

CV-Dr. Julio Castillo

I am graduated in Microbiology and obtained a master in Geology and Environmental Management (International University of Andalucía, Spain), as well as a second master in Instrumental Techniques in Chemistry (University of Huelva, Spain) and I am doctor in Applied Geomicrobiology by the International University of Andalucía and University of Huelva in 2013. In the same year, I moved to South Africa for a Post-doctoral researcher position in the SAENSE platform at Biotechnology department of the University of the Free State. Currently, I am appointed as Senior Research at the same University.

I have published 16 paper in indexed journals, 1 Book, 2 book chapters and 1 International patent (PCT/IB2015/056760) of a mine water treatment already installed in 5 mines. I received the International Award to the best research project in the area of science and technology by the University International of Andalucía in 2012. I have participated in 10 research International (e.g. H2020-ERAMIN, JPI among others)/national projects (ESKOM, EXXARO, among others) (Bioremediation and chemical and biological extraction of metals). I have authored 26 international proceedings and Abstracts. I am reviewer in 6 indexed journals (Water Research, Journal of Hazardous Materials, among others). Currently, I am main or co-supervisor of MSc (4) and PhD students (5) and I have previously collaborated in the training of several other under and post-grad students. I am lecturing Scientific methodology to honor students (equivalent to 4th year degree). I am skilled in biogeochemical process in water and soil, specialized in alkaline and acid mine drainages bio/remediation, community structure and function of biofilms and metal-microbe Interaction. In addition, I have had a strong background in using microscopy techniques (SEM-EDS-Fluorescence), mineralogical analyses (XRD, XRF and μ XRD and μ XRF at Synchrotron-LNLS) and geochemical analyses (ICP OES-MS, GC, HPLC), as well as, bioinformatics and molecular biology (DNA extraction, cloning and NGS). I have also knowledge of modeling software such as PhreeqC and the Geochemist's Workbench. My current network includes University of Huelva, Institute of Environmental Assessment and Water Research-Barcelona, Institut de Chimie Séparative de Marcoule-France, University of Applied Sciences Magdeburg-Stendal Water, Environment, Civil Engineering and Safety, State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences, Department of Life Science National Institute of Technology Rourkela, India, University of Calgary, Geosyntec Consultants Inc-USA, ESKOM, SOTH32, EXXARO, Schlumberger water services-Chile and University of Chile.