

## **I. Personal Information**

Nationality/Passport: Hellenic/Hellenic  
Date/Place of birth: 16<sup>th</sup> February 1982/Amarousio-Athens, Hellas  
Languages: Hellenic, German, English  
Marital Status: Married to Ioanna Papaconstantinou, one (1) daughter  
Employer: NTUA – National Technical University of Athens  
Address (work): 9 Heroon Polytechniou Str., 15780 Zografou-Athens, Hellas  
Address (living): 1 Sarantaporou Str., 15661 Chologargos-Athens, Hellas  
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URL: www.mech.ntua.gr/en/chasalevris



## **2. Professional Experience**

- (Sep. 2018 – today) **NTUA – National Technical University of Athens** (Zografou – Athens 15780, Hellas)  
Position: Assistant Professor  
Faculty: Dynamics and Structures Laboratory, School of Mechanical Engineering – Section of Mechanical Design and Automatic Control
  
- (July. 2017 – Sep. 2018) **General Electric Co. / GE Oil & Gas<sup>1</sup>** (Rugby CV212NH, United Kingdom)  
Position: Team Leader Rotordynamics, Senior Engineer & Product Owner<sup>2</sup> (bearings)  
Business: Industrial Power Solutions / Turbine Power Systems  
Objective: R&D and Execution Engineering of Industrial Steam Turbines
  
- (Nov. 2015 – Jun. 2017) **General Electric Co. / GE Oil & Gas<sup>1</sup>** (Rugby CV212NH, United Kingdom)  
Position: Rotodynamic Engineer & Product Owner<sup>2</sup> (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<sup>1</sup>** (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
  
- (Sep. 2012 – Aug. 2013) **Technische Universität Darmstadt** (Darmstadt 64287, Germany)  
Position: Research Associate  
Faculty: Institute for Dynamics of Structures, Faculty of Mechanical Engineering
  
- (May 2010 – Aug. 2012) **Technische Universität Darmstadt** (Darmstadt 64287, Germany)  
Position: Alexander von Humboldt postdoctoral researcher  
Faculty: Institute for Dynamics of Structures, Faculty of Mechanical Engineering

<sup>1</sup> The acquisition of ALSTOM Power from GE was finalized in November 2015

<sup>2</sup> The responsibility of Product Owner for bearings was assigned in November 2016

### 3. Education

- (July 2004–July 2009) **Ph.D. - University of Patras**  
Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics / **Division 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). Supervision: Prof. Chris Papadopoulos
  - (Sep. 1999–July 2004) **Dipl. Mechanical & Aeronautical Engineer (MEng.) - University of Patras** (7.47/10, graduated 6<sup>th</sup> of 160)  
Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics / **Division 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)
  - (Sep. 1996–June 1999) **Lyceum Certificate** (17.8/20) - **4<sup>th</sup> General Lyceum of Ioannina**, Ioannina 45332, Hellas
  - (Sep. 1993–June 1996) **High School Certificate** (18.6/20) - **High School of Pedini**, Ioannina 45500, Hellas
  - (Sep. 1987–June 1993) **Primary School Certificate (A) - 12<sup>th</sup> Primary School of Ioannina**, Ioannina 45332, Hellas
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### 4. Research Objectives

- **Machine Dynamics:** linear & nonlinear dynamics of rotating machinery (theoretical & experimental)
  - **Tribology – Fluid Mechanics:** analytical and numerical solutions on lubrication of journal bearings
  - **Nonlinear Dynamics:** nonlinear simulation of high speed systems using analytical methods
  - **Solid Mechanics:** continuous medium models for large scale rotating systems of complex geometry
  - **Time periodic systems – Parametric excitation:** development of adjustable/controllable journal bearings of variable geometry
  - **Fracture Mechanics – Tribology:** simulation of defects in rotating systems (rotor crack & bearing wear) & methods for nondestructive detection (theory & experiment)
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### 5. Teaching Experience

- (Sep. 2018 – today) Machine Design (Στοιχεία Μηχανών) (3<sup>rd</sup> semester of studies) at the School of Mechanical Engineering, NTUA
  - (Sep. 2012 – Jul. 2013) Teaching assistant in tutorials and in correction of examination scripts on rigid body dynamics (Dynamik starrer Körper) (4<sup>th</sup> semester of studies) and on structural mechanics (Strukturmechanik)(6<sup>th</sup> semester of studies), at the Institute for Dynamics of Structures, Faculty of Mechanical Engineering, TU Darmstadt
  - (Sep. 2004 – Jun. 2007) Teaching assistant in undergraduate courses in Machine Design (Critical speeds of Rotors, Balancing, Fatigue Failure) (5<sup>th</sup> and 6<sup>th</sup> semester of studies), 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) (10<sup>th</sup> semester of studies), at the Machine Design Laboratory, Dept. of Mechanical Engineering and Aeronautics, University of Patras
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### 6. Projects for Research and Development, and bearing product qualification

> As **Performance Engineer - Rotordynamics** and **Product Owner** at **GE Oil & Gas** and **ALSTOM Power**<sup>1</sup> 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, participates on the projects (d) for the qualification of bearing products.

#### a) R&D Engineering Projects

- (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) Execution Engineering Projects

- (Mar. 2018 – Sep. 2018) *Oyka (Turkey) – Rotordynamic Assessment of **35MW** Steam Turbine-Gen*
- (Apr. 2018 – Sep. 2018) *Yinchun, Wuhan, Kangbao (China) – Rotordynamic Assessment of **3X45MW** 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) Basic Research Projects 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) Projects in product ownership (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))*

> 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:

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| • (Sep. 2013 – Feb. 2015) <i>Basic Development – Methodology Bearing Development</i>       | R&D-Nr.: EB 0.86.051 |
| • (Sep. 2013 – Feb. 2015) <i>Basic Development – Rotordynamics</i>                         | R&D-Nr.: EB 0.86.009 |
| • (Feb. 2013 – Feb. 2015) <i>JAGUAR LAND ROVER R2S 2.0L Diesel</i>                         | R&D-Nr.: BF 1.49.002 |
| • (Mar. 2013 – Feb. 2015) <i>BMW B53 TU1 1.5L 3cyl. Gasoline</i>                           | R&D-Nr.: RZ 1.02.001 |
| • (Mar. 2013 – Feb. 2015) <i>RENAULT K9K Gen7 Eu6C VTG (Variable Turbine Geometry)</i>     | R&D-Nr.: OR 1.14.018 |
| • (Sep. 2014 – Feb. 2015) <i>VOLKSWAGEN 2.0L CR 140/147kW MDB laengs (TiAl)</i>            | R&D-Nr.: KI 1.15.027 |
| • (Sep. 2014 – Feb. 2015) <i>FORD Advanced Development - Vorentwicklungszusammenarbeit</i> | R&D-Nr.: EA 0.83.080 |
| • (Nov. 2014 – Feb. 2015) <i>DAIMLER AG – OM654DE20LA R2S EU6 160kW (BV35/B03)</i>         | R&D-Nr.: KI 1.09.032 |

> As postdoctoral researcher in **Technische Universität Darmstadt** applied for, undertook 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 **BMW** (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€)

## 7. Major Collaborations

- 1) Dr. techn. habil. Fadi Dohnal, Assistant Professor, UMIT, Hall in Tirol, Austria
- 2) Dr. Dimitrios Sfyris, Inst. for chemical Engineering Sciences, Foundation for Research and Technology, Patras, Hellas

## 8. Further Scientific Activities

### • Invited Talks:

- 1) University of Southampton (SOTON) – Institute of Sound and Vibration Research (28.11.2017)
  - Objective: Turbomachinery Rotordynamics | Current research activity and future trends
- 2) National Technical University of Athens (NTUA) – School of Mechanical Engineering (22.09.2017)
  - Objective: Analysis & Design of Mechanical Structures | Trends in scientific research and technology | Development prospects in Greece and NTUA | Undergraduate and postgraduate education in the field

### • Associate Editor in the following international scientific journals:

- 1) Shock & Vibration, Hindawi

### • Guest Editor for special issues in the following international scientific journals:

- 1) International Journal of Rotating Machinery

### • Member of:

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| 1) IFToMM – <i>Technical Committee for Rotordynamics</i> | 4) ASME – <i>American Society of Mechanical Engineers</i> |
| 2) EUROMECH – <i>European Mechanics Society</i>          | 5) TEE – <i>Technical Chamber of Greece</i>               |
| 3) VDI – <i>Verein Deutscher Ingenieure</i>              | 6) AvH – <i>Alexander von Humboldt Foundation</i>         |

### • Reviewer<sup>3</sup> in the following international scientific journals:

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| 1) <i>Journal of Sound and Vibration</i> , Elsevier                              | 16) <i>Tribology International</i> , Elsevier,         |
| 2) <i>Communications in Nonlinear Science and Num. Simulations</i> , Elsevier    | 17) <i>Nonlinear Dynamics</i> , Springer               |
| 3) <i>Mechanical Systems and Signal Processing</i> , Elsevier                    | 18) <i>Journal of Vibration &amp; Acoustics</i> , ASME |
| 4) <i>International Journal of Bifurcation and Chaos</i> , World Scientific      | 19) <i>Journal of Vibration &amp; Control</i> , SAGE   |
| 5) <i>Mechanics Research Communications</i> , Elsevier                           | 20) <i>Advances in Fuzzy Systems</i> , Hindawi         |
| 6) <i>International Journal of Structural Integrity</i> , Emerald                | 21) <i>Measurement</i> , Elsevier                      |
| 7) <i>Journal of Mechanics Engineering and Automation</i> , David Publishing     | 22) <i>Lubrication Science</i> , Wiley                 |
| 8) <i>Journal of the Brazilian Society of Mech. Sciences and Eng.</i> , Springer | 23) <i>Lubricants</i> , MDPI                           |
| 9) <i>Official Journal of the Brazilian Academy of Sciences</i>                  | 24) <i>Acta Mechanica</i> , Springer                   |
| 10) <i>Journal of Mechanical Engineering Science</i> , SAGE                      | 25) <i>Shock &amp; Vibration</i> , Hindawi             |
| 11) <i>Aircraft Engineering and Aerospace Technology</i> , Emerald               | 26) <i>Applied Mathematical Modelling</i> , Elsevier   |
| 12) <i>Simulation Modelling Practice and Theory</i> , Elsevier                   | 27) <i>Int. Journal of Mech. Sciences</i> , Elsevier   |
| 13) <i>Industrial Lubrication and Tribology</i> , Emerald                        | 28) <i>Actuators</i> , MDPI                            |
| 14) <i>IMechE, Part C: Journal of Mechanical Engineering Science</i> , SAGE      | 29) <i>Energies</i> , MDPI                             |
| 15) <i>IMechE, Part E: Journal of Process Mechanical Engineering</i> , SAGE      | 30) <i>Journal of Tribology</i> , ASME                 |

### • Reviewer in the following international scientific conferences:

- 1) 9<sup>th</sup> 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) 10<sup>th</sup> IFToMM International Conference on Rotor Dynamics 2018, Rio de Janeiro (BR)

### • Reviewer in the following editorial housings:

- 1) Springer/Springer Brief series, NY, USA

<sup>3</sup>More than 80 reviews have been delivered since 2006

• **Reviewer** in the following research councils:

- 1) **UKRI-EPSC** UK Research & Innovation - Engineering and Physical Sciences Research Council, Associate Review College

• **Scientific member**

- 1) Industrial Committee for the **9th IFToMM** International Conference on Rotor Dynamics 2014, Milan (I)
- 2) Industrial Committee for the **10th IFToMM** International Conference on Rotor Dynamics 2018, Rio de Janeiro (BR)

• **PhD thesis examiner** of the thesis entitled 'Modelling and Model Reduction of Viscoelastic Composite Rotors: an Operator Based Approach', submitted from Saurabh Chandracker and supervised from Dr. Haraprasad Roy in National Institute of Technology Rourkela, Orissa, India.

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## 9. Awards

- (Apr. 2010) Research fellowship award for postdoctoral researchers, **Alexander Von Humboldt Foundation**
  - (Jun. 2004) Award from the **Technical Chamber of Greece** (TEE) for the excellence of studies in Mech. Eng.
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## 10. 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

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## 11. Further Training/Studies/Education & Interests

- (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 of drums, Municipal Conservatory of Patras, Patras 26221, Hellas
- (18 May 2009 – 18 Mar. 2010) Corporal of the Hellenic Army/Engineer Corps during the armed military service (obligatory for Greek citizens), specialized in minesweeping and destructions.
- Ancient Civilizations - Poetry/Literature (Ancient and Modern Greek) - Biography of Alexander the Great - History of the Greek Nation - Work and Biography of the Composer Mikis Theodorakis - Work and Biography of Nikola Tesla - Naval Architecture/ Engineering - Marine Diesel Engines - Mechanical Drawing without computer

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## 12. Recommendations

- 1) *Gilles Guignier* Manager IST Engineering, General Electric Oil & Gas, Rugby UK-CV212NH (2017)
- 2) *Nicolas Driot, PhD* Manager CSBPP, BorgWarner Turbosystems, Kirchheimbolanden DE-67292 (2014)
- 3) *Prof. Dr.-Ing. Richard Markert* Emeritus Professor in the Institute for Dynamics of Structures, Faculty of Mechanical Engineering, Technische Universität Darmstadt, Darmstadt DE-64287 (2014)
- 4) *Prof. Chris Papadopoulos, PhD* Head of Dept. of Mech. Eng. and Aer., University of Patras, Patras GR-26504 (2014)

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## 13. Publications, Reports, and Further Written Work

- **Books<sup>4</sup>**

- [B1] **A. Chasalevris**, Analytical Solutions in Journal Bearing Simulation with Rotordynamic Applications. Springer Brief Series, Springer, NYC (US) (Under Preparation, to be submitted by Dec 2018)
- [B2] **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** (citations : **554/** *h* index : **11**, <http://scholar.google.de/citations?user=T5e35TEAAAAJ&hl=de>)

- (full text available in [www.researchgate.net/profile/Athanasios\\_Chasalevris](http://www.researchgate.net/profile/Athanasios_Chasalevris))

- [J1] **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 2017: **0.996**), 0(0), pp. 1-21
- [J2] **A. Chasalevris** and **F. Dohnal**, Improving Stability and Operation of Turbine Rotors Using Adjustable Journal Bearings. *Tribology International* (IF 2016: **2.903**), 104, 2016, Pages 369-382, doi: 10.1016/j.triboint.2016.06.022
- [J3] **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 2016: **0.811**), Vol. 2016, 2016, Article ID 7817134
- [J4] **A. Chasalevris**, Finite Length Floating Ring Bearings: Operational Characteristics Using Analytical Methods. *Tribology International* (IF 2016: **2.903**), (94) 2016, pp. 571-590
- [J5]<sup>5</sup> **A. Chasalevris** and **F. Dohnal**, Enhancing Stability of Industrial Turbines Using Adjustable Partial Arc Bearings. *Journal of Physics: Conference Series* (IF 2016: **0.44**), 744 (2016) 012152, doi: 10.1088/1742-6596/744/1/012152
- [J6]<sup>5</sup> **A. Chasalevris** and **F. Dohnal**, Modal Interaction and Vibration Suppression in Industrial Turbines Using Adjustable Journal Bearings. *Journal of Physics: Conference Series* (IF 2016: **0.44**), 744 (2016) 012156, doi: 10.1088/1742-6596/744/1/012156
- [J7]<sup>5</sup> **F. Dohnal** and **A. Chasalevris**, Exploiting Modal Interaction During Run-Up of a Magnetically Supported Jeffcott Rotor. *Journal of Physics: Conference Series* (IF 2016: **0.44**), 744 (2016) 012128, doi: 10.1088/1742-6596/744/1/012128
- [J8] **A. Chasalevris**, Analytical Evaluation of the Static and Dynamic Characteristics of the Three-Lobe Bearing with Finite Length. *ASME Journal of Tribology* (IF 2015: **1.616**), 137, 2015 art. No. 041701-1.
- [J9] **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 2015: **4.116**),

<sup>4</sup> Book [B2] is PhD dissertation

<sup>5</sup> Journal papers [J5]-[J7] are the conference papers [C2]-[C4] published in *Journal of Physics: Conference Series*

- [J10] **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 2014: 1.813)*, 333 (7) 2014, pp. 2087-2099
- [J11] **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 2012: 1.268)*, 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 2013: 2.907)*, (57) 2013, pp. 216-234
- [J13] **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 2014: 0.730)* (former: Advances in Mechanical Engineering). 2 (5) 2014
- [J14] **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 2014: 0.617)*, 333 (7) 2014, pp. 2087-2099
- [J15] **A. Chasalevris** and **C. A. Papadopoulos**, A novel semi-analytical method for the dynamics of nonlinear rotor-bearing systems, *Mechanism and Machine Theory (IF 2014: 1.660)*, (72) 2014, pp. 39-59
- [J16] **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 2008: 1.364)*, 309 (3-5) 2008, pp. 507-528
- [J17] **A. Chasalevris** and **C. A. Papadopoulos**, Identification of multiple cracks in beams under bending. *Mechanical Systems and Signal Processing (IF 2006: 2.368)*, 20 (7) 2006, pp. 1631-1673
- [J18] **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 2009: 1.407)*, 44 (6) 2009, pp. 1176-1191.
- [J19] **D. Sfyris** and **A. Chasalevris**, An exact analytical solution of the Reynolds equation for the finite journal bearing. *Tribology International (IF 2012: 2.046)*, (55) 2012, pp. 46-58.
- [J20] **A. Chasalevris**, **F. Dohnal** and **I. Chatzisavvas**, Identification of the wear pattern in journal bearings using external excitation by a magnetic bearing. *Tribology International (IF 2014: 2.539)*, (71) 2014, pp. 158-167
- [J21] **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 2013: 1.147)*, 135 (1) 2013, art. No. 011008.
- [J22] **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 2008: 1.223)*, 86 (11-12) 2008, pp. 1318-1338
- [J23] **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 2010: 1.719)*, (89) 2010, pp. 55-66

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• **International Conference Proceedings** – Peer Reviewed in the entire manuscript (\*speaker)

- [C1] **A. Chasalevris\*** and **G. Guignier**, Real-Time Alignment and Operation Optimization of Turbine Shaft Trains Using Adjustable Bearings. *16<sup>th</sup> EDF/Prime Workshop, Futurescope (F)*, (October 2017)
- [C2] **A. Chasalevris\*** and **F. Dohnal**, Enhancing Stability of Industrial Turbines Using Adjustable Partial Arc Bearings. *13<sup>th</sup> Int. Conf. on Motion & Vib. Control - MOVIC & RASD 2016*, Southampton UK, (July 2016)
- [C3] **A. Chasalevris\*** and **F. Dohnal**, Modal Interaction and Vibration Suppression in Industrial Turbines Using Adjustable Journal Bearings. *13<sup>th</sup> Int. Conf. on Motion & Vib. Control - MOVIC & RASD 2016*, Southampton UK, (July 2016)
- [C4] **F. Dohnal\*** and **A. Chasalevris**, Exploiting Modal Interaction During Run-Up of a Magnetically Supported Jeffcott Rotor. *13<sup>th</sup> Int. Conf. on Motion & Vib. Control - MOVIC & RASD 2016*, Southampton UK, (July 2016)
- [C5] **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)
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- [C7] **A. Chasalevris\***, Evaluation of the Floating Ring Bearing Characteristics Using Analytical Methods. *IFTOMM International Conference on Engineering Vibration ICoEV2015*, Ljubljana, Slovenia (Sept. 2015)
- [C8] **F. Dohnal\*** and **A. Chasalevris**, Inducing modal interaction during run-up of a magnetically supported rotor. *13<sup>th</sup>*



- International Conference in Dynamical Systems Theory and Applications [DSTA 2015](#), Lodz, Poland (2015)
- [C9] **F. Dohnal\***, **B. Pfau** and **A. Chasalevris**, Analytical predictions of a flexible rotor in journal bearings with adjustable geometry to suppress bearing induced instabilities. 13<sup>th</sup> International Conference in Dynamical Systems Theory and Applications [DSTA 2015](#), Lodz, Poland (2015)
- [C10] **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)
- [C11] **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)
- [C12] **A. Chasalevris\*** and **F. Dohnal**, Experimental identification of wear in journal bearing using an active magnetic bearing. 10th International Conference on Vibration in Rotating Machines [SIRM 2013](#), Berlin, Germany (Feb. 2013)
- [C13] **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)
- [C15] **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)
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