Carlos Hidalgo is a highly experienced researcher and academic with a PhD in Physical Sciences from the Universidad Complutense de Madrid. Since 1986, he has worked as a researcher at the Laboratorio Nacional de Fusión (LNF) at CIEMAT, where he has focused on studying transport and turbulence in high-temperature plasmas. He has also held visiting scientist positions at a number of institutions around the world, including the Fusion Research Centre of the University of Texas, Oak Ridge National Laboratory, and the Max Planck Institute.

In addition to his research work, Hidalgo has held various leadership and coordination roles in the field of plasma physics. He has served as the Chair of the Plasma Physics Division of the European Physical Society (EPS), as well as the Chair of the Plasma Group of the Spanish Royal Physics Society. He is also the author of over 300 publications in international journals and has supervised PhD theses in plasma physics. Currently, Hidalgo serves as the Director of Laboratorio Nacional de Fusión (LNF) - CIEMAT and Chair of the Fusion Working Group of the EURATOM Scientific and Technical Committee.