

Abderrachid Hamrani

1. Name and academic rank:

Abderrachid Hamrani, Visiting Assistant Professor, Department of Mechanical and Materials Engineering

2. Education – degree, discipline, institution, year

Ph.D. Mechanical Engineering, Arts et Métiers Institute of Technology ParisTech, Paris, October 2016

M.S. Mechanical Engineering, Polytechnic Military School (EMP), Algiers, January 2010

B.S. Mechanical Engineering, University of Science and Technology (USTHB), Algiers, September 2007

3. Academic experience – institution, rank, title

10 Years

Visiting Assistant Professor, Mech. & Mater. Eng. Dept., FIU, USA, 2021-present

Postdoc Researcher, Bioresource Engineering Dept., McGill University, Canada, 2018-2020

Assistant Professor, Mech. Eng. Dept., University of Boumerdes, Algeria, 2012-2018

Researcher fellow, Center for Development of Advanced Technologies, Algeria, 2011-2012

4. Non-Academic experience:

Design engineer, Maghreb Truck Company Spa, 2008-2011

5. Certifications or professional registrations: N/A

6. Current membership in professional organizations: N/A

7. Honors and awards: N/A

8. Service activities (within and outside of the institution)

Reviewer for Journal of Advances in Applied Mathematics and Mechanics, Cambridge

University Press, Reviewer for International Journal of Rotating Machinery, Hindawi, Reviewer

for Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering

Tribology, SAGE. Conference organizing committee member: (28-29 Nov. 2018), International

Conference on Advanced Mechanics and Renewable Energies, UMBB, Algeria

9. Briefly list the most important publications and presentations from the past five years

- A. Hamrani, A. Akbarzadeh, C. A. Madramootoo, Machine Learning for Predicting Greenhouse Gas Emissions from Agricultural Soils", Science of The Total Environment, Elsevier (2020).
- B Manser, I Belaidi, A. Hamrani, S Khelladi, F Bakir, Texture shape effects on hydrodynamic journal bearing performances using mass-conserving numerical approach, Tribology - Materials, Surfaces and Interfaces, Taylor & Francis (2020).
- F.Z. Bouarab, H. Aknouche, A. Hamrani, A predictive model of the optimal tool edge geometry for veneer cutting processes", Machining Science and Technology, Taylor & Francis (2019).

- M. Aitchikh, i. Belaidi, A. Hamrani, S. Khelladi, f. Bakir, Coupling of inverse method and cuckoo search algorithm for multiobjective optimization design of an axial flow pump", Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, SAGE Publications (2019).
- B. Manser, I. Belaidi, A. Hamrani, S. Khelladi, F. Bakir, Performance of hydrodynamic journal bearing under the combined influence of textured surface and journal misalignment: a numerical survey", Comptes Rendus Mecanique, Elsevier (2019).
- A. Hamrani, S.H. Habib, I. Belaidi, CS-IGA: A new Cell-based Smoothed Isogeometric
- Analysis for 2D computational mechanics problems", Computer Methods in Applied Mechanics and Engineering, Elsevier (2017).

10. Briefly list the most recent professional development activities

- Attended professional session for the industry 4.0 Program at CRIQ, Quebec, Canada, 2020.
- Attended summer school industry 4.0 at ETS Montreal, Canada, 2019.