

Departamento de Física Aplicada

José Antonio Ruiz López

Jose Antonio Ruiz-Lopez works as Postdoctoral Researcher funded by the Andalusian government in the Department of Applied Physics of the University of Granada (UGR), In 2010, he obtained his BSc. in Physics and, in 2011, his MSc. in Science and Technology of Colloids and Interfaces in the UGR. He got a "Formación de Profesorado Universitario (FPU)" fellowship in 2011 to study his PhD. in the Department of Applied Physics in the UGR, graduating in 2015 with a PhD. thesis titled "Squeeze Flow and Polydispersity Effects in Magnetorehology". He also obtained the "Extraordinary Doctoral Thesis Award" for his thesis in Sciences.

From 2016, he got several postdoctoral positions to develop his research career. In 2016-2019 he works as Research Associate in the University of Strathclyde, Glasgow, in a project dealing with high-solid-content dispersions. In 2020 he carried out a simulation project in suspension rheology and artificial intelligence in the Basque Centre for Applied Mathematics (BCAM) in Bilbao. From 2021, he came back to the UGR as a postdoctoral researcher.

He has taught several subjects in the Physics degree in the UGR as Numerical Methods or General Physics II and also Physics II: Physical Fundaments for Engineers in the Construction Degree. In the University of Strathclyde, he taught Chemical Engineering Practice 1 and Fluid Flow and heat transfer in the Chemical Engineering degree. He also participated in several outreach programs as Young Chemical Ambassador and ReallySmallScience, for which he obtained the Strathclyde Medal Award in 2019.

Jose Antonio Ruiz-Lopez research interests has been focused on the rheology of suspensions, especially magnetic suspensions. His research carries out experimental studies as well as numerical simulations and theoretical analysis. His current research lines are: 1) Highly-concentrated colloids subjected to strong friction and hydrodynamic interactions; 2) Shear-thickening colloids with Carbonyl Iron with a silica or starch Shell and 3) Extensional flows in thickening fluids under magnetic fields.