ANNUAL REPORT FOR ACADEMIC YEAR 2021-22

Department of Metallurgy and Materials Science

❖ MEMBERSHIPS TO SOCIETIES/ PROFESSIONAL BODIES

> Individual Membership

Name of Society/ Professional Body	Name of Faculty Member/s			
Department of Metallurgy and Materials Science				
IIM National Council Nomination	Dr. S. P. Butee			
INCERS National Council Member	Dr. S. P. Butee			
IIM Pune Chapter	Dr. V. S. Poddar			
Indian Institute of Metals Fellowship	Dr. N. B. Dhokey			
The Institute of Engineers (India) – IEI Fellowship 2021-22	Dr. N. B. Dhokey			
INCERS National Council Member	Dr. S. P. Butee			
Indian Institute of Welding	Prof. M. J. Rathod			
mulan motitute of welding	Dr. A. M. More			

> Institute level Membership

Sr. No.	Name of the Professional Body/ Student's Chapter	Name of the Department Coordinating the activities	Name of the Faculty Coordinator
1	ALUCAST MEMBERSHIP FOR COEP	Metallurgy and Materials Science	Prof. V. T. Thavale
2	INCERS National	Metallurgy and Materials	Dr. S. P.
	Council Member	Science	Butee
3	IIM Pune Chapter,	Metallurgy and Materials	Dr. V. S.
	Vice Chairman	Science	Poddar

NATIONAL / INTERNATIONAL CONFERENCES / SEMINARS / SYMPOSIA / WORKSHOPS ATTENDED DURING LAST ACADEMIC YEAR.

SUMMARY

Name of Department	No. of National Conferences Attended	No. of International Conferences Attended	No. of Workshop/ seminars Attended	No. of Refresher Courses/ STTP Attended	Total
Department of Metallurgy and Materials Science	0	7	1		
Total					

	INTERNATION	AL CONFERENCE A	ATTENDED	·
Sr. No.	Name of the Conference	Name of the Faculty	Period (DD-MM-YYY)	Venue
Depai	rtment of Metallurgy and Material S	Science		
1	Advances in Mechanical Engineering and Material Science (ICAMEMS-2022), VIT- AP University	S T Vagge, S Ghogare	22-24 Jan 2022	Online presented
2	International conference on Material Science and Manufacturing Engineering (ICMSME-2021) held at Shakti Institute of Engg. &Tech.Coimbatore	S T Vagge, P. Purohit	10-11 Dec21	Online presented
3	International conference on Advanced Materials and Mechanical Characterization (ICAMMC2021), SRM Institute	S T Vagge, A S Mali	2-4 Dec21	Online presented
4	International conference on Advanced Materials and Mechanical Characterization (ICAMMC2021), SRM Institute	S T Vagge, A R Patil	2-4 Dec21	Online presented
5	International conference on Advanced Materials and Mechanical Characterization (ICAMMC2021), SRM Institute	S T Vagge, S R Gade	2-4 Dec21	Online presented

6	CORCON 2021, NACE International Gateway India section,	S T Vagge, A R Patil	18-20 Nov21	Online presented
7	NMD ATM 2021, Jamshedpur,	S T Vagge, A R Patil	14-15 Nov21	Online presented

	WORKSHOPS ATTENDED					
Sr.	Name of the Conference	Name of the	Period	Venue		
No.		Faculty	(DD-MM-YYY)			
Depai	rtment of	•				
1	FDP: Industry 4.0 preparedness of academia to meet challenges	S T Vagge	28-02-2022 to 05-03-2022	Online mode, WCE Sangli		

❖ NATIONAL / INTERNATIONAL CONFERENCES / SEMINARS / SYMPOSIA / WORKSHOPS ORGANIZED DURING LAST ACADEMIC YEAR.

		SUMMARY			
Name of Department	No. of National Conferences Organized	No. of International Conferences Organized	No. of Workshop/ seminars Organized	No. of Refresher Courses/ STTP Organized	Total
Department of					
Total		1	2		3

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	INTERNATIONAL CONFERENCE ORGANIZED						
Sr.	Name of the Conference	Name of the Faculty	Period	Venue			
No.			(DD-MM-YYY)				
Depart	ment of						
1	Int. Conference on Powder	Dr N B Dhokey	18-20April2022	Digital			
	Metallurgy			platform			

	WORKSHOPS/ SEMINARS ORGANIZED					
Sr.	Name of the Conference	Name of the Faculty	Period	Venue		
No.			(DD-MM-YYY)			
Depar	tment of					
1	AICTE ATAL online FDP in Future skill technology on 3D printing and design	Prof. S. P. Butee, Mr. Appasaheb Pacharne	29 th Nov 3 rd Dec. 2021	Online		
2	PM Short course	Dr S P Butee, Dr V Poddar, Dr N B Dhokey	25-28 Sept 2021	Digital platform		

❖ RESEARCH & DEVELOPMENT ACTIVITIES

Sr.	Name of		Summary of F	Total		
No.	Department	National Journal	Internation al Journal	National Conference	International Conference	
	Total		45			

PUB	LICATIONS IN INTERNATIONAL	JOURNALS		
Sr. No.	Title of the Paper	Authors	Publication Details/Vol.No.	National/ Internatio nal
Depa	artment of			
1	Synthesis and characterization of NiO/ZnO composite prepared by solid-state reaction method	Mahajan, A., Deshpande, P., Butee, S.	Materials Today: Proceedings, 50, pp. 1912-1917, 2021	Internation al
2	Effect of in situ formation of tungsten semicarbide on the microstructure and mechanical properties of medium carbon steel composites	Soni, N.G., Mahajan, A.G., Kambale, K.R., Butee, S.P.	Metallurgical Research and Technology 118(6),606, 2021	Internation al
3	Microstructural aspects of tensile strength, toughness, and wear for 34crmo4 steel	Thakare, A.S., Butee,	Materials Today: Proceedings, 43, pp. 2985-2992, 2021	Internation al

		S.P., Kambale, K.R.		
4	Improved process for synthesizing n-type and p-type b-fesi2 thermoelectric material from attritor milled powder	Poddar, V.S., Dhokey, N.B., Butee, S.P., (), Purohit, R.D., Sinha, R.K	Materials Today: Proceedings, 43, pp. 3156-3160, 2021	Internation al
5	Numerical Modeling Simulation and Experimental Study of Dynamic Particle Bed Counter Current Reactor and Its Effect on Solid–Gas Reduction Reaction	Jikar, P.C., Dhokey, N.B., Shinde, S.S.	Mining, Metallurgy and Exploration, 39(1), pp. 139-152, 2022	Internation al
6	Study of synergy between photovoltaic, thermoelectric and direct evaporative cooling system for improved performance	Poddar, V.S., Ranawade, V.A., Dhokey, N.B.	Renewable Energy, 182, pp. 817-826, 2022	Internation al
7	Effect of deep cryogenic treatment on corrosion behavior of AISI H13 die steel, open access	Shinde, T., Pruncu, C., Dhokey, N.B., Parau, A.C., Vladescu, A.	Materials Today: Proceedings, 14(24),7863, 2021	Internation al
8	Fabrication of Pure Aluminium Reinforced Graphene Composite for Heat Sink Applications, open access	Pillai, K.V., Nerpagar, V.V., Dhokey, N.B.	IOP Conference Series:Earth and Environmental Science, 795(1),012002, 2021	Internation al
9	Evaluation of Thermoelectric Properties of Doped β-Iron Disilicide Prepared by the Powder Metallurgy Technique	Poddar, V.S., Dhokey, N.B.	Transactions of the Indian, Institute of Metals, 74(2), pp. 399-410, 2021	Internation al
10	Overview on Hardfacing Processes, Materials and Applications	Garbade, R.R., Dhokey, N.B.	IOP Conference Series: Materials Science and Engineering, 1017(1),012033, 2021.	Internation al

11	Effect of tempering and cryogenic treatment on wear and mechanical properties of hot work tool steel (h13)	Dhokey, N.B., Maske, S.S., Ghosh, P.	Materials Today: Proceedings, 43, pp. 3006-3013, 2021	Internation al
12	Transition in wear behavior and mechanical properties of novel high nitrogen martensitic steel in cryogenic temperature regimes	Dhokey, N.B., Upadhye, A., Shah, N., Tharian, K.T.	Materials Today: Proceedings, 43, pp. 3023-3029, 2021	Internation al
13	Dimensionless model and performance analysis of low temperature thermoelectric materials	Chandra, V., Balasinorwala, T., Dhokey, N.B.	Materials Today: Proceedings, 43, pp. 3161-3165, 2021	Internation al
14	Improved process for synthesizing n-type and p-type b-fesi2 thermoelectric material from attritor milled powder	Poddar, V.S., Dhokey, N.B., Butee, S.P., (), Purohit, R.D., Sinha, R.K.	Materials Today: Proceedings, 43, pp. 3156-3160, 2021	Internation al
15	A novel process for spheroidization of irregular shaped metallic powders	Runwal, J., Ambekar, R., Dhokey, N.B.	Powder Metallurgy, 64(1), pp. 1-7, 2021	Internation al
16	Influence of Intermediate Cryogenic Treatment on the Microstructural Transformation and Shift in Wear Mechanism in AISI D2 Steel	Dhokey, N.B., Thakur, C., Ghosh, P.	Tribology Transactions, 64(1), pp. 91-100, 2021	Internation al
17	Numerical investigation of galvanic corrosion between galvanized steel and mild steel in bolted joint	Kamble, P.A., Deshpande, P.P., Vagge, S.T.	Materials Today: Proceedings, 50, pp. 1923-1929, 2021	Internation al
18	Synthesis and processing of thermal barrier coatings with the use of YSZ, LTA and LTA/YSZ	Vagge, S.T., Pahurkar, A.B., Ghogare, S.B.	Materials Today: Proceedings, 48, pp. 1680-1689, 2021	Internation al

19	Tribological behaviour of LM25 hybrid metal matrix composites by using Taguchi's techniques	Mali, A.S., Vagge, S.T., Kolekar, A.	Materials Today: Proceedings, 50, pp. 1827-1834, 2021	Internation al
20	Investigation of Effects of Different Heat Treatment Cycles Combined with Quenching Partitioning Treatment on Mechanical Properties of High Carbon Spring Steel	Ranaware, P.G., Rathod, M.J., Dhorde, V.G.	Springer Proceedings in Materials, 12, pp. 213-220, 2022	Internation al
21	Analysis of Electrically Low-Profile Wideband Microwave Absorber for C Band Applications	Bathani, N.J., Rathod, J.M.	Progress In Electromagnetics Research M, 108, pp. 53-63, 108, pp. 53-63, 2022	Internation al
22	Design and Fabrication of Axially Corrugated Gaussian Profiled Horn Antenna	Sachaniya, P.D., Rathod, J.M., Mehta, U.	EAI/Springer Innovations in Communication and Computing, pp. 393-403, 2022	Internation al
23	IoT based wastewater spillage detection system	Patel, R., Prajapati, J., Dave, M., Joshi, I., Rathod, J.M.	Journal of Physics: Conference Series, 2007(1),012008, 2021	Internation al
24	Effect of gas nitrocarburizing post oxidation on electrochemical behaviour of AISI 4140 steel in neutral medium	Deshpande, S.S., Deshpande, P.P., Rathod, M.J.	Materials Today: Proceedings, 50, pp. 1979-1982, 2021	Internation al
25	A study of mobile ad hoc network and its performance optimization algorithm	Polara, V., Rathod, J.M.	Lecture Notes on Data Engineering and Communications Technologies, 66, pp. 131-142,2021	Internation al
26	Effect of milling parameters on emi shielding of the pes/mwcnt nanocomposites	Verma, R., Rathod, M.J., Goyal, R.K.	Materials Today: Proceedings, 43, pp. 3169-3172, 2021	Internation al
27	Evaluation of mechanical properties of cold roll bonded mild steel and aluminum	Poddar, V.S., Rathod, M.J.	Materials Today: Proceedings, 43, pp. 3014-3022, 2021	Internation al

28	Investigation of nanocrystallization behaviour of aisi 316 stainless steel under adiabatic and non-adiabatic severe plastic deformation conditions	Ranaware, P.G., Rathod, M.J., Bakare, C.	Materials Today: Proceedings, 43, pp. 3079-3084, 2021	Internation al
29	High-rate quasi-solid-state hybrid supercapacitor of hierarchical flowers of hydrated tungsten oxide nanosheets	Gupta, S.P., More, M.A., Late, D.J., Walke, P.S.	Electrochimica Acta, 366,137389, 2021	Internation al
30	Comparison of electrochemical response and electric field emission characteristics of pristine La2NiO4 and La2NiO4/CNT composites: Origin of multifunctionality with theoretical penetration by density functional theory	Karmakar, S., Mistari, C.D., Vaidyanathan, A., (), Chakraborty, B., Behera, D.	Electrochimica Acta, 369,137676, 2021	Internation al
31	Evolution of microstructure and texture in the third generation Al–Li alloy AA2195 during warm hybrid processing	Suresh, M., Kalsar, R., More, A.M., (), Nayan, N., Suwas, S.	Journal of Alloys and Compounds, 855,156750, 2021	Internation al
32	Field emission behaviour of hexagonal Sb2Te3 micron sized platelets of nanometric thickness	Bhopale, S.R., More, M.A.	AIP Conference Proceedings, 2335,080004, 2021	Internation al
33	Electrical characterization of pulsed laser deposited high-k HfO2 nanoparticles on tapered Cu2O anowires: promising cold cathode applications	Suryawanshi, S.R., Shisode, R.T., Jagtap, K.K., (), uryavanshi, S.S., More, M.A.	Journal of Materials Science: Materials in Electronics, 32(7), pp. 8440-8449,2021	Internation al
34	Highly ordered nano-tunnel structure of hydrated tungsten oxide nanorods for superior flexible quasi-solid-state hybrid supercapacitor	Gupta, S.P., More, M.A., Late, D.J., Walke, P.S.	Applied Surface Science, 545,149044, 2021	Internation al

35	Photo-enhanced field-emission behavior of CdSSe microflowers	Deore, A.B., More, M.A., Musmade, B.B., (), Chavan, P.G., Koinkar, P.M.	International Journal of Modern Physics B, 35(14-16),2140032,2021	Internation al
36	Controlled decoration of palladium (Pd) nanoparticles on graphene nanosheets and its superior field emission behavior	Dusane, P.R., Gavhane, D.S., Kolhe, P.S., (), More, M.A., Patil, S.I.	Materials Research Bulletin, 140,111335,2021	Internation al
37	Development of Nanocrystalline LaB Electron Emitters Processed Using Arc Thermal Plasma Route	Kamble, S.A., Bhopale, S.R., Ghorui, S., (), More, M.A., Mathe, V.L.	IEEE Transactions on Plasma Science, 49(8),9487001, pp. 2440-2451,2021	Internation al
38	Field emission applications of graphene-analogous two-dimensional materials: recent developments and future perspectives	Patra, A., More, M.A., Late, D.J., Rout, C.S.	Journal of Materials Chemistry C, 9(34), pp. 11059-11078	Internation al
39	Morphology-dependent field emission investigations from the 2- dimensional Bi2Se3-RGO nanocomposites	Bansode, S.R., Harpale, K.V., Mutadak, P., (), More, M.A., Sharma, R.B.	Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 274,115450, 2021	Internation al
40	Nanofibers of Palladium (Pd)- sensitized SnO2 Encapsulated with Polyaniline for Effective Hydrogen Gas Sensing	More, A.M., Kondawar, S.B., Dongre, S.P.	Jordan Journal of Physics 15(1), pp. 1-8, 2022	Internation al
41	Thermal plasma synthesized nano- powders of (LaCe)B6 starting from oxide-based precursors and its field electron emission performance	Kamble, S.A., Harpale, K., Nandi, A., (), More, M.A., Mathe, V.L.	Advanced Powder Technology, 33(4),103526, 2022	Internation al

42	Facile synthesis of nanocomposites of CNF-Sn and C-Sn microspheres: Prospective field emitter	Badadhe, S.S., Yadav, P., Suryawanshi, S.,	Journal of Alloys and Compounds, 907,164318,2022	Internation al
		More, M.A.		
43	Thermal Barrier Coatings: Review	S. T.Vagge, Suraj B. Ghogare	materials today: PROCEEDINGS (2022) In press	Internation al
44	Hot corrosion behaviour of Inconel 738 superalloy in presence of NaCl, Na2SO4, V2O5	Arpit R Patil, S T Vagge	materials today: PROCEEDINGS (2022) In press	Internation al
45	Chemical composition of Low Moor and Walker Company cannons in the Odisha State Maritime Museum, east coast of India	Sila Tripati,Rudra Prasad Behera, N. G.Rudraswami and P. p.Deshpande	CURRENT SCIENCE, VOL. 122, NO. 8, 25 APRIL 2022	Internation al

* BOOKS PUBLISHED

Sr. No.	Name of the Author	Title of the book	Name of the publisher	Month of Publication			
Depai	Department of						
1	Dr.P. P. Deshpande, Dr.V. S. Kathavate	Smart Coatings: Fundamentals, Developments and Applications	CRC Press, 2022	2022			

❖ PATENTS

Sr.	Faculty / Students	Title	Application No. &	Status
No.			Date	
Depar	tment of			
1.	Prof. N.B. Dhokey, Prakash Savant, Rajkumar Shelke	Provisional patent: 1884/mum/2012 dtd. 29/9/2012 entitled iron particles coated with	1884/mum/2012 dtd. 29/9/2012	Filed

2	Prof. M.J. Rathod, Dr. P.G. Ranaware	magnesium compounds, process for preparing these iron particles and uses thereof Provisionalpatent:4020/MU M/2015 dtd.25/10/2016 on A system and Method for Centrifugal Air Blast Shot peening	4020/MUM/2015 dtd.25/10/2016	Filled
3	Prof. N.B. Dhokey, Jay Runwal, Revati Ambekar	provisional patent: e-2/160/2020/mum dated: 21/01/2020: a mechanical grinding system and process of surface modification of irregular shaped powders		Filled
4	V.S. Poddar, V.A. Ranawade, N.B. Dhokey	Provisional Patent: E- 2/525/2022/MUM Dated: 01/04/2021: Synergy between Photovoltaic,Thermoelect ric and Direct Evaporative Cooling to Develop a Novel Hybrid Energy System		Filled
5	N.B. Dhokey, R. Garbade	Provisional Patent: A process for manufacturing improved iron-based hard facing alloy		Filled
6	M. J. Rathod, S. N. Ingole	Bimetallic Liner for shaped charge application		Filled

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SPONSORED RESEARCH PROJECTS

A. Research Projects Sponsored by Government Orgnanizations

Sr. No	Project Title	Co- Ordinator	Sponsorin g agency	Sancti oned Letter No. and Date	Amoun t (RS. in Lakhs)	Whether Ongoing/ Completed		
Dep	Department of							
1	To strengthen teaching and research facilities in all science departments of college	B. B. Ahuja and S P Butee	DST-FIST	16/Jan/ 18	150	Ongoing		
2	Synthesis and Characterization of LTA/YSZ Double Layer Thermal barrier Coating (TBC) and Their variants with respect to Their Corrosion and Oxidation Resistance MT/2017/DST- SERB/STV/172	S T Vagge	DST-SERB	14/Mar/ 18	33.845	Ongoing		
3	Synthesis, Design and Development of Al7075- 10% Cr composites	N B Dhokey	NRB-DRDO	2017	26.000	Ongoing		
4	Development of I ronbased austenitic Hard facing alloy forhigh temperature applications COEP/2018/NBD/IGCAR/174	N B Dhokey	IGCAR Kalapakka m	9/Jul/18	28.274			
5	Development of Aluminum Nitride and alumina based ceramics for high temperatureelectrical	K R Kambale	ISRO- UOP	31stJul y 2017	9.470			
6	Studies on microstructure and Mechanical Properties of En19 Steel for small arms gun barrel applications	N.B. Dhokey and V Poddar	ARDE- DRDO	Feb 2021	8.5			
				TOTAL				

Funde	d by Industry				
Depart	ment of				
1	To developtraining Lab at Metallurgy department	B. B. Ahuja and S P Butee	ALUCAST	Aug 2020	400
2	Installation of High PressureDie Casting	B. B. Ahuja and S P Butee	FORCE MOTORS	Jan 2020	100
				Total	
Funde	ed by TEQIP				
Depar	tment of				
1	A study on Piezoelectric properties of High Curie temperaturepiezoceramics	N B Dhokey and K Kambale	AICTE- MODROB	2019	11.00
2	High temperaturewear study of High Entropy Alloy	N B Dhokey and V S Poddar	AICTE-RPS	14 August 2020	12.533
				Total	

* MAJOR EQUIPMENT & FACILITIES

Sr. No.	Name of the Lab			Fa	cilities			
Depa	artment of							
1	Ceramic Processing	Tubular	Si-C	Furnace,	Jniversal	Test	ing	Machine,
	Laboratory	BETsurface	area,analyser	Jar	Mill,	Rotap	Sieve	Shaker
		Spray dryer,	Analystical W	eighing ba	alance Lab	oratory Ov	en, Si-C F	urnace
2	Surface Engineering	Gas Nitridin	g Furnace, Wi	re Flame	Thermal S	pray, Indu	ction Fur	nace, Drip
	Laboratory	Carburizing	Furnace, Fl	udized-be	d Nitridi	ng Furnac	e, Powd	ler Flame
		Thermal Spi	ray & Grit Bla	sting Mad	chine, Lase	er Machine	, X-Y Tal	ble, Muffle
		Furnaces (N	o. 4)					
3	Advanced Materials	Potentiostat	, Jasco - UV vis	ible Spect	rophotom	eter, FTIR S	Spectropl	notometer,
	Laboratory - Eaton	Adhesion Te	ester, Mould a	and Press	Assembly	, Interface	1000 Pc	otentiostat
	Sponsored	System, Thic	ckness Gauge,					

4	Powder Metallurgy	Attritor Mill, Hot Press Compaction Machine, Weighing Balance- Nos,
+	and Tribology	Weighing Balance-Nos, Powder Coating Apparatus, Fatigue Test Machine,
	Laboratory	Image Analyser, Digital Multimeter, Powder Compacting Machine, Muffle
		Furnace, Electroytic Polishing, Pin-On-Disc (magnum make), Low Speed
		Diamond Machine, Cryogenic System, MoSi2 sintering Furnace, Vacuum
		Sintering Furnace, Low Temperature Muffle Furnace, Sintering Furncae-I.
5	Polymer and Nano	Twin Screw Extruder, Thermogravimetric Analyser, DSC, Vaccum Oven, 7.5
	Composites	Digit Multimeter (Keithley, Germany), Plastic Injection Moulding, 2 Ton UTM
	Laboratory	- Polymer testing, Digital Source Meter (Tektronix Inc, USA), Electrometer/
		High Resistance Meter (Keithley, Germany), Dilatometer (V.B. Ceramics,
		Indra), 4 Points Probe Conducting Meter (Lucas Signatone, USA), Precision
		Impedance Analyser (Wayne - Kerr, UK), Hot Compaction M/C (Kimya Ind.,
		India), Melt Flow Index Tester, Izod Impact Tester
6	Computer Laboratory	HP Compac Pro 6300 Led Moniter Desktop 60 nos
	1	
7	Scanning Electron	FE -SEM + EDS
	Microscope	
	Laboratory	
8	Metallography and	Optical Microscope, Inverted Microscope, Optical Microscope with Image
	Image Analysis	Analyzer, Upright Microscope, Charpy, Hot Mounting Press, Automatic
		Polishing Machine, Stereo Microscope, Microhardness Tester, Inverted
		Microscope- Ziess.
9	Material Analysis	Analytical Balance (2 Nos), Strohlins Carbon Analyser, Electrogravimetric
	Laboratory	analyzer, Atomic Absorption Spectroscopy.
10	Mechanical Testing	Ericson Cupping, 60 T UTM, 10 T UTM, Vickers hardness tester, Brinell
	Laboratory	hardness tester, Rockwell hardness testers, Digital Charpy Impact testing
	2450140019	machine.
11	Manufacturing	Rolling Mill, Jaw crushers (2 No.), Rotary Swagger
''	Process Laboratory	Noming 1.m, jaw crushers (2 110.), Notary Swagger
12	<u>-</u>	Industion Europea Contribugal Costing machines (2 Nea) Mullon miner (2 lea
12	Foundry Laboratory	Induction Furnace, Centrifugal Casting machines (2 Nos.), Muller mixer (2 kg-
		5 kg), Sieve analysis set up, Shell moulding machine, Sand testing
		equipments: UTM, Permeability meter, Rapid moisture teller.
13	Corrosion and	Tubular High Temperature Furnace, Slow strain rate testing machine, Scratch
	Surface Protection	tester, Wear and Friction motor, potentiostat, galvanostat. Cyclic corrsion test
	Lab	
14	Material	XRD SEM
	Charatctrization	
	Laboratory	

❖ FACULTY DETAILS

No. of Professors- 04

No. of Asso. Professors- 00

No. of Asst. Professors- 06

No. of Adjunct. Professors- 03

No. of Professors Emeritus- 02

No. of Professors of Practice- 02

No. of newly appointed regular faculty- NIL

No. of faculty superannuated/ left - 05

No. of visiting faculty- 2

Sr. No.	Name of the Faculty	Highest Qualifica tion	Designation	Area of Interest
1	Dr. S. P. Butee	Ph.D.	Professor & Head	Electro-Ceramics, Characterization techniques
2	Dr. N. B. Dhokey	Ph.D.	Professor	Tribology, Powder metallurgy, Energy Materials, Soft Magnetic materials , Cryotreatment of materials
3	Dr. M. J. Rathod	Ph.D.	Professor	Material joining and Laser material processing
4	Dr. S. T. Vagge	Ph.D.	Professor	Corrosion and Surface Engg.
5	S. U. Dangrikar	Ph.D	Assistant Professor	Heat Treatment, Metal Working
6	Dr. P. P. Deshpande	Ph.D.	Adjunt Faculty	Conducting polymers and corrosion control of Steels
7	V. T. Thavale	Ph.D	Assistant Professor	Powder Metallurgy, Nuclear Materials, Foundry Technology
8	M. G. Kulthe	M.E. (Metallurg y)	Assistant Professor	Polymer matrix micro and nano composites
9	Dr. A. M. More	Ph.D	Assistant Professor	Physical Metallurgy, Metal Forming
10	K. R.Kamble	Ph.D	Assistant Professor	Ceramic processing, Electroceramics, ionic conductors, composite materials
11	Dr. S. B. Sarkar	Ph.D.	Emeritus Professor	Fatigue and Fracture Study, Advanced Steel Making
12	Dr. Madhu Ranjan	Ph.D.	Emeritus Professor	Forging Technology, Materials Joining, Metal Working

13	Dr. V. S. Poddar	Ph.D	Adjunt Faculty	Wire Tech, Electronic and Magnetic Materials, Materials Characterization
14	A.P. Pacharne	M.Tech	Adjunt Faculty	Heat treatment, Biomedical Materials, Wire drawing, Corrosion Protection
15	Ms. Amrapali Shinde	B.E.	Assistant Professor	Physical metallurgy, stress corrosion Cracking, Residual stresses and distrubtion
16	Dr. Bhanu Pant	Ph.D.	Professor of Practice	Aerospace materials, Green Energy and Materials Technologies for Electric Vehicles, Forging Technology.
17	Dr. Sambhaji Pawar	Ph.D.	Professor of Practice	Foundry Technology (Ferrous and Non- Ferrous)

❖ DETAILS OF SUBJECT CO-TAUGHT

Department	Name of the External Resource Person	Organization	Subjects Co Taught	Branch & Year	Duration (DD/MM/YYYY)
Metallurgy and Materials Science	Dr. Amit Bhattacharjee	Titanium Alloy Group, DMRL, Hyderabad, India	Development of high temperature and high strength Titanium alloys for aeronautical applications	T.Y. and Final year B.Tech	Friday, Augest 28, 2021
Metallurgy	Dr. R.N. Ghosh	INAE	Failure Analysis of engineering materials	T.Y.B.Tech	16/11/2021, 17/11/2021, 19/11 2021.
Metallurgy	Dr. R.N. Ghosh	INAE	Non destructive testing	T.Y.B.Tech	29/11/2021, 21/12/2021 31/12 2021.
Metallurgy	Dr. R.N. Ghosh	INAE	Failure Analysis of engineering materials	T.Y.B.Tech	26/03/2022, 02/04/2022, 13/04/2022.
Metallurgy	Dr. R.N. Ghosh	INAE	Non destructive testing	T.Y.B.Tech	29/03/2022, 10/04/2022, 12/04/2022.

❖ STUDENT'S RELATED ACTIVITIES/ PROGRAMMES ORGANIZED DURING LAST ACADEMIC YEAR.

Sr. No.	Name of the Programme	Name of the Faculty/ student coordinator	Period (DD-MM-YYY)	Venue	*	
Depart	Department of					
1	MetaVista 2022	Dr.V.S. Poddar, Prof.	6th- 78th April	COEP	*	
		S.P.Butee,	2022		*	

❖ DETAILS OF STUDENTS' INTERNSHIP PROGRAMME

Sr. No.	Name of the Student	Year (Sy/ Ty/ Final Year)	Name of the Organization where the students have done internship	Duration	Stipend received in Rs. (if applicable)
Depa	artment of				
1	ABHAY CHANDRAKANT KHADE	TY	DIAT, Pune	1 Month	
2	ADESH KIRAN GAIKWAD	TY	Siddhalaxmi Engg. Inds. Pvt. Ltd	1 Month	
3	ADITYA SANJAY YEOLE	TY	Unique Treatments	1 Month	
4	ANJALI KAILAS NAWKAR	TY	ANTS Ceramics	1 Month	
5	CHETANESHWARI JITENDRA NIVARGI	TY	DIAT, Pune	1 Month	
6	DHEKANE SHAUNAK	TY	Tata Motors	1 Month	
7	KOMAL SANDEEP PANDYA	TY	DIAT, Pune	1 Month	
8	KUSHAL SHRIKRUSHNA DEULKAR	TY	Bhat Metals	1 Month	
9	MADHURA ARVIND MAHAMUNI	TY	Aarsh Die Casting Pvt. Lmt., Exide battery	1 Month	
10	MAMTA MAHADEO WANKHADE	TY	ANTS Ceramics	1 Month	
11	MAYURI MOHAN WAKLE	TY	ANTS Ceramics, Kalyani Mexican	1 Month	

12	OM BHAGYESH GAWANDE	TY	kothari power system	1 Month
13	ONKAR PRASHANT JOSHI	TY	Swajit Engineering Pvt Ltd	1 Month
14	PRAFUL SUNIL KADAM	TY	Bartakke Electrofab Pvt Ltd	1 Month
15	RAGHAV SUJEET MUNDADA	TY	S N metallurgy services	1 Month
16	RUTUJA RAMDAS MISAL	TY	Kalyani maxion wheels, Chakan	1 Month
17	SAAD LIYAKAT JAMADAR	TY	rohit precision technologies pvt ltd	1 Month
18	SAHIL RAJESH KUSHARE	TY	ANTS-CERAMICS	1 Month
19	SAKSHI AMAR CHAVAN	TY	S B reshellers Pvt Ltd	1 Month
20	SHUBHAM NAMDEO KHATAL	TY	Orange city alloys	1 Month
21	SUYASH SUHAS DEULGAONKAR	TY	Bharat gears Ltd	1 Month
22	SWAPNIL PRALHAD PANCHDANE	TY	ANTS CERAMICS	1 Month
23	VAIDEHI VIPIN PAJAI	TY	SRJ Peety Steels Pvt. Ltd. Jalna	1 Month
24	VARAD PUSHKARAJ UDGIRKAR	TY		1 Month
25	VIDYA SATISH KADAM	TY	Aurangabad Foundries Pvt. LTD.	1 Month
26	YASHWARDHAN BALASAHEB PATHARE	TY	Forbes Marshall Pvt. Ltd., DIAT Pune	1 Month
27	ASHIK ANTO CHIRAMAL	TY	DIAT, Pune	1 Month
28	BHOSALE INDRANEEL SANJAY	TY	Sunflag Iron And Steel Co Ltd.	1 Month

29	CHANDORE MOHIT DEVENDRA	TY	Exide Battery, Chinchwad	1 Month	
30	HENDRE ATHARVA PRASHANT	TY	SMW ISPAT Pvt.Ltd.(Sangam Steels Group)	1 Month	
31	BHANDARI OM SANJAY	TY	Exide Battery, Chinchwad	1 Month	
32	MUTHIYAN VARUN RAKESH	TY	Exide Battery, Chinchwad	1 Month	
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> Details of COEP students gone to other universities/ institutes

Sr. No.	Name of the Student	Name of the University/ institute	Duration
1	Hrishikesh Deodhar	University of Wisconsin - Madison	
2	Mrudul Parasnis	University of Delaware	

❖ MAJOR ACHIEVEMENTS/ AWARDS/ RECOGNITIONS

> ON FACULTY FRONT

SI. No.	Name of the faculty who received Awards / recognition	State Level	National Level	International Level	Others			
Departi	Department of							
1	Prof. S.T. Vagge	"Best Teacher Award" from Pune University, in Feb 2022.						

> ON STUDENTS' FRONT

SI. No.	Name of the student/s who received Awards / recognition	State Level	National Level	Interna tional Level	Others
Depart	ment of				
1	Sanap Bharti Vasudev	Meta vista (Metallography)			IIM Pune chapter
2	Srushti Chormale	MetaVista(Metallo graphy)			Indian Institute of Metals Pune Chapter
3	SANDESH ARUN PATIL	ZEST'22 (Kabbaddi)			College of Engineering Pune
4	Shreyas Avinash Lahor	CP boat race			Boat club
5	Priyanshu Raghuwanshi	Rewarding Research Review			Indian Institute of Metals, Pune Chapter
6	Aryan Jain				
7	Shaunak Dhekane	2nd prize in English Essay Writing Competition	_		COEP Debate and Quiz Club