

Malaviya National Institute of Technology Jaipur

Department of Metallurgical and Materials Engineering

Details of R & D Projects

Sl.No.	Project Title	Year	Amount in Lakhs	Funding Agency	Name of Project Investigation / coordinator(s)	Current Status
1.	Synthesis and environmental degradation study of multicomponent alloy for high temperature application	2014	16.15	BRNS Mumbai	Dr. Vinod Kumar	IP
2.	Development of MoSi ₂ heating rod element for high temperature furnace	2013	17.50	Naskar and Company, Kolkatta	Prof. UpenderPandel Prof. A. K. Bharagava Dr. V. K. Sharma Dr. Vinod Kumar	IP
3.	Ageing behavior study of Mg-Li Alloys	2013	15.95	MNIT Jaipur (Initiation grant)	Dr. Vinod Kumar	IP
4.	Synthesis and characterization of high entropy alloys	2013	17.86	DST New Delhi	Dr. Vinod Kumar	IP
5.	Iron Powder from Mill Scale	2013	0.3	TEQIP II	Prof. UpenderPandel MayuriNayak NikithaGade	IP
6.	Scale Marble Slurry in the Preparation of Building Material	2013	0.3	TEQIP II	Prof. UpenderPandel Akshita Jain PremlataRao RachiJhajharia Sarita Yadav	IP
7.	Improvement in the property of Magnesium Aluminum alloy for automobiles and aerospace applications	2013	1.00	TEQIP II	Prof. Ashok Sharma Amit Jain Anshul Jain Arun Sharma VipinDangi	IP
8.	Investigation of heat-transfer characteristic on nano-fluid in sub-cooled flow boiling	2012	17.00	BRNS	Dr. R. K. Duchaniya	IP
9.	Synthesis of ZnO-CdO nanocomposite for CO gas sensing	2012	00.11	DST Rajasthan	Dr. R. K. Duchaniya	IP
10.	Study of Metallurgical Aspects of Nitronic Steel for Under Water Part Applications	2012	28.80	Central Power Research Institute, Bangalore	Prof. Ashok Sharma Prof. C. P. Sharma	IP

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1.	Development of Equation of State of Al ₂ O ₃ and ZTA materials	2010	21.00	BRNS GAP-0219	Prof. S. K. Biswas	C
2.	Effect of Strain Induced Melt Activation (SIMA) Process on Microstructure and Properties of A356 Al Alloys	2010	00.90	UGC Networking Resource Centre for Materials IISc Bangalore	Prof. Ashok Sharma	C
3.	Non-Oxide Ceramic Based Advance Structural Materials for Application in Armors	2009	1450.00	CSIR Network NWP0029	Prof. S. K. Biswas	C
4.	Design and Fabrication Capabilities for Very High Frequency Microwave Tubes	2009	4500.00	CSIR Network NWP0024	Prof. S. K. Biswas	C
5.	Synthesis & Characterization of Nano-Crystalline Ni-p Coating on aluminium	2007	00.60	IE(I)	Prof. Ashok Sharma Dr. R. K. Duchaniya	C
6.	Supply of AlN Tiles	2007	01.66	Ordnance Factory, Medak	Prof. S. K. Biswas	C
7.	Development of discontinuously reinforced P/M aluminum composites for automotive & allied field	2006	14.00	MHRD	Prof. P.R. Soni Dr. Munan Mandira	C
8.	To study the effect of Al-Ti-C Master Alloys on Grain Refinement Microstructure and Properties of Aluminium Foundry Alloys	2005	10.00	MHRD	Prof. Ashok Sharma	C
9.	MODROB project for	2005	07.00	MHRD	Dr.Munan Mandira	C

	modernization corrosion laboratory					
10.	Modernization of Powder Metallurgy laboratory	2005	10.00	MHRD	Prof. P.R. Soni	C
11.	RUIDP Projects work	2005	00.20	Asian Techs Ltd., Jaipur	Prof. Upender Pandel	C
12.	Development of Aluminium-3%Titanium-0.15% Carbon Grain Refiner for Cast Aluminium-Silicon Alloys	2004	00.20	IIF, National R&D Centre, Hyderabad	Prof. Ashok Sharma	C
13.	Development of Aluminium-Titanium-Carbon Master alloy for the Grain Refiner of Cast Aluminium-Silicon Base Alloys	2004	00.30 lakhs	Institution of Engineers (India), R&D project	Prof. Ashok Sharma	C
14.	Materials Selection for various Products and Solutions to other problems	2004	02.50	Sree Power Project/Sree Cement, Beawar	Prof. A. K. Bhargava Dr. Y.V.S.S. Parsad	C
15.	Development of lab for advance coating by Plasma and Laser techniques,	2002	09.00	MHRD	Prof. Upender Pandel	C
16.	Quality Upgradation of Aluminium Base Materials by Surface Treatment	2001	06.00	MHRD	Prof. Ashok Sharma	C
17.	Preparation and Densification of AlN powder	2001	33.00	DST	Prof. S. K. Biswas	C
18.	Development of high strength Al-base alloys	2000	00.30	IIF, National R&D Centre, Bangalore	Prof. Ashok Sharma	C
19.	Development of AlN armor tiles	2000	14.00	DRDO	Prof. S. K. Biswas	C
20.	Study of tribological behavior of cast aluminium	2000	00.60	MHRD	Prof. Ashok Sharma	C

	base alloys					
21.	Development and Characterization of Continuous casting mould fluxes	2000	05.00	AICTE	Prof. Upender Pandel	C
22.	Microwave as a probe to Estimate Metal in its Ore through the Study of Particulate Behavior of Basic Electronic Materials	1997	02.88	DST, Rajasthan	Prof. Upender Pandel	C
23.	Development of Al alloys	1988	0.30	UGC	Prof. P. R. Soni	C
24.	Matte-Slag Interaction and Copper losses during Flash Smelting	1987	11.98	Hindustan Copper Limited, Khetri	Prof. Upender Pandel Prof. H.N.Dharwadkar	C
25.	R&D project on development & characterization of continuous casting mould fluxes		05.00	AICTE	Dr. Munan Mandira	C

IP:- In Progress

C:-Completed