## **Biodata**

Name	Dr. Raghu C. Reddy
Designation	Scientist E
Educational qualification	B.E. from National Institute of Technology, Surathkal M.Tech. from National Institute of Technology, Surathkal Ph.D from National Institute of Technology, Warangal
Research area	Hydro Metallurgy of Hafnium separation from Zirconium, Powder Metallurgy of Solder Powder atomization, Purification of Metals for electronics by vacuum distillation and zone refining, Nanomaterials for power storage applications.
Recognised Awards/Honors/Fellow	<ul> <li>Life Member of Indian Institute of Metals.</li> <li>Life Member of Powder Metallugy Association of India.</li> </ul>
Projects	Ongoing:
	<ol> <li>"Processing and Supply of Hafnium Metal Sponge to VSSC/ISRO for Space applications" with an outlay of Rs. 630 lakhs.</li> </ol>
Publications/Patents (Past 5 years)	<ul> <li>Conference Proceedings:</li> <li>"Solvent Extraction Process for the Production of 99% pure hafnium Oxide for NIOBAT-101 Alloy for Space Applications", Raghu C Reddy, T Praveen Kumar, V P Ashique Ali, B Suresh, M KishanChawan, K Mahesh, D Saidulu, B G Biswas, Angad Choudhary, Arbind Kumar and N R Munirathnam, 26<sup>th</sup> MRSI-AGM-2015, held during, 09-11 February, 2015, University of Rajasthan, Jaipur.</li> <li>"E-Waste Recycling Methods – A technological Perspective", K Sri Gowri, B Shiva, K SrinivasasVadayar, S Devaki Rani, M R P Reddy, Raghu C Reddy, and N R Munirathnam, 26<sup>th</sup> MRSI-AGM-2015, held during, 09-11 February, 2015, University of Rajasthan, Jaipur.</li> <li>"Nano Sized Metal Oxide Powders for Energy Storage Applications", Raghu C Reddy, R Narasimha Rao, N R Munirathnam, International Conference on Powder Metallurgy and particulate Materials, held during, 19-21 January, 2015, IIT, Mumbai.</li> <li>"Kinetics of Hafnium - Zirconium separation in solvent extraction using TBP", Raghu C. Reddy, Arbind Kumar, Munirathnam N.R., advances in refractory and reactive metals and alloys, held during 27 - 29 January, 2016 at Mumbai.</li> <li>"Wet Chemical Synthesis of Zirconium Oxychloride for High Temperature Coating Applications", Raghu C. Reddy, Swathi Chenna, Arbind Kumar, International Conference on</li> </ul>

- Advanced Materials and Processes for Defence Applications (ADMAT 2019), Hyderabad, September 23-25, 2019.
- "Preparation of Hafnium Oxide for Ultra High Temperature Applications", Raghu C. Reddy, ArbindKumar; International Conference on Advanced Thermostructural Materials & Thermal Protection Systems, (*ADTHERM*'20), Thiruvananthapuram, January 19 -21, 2020.
- "Preparation of Hafnium Sponge from Zirconium process raffinate solution for advanced Space Applications – an overview", Arbind Kumar, Rajesh Kumar, Raghu C. Reddy, Y Purushotham, International Conference on Advanced Materials and Processes for Defence Applications (ADMAT 2019), Hyderabad, September 23-25, 2019.
- "Processing of Silica free Zircon sand Using Alkali Fusion Method", Chenna Swathi, G. Prabhakar Reddy, International Conference on Purification and Recycling of Electronic Materials (ICPREM), Hyderabad, March8 10, 2020.

## **Book Chapters:**

'Synthesis and Fabrication of Nanomaterials, edited by V. Rajendran, et.al., Publisher, Bloomsbury ISBN 978-93-85436-76-5, B Shiva, Raghu C Reddy, K Sri Gowri, S Devaki Rani, K Srinivasa Vadayar, Arbind Kumar and N R Munirathnam.

## **Invited Lectures:**

- "Aluminium based Nano composites and its applications", at Sri Venkateswara College of Engineering and Technology (Autonomous), Chittoor on 15.10.2016
- "The Elements, Materials for Sensors and 3D Printing", at Digital India in Global IT Spectrum (DIGITS 2017), an International conference held at Visakhapatnam on 25.02.2017
- "Role of Metallurgical Industry in National Development" at IIIT, Nuzvid, AP on 14.11.2017 as a part of National Metallurgists Day celebrations.
- "Indigenization of Hafnium for Space and Atomic Energy Applications - from Ore to Metal", at JNTU, Hyderabad on 28.09.2018
- "Recovery of Rare Metals from Zirconium Plant Effluents Waste to Wealth", at M/S Nava Bharat Ferroalloys, Paloncha, TS, on 06.10.2018
- "Role of Materials in Advancement of Technology" at National Institute of Technology (NIT), Raipur, September 20, 2019.
- "Ultra High Purification of Metals Electronics", at Bheemanna Khandre Institute of Technology, Bhalki, Karnataka, July 03, 2020.