



Ronaldo S. Sampaio

Professor Sampaio has conducted important work in the Brazilian steelmaking industry. Born in Uberlandia city, Brazil, he graduated with the highest honors in Metallurgical Engineering at the Federal University of Minas Gerais, Brazil (July 1977) and obtained his master's degree there in 1981. In 1983, he began his post-graduation at Carnegie Mellon University, United States, obtaining his Masters in 1985 and PhD in 1990, both supervised by Prof. Dr. Richard Fruehan. His complimentary education focused on sustainable development, green production, business, and management, with an MBA in Economic Engineering. From 1977 to 1988, he held a professor position at Federal University of Minas Gerais in Extractive Metallurgy.

In his professional career, Dr. Sampaio worked in important Brazilian industries as a senior researcher of Vale and the VALE expert in New Ironmaking Technologies and Value-In-Use applications to sell Iron ore and Pellets, and CEO of a Vale division of magnetic ferrites. Since 1998, he has run his own consultancy company, RSConsultants Ltda, working with the charcoal making, ironmaking, ferrous alloy production, and steelmaking industries. He is a pioneer in Brazil for CO₂ emissions reduction in ferrous alloys, iron making, and steelmaking with the use of woody biomasses.

Dr. Sampaio has proven experience in training and retaining young engineering students for industry-ready skills. Through mentoring a team of engineering students, the EDP methodology became a sustainable tool to train and verify future engineers, benefitting the industry, students, and schools. Professor Sampaio has spent the last 22 years mentoring over 260 highly skilled professionals and staying updated with his major subjects related to the upstream of the iron, steel, and ferrous alloys industry technologies and fundamentals.

Dr. Sampaio has won eleven awards from the Brazilian Association of Materials, Metals, and Mining, including the Intendente Câmara Award for Innovation. Professor Sampaio has great scientific contributions. He has authored and co-authored more than one hundred papers and eleven books on themes that span from iron ore pelletizing, new ironmaking technologies, and steel refining to woody biomass to charcoal production. His thesis about atmospheric oxygen depletion must become part of the CO₂ equivalent IPCC accountability. His 29-year fight will bring justice to incentivize vectors for sustainable photosynthesis-based processes.

Dr. Sampaio has been the volunteer secretary-treasurer of the AIST Brazil Member's Chapter Office for more than 35 years (ISS previously). He is a constant presence at AISTech, making significant efforts to bring his group of trainees from the steel industry annually to attend the conference, present papers, participate in contests and increase their immersion into the global steel industry. He is the AIST 2016 Distinguished Member and Fellow.