

Prof. Rachid AMROUSSE

Professor, Chouaib Doukkali University, Faculty of Sciences, Departement of Chemistry, El Jadida, Morocco

e obtained his Bachelor's degree in 2006 from University of Chouaib Doukkali, El Jadida, Morocco. He then pursued his studies at the University of Poitiers in France, where he earned his Master's degree in 2007. In 2010, Prof. Amrousse obtained his PhD degree from the University of Poitiers, collaborating with both the French space agency (CNES) and the Air Liquide Society. His doctoral research was centered on the topic of "The ignition of cold hydrogen-oxygen mixtures for satellite control reactions." Following his PhD, in 2011, he became a Research Associate at the Japan Aerospace Exploration Agency (JAXA), becoming the first foreign national to be recruited by JAXA. His research focuses on the development of high-energy materials and the exploration of catalysis as applied to space propulsion, encompassing areas such as thermal decomposition, combustion mechanisms, characterization, and stability. In 2016, Prof. Amrousse secured a competitive grant from the Japan Society for the Promotion of Science (JSPS) for a two-year project aimed at developing green propellant thrusters for reaction control systems, particularly for small satellites. During the same year, he also joined University of Chouaib Doukkali, El Jadida, Morocco, where he eventually attained the position of Associate Professor in 2020. Throughout his career, Prof. Amrousse has received numerous allowances and awards for his research endeavors. These accolades include the Poitou-Charentes Region's Allowance for his Master's degree, CNES's allowance for his PhD degree, recognition from the European Green Aerospace Propellant (GRASP) Project, acknowledgments from JAXA, and support from JSPS. He has authored over 60 peer-reviewed papers and proceedings and has delivered more than 80 presentations, including oral presentations, keynote speeches, and plenary lectures, all revolving around propellant-related topics. He is an active member of the Japan Explosives Society. Prof. Amrousse is also an avid contributor to academic journals, reviewing more than 25 papers annually for various journals related to catalysis and propulsion. He edited several special issues and co-edited recently a book titled recent advancements in green propulsion, published by Springer Nature in 2024 and two other books with IGI Global. His achievements have been recognized with awards for best presentations, but perhaps most notably, he was awarded the National Medal of Merit by King Mohammed VI of Morocco in 2016.