

Identification

Name: Joaquim António Oliveira de Barros

Date of birth: 1 October 1962

Nationality: Portuguese

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Academic degrees

- **PhD:** Structural Engineering by the Faculty of Engineering, University of Porto, Portugal, 1996.
Dissertation: "Behavior of fiber reinforced concrete. Experimental analysis and numerical simulation." (in Portuguese)
Fields of study: Experimental and numerical simulation of fiber reinforced concrete structures
- **MSc:** Structural Engineering by the Faculty of Engineering, University of Porto, Portugal, 1989.
Dissertation: "Models for the analysis of laminate and composite structures." (in Portuguese)
Fields of study: Numerical simulation of composite laminate structures
- **Graduation:** Civil Engineering by the Faculty of Engineering, University of Porto, Portugal, 1985

Employment

- Coordinator of the Laboratory of the Structural Division of the Department of Civil Engineering of Minho University since May 2002
- Assistant Professor of the Department of Civil Engineering of Minho University since March of 1996
- Assistant researcher of the Department of Civil Engineering of Minho University from October of 1988 to March of 1996
- Assistant researcher in training of the Physics Department of Beira Interior University, from September of 1985 to September of 1998

Main scientific area of research

- Characterization of materials of cement and polymeric matrix by experimental research, mainly, fiber reinforced concrete and concrete structures strengthened with composite materials
- Numerical models based on the finite element techniques for material and geometric nonlinear analysis of structures

Other scientific areas of interest

- Structural rehabilitation
- Models for soil-structure interaction
- Graphical software in oriented object programming in C++ language for pre- and post-process of the data and results from finite element programs

Publications

- 2 books
- 1 International Conference (editor of the proceedings)
- 1 National Conference (editor of the proceedings)
- 2 seminars (editor of the proceedings)

- 1 National Conference (member of executive commission)
- 14 articles published in International Journals
- 20 articles in National Journals
- 35 articles published in the proceedings of International Conferences
- 68 articles published in the proceedings of National Conferences
- 3 invited articles for International Conferences
- 51 technical, scientific and pedagogic reports

Other relevant technical and scientific activities

- Co-author of professional software for analyzing and designing structures based on the finite element method
- Author of software to material and geometrical non-linear analysis of concrete and composite material structures
- Participation on the development of three servo-controlled equipments for experimental testing
- Professor on post-graduation courses for Civil Engineers
- Participation on 37 International and National Conferences with oral presentations
- Supervisor of 1 Pos-Doc, 7 PhD Students and 11 MSc Students on the domains of experimental and numerical simulation of concrete structures and structures strengthened with composite materials
- Reviewer of articles for 8 International Journals and 3 National Journals
- Reviewer of several articles for National and International Conferences
- Member of the RILEM Committee TC 162-TDF
- Voting Member of the ACI Committee 544
- Voting Member of the ACI Committee 506
- Associate Member of the ACI Committee 440
- Given lectures in several International and National Institutions
- Coordinator of 2 research projects supported by the Portuguese Foundation of Scientific and Technical research (FCT), 2 projects of I&D with the Industry, 1 CRAFT project, 1 ADI project
- Member of the organization of 1 International Conference
- Member of the organizations of 2 National Conferences
- Organized 2 Seminars
- Member of 11 Scientific Technical committees of International and National Conferences
- Consulting on the areas of steel fiber reinforced concrete structures and on the structural rehabilitation and strengthening
- Set a laboratory for a private Company