

# Harold S. Ruiz



Dr. Harold Ruiz is the Director of Electrical Engineering at the University of Leicester in the UK and since 2016 the Head of its Energy Systems and Superconducting Materials Research Group, bringing together the cryogenics facilities at the Space Park Leicester (the largest space center in the UK), and the extensive computational facilities of the University of Leicester. He received his diploma in Physics in 2004, and since then he has been working on the low temperature physics and cryogenics of type-II superconductors. He holds a MSc in Condensed Matter Physics from the National University of Colombia (his home country), where he developed not only his passion for superconductivity but also for good coffee. He also holds a MSc in Physical Technologies for the use and designing of cryogenics systems, and a PhD in applied superconductivity from the University of Zaragoza in Spain. He worked for the cryogenics lab at the Center for Advanced Power Systems of the Florida State University, USA, before moving to the superconductivity labs of the Center for Advanced Photonics and Electronics systems of the University of Cambridge in the UK, between 2014-2015.

He has participated in about 10 research funded projects accounting for circa \$2.5M USD, all of them focused on diverse aspects of superconductivity and related cryogenics issues in the UK, US, and EU.

His research mostly focuses on the understanding of the microscopical and macroscopical mechanisms that govern the behavior of type-II superconductors at cryogenic temperatures, and on the minimization of the AC losses of these systems.

Being an ethnic minority with strong interest in the theoretical blocks that build our understanding of cryogenics and applied superconductivity, he aims to add a greater diversity and inclusivity to the board of CEC which could increase the reach of our conference.