Athanasios Chasalevris, PhD

1. Personal Information

Nationality/Passport:	Hellenic/Hellenic
Date/Place of birth:	16th February 1982/Athens, Greece
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
	http://users.ntua.gr/chasalevris

2. Professional Experience

A. University Positions

• (Sep. 2018 – today) **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 Mechanical Design & Automatic Control

• (Sep. 2012 – Aug. 2013) **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) **TUD - Technische Universität Darmstadt** (Darmstadt 64287, Germany)
Position: ***Alexander von Humboldt*** postdoctoral researcher
Faculty: Institute for Dynamics of Structures, Faculty of Mechanical Engineering

A.2 Visiting Positions

• (26-30 Sep. 2022) **CUT – Cyprus University of Technology** (Limassol 3041, Cyprus)
Position: Visiting Scientist (Bilateral Program in Educational Exchange – Greek Ministry of Education and Religious Affairs)
Faculty: Dept. of Mechanical and Materials Science and Engineering

B. Positions in Industry

• (Nov. 2015 – Sep. 2018) **GENERAL ELECTRIC Co. / GE Oil & Gas** (Rugby CV212NH, United Kingdom)
Position: Team Leader Rotordynamics, Senior Engineer & Product Owner[2] (bearings)
Business: Industrial Power Solutions / Turbine Power Systems
Objective: R&D and Execution Engineering of Industrial Steam Turbines

• (Feb. 2015 – Oct. 2015) **ALSTOM / ALSTOM Power** (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) **BORGWARNER Inc. / BorgWarner Turbosystems Engineering GmbH**
Position: Rotodynamic Engineer (*Ingenieur Rotordynamik*) (Kirchheimbolanden, 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

3. Education

• (July 2004–July 2009) **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, University of Patras Press, 2009, (In English). Supervisor: Prof. Chris A. Papadopoulos†

- (Sep. 1999–July 2004) **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**: linear & nonlinear dynamics of rotating machines, turbomachines, turbochargers, and mechanisms. Dynamic design, optimization methods and surrogate models in turbomachines.
- **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)
- **Tribotronics**: Active (smart) oil/gas bearings with mechatronic elements. Active Magnetic Bearings. Cyberphysical rotor-bearing systems
- **Nonlinear Dynamics and Control**: periodic, quasi periodic and chaotic solutions, and bifurcation analysis and control of rotating machines, and of structures on fluid interaction

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5. Collaborations[1]

- (since 2021) **KIT-Karlsruhe Institute of Technology (DE)**: Nonlinear Dynamics of Rotors on Adjustable Bearings
- (since 2020) **SUT-Sharif University of Technology (IR)**: Dynamics of bent rotors on nonlinear bearings
- (2021) **FHV-Voralberg University of Applied Sciences (AT)**: Parametric excitation of rotors
- (since 2021) **RPI-Rensselaer Polytechnic Institute (US)**: Application of Operational Modal Analysis (OMA) in rotating machines with gas bearings
- (since 2021) **MTU Aero engines (DE)/Jet Engine Dynamics div.**: Squeeze film damper models, rotor-stator contact models, surrogate dynamic models, in jet engines (co-supervision of MSc Thesis)

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6. Teaching Work

- (Feb. 2019 – today) Kinematics and Dynamics of Mechanisms (4th semester-basic course) at the School of Mechanical Engineering, NTUA (**full time teaching**)
- (Sep. 2020 – today) Dynamics and Vibrations (5th semester-basic course) at the School of Mechanical Engineering, NTUA (**co-teaching 2/3**)
- (Sep. 2020 – today) Dynamics of Rotating Machines (7th semester-elective[2]) at the School of Mechanical Engineering, NTUA (**full time teaching**)
- (Sep. 2018 – Feb. 22) Machine Elements I (3rd semester-basic course) at the School of Mechanical Engineering, NTUA (**co-teaching 2/3, and full-time teaching in 2019-2020**)

- (Sep. 2012 – Jul. 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

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[1] Only the collaborations with KIT and MTU are established with contract. The collaboration with KIT includes funding

[2] **9** students at the 1st year of teaching; **15** students at the 2nd year of teaching; **21** students at the 3rd year of teaching.

- (Sep. 2004 – Jun. 2007) Teaching assistant in undergraduate courses in Machine Design (Critical speeds of Rotors, Balancing, Fatigue Failure) (5th and 6th semester), at the Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics, University of Patras
- (Sep. 2004 – Jun. 2007) Teaching assistant in undergraduate courses in Computational methods in Engineering Design using Computer (CAD) (10th semester), at the Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics, University of Patras

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7. Supervision[3]

- **PhD Theses**

  [3] 24/10/2022 – Today | **Anastasios Papadopoulos** | NTUA – School of Mech. Eng. | Cyperphysical systems for Smart Machine Dynamics.

  [2] 24/10/2022 – Today | **Emmanouil Dimou** | NTUA – School of Mech. Eng. | Dynamics of Machines with Quasi – Periodic Characteristics and Tribotronic Elements.

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

- **MSc Theses**

  [11] 12/2022 – today | **Nikolaos Zacharakis** | NTUA – School of Mech. Eng. | Simulation of the Rotor-Stator Contact Phenomenon in the Dynamics of Rotor Systems: Application on a Turbine-Generator Shaft Train.

  [10] 12/2022 – today | **Filippos Milionis** | NTUA – School of Mech. Eng. | Multiphysical Analysis and Design of a novel Mechanical Layout for Continuous Variable Transmission with Gyroscopic Torque Converter.

  [9] 07/2022 – today | **Vasilios Veloudis** | NTUA – School of Mech. Eng. and MTU Aero Engines (**co-supervision**) | Surrogate Modelling and Optimization in Aircraft Engines Rotordynamics.

  [8] 05/2022 – today | **Ino Stylianopoulou** | NTUA – School of Mech. Eng. and MTU Aero Engines AG (**co-supervision**) | Rolling Element Bearing Modeling and application in Aircraft Engines Rotor Models.

  [7] 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.

  [6] 10/2021 – **10/2022** | **Georgios Mitsos** | NTUA – School of Mech. Eng. and MTU Aero Engines AG (**co-supervision**) | Multi-harmonic unbalance response of aircraft jet engine rotors on squeeze film dampers.

  [5] 03/2021 – 06/2022 | **Alexis Chatzistavris** | NTUA – School of Mech. Eng. | Dynamic Design Optimization and Statistical Analysis in Virtual Prototyping of Wire Mesh Dampers in Turbocharger Rotors.

  [4] 03/2021 – 06/2022 | **Emmanouil Dimou** | NTUA – School of Mech. Eng. | Parametric Excitation and Antiresonance in Rotating Systems with Gas Bearings.

  [3] 03/2021 – 03/2022 | **Ioannis Gavalas** | NTUA – School of Mech. Eng. | Nonlinear Rotordynamic Design of Turbine-Generator Shaft Trains Applying Numerical Continuation.

  [2] 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.

  [1] 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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- **Projects with Students[4]**

  [4] 2022 - 2023 | **Konstantinos-Petros Tzafestas** | NTUA – School of Mech. Eng. | Kinematic analysis of jet engine thrust vectoring mechanisms.

  [3] 2022 - 2023 | **Chotzali Anna** and **Dimitrios Georgiou** | NTUA – School of Mech. Eng. | Multi-objective optimization of slider crank mechanism dynamics with flexible links and nonlinear bearing joints.

  [2] 2022 - 2023 | **Dimitrios Georgiou** and **Ioannis Polyzos** | NTUA – School of Mech. Eng. | Active Magnetic Bearings on Rotor Applications: Dynamic Simulation and Control for Stabilization.

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

[4] The projects are offered to undergraduate students, on their initiative, and DO NOT contribute on ECTS.

[1] 2022 - 2023 | **Alvertos Reitan** | NTUA – School of Mech. Eng. | Experimental setup of a rotor on Active Magnetic Bearings: Assembly, measurement layout, and control.

- **Internships**

[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**[5]

1) As Assistant Professor in NTUA

   a) **Source:** Alexander von Humboldt Foundation (Germany) | **Fund: 55k€** total - **47k€** for NTUA | **Title:** Nonlinear Dynamics of Rotor Systems on Adjustable Bearings | **Description:** Research Group Linkage Program with Karlsruhe Institute of Technology (KIT)

2) As **Senior Engineer - Rotordynamics** and **Product Owner** at **GE Oil & Gas** and **ALSTOM Power**[1] 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)

[5] During the employment in General Electric Co.

- (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. 2013 – Feb. 2015) *JAGUAR LAND ROVER R2S 2.0L Diesel* R&D-Nr.: BF 1.49.002
- (Mar. 2013 – Feb. 2015) *BMW B53 TU1 1.5L 3cyl. Gasoline* R&D-Nr.: RZ 1.02.001
- (Mar. 2013 – 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**
  (Supervision: Prof. Dr.-Ing. Richard Markert, estimated budget over 50.000€)

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9. Further Scientific Activities

- **Associate Editor** in the following international scientific journals:
  1) Frontiers in Mechanical Engineering, Editorial Board of Tribology, Review Editor (since 2022)
  2) Journal of Engineering for Gas Turbines and Power, ASME (2019-2021)
  3) Shock & Vibration, Hindawi (since 2016)

- **Guest Editor** for special issues in the following international scientific journals:
  1) Rotordynamics in Automotive Engineering, Vehicles – MDPI (2022)
  2) Design and Optimization of Rotor Dynamics in Applications, Applied Sciences, MDPI (2021)
  3) Dynamic Analysis and Control Applied in Nonlinear Rotor Systems, Shock and Vibration, Hindawi (2021)
  4) Advances in research and dynamic analysis of high-speed rotating machines, Shock and Vibration, Hindawi (2020)
  5) Rotordynamics in Automotive Engineering, Vehicles, MDPI (2019)
  6) International Journal of Rotating Machinery, Hindawi (2017)

- **Conference/Workshop/Session/Minisymposium Organizer**:
  1) **Session Organizer** ''Rotordynamic Design and Applications'' (7 papers) in ASME Turbo Expo 2023, Boston MA
  2) **Chair** and **Organizer** of the ''1st Workshop on Active Bearings in Rotating Machinery – ABROM 2022'', Athens
  3) **Session Co-organizer** ''Rotordynamic Design and Applications'' (7 papers) in ASME Turbo Expo 2022, Rotterdam
  4) **Session Co-organizer** ''Methods in Rotordynamics'' (5 papers) in ASME Turbo Expo 2022, Rotterdam
  5) **Session Co-organizer** ''Rotordynamic Testing and Rotor Bow'' (4 papers) in ASME Turbo Expo 2021, online

6) **Session Co-organizer** ''Malfunctions and Diagnostic Techniques'' (6 papers) in ASME Turbo Expo 2020, London
7) **Co-organizer** of the **Minisimposium** ''Recent Advances in Rotordynamics'' (12 papers) in ICOVP 2019, Crete

- **Conference related activities (chronologically)**

1) **Member** of the Scientific Committee in **SIRM 2023** – European Conference on Rotordynamics, Darmstadt (DE)
2) **Member** of the Scientific Committee in **Rotordynamics2023** – IFToMM Int. Conf. on Rotordynamics, Beijing (PRC)
3) Session **co-Chair** in **ASME Turbo Expo 2020**, London (UK)
4) Session **Chair** in **COMADEM 2019**, Huddersfield (UK)
5) **Member** of the International Scientific Advisory Committee of the **COMADEM 2019**, Huddersfield (UK)
6) Session **Chair** in **ICOVP 2019**, Crete (GR)
7) Session **Chair** in **SIRM 2019**, Copenhagen (DK)
8) **Member** of the Industrial Committee in the **ICORD 2018**, 10th IFToMM International Conference on Rotor Dynamics 2018, Rio de Janeiro (BR)
9) Session **co-Chair** in **MOVIC & RASD 2016**, Southampton (UK)
10) **Member** of the Industrial Committee in the **ICORD 2014,** 9th IFToMM International Conference on Rotor Dynamics 2014, Milan (I)

- **Invited Talks (chronologically)**

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**[6] in the following international scientific journals:

1) *International Journal of Solids and Structures*, Elsevier
2) *Journal of Sound and Vibration*, Elsevier
3) *Communications in Nonlinear Science and Num. Simulations*, Elsevier
4) *Mechanical Systems and Signal Processing,* Elsevier
5) *International Journal of Bifurcation and Chaos*, World Scientific
6) *Mechanics Research Communications*, Elsevier
7) *International Journal of Structural Integrity*, Emerald
8) *Journal of Mechanics Engineering and Automation*, David Publishing
9) *Journal of the Brazilian Society of Mech. Sciences and Eng.*, Springer
10) *Official Journal of the Brazilian Academy of Sciences*
11) *Journal of Mechanical Engineering Science*, SAGE
12) *Aircraft Engineering and Aerospace Technology*, Emerald
13) *Simulation Modelling Practice and Theory*, Elsevier
14) *Industrial Lubrication and Tribology*, Emerald
23) *Tribology International,* Elsevier,
24) *Nonlinear Dynamics*, Springer
25) *Journal of Vibration& Acoustics*, ASME
26) *Journal of Vibration & Control*, SAGE
27) *Advances in Fuzzy Systems*, Hindawi
28) *Measurement*, Elsevier
29) *Lubrication Science*, Wiley
30) *Lubricants*, MDPI
31) *Acta Mechanica*, Springer
32) *Shock & Vibration*, Hindawi
33) *Applied Mathematical Modelling*, Elsevier
34) *Int. Journal of Mech. Sciences*, Elsevier
35) *Actuators*, MDPI
36) *Energies*, MDPI

[6] Approximately 25 reviews are performed each year

15) *IMechE, Part C: Journal of Mechanical Engineering Science*, SAGE
16) *IMechE, Part E: Journal of Process Mechanical Engineering*, SAGE
17) *IMechE, Part J: Journal of Engineering Tribology*, SAGE
18) *SN Applied Sciences*, Springer Nature
19) *ASME Letters in Dynamic Systems and Control*, ASME
20) *Aircraft Engineering and Aerospace Technology*, Emerald
21) *Journal of Vibration Engineering and Technologies*, Springer
22) *Mathematical Biosciences and Engineering*, AIMS Press
37) *Vehicles*, MDPI
38) *Computation*, MDPI
39) *Micromachines*, MDPI
40) *Journal of Tribology*, ASME
41) *Applied Sciences*, MDPI
42) *Aerospace*, MDPI
43) *Encyclopedia*, MDPI

- **Reviewer** in the following international scientific conferences:
  1) 9th IFToMM International Conference on Rotor Dynamics 2014, Milan (I)
  2) ASME Turbo Expo 2015, Montreal (CN)
  3) MOVIC & RASD 2016, Southampton (UK)
  4) ASME Turbo Expo 2017, Charlotte (US)
  5) ASME Turbo Expo 2018, Oslo (NO)
  6) 10th IFToMM International Conference on Rotor Dynamics 2018, Rio de Janeiro (BR)
  7) COMADEM 2019, Huddersfield (UK)
  8) ASME Turbo Expo 2020, London (UK)

- **Reviewer** in the following editors:
  1) Springer/Springer Brief series, NY, USA
  2) CRC Press/Engineering-Environmental Sciences, New Delhi, India.
     - Tutorial Problems on Rotor Systems: Analysis and Identification, by Rajiv Tiwari

- **Evaluator** in the following Governmental Research organizations:
  1) **OSF –** National Science Centre, Poland (**salaried**), since 2022
  2) **FCT -** Portuguese public funding agency for R&D **-** Civil and Mech. Eng. and Engineering Systems (**salaried**), since 2021
  3) **UKRI-EPSRC** UK Research & Innovation – Eng. & Phys. Sciences Research Council, Assoc. Review College, since 2017
  4) **HFRI** – Hellenic Foundation for Research and Innovation (ΕΛΙΔΕΚ), since 2022

- **PhD thesis examiner**
  1) ''Integrated Processes for Turbocharger design and retrofitting'', submitted by Dr. Konstantinos Ntonas and supervised by Assoc. Prof. Nikolaos Aretakis in School of Mech. Eng. NTUA, Hellas. (2022)
  2) ''Geometric Solution of Problems in Dynamics of Multiple Rigid Bodies with Bilateral and Unilateral Motion Constraints'', submitted by Dr. Panagiotis Passas and supervised by Prof. Sotirios Natsiavas in Dept. of Mech. Eng. in Aristotle University of Thessaloniki, Hellas (2022)
  3) ''Optimization of Tribological Design of Internal Combustion Engines-Nanolubricants'', submitted by Dr. Elias Tsakiridis and supervised by Assoc. Prof. Pantelis Nikolakopoulos in Dept. of Mech. Eng. in University of Patras, Hellas (2021)
  4) ''Applications of Oscillators in Energy Conversion'', submitted by Dr. Andreas Paradeisiotis and supervised by Prof. Ioannis Antoniadis in School of Mech. Eng. NTUA, Hellas. (2019)
  5) ''Modelling and Model Reduction of Viscoelastic Composite Rotors: an Operator Based Approach'', submitted by Dr. Saurabh Chandracker and supervised by Prof. Haraprasad Roy in National Institute of Technology Rourkela, Orissa, India. (2016)

- **Judge in Competitions**:
  1) Invited judge, European BEST Engineering Competition (EBEC), NTUA 2023
  2) Invited judge, European BEST Engineering Competition (EBEC), NTUA 2022
  3) Invited judge, European BEST Engineering Competition (EBEC), NTUA 2021

- **Academic Consultancy**:
  1) **ΥΠΑΙΘ** Greek Ministry of Education and Religious Affairs – Evaluator for the Selection of Education Consultants, 2022
  2) **DOATAP** Hellenic National Academic Recognition and Information Center, Evaluator of the equivalence of Mechanical Engineering Diplomas obtained abroad, since 2021

- **Member (subscribed)** of:

1) IFToMM – *Technical Committee for Rotordynamics*
2) EUROMECH – *European Mechanics Society*
3) ASME – *American Society of Mechanical Engineers*

10. Awards

- (Jun. 2017) Award '*Beyond and Above*' (700£) for the Patent [P2], **General Electric Co.**
- (Apr. 2010) Research fellowship award for postdoctoral researchers (54000€), **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) 17.03.2016 – Steam Turbine Awareness (power Plant basics, thermodynamics, steam cycles, turbine architecture, main components, turbine auxiliaries and control)
  d) 16.03.2016 – Last Stage Low Pressure Blade Lifetime Assessment
  e) 02.03.2016 – Control and Determination of Steam Turbine Clearances
  f) 18.02.2016 – Steam Turbine Material Selection and Specifications
  g) 20.01.2016 – Bearing Design and Failure Mechanisms
  h) 18.11.2015 – Turbine Overview

- (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 Assessment
  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 Rotordynamics
  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

- (01 Jul. 2002 – 31 Aug. 2002) Student trainee mechanical engineer in Agricultural Dairy Industry of Epirus DODONI SA. Ioannina 45110, Hellas
- (01 Sep. 2006 – 30 Jun. 2008) Music studies on drums, Municipal Conservatory of Patras, Patras 26221, Hellas

• (18 May 2009 – 18 Mar. 2010) Corporal of the Hellenic Army/Engineer Corps, during the military service (obligatory for Greek citizens), specialized in minesweeping and destructions (Valtos, Orestiada)

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13. Publications, Reports, and Further Written Work (2006-2022)

(Citations: **585, *h* index: 15 – Excluding self-citations** of **ALL** authors, Source: SCOPUS)

(Citations: **1030, *h* index: 16**, Source: GOOGLE SCHOLAR)

- ***Books***

[B2] **A. Chasalevris**, Analytical Solutions in Journal Bearings: A Treatment with Algorithms for Rotor Dynamic Applications. Springer, NYC (US), (to be finalized by end of 2022)

[B1][7] **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

- ***International Journals*** **(Total Impact Factor[8] : 84.631 | Average Impact Factor : 3.526/article)**

[J26] **F. Mehralian, S. Mousavi, R. 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: **2.361 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: **5.741 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: **1.732 Q2**), 2022, https://doi.org/10.1115/1.4055533

[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: **1.872 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: **4.872, Q1**), 145, 2020, 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: **2.451 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: **1.762 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: **4.872 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: **0.811 Q3**), Vol. 2016, 2016, Article ID 7817134

[J17] **A. Chasalevris**, Finite Length Floating Ring Bearings: Operational Characteristics Using Analytical Methods. **Tribology International** (IF: **4.872 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: **2.045 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: **6.823 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: **3.655 Q1**), 333 (7) 2014, pp. 2087-2099

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[7] Book [B1] is PhD dissertation

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[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: **2.343 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: **4.872 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: **1.889 Q3**) (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: **0.617 Q3**), 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: **3.866 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: **3.655 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: **6.823 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: **3.866 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: **4.872 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: **4.872 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: **2.343 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: **4.578 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: **4.578 Q1**), (89) 2010, pp. 55-66

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[C39] **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)

[C38] **A. Chatzistavris**, and **A. Chasalevris***, Turbocharger Rotors with Wire Mesh Dampers: Sensitivity and Optimization Analysis in Dynamic Design. 15th European Conference on Rotordynamics – SIRM 2023, Darmstadt (DE), (Feb. 2023)

[C37] **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)

[C36] **S. Ahmed**, **F. Kopsaftopoulos**, and **A. Chasalevris***, Utilizing Active Gas Foil Bearings for the Parameter Estimation in Rotating Shafts via Stochastic Time Series Representations. 1st Workshop on Active Bearings in Rotating Machinery - ABROM 2022, Athens (GR), (June 2022)

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[C34] **E. Dimou***, **F. Dohnal,** and **A. Chasalevris**, Parametrically Excited Rotating Shafts on Gas Foil Bearings. 1st Workshop on Active Bearings in Rotating Machinery - ABROM 2022, Athens (GR), (June 2022)

[C33] **I. Gavalas*** and **A. Chasalevris**, Nonlinear Dynamics of Turbine Generator Shaft Trains: Evaluation of Bifurcation Sets Applying Numerical Continuation. ASME 2022 Turbo Expo Conference – ASMETE 2022, Rotterdam (NL), (June 2022)

[C32] **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)

[C31] **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)

[C30] **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)

[C29] **F. Dohnal*, A. Chasalevris** and **H. D. Klement**, Rotor-Structure Interaction: Complex Foundation Models in MADYN. 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, Kos, Aegean Archipelago, Hellas (Jun. 2013)

[C16] **A. Chasalevris*** and **F. Dohnal**, An Experimental Study on the Additional Harmonics due to Worn Journal Bearings. 10th International Conference on Vibration in Rotating Machines SIRM 2013, Berlin, Germany (Feb. 2013)

[C15] **A. Chasalevris*** and **D. Sfyris**, Analytical evaluation of the finite journal bearing impedance forces using the exact analytical solution of the Reynolds equation. International Conference On Vibration Engineering And Technology of Machinery VETOMAC VIII, Gdansk, Poland (Sep. 2012)

[C14] **A. Chasalevris*** and **D. Sfyris**, On the analytical evaluation of the lubricant pressure in the finite journal bearing. ASME 2012 International Design Engineering Technical Conf. IDETC/CIE 2012, Chicago, Illinois, USA (Aug. 2012)

[C13] **A. Chasalevris***, **F. Dohnal** and **R. Markert**, Symptoms of Misaligned Worn Journal Bearings in Rotor Response under External Excitation by a magnetic bearing. ASME 2011 International Design Engineering Technical Conferences IDETC/CIE 2011, Washington, DC, USA (2011)

[C12] **A. Chasalevris***, **F. Dohnal** and **R. Markert**, A Journal Bearing with Variable Geometry for Reduction of Rotor Resonance Vibration. 10th biennial International Conf. on Vib. Problems ICOVP 2011, Prague, Czech Republic (2011)

[C11] **A. Chasalevris** and **C. Papadopoulos***, Structural Integrity Assessment of Rotating Systems. 2 International Conference of Engineering Against Fracture. ICEAF 2011, Mykonos, Hellas (2011)

[C10] **A. Chasalevris***, **P. Nikolakopoulos** and **C. Papadopoulos**, Aligned and Misaligned Wear Pattern in Fluid Film Bearings and Influence on the Rotor Response. 9th International Conference on Vibration in Rotating Machines SIRM 2011, Darmstadt, Germany (2011)

[C9] **A. Chasalevris** and **C. Papadopoulos***, Nonlinear simulation of continuous rotor bearing systems with multi-step geometry and breathing cracks. 8th IFToMM – Conference on Rotor Dynamics, Seoul, Korea (2010)

[C8] **A. Chasalevris*** and **C. Papadopoulos**, Early Detection of Rotor Cracks by Measuring the Coupled Response under External Excitation. 8th IFToMM – Conference on Rotor Dynamics, Seoul, Korea (2010)

[C7] **A. Chasalevris*** and **C. Papadopoulos**, Crack identification of a continuously modeled rotor with internal damping mounted on nonlinear fluid film bearings. 9th International Conference on Computational Structures Technology CST 2008, Athens, Hellas, (2008)

[C6] **A. Chasalevris*, P. Nikolakopoulos** and **C. Papadopoulos**, A nonlinear, dynamic, continuous, damped model for rotor-bearing systems. 9th Int. Conference on Motion and Vibration Control MOVIC 2008, Munich, Germany (2008)

[C5] **C. Papadopoulos*, A. Chasalevris** and **P. Nikolakopoulos,** Cracked continuous rotors vibrating on nonlinear bearings – some aspects on future trends. IUTAM 2009 Symposium on Emerging Trends in Rotor Dynamics, Delhi, India, (2009)

[C4] **P. Nikolakopoulos*, A. Chasalevris** and **C. Papadopoulos**, Wear Identification in Rotor-Bearing Systems by Volumetric and Bearing Performance Characteristics Measurements. 9th International Conference on Computational Structures Technology CST 2008, Athens, Hellas, (2008)

[C3] **K. Gertzos, P. Nikolakopoulos*, A. Chasalevris** and **C. Papadopoulos**, Wear identification in continuously modeled rotor on worn nonlinear fluid film bearings. 9th International Conference on Computational Structures Technology CST 2008, Athens, Hellas, (2008)

[C2] **K. Saridakis, A. Chasalevris**, **A. Dentsoras** and **C. Papadopoulos**, Fusing Neural Networks, Genetic Algorithms and Fuzzy Logic for Diagnosis of Cracks in Shafts. Intelligent Production Machines and Systems-2nd I*PROMS Virtual International Conference 3-14 July 2006, (2006) pp. 332-337

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- ***Patents***

[P2] **A. Chasalevris** and **F. Dohnal**, Suppressing Vibrations of a Shaft on Sliding Bearings. WO 2018/002277 A1

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- ***Reports in Industry***

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[R19] **A. Chasalevris**, Damhead Creek Rotordynamics – Rotordynamic Assessment of 490MW Shaft Train. (2016)

[R18] **P. Jenkins** and **A. Chasalevris**, ThermaVisayas – Rotordynamic Assessment of 169MW Steam Turbine. (2015)

[R17] **A. Chasalevris**, Geothermal Steam Turbine GST55N – Rotordynamic Assessment (2015)

[R16] **A. Chasalevris,** Analytical Evaluation of the Dynamic Characteristics of the ALSTOM Bearings R1T and R2T (2015)

[R15] **A. Chasalevris,** Geared Reaction Turbine GRT25ME18FL – Rotordynamic Case Study for Longer Rotors (2015)

[R14] **A. Chasalevris,** Geared Reaction Turbine GRT35E22 (2016)

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> Selected Internal Reports in **BorgWarner Turbo Systems**:

[R11] **A. Chasalevris**, B01-BV40 Rotordynamic Case Study – Variation of Parameters for Bearing Geometry. (2013)

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[R9] **A. Chasalevris**, B01 VS45 TS37 Gen. 3 Rotordynamic Case Study for Bearing Clearances Variation. (2013)

[R8] **A. Chasalevris**, Investigation of the Use of Transfer Functions in Balancing of Turbosystems. (2014)

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[R6] **A. Chasalevris**, K9K BV35 Euro6 – Rotordynamic Case Study for Bearing Clearances and Lubr. Viscosity. (2014)

[R5] **A. Chasalevris**, K9K/B01 BV30 Gen 3.2-Rotordynamic Case Study. (2014)

[R4] **A. Chasalevris**, Development of an Analytical Model for the nonlinear simulation of high speed systems. (2014)

[R3] **A. Chasalevris**, Nonlinear Dynamics and Stability of Turbosystems Using Analytical Methods. (2014)

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[R1] **A. Chasalevris**, B03/BV35 Rotordynamic Simul. for Max. and Min. Permissible Bearing Clearances. (2014)

- ***Reports in Academy***

[AR2] **A. Chasalevris**, Gleitlager mit dynamischer Spaltvertellung zur reduction der Schwingungen bei Resonanzdurchfahrt in rotierenden Maschinen. Report for BMWi-SIGNO Project. Darmstadt, Germany (2013)

[AR1] **D. Sfyris** and **A. Chasalevris**, An analytical solution of the Reynolds equation for the lubrication of the finite journal bearing and evaluation of the lubricant pressure. TU Darmstadt Prints (2012), Darmstadt, Germany. Available online at the German National Library http://nbn-resolving.de/urn/resolver.pl?urn=urn:nbn:de:tuda-tuprints-28795

- ***Book Chapters***

[BC3] **A. Chasalevris** and **F. Dohnal,** "Construction and Experimental Application of a Variable Geometry Journal Bearing (VGJB) for the Vibration Suppression of Rotors ", Proceedings of the 9th IFToMM Internation Conference on Rotor Dynamics, Mechanisms and Machine Science © Springer International Publishing, pp. 943 - 954.

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[CM3] **A. Chasalevris**, Active Magnetic Bearings: Advantages and Applications (Ενεργά μαγνητικά έδρανα: Πλεονεκτήματα και εφαρμογές). Power Transmission (Μετάδοση Ισχύος), T-Press, Issue (τεύχος) 245 (2022) pp. 38-39

[CM2] **A. Chasalevris**, Gas Lubrication, Gas Bearings and Technical Applications (Αερολίπανση, Αεροέδρανα, και Τεχνολογικές Εφαρμογές). Power Transmission (Μετάδοση Ισχύος), T-Press, Issue (τεύχος) 244 (2022) pp. 40-41

[CM1] **A. Chasalevris**, Predictive Maintenance of Ball Bearings Applying Intelligent Methods (Προληπτική συντήρηση ρουλεμάν με ευφυείς μεθόδους). Power Transmission (Μετάδοση Ισχύος), T-Press, Issue (τεύχος) 243 (2022) pp. 40-41