



# University of São Paulo

## Polytechnic School of Engineering

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### Postdoctoral Research Opportunities at EPUSP

The Fracture Mechanics Research GROUP (NAMEF) of the Engineering School at the University of São Paulo (EPUSP) has openings for 2-year postdoctoral fellows with a strong background in fracture mechanics and computational modeling of materials starting from Feb/2020 to May/2020. We are looking for a highly motivated candidate. A strong interest in developing and using numerical modeling to solve real-world problems is key to success. Background in continuum mechanics, computational modeling, fracture mechanics, programming skills with Python, experience in code development and finite element analysis are desirable. Current R&D programs conducted at NAMEF focus on the development of robust procedures for integrity analyses of in-service structural components for the oil and gas industry, including specifically high pressure pipelines and submarine risers in deep water offshore fields in the Brazilian pre-salt area, and cover the following topics:

- *Ductile fracture and crack growth resistance behavior of pipeline girth welds*
- *Computational modeling of dissimilar girth welds for lined pipes*
- *Stress corrosion cracking in high strength steel alloys and weldments*

Eligible candidates must have received their Ph.D. degree within the past 10 years in Mechanical Engineering, Naval and Ocean Engineering, Metallurgical Engineering, Materials Science or related areas. Good command in spoken and written English is highly desirable. We look forward to receiving your application, single PDF file, containing the following documents: cover letter, full CV with contact details of two referees included, academic transcripts, and journal publications if available.

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