

Biography

Dr. Syamala R. Pulugurtha

Dr. Pulugurtha joined the Master's program at The University of Arkansas in Spring 2005. At that time she had an undergraduate degree in metallurgical engineering and had trained in the advanced characterization of materials in the field of surface engineering and laser processing (Advanced Research Center for Powder Metallurgy and New Materials, Hyderabad, India). Consequently she was offered a Graduate Research Assistantship by the Department of Mechanical Engineering to pursue research in the development of specialty coatings for the cutting tool industry. She graduated from University of Arkansas in 2007 and took up the position as a Process Engineer at IonBond Inc. Her work involved development of specialty coatings for automotive components and commercial products. She worked only briefly before undertaking a PhD program at Missouri S&T. As a part of her graduate research work, Dr Pulugurtha investigated functionally grading two commercially available aerospace alloys, Ti6Al4V and Inconel 625 which had the potential for wide spread applications in military, space heat exchangers and chemical processing. After completing her graduate school, Dr Pulugurtha joined Coronary and Structural Heart Division of Medtronic, Inc. in 2012 as a Sr. R&D Engineer. Since then, she has been actively applying her expertise in the field of materials science (including surface sciences and additive manufacturing) to multiple areas in the coronary and structural heart device space. She has published 4 journal articles during her MS program, and submitted a few articles from her PhD work recently. She is a reviewer for Journal of Surface Coatings and Technology, Additive Manufacturing and Magnesium Technology-TMS. She holds one US patent and has 5 patents that are pending in the field of additive manufacturing, alloy design and bioabsorbable coatings.

Abstracts

Title: An Overview of Biomedical Technology in Interventional Cardiology

Abstract:

Medtronic plc is a medical device company headquartered in Dublin, Ireland. Medtronic recently acquired Covidien in 2015 and became the world's largest medical technology only company. Medtronic is committed to improving the lives of people through the application of medical technologies. In this talk, the speaker will share with you the history of Medtronic, its expanded portfolio of innovative products and services that are impacting patients in a positive way around the world. The speaker will also provide an overview of cardiovascular disease state and some of the therapy products that she has had an opportunity to develop.

Title: Career Perspective

Abstract:

An informal presentation where the speaker will share her experiences from graduate school to working in industry.