

N. Ballal

N.Bharath Ballal is a process metallurgist specialising in iron and steel technology. He graduated from NITK (erstwhile KREC) and then did his Master's and Doctorate from IIT Kanpur. He taught at IIT Bombay for 40 years before superannuating, during which period he undertook projects for DRDO labs, Vikram Sarabhai Space Centre, several large steel companies like SAIL, Tata steel, etc. He has transferred technology (design, commissioning and support) for the Electro-Sag Refining process for making high quality steel, not only to several entrepreneurs, but also to VSSC for its alloy development effort for GSLV. An alloy was also developed at IIT Bombay for the PSLV rocket motor casing, which is a candidate alloy.

Dharampalji's book on 'Science & Technology in 18th century India' brought a focus to the scepticism and confusion of his early years, when dealing with indigenous practices and knowhow among people from a perspective of 'modern' science. This insight, with encouragement from friends at PPST at Chennai and elsewhere, led him and his students to reconstruct, study, and document the practice of smelting iron by the Agariyas, who are the traditional iron smelters of central/eastern India. The study resulted in a monograph on this technology of the Adivasis, who were still practising this 'art' *for a living* at the time of this study in the early nineteen nineties. The major take-away from this work was that one can learn and benefit from the study of any knowledge system only when you approach with humility towards its content and respect towards its practitioners.