

Abstract

Flow of solid material is often encountered in various process industries, namely, mineral, coal, food, pharmaceutical, cement, chemicals, etc. The unique characteristics of granular materials bring challenges at every stage of their handling and processing in these sectors. Therefore, appropriate understanding of solid flow is very much required for maintaining the down-stream material quality as well as for plant-wide process control. In this presentation, two different approaches of modeling granular systems will be discussed. This will be followed by several case studies on applications involving granular material.

Brief biography

Currently, Assistant Vice President and Head of Material and Mineral Division at Aditya Birla Science and Technology Co. Ltd., the Corporate R&D centre of Aditya Birla Group.

Ph.D., Metallurgical Engineering, University of Utah (1998)

M.Tech., Materials and Metallurgical Engineering, Indian Institute of Tech, Kanpur, India (1994)
B.E., Metallurgical Engineering, Visvesvaraya National Institute of Technology, Nagpur, India (1990)

Prior to Aditya Birla Group, Amlan worked in Tata Consultancy Services, James Hardie Building Product, University of Utah and Walchandnagar Industries Ltd.

More than 15 years of industrial experience with major focus on R&D. Experience includes product and process development, establishing technology strategies, developing new initiatives for businesses, technology management and leadership, and technical due diligence pertaining to M&A.

Areas of expertise include

- Particle technology
- Mineral processing
- Extractive metallurgy
- Cement based composite

Amlan has more than 20 publications in peer reviewed journals and international conferences and 3 granted US patents and several other patents are in application stage.