

Inglés

Civil Engineer from the Universidad Politécnica de Madrid in 1986, he combined these studies with a degree in Physical Sciences at the Universidad Complutense de Madrid, which he finished in 1988.

In 1990 he received the Extraordinary Doctorate Award for his doctoral thesis at the Universidad Politécnica de Madrid, and in 1992 the Award for Scientific Work of a Professor under 35 years of age from the same institution. He also holds the Robert L'Hermite medal, awarded in 1994 by the International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM).

Since 2001 he has been Full Professor of Materials Science at the School of Civil Engineering in Madrid, where he works in the field of mechanical behaviour and modelling of biomaterials and biological fibres, and is head of the Biological Materials and Biomaterials Group of the Materials Science Department, as well as head of the Biomaterials and Regenerative Engineering Laboratory of the Center for Biomedical Technology (www.ctb.upm.es) of the Universidad Politécnica de Madrid, of which he has been director since 2016.

He is a member of the Ethics Committee of the Universidad Politécnica de Madrid (since 2008) and member of the Delegate Commission of the Instituto de Investigación Sanitaria Hospital Clínico San Carlos (IdISSC) (since 2016).

He has carried out more than forty research projects funded by competitive calls and has published more than two hundred scientific articles on mechanical properties and behaviour of materials. He has supervised twelve doctoral theses with the highest marks, four of which have received the Extraordinary Doctorate Award. He is co-author of 3 patents in exploitation by the biotechnology industry.

He has participated in numerous seminars and postgraduate courses, including those of the Menéndez Pelayo International University on Biological Structural Materials (2001) and Nano-biomaterials (2002), of which he was co-organiser. He has also given - among others - several courses on fracture mechanics, structural integrity and arterial tissue mechanics at the invitation of the National University of La Plata, the Favaloro University (Argentina) and the Catholic University of Peru.

Together with Prof. Manuel Elices Calafat, he coordinated the introduction, for the first time in Spain, of the Higher Degree in Materials Engineering at the Universidad Politécnica de Madrid, where he was Secretary in charge of academic management from 1995 to 2006. He has also been secretary of the Study Network of the Materials Engineering Degree of the National Agency for Quality Assessment and Accreditation, Spain (ANECA).

Professor Guinea has been a founding member and President of the Spanish Society of Structural Integrity (2002-2011). He is also a member of the Spanish Royal Society of Physics, and belongs to the Spanish Society of Materials, the European Structural Integrity Society (ESIS) and the International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM).