

Faculty Position Opportunity Pontifícia Universidade Católica do Paraná – PUCPR Mechanical Engineering

Curitiba, Brazil

This position covers special responsability for teaching and developing research activities in the Area of Solid Mechanics

Computational Solid Mechanics: Apply concepts and methods of computational mechanics to study typical problems of solid mechanics such as stress and strain analysis, structural dynamics and vibration, failure and fracture analysis, stability and structural analysis.

Vibration and Acoustics: studies on vibration control of machines and equipment, structural vibrations, modal analysis, vehicular dynamics, maintenance, machines noise and environmental acoustics.

PUCPR, established in 1959, is a private, non-profit catholic university (http://www.pucpr.br). The main campus is located in Curitiba, the capital city of the State of Paraná, Brazil. It is maintained by APC (Associação Paranaense de Cultura), which is an organization run by Marist Brothers. Curitiba campus was the first to be established and houses five academic schools: Polytechnic, Law, Medical, Humanities and Business School. The main buildings of the campus are the central library, which manages the integrated library system (ILS), research labs, classrooms and lecture hall, a 570-seat theater, a pilot plant, and a sports complex. There are more than 27,000 students in 60 undergraduate and over 150 postgraduate courses (latu sensu). Over 80% of the faculty owns a master's or a doctoral degree. There are 22 graduate programs, at master's and doctoral levels: Health Sciences, Law, Animal Science, Urban Management, Philosophy, Theology, Business Administration, Mechanical Engineering, Dental Health, Production Engineering, Education, Informatics and Health Technology.

PPGEM Mechanical Engineering Graduate Program started in 1999 (master's) and 2006 (doctorate). The areas of concentration are well consolidated: Materials and Fabrication, Solid Mechanics and Thermal Sciences and Engineering. Research lines with governmental and industry fundings include: Materials properties caracterization, Surface Engineering and Conventional and Non-Conventional Machining Technology; Computational Solid Mechanics, Vibration and Accoustics; Hygrothermal and Energetic Analysis of Buildings, Science and Technology in Transport Phenomena, Energetic Efficiency in Thermal Sciences. Current numbers: 13 permanent faculty members, more than 180 master's and doctorate theses completed and about 100 master's and doctorate students enrolled. Our goal and practice is to contribute with the future through strategic and sustainable research in mechanical engineering. PPGEM holds grade 6 granted by **CAPES - Coordination for the Improvement of Higher Level** Personnel (grades from 3 to 7) after its last evaluation. It represents a highly consolidated Program. This Federal Agency rules all the Graduate Programs in Brazil and it is subordinated to the Ministry of Education of Brazil.

Curitiba is the capital city of the state of Paraná. The city's population is over 1.7 million people. Curitiba is a cultural, political, and economic center, and it has one of the highest HDI of Brazil at 0.856. In 2010, Curitiba was awarded the Globe Sustainable City Award, given to cities and municipalities which excel in sustainable urban development around the world. According to *Reader-s Digest*, Curitiba is the best "Brazilian Big City" in which to live. More details at: http://www.curitiba.pr.gov.br/

The **Candidate** must hold a doctorate degree in Mechanical Engineering, or in a related field, and be specialized in computational solid mechanics and/or vibrations and acoustics. He or she must have authored articles, books and book chapters in high quality vehicles, must have experience in College or University teaching, and must have advised students at different levels of academic work. The candidate must also be part of research groups in Brazil and/or abroad, be fluent in English, have excellent communication skills, and have the ability to work in teams. Further, it is desirable that the candidate have some international academic experience, and a Scopus h-index 7 or higher.

Who are You?

You are able to document extensive qualifications in the described disciplines. In addition weight will be placed on ability to supervise and initiate research and development work. Pedagogical skills must also be documented. If you are not fully qualified the position may defined as a qualification fellowship for a certain period of time.

Why should you apply?

- Excellent and attractive working enviroment
- High relevance and working challenges
- Close cooperation with researchers in many fields
- Advanced laboratories

Other practical issues:

More information about the position, wages and application process you should refer to: <u>fred.amorim@pucpr.br</u> (Head of PPGEM).



Professorship Opportunity

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Curitiba, Brazil

The PUCPR University (http://www.pucpr.br)



The city of Curitiba

