

JOSE F. FERNANDEZ SPAIN



Jose F. Fernandez is Professor in Materials Technology and Head of the Electroceramics Department at the Instituto de Ceramica y Vidrio, CSIC, Madrid, Spain. He is leader of the Ceramic for Smart System Group (CSS). He obtained his PhD in Physics in 1990 by the University Autonoma of Madrid.

Prof. Fernandez possesses a large experience in ceramic processing of functional ceramics which properties are based on complex micro and nanostructures. The research activities have crystallized in the development of several concepts in functional ceramics and nanotechnology as: surface modification of ceramic particle; grain boundaries engineering of semiconductor ceramics; sintering and tailoring of lead free piezoceramic; Confocal Raman Microscopy of ceramics; proximity effects in the nanoscale; dry nanodispersion of metal oxides; functionalization of traditional ceramics through nanotechnology; and unusual properties in nanostructured ceramics. His interests are focussed in the development of advanced ceramics to be integrated in smart systems. For this reason the knowledge transfer activities are intensively pursuit.

Is authored and co-authored over 215 peer-reviewed scientific publications, 42 invited talks and 19 filed patents (17 issued and among then 13 under exploitation) and the foundation of a spin-off company in functional micro-nanoparticles. He has supervised 13 Ph. D's and he has been Principal Investigator in 61 projects.

He served as secretary of the Third ECERS Conference held in Madrid 1993. The main responsibilities in the Spanish Ceramic Society were Basic Science division secretary (1992-96) and former president of the Electroceramic division (1998-2004). In 1996 and 1999 received the Gold-Alfa Award of the Spanish Ceramic Society for technological achievements.