q1**), 2025, https://doi.org/10.1016/j.triboint.2025.110687

[J31] **A. Chasalevris, I. Gavalas** and **J. Sawicki**, Optimal bearing configuration selection for power generation shaft-trains: A linear and nonlinear dynamics approach. **Journal of Sound and Vibration** (IF: **4.9** **Q1**), 2024, https://doi.org/10.1016/j.jsv.2024.118907

[J30] **I. Polyzos**, **E. Dimou**, and **A. Chasalevris,** Coupling Nonlinear Dynamics and Multi-Objective Optimization for Synchronous Response and Reduced Power Loss in Turbochargers with Floating Ring Bearings. **Nonlinear Dynamics** (IF: **6.0** **Q1**), 2024, https://doi.org/10.1007/s11071-024-10148-2

[J29] **A. Chatzistavris** and **A. Chasalevris**, A Design Method to Eliminate Sub Synchronous Response in Automotive Turbochargers utilizing Nonlinear Dynamics of Time Periodic Systems. **Journal of Sound and Vibration** (IF: **4.9** **Q1**), 118192, 2023, https://doi.org/10.1016/j.jsv.2023.118192

[J28] **I. Gavalas, A. Chasalevris, F. Mehralian,** and **R. D. Firouz-Abadi**, On the Quality of Stability and Bifurcation Sets in Rotors with Permanent Shaft Bow on Nonlinear Supports. **International Journal of Non-linear Mechanics** (IF: **3.2** **Q1**), 104563, 2023, https://doi.org/10.1016/j.ijnonlinmec.2023.104563

[J27] **A. Papadopoulos, I. Gavalas** and **A. Chasalevris**, Controlling Bifurcations in High-Speed Rotors Utilizing Active Gas Foil Bearings. **Bulletin of the Polish Academy of Sciences: Technical Sciences** (IF: **1.2** **Q3**), 71(6) 2023, https://doi.org/10.24425/bpasts.2023.146796

[J26] **F. Mehralian, S. Mousavi, R. D. Firouz-Abadi, M. Farajolahi** and **A. Chasalevris**, Stability assessment of bowed asymmetric rotors on nonlinear supports. **Journal of the Brazilian Society of Mechanical Sciences and Engineering** (IF: **2.1** **Q2**), 2022, https://doi.org/10.1007/s40430-022-03897-x

[J25] **P. Papafragkos, I. Gavalas, I. Raptopoulos** and **A. Chasalevris**, Optimizing Energy Dissipation in Gas Foil Bearings to Eliminate Bifurcations of Limit Cycles in Unbalanced Rotor Systems. **Nonlinear Dynamics** (IF: **6.0** **Q1**), 2022, https://doi.org/10.1007/s11071-022-07837-1

[J24] **I. Gavalas** and **A. Chasalevris**, Nonlinear Dynamics of Turbine Generator Shaft Trains: Evaluation of Bifurcations Sets Applying Numerical Continuation. **ASME Journal of Engineering for Gas Turbine and Power** (IF: **2.1** **Q2**), 2022, https://doi.org/10.1115/1.4055533

[5] Impact Factor and SCImago (Q) ranking of each Journal was recorded for the year 2024

[J23] **L. Anastasopoulos** and **A. Chasalevris**, Bifurcations of limit cycles in rotating shafts mounted on partial arc and lemon bore journal bearings in elastic pedestals. **ASME Journal of Computational and Nonlinear Dynamics** (IF: **2.1** **Q2**), 2022, 17(6) 061003 https://doi.org/10.1115/1.4053593

[J22] **A. Chasalevris**, Stability and Hopf Bifurcations in Rotor-Bearing-Foundation Systems of Turbines and Generators. **Tribology International** (IF: **6.9** **Q1**), 145, 2020, 106154 https://doi.org/10.1016/j.triboint.2019.106154

[J21] **A. Chasalevris**, and **J.C. Louis**, Evaluation of Transient Response of Turbochargers and Turbines Using Database Method for the Nonlinear Forces of Journal Bearings. **Lubricants** (IF: **2.9** **Q2**), 7, 78, 2019

[J20] **A. Chasalevris** and **G. Guignier**, Alignment and Rotordynamic Optimization of Turbine Shaft Trains Using Adjustable Bearings in Real Time Operation. **Proc. IMechE Part C: Journal of Mechanical Engineering Science** (IF: **1.7** **Q2**), 0(0), 2019, pp. 1-21

[J19] **A. Chasalevris** and **F. Dohnal**, Improving Stability and Operation of Turbine Rotors Using Adjustable Journal Bearings. **Tribology International** (IF: **6.9** **Q1**), 104, 2016, Pages 369-382, doi: 10.1016/j.triboint.2016.06.022

[J18] **A. Chasalevris**, An investigation on the Dynamics and Stability of High-Speed Systems Using Analytical Floating Ring Bearing Models. **International Journal of Rotating Machinery** (IF: **1.0** **Q3**), Vol. 2016, 2016, Article ID 7817134

[J17] **A. Chasalevris**, Finite Length Floating Ring Bearings: Operational Characteristics Using Analytical Methods. **Tribology International** (IF: **6.9** **Q1**), (94) 2016, pp. 571-590

[J16] **A. Chasalevris**, Analytical Evaluation of the Static and Dynamic Characteristics of the Three-Lobe Bearing with Finite Length. **ASME Journal of Tribology** (IF: **3.0** **Q2**), 137, 2015 art. No. 041701-1.

[J15] **A. Chasalevris** and **F. Dohnal**, A Journal Bearing with Variable Geometry for the Suppression of Vibrations in Rotating Shafts: Simulation, Design, Construction and Experiment. **Mechanical Systems and Signal Processing** (IF: **8.9** **Q1**) 52-53 2015, pp. 506

[J14] **A. Chasalevris** and **F. Dohnal,** Vibration Quenching in a Large-Scale Rotor-Bearing System Using Journal Bearings with Variable Geometry. **Journal of Sound and Vibration** (IF: **4.9** **Q1**), 333 (7) 2014, pp. 2087-2099

[J13] **A. Chasalevris** and **F. Dohnal,** A Journal Bearing with Variable Geometry for the Reduction of the Maximum Response Amplitude During Passage Through Resonance. **ASME Journal of Vibration & Acoustics** (IF: **1.9** **Q1**), 134 (6) 2012 No. 61005.

[J12] **A. Chasalevris** and **D. Sfyris**, Evaluation of the Finite Journal Bearing Characteristics Using the Exact Analytical Solution of the Reynolds Equation. **Tribology International** (IF: **6.9** **Q1**). (57) 2013, pp. 216-234

[J11] **A. Chasalevris** and **D. Sfyris**, Analytical Evaluation of the Finite Journal Bearing Impedance Forces Using the Exact Analytical Solution of the Reynolds Equation. **Journal of Vibration Engineering and Technologies** (IF: **2.4** **Q2**) (former: Advances in Mechanical Engineering). 2 (5) 2014

[J10] **A. Chasalevris** and **C. A. Papadopoulos**, Experimental Detection of an Early Developed Crack in Rotor-Bearing Systems Using an AMB. **International Journal of Structural Integrity** (IF: **3.5** **Q1**), 333 (7) 2014, pp. 2087-2099

[J9] **A. Chasalevris** and **C. A. Papadopoulos**, A novel semi-analytical method for the dynamics of nonlinear rotor-bearing systems, **Mechanism and Machine Theory** (IF: **5.3** **Q1**), (72) 2014, pp. 39-59

[J8] **A. Chasalevris** and **C. A. Papadopoulos**, Coupled horizontal and vertical bending vibrations of a stationary shaft with two cracks. **Journal of Sound and Vibration** (IF: **4.9** **Q1**), 309 (3-5) 2008, pp. 507-528

[J7] **A. Chasalevris** and **C. A. Papadopoulos**, Identification of multiple cracks in beams under bending. **Mechanical Systems and Signal Processing** (IF: **8.9** **Q1**), 20 (7) 2006, pp. 1631-1673

[J6] **A. Chasalevris** and **C. A. Papadopoulos**, A continuous model approach for cross-coupled bending vibrations of a rotor-bearing system with a transverse breathing crack **Mechanism and Machine Theory** (IF: **5.3** **Q1**), 44 (6) 2009, pp. 1176-1191.

[J5] **D. Sfyris** and **A. Chasalevris**, An exact analytical solution of the Reynolds equation for the finite journal bearing. **Tribology International** (IF: **6.9** **Q1**), (55) 2012, pp. 46-58.

[J4] **A. Chasalevris, F. Dohnal** and **I. Chatzisavvas,** Experimental detection of additional harmonics due to wear in journal bearings using excitation from a magnetic bearing. **Tribology International** (IF: **6.9** **Q1**), (71) 2014, pp. 158-167

[J3] **A. Chasalevris, P. Nikolakopoulos** and **C. A. Papadopoulos**, Dynamic effect of bearing wear on rotor rotor-bearing system response. **ASME Journal of Vibration and Acoustics** (IF: **1.9** **Q1**), 135 (1) 2013, art. No. 011008.

[J2] **K. Saridakis, A. Chasalevris, A. Dentsoras** and **C. A. Papadopoulos**, Applying neural networks, genetic algorithms and fuzzy logic for the identification of cracks in shafts by using coupled response measurements. **Computers & Structures** (IF: **4.8** **Q1**), 86 (11-12) 2008, pp. 1318-1338

[J1] **K. Gertzos, P. Nikolakopoulos, A. Chasalevris** and **C. A. Papadopoulos**, Wear identification in rotor-bearing systems by measurements of dynamic bearing characteristics **Computers & Structures** (IF: **4.8 Q1**), (89) 2010, pp. 55-66

- ***International Conference Proceedings (*speaker)*** **–** ALL papers were **Peer Reviewed** in the **entire** manuscript

[C46] **E. Dimou, K. Kavvadas, I. Stylianopoulou, V. Veloudis,** and **A. Chasalevris***, Evaluation of Quasi-Periodic Oscillations for the Dynamic Design of Dual Spool Jet Engines Utilizing a Solution of the Invariant Manifold. ASME Turbo Expo Conference – ASME TE 2025, Memphis, TN (US), (June 2025)

[C45] **A. Chasalevris*, I. Gavalas**, and **J. T. Sawicki**, Robust Rotor Dynamic Design Evaluation of Turbine-Generators Integrating Sensitivity, Uncertainty, and Optimization. ASME Turbo Expo Conference – ASME TE 2025, Memphis, TN (US), (June 2025)

[C44] **I. Gavalas**, **A. Chasalevris***, and **J. T. Sawicki**, Control of Seismic Excitation in Power Generation Turbomachines Utilizing Active Oil Film Bearings. ASME Turbo Expo Conference – ASME TE 2025, Memphis, TN (US), (June 2025)

[C43] **I. Polyzos*** and **A. Chasalevris**, Controlling Chaos in Rotating Systems applying the OGY Feedback Method via Active Sliding Bearing Configurations. 20th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC) – ASME IDETC-CIE 2024, Washington DC, (Aug. 2024)

[C42][6] **I. Polyzos*** and **A. Chasalevris**, Controlling Chaos in Rotating Systems applying the OGY Feedback Method via Active Sliding Bearing Configurations. 10th European Nonlinear Dynamics Conference - ENOC 2024, Delft (NL), (July 2024)

[C41] **M. S. Fasih*, M. Ramírez-Barrios**, **A. Chasalevris**, and **F. Dohnal**, Analytical estimation of maximum amplitude during passage through resonance of a flexible rotor. 14th International Conference on Recent Advances in Structural Dynamics - RASD 2024, Southampton (UK), (Jul. 2024)

[C40] **I. Gavalas**, **E. Dimou**, and **A. Chasalevris***, Applying Central Manifold Theory in the Definition of Active Gas Foil Bearing Configurations for High-Speed Stability of Rotors. 11th IFToMM International Conference on Rotordynamics – IFToMM ICORD 2023, Beijing (CN), (Sep. 2023)

[C39] **E. Dimou**, **I. Gavalas**, **F. Dohnal**, and **A. Chasalevris***, Locating Period Doubling and Neimark-Sacker Bifurcations in Parametrically Excited Rotors on Active Gas Foil Bearings. 11th IFToMM International Conference on Rotordynamics – IFToMM ICORD 2023, Beijing (CN), (Sep. 2023)

[C38] **A. Papadopoulos***, **I. Gavalas**, and **A. Chasalevris**, Controlling Bifurcations in High-Speed Rotors Utilizing Active Gas Foil Bearings. 15th European Conference on Rotordynamics – SIRM 2023, Darmstadt (DE), (Feb. 2023)

[C37] **G. Mitsos***, **I. Chatzisavvas**, and **A. Chasalevris**, Multi-harmonic Unbalance Response of Aircraft Jet Engine Rotors on Squeeze Film Dampers. 15th European Conference on Rotordynamics – SIRM 2023, Darmstadt (DE), (Feb. 2023)

[C36] **A. Chatzistavris***, and **A. Chasalevris**, Turbocharger Rotors on Wire Mesh Dampers: Sensitivity and Optimization Analysis in Dynamic Design. 15th European Conference on Rotordynamics – SIRM 2023, Darmstadt (DE), (Feb. 2023)

[C35] **P. Papafragkos, I. Gavalas, I. Raptopoulos** and **A. Chasalevris***, Bifurcation Elimination in Rotor Gas Bearing Systems Applying Numerical Continuation with Embedded Design Optimization Scheme. 10th European Nonlinear Dynamics Conference - ENOC 2022, Lyon (F), (July 2022)

[C34] **I. Gavalas***, **A. Papadopoulos**, and **A. Chasalevris**, Investigation of Active Configuration in Gas Foil Bearings for Optimum Load Capacity and Stability of Rotating Systems. 1st Workshop on Active Bearings in Rotating Machinery - ABROM 2022, Athens (GR), (June 2022)

[C33] **E. Dimou***, **F. Dohnal,** and **A. Chasalevris**, On the Stability Margins of Parametrically Excited Rotating Shafts on Gas Foil Bearings Linear and Nonlinear Approach. 1st Workshop on Active Bearings in Rotating Machinery - ABROM 2022, Athens (GR), (June 2022)

[C32] **I. Gavalas*** and **A. Chasalevris**, Nonlinear Dynamics of Turbine Generator Shaft Trains: Evaluation of Bifurcation Sets Applying Numerical Continuation. ASME 2022 Turbo Expo Conference – ASME TE 2022, Rotterdam (NL), (June 2022)

[C31] **L. Anastasopoulos*** and **A. Chasalevris**, Bifurcations and instability mechanisms in rotor systems generated by nonlinear bearings of complex design and elastic pedestals. 14th Int. Conf. Dynamics of Rotating Machinery – SIRM 2021, (online) Gdansk (PL), (Feb. 2021)

[C30] **A. Chasalevris***, Applying Hopf Bifurcation Theory on the Stability Design of Rotor-Bearing-Foundation Systems. 12th International Congress on Mechanics – HSTAM 2019, Thessaloniki (GR), (September 2019)

[6] Conference paper [C42] is a two-page abstract

[C29] **A. Chasalevris***, Nonlinear Stability of Turbine and Generator Rotors Applying Hopf Bifurcation Theory. 14th International Conference on Vibration Problems – ICOVP 2019, Crete (GR), (September 2019)

[C28] **A. Chasalevris***, An Extension of the Bearing Database Method to Enable Nonlinear Transient Analysis in the Standard Rotordynamic Design Evaluation of Turbomachinery. 13th Int. Conf. Dynamics of Rotating Machinery – SIRM 2019. Copenhagen (DK), (February 2019)

[C27] **A. Chasalevris*** and **G. Guignier**, Real-Time Alignment and Operation Optimization of Turbine Shaft Trains Using Adjustable Bearings. 16th EDF/Pprime Workshop, Poitier (F), (October 2017)

[C26] **A. Chasalevris*** and **F. Dohnal**, Enhancing Stability of Industrial Turbines Using Adjustable Partial Arc Bearings. 13th Int. Conf. on Motion & Vib. Control - MOVIC & RASD 2016, Southampton UK, (July 2016)

[C25] **A. Chasalevris*** and **F. Dohnal**, Modal Interaction and Vibration Suppression in Industrial Turbines Using Adjustable Journal Bearings. 13th Int. Conf. on Motion & Vib. Control - MOVIC & RASD 2016, Southampton UK, (July 2016)

[C24] **F. Dohnal*** and **A. Chasalevris**, Exploiting Modal Interaction During Run-Up of a Magnetically Supported Jeffcott Rotor. 13th Int. Conf. on Motion & Vib. Control - MOVIC & RASD 2016, Southampton UK, (July 2016)

[C23] **A. Chasalevris***, Evaluation of the Dynamic Characteristics of the Three-Lobe Journal Bearing with Finite Length Using Analytical Methods. IFTOMM Int. Conf. on Engineering Vibration ICoEV2015, Ljubljana, Slovenia (Sept. 2015)

[C22] **A. Chasalevris***, An Investigation on the Dynamics of High-Speed Systems Using an Analytical Model for the Floating Ring Bearings and the Rotating Shaft. IFTOMM International Conference on Engineering Vibration ICoEV2015, Ljubljana, Slovenia (Sept. 2015)

[C21] **A. Chasalevris***, Evaluation of the Floating Ring Bearing Characteristics Using Analytical Methods. IFTOMM International Conference on Engineering Vibration ICoEV2015, Ljubljana, Slovenia (Sept. 2015)

[C20] **F. Dohnal*** and **A. Chasalevris**, Inducing modal interaction during run-up of a magnetically supported rotor. 13th International Conference in Dynamical Systems Theory and Applications DSTA 2015, Lodz, Poland (2015)

[C19] **F. Dohnal***, **B. Pfau** and **A. Chasalevris**, Analytical predictions of a flexible rotor in journal bearings with adjustable geometry to suppress bearing induced instabilities. 13th International Conference in Dynamical Systems Theory and Applications DSTA 2015, Lodz, Poland (2015)

[C18] **A. Chasalevris*** and **F. Dohnal**, Construction and Experimental Application of a Variable geometry Journal Bearing (VGJB) for the Vibration Suppression of Rotors. 9th IFToMM Rotor Dynamics 2014, Milan, Italy (Sep. 2014)

[C17] **A. Chasalevris** and **C. Papadopoulos***, Experimental detection of an early developed crack in rotor-bearing systems using an AMB. ICEAF III International Conference of Engineering Against Fracture, Kos, Aegean Archipelago, Hellas (Jun. 2013)

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