
# Jorge Pereira Gomes

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## Professional summary

In 1987 Jorge Gomes obtained the bachelor degree in civil engineering from Instituto Superior de Engenharia de Lisboa of Lisbon Polytechnic Institute (ISEL-IPL). Since 1990, is a Civil Engineer (structures), from Instituto Superior Técnico of the University of Lisbon (IST–UL).
In 1988 ingresses in Dams Department of LNEC with a research grant.
In 2006 he has obtained a doctoral degree in civil engineering form Universidade Federal do Rio de Janeiro (UFRJ) with the thesis “Experimental analysis of failure scenarios for concrete dams foundations. Static and dynamic tests" in Portuguese. In the same time has obtained de degree of Specialist in Concrete Dams form LNEC.
Since 2006 is Research Officer in Concrete Dams Department of LNEC

## Main areas of interest and activity

Area of specialization
- Experimental analysis.
- Physical modeling of concrete dams to study failure scenarios for static and dynamic loads.
- Numerical modeling for dam failure scenarios.
- Forced vibration tests to characterize the dynamic behavior of structures.
- Observation of seismic activity and response of concrete dams.
- Monitoring real structures subject to dynamic loads.
- Observation the structural response of concrete dams to vibrations caused by rock blasting.
- Study of the propagation of vibrations due to trains. Field tests and numerical modeling

Research interests
- Development the new experimental technologies to performed forced vibration tests in prototype
- Study the dynamic behaviour of concrete dams, to low-intensity action and seismic events supported by experimental and numerical methods.
- Interaction water structure in the study of the dynamic behaviour of concrete dams, supported by experimental and numerical methods.
- Effect of the reservoir level and temperature variation in the dynamic behaviour of dams.
- Study the variation of hydrodynamic pressures in the reservoir and in the dam during an earthquake.
- Study the propagation of vibrations caused by rock blasting and the effect on existing structures, mainly in concrete dams