

Sergio Busquets-Monge received the M.S. degree in electrical engineering and the Ph.D. degree in electronic engineering from the Universitat Politècnica de Catalunya (UPC), Barcelona, Spain, in 1999 and 2006, respectively, and the M.S. degree in electrical engineering from Virginia Polytechnic Institute and State University, Blacksburg, VA, USA, in 2001.

From 2001 to 2002, he was with Crown Audio, Inc. In 2005, he was awarded an Assistant Professor position with the Electronic Engineering Department, UPC. He was promoted to Associate Professor in 2007. Since 2023, he is Full Professor. In 2009, he was a Visiting Scholar at the Center for Power Electronics Systems, VPI&SU, VA, USA, and the Institute of Energy Technology, Aalborg University, Denmark. He has published more than 100 journal and conference papers in the fields of power electronics and industrial electronics. His current research interests include modular and scalable power converter design based on multilevel neutral-point-clamped topologies and electric vehicles.

Hugo Valderrama Blavi, with DNI 39691310A, associate professor since July 26, 2003, with 4 six-year terms of research, and 4 five-year teaching terms, with more than 6200 hours of class. Recently promoted to Full professor.

Area of knowledge, Systems Engineering and Automation. Accredited as a full professor by ANECA on June 3, 2022. Graduated in Telecommunications Engineering from the UPC, I obtained my PhD in February 2001, when I left for a one-year post-doctoral stay at LAAS-CNRS in Toulouse, France.

My research interests are: power electronics, DC and AC microgrids, multilevel inverters, renewable energies, especially photovoltaic solar energy and fuel cells, nonlinear control, electric vehicles.

I have published around 50 articles in indexed journals, more than 120 contributions to conferences, 5 supervised doctoral theses, and 2 more in the process of being read. I have directed 40 TFG and TFM, and I have been the PI (principal investigator) of 5 research projects of the ministry, and co-PI of two more.

I have organized two editions of the SAAEI (Annual Seminar on Automation and Industrial Electronics), in Tangier 2024, and in Lleida in 2022, and an Automation Conference in Tarragona in 2008. At the management level, I was responsible for the Master's Degree in Electric Vehicle Technologies for 3 years, and since February 25, 2022, I have been the director of the Electronic, Electrical and Automatic Engineering department.

Cristina Fernandez received her M.Sc. degree in Industrial Engineering and her Ph.D. degree in Electrical Engineering from the Polytechnic University of Madrid in 1998 and 2004, respectively. Her research focuses on the field of Power Electronics. In 2000 she was summer intern in the Research and Development Center of General Electric (USA). Since 2003 she has worked in the Department of Electronic Technology of the Carlos III University of Madrid, where she is associate professor. In 2016 she made a stay as visiting researcher at the Tyndall National Institute research center (Ireland). She has worked on 20 projects and 46 research contracts and is co-founder of a spin-off company targeting CAD for power electronics (PowerSmartCtrl). She has published 29 manuscripts in JCR-Indexed Journals and over 100 scientific papers at main international and national conferences. Her publications have more than 2,300 citations, with a h-index equal to 24 (Google Scholar).

She serves as Associate Editor for the IEEE Transactions on Power Electronics since 2013. She also served as Associate Editor for the IEEE Journal of Emerging and Selected Topics in Power Electronics since 2017 till 2024, and was awarded as STAR Associate Editor in 2019. Since 2008 till 2023 she was member of the Directive Board of the IEEE-PELS-IES Spanish Chapter, being elected chair in the period 2019-21. She is member of the Directive Board of the IEEE Education Spanish Chapter since 2016. From 2017 till 2022 she served as publication liaison and elected secretary of the Power and Control Core Technologies (TC1) of the IEEE Power Electronics Society (IEEE-PELS). She has been member of Technical Program Committees of international conferences in Power Electronics: IEEE COMPEL 2014, 2018 and 2022, and PwrSoc 2016.