

## BIO-DATA



Name: - Dr. Ashish Bhalchandra Deoghare  
Present Post: - Associate Professor,  
Address for correspondence: - Department of Mechanical Engineering  
National Institute of Technology Silchar, Assam 788010  
Email(s) and contact number(s):- abdeoghare@mech.nits.ac.in, Mobile No:- 9373986998  
Institution: - National Institute of Technology Silchar  
Date of Birth: - 06 th November 1973  
Gender: - Male  
Category: - General  
Whether differently abled: - No  
Discipline: - Mechanical Engineering

### Educational Qualification details

Examination	Board/university	Year of passing	Division
SSC	M.S .Board	1989	First
HSSC	M.S.Board	1991	First
B.E (MECH.)	Nagpur University	1995	First
M.Tech.(MMD)	Nagpur University	2001	Dist.
Ph.D.	VNIT, Nagpur	(Awarded June 14,2011)	

PhD Thesis Title: - Integration of Medical Imaging Technique and Finite Element Method for Lumbar Spine Fusion Process,

Ph.D. Guided by Professor P. M. Padole, Department of Mechanical Engineering VNIT, Nagpur and PhD awarded on June 14, 2011 from VNIT, Nagpur.

### Work experience (in chronological order).

Sr. No	Name of Institute	Position Held	From	To	Pay details
1	National Institute of Technology Silchar	Associate Professor	06/07/2022	Till Date	Level 13A2 Basic Rs 152500.
2	National Institute of Technology Silchar	Assistant Professor	30/12/2014	05/07/2022	PB-3 15600-39100
3	Shri Ramdeobaba College of Engineering and Management, Nagpur	Assistant Professor	16/09/2014	27/12/2014	PB-3 15600-39100 AGP 8000
4	G.H.Raisoni College of Engineering, Nagpur	Professor	21/12/2011	15/09/2014	37400-67000 Basic 43000
5	St.Vincent Pallotti College of Engg. & Tech. Nagpur	Assistant Professor	01/07/2006	20/12/2011	PB-3 15600-39100

## Funded Project Details

Sr. No	Title of Project	Ref. Id	Project Team Members	Role	Amount in Rs	Duration
1	Capacity Building on Design and Entrepreneurship (CBDE)	Ministry of Education, Letter No. 1-9/2024-PN.II dated 21 Oct 2024	PI: Dr. Ashish B Deoghare PI: Dr. Wasim Arif Co-PI: Dr. J Prasanth Co-PI: Dr. Binoti Patra	PI	Rs. 42.06 lakhs (Rupees Forty-two lakhs six thousand)	Two Years
2	NIDHI-Inclusive Technology Business Incubator NIDHI i-TBI for Fostering Innovation and Entrepreneurship in North Eastern Region at M/S NITS FOUNDATION FOR INNOVATION AND ENTREPRENEURSHIP	Ministry of Science & Technology, Department of Science & Technology, Ref: 34/20/2023 (G) (Technology Translation and Innovation), Dated: 02/06/2025	PI: Prof. Fazal Ahmed Talukdar Co-PI: Dr. Wasim Arif Co-PI: Dr. Ashish B Deoghare	Co-PI	Rs. 3,20,58,000/- (Rupees Three Crore Twenty Lakh Fifty Eight Thousand only)	Three Years
3	Prediction of Mechanical Behavior of Materials Subjected to Fatigue	All India Council for Technical Education (AICTE) – New Delhi, India under RPS. Dt Feb 13, 2013	PI: Dr. Ashish B Deoghare	PI	Rs. 18 lakhs (Rupees Eighteen Lakh only)	Three Years

**Patents Details:**

S.No	Patent Title	Name of Applicant(s)/Inventors	Patent No. / Application No.	Award Date	Agency/Country	Status
1	Mobile Intravenous Drips	Ayush Singh Beruvar, Deoghare Ashish Bhalchandra, Sidda Lal Dayal Saran	201931011489	23/07/2024	India	Granted
2	Development of composite materials for efficient electromagnetic interference (EMI) shielding	Papari Das, Ashish Bhalchandra Deoghare, Saikat R. Maity	202231026923	29/05/2024	India	Granted
3	Development of composite materials reinforced with Kaolin clay and Boron Carbide for efficient compression and wear properties	Venkatesh Vavilada, Ashish Bhalchandra Deoghare	202231000158	07/09/2023	India	Granted
4	Development of composite bone scaffold from <i>Puntius conchoni</i> fish bone derived Hydroxyapatite	Payel Deb, Emon Barua, Sumit Das Lala, Ashish B. Deoghare	202031021533	04/08/2025	India	Granted
5	Development of composite material from oil extracted and alkali treated Cashewnut shells ( <i>Anacardium occidentale</i> )	Sumit Das Lala, Ashish B. Deoghare, Sushovan Chatterjee	201731007337	11/10/2022	India	Granted
6	Development of composite material from biodegradable cashew nut shell ( <i>Anacardium occidentale</i> )	Sumit Das Lala, Ashish B. Deoghare, Sushovan Chatterjee	201731007338	01/11/2021	India	Granted
7	Foot operated Tap	Ashutosh D. Bagde, Kishor K. Khandare, Dr. Ashish B. Deoghare	370685	30/06/2021	India	Granted
8	Development of composite bone scaffold using hydroxyapatite derived from Caprine bone bio-waste and Polylactic-co-glycolic acid (PLGA)	Emon Barua, Payel Deb, Sumit Das Lala, Ashish B. Deoghare	201931010903	03/06/2021	India	Granted

### Details of Research Scholars Completed PhD

Sr. No	Title of Thesis	Name of Scholar (Reg. No.)	Name of Supervisor / Jt. Supervisor	Ph.D. Awarded Date	Research Centre	University
1	Laser shock peening of Ti6Al4V alloy fabricated by laser directed energy deposition additive manufacturing	Sapam Ningthemba Singh (18-3-02-124)	Dr. Ashish B. Deoghare	14/03/2024	Department of Mechanical Engineering, NIT Silchar	NIT Silchar
2	Development of Graphene Based Polymer Composites for Efficient Electromagnetic Interference (EMI) Shielding	Papari Das (17-3-02-125)	Dr. Ashish B. Deoghare and Dr. Saikat R Maity	17/08/2022	Department of Mechanical Engineering, NIT Silchar	NIT Silchar
3	Mechanical and Tribological Study of Al-SiC-Kaoline Composite Fabricated Through Powder Metallurgy Technique	Mr. V S S Venkatesh (18-3-02-105)	Dr. Ashish B. Deoghare	26/07/2021	Department of Mechanical Engineering, NIT Silchar	NIT Silchar
4	Development and Characterization of Hydroxyapatite based Composite Bone Scaffold for Bone Tissue Engineering	Emon Barua (15-3-02-121)	Dr. Ashish B. Deoghare & Dr. Sushovan Chatterjee (Jt Supervisor), Cooch Behar Govt. Engg College, W Bengal	24/12/2020	Department of Mechanical Engineering, NIT Silchar	NIT Silchar
5	Synthesis of Hydroxyapatite from Fish scales to Develop Bone Scaffold	Payel Deb (15-3-02-103)	Dr. Ashish B. Deoghare	22/09/2020	Department of Mechanical Engineering, NIT Silchar	NIT Silchar
6	Influence of tolerance stack-up on Dynamics of mechanism	Chandrashekhar Arun Akhadkar	Dr. Ashish B. Deoghare & Dr. Adwait M Vaidya (Co-	31/01/2020	Department of Mechanical Engineering, G.H.	Rashtrasant Tukadoji

Sr. No	Title of Thesis	Name of Scholar (Reg. No.)	Name of Supervisor / Jt. Supervisor	Ph.D. Awarded Date	Research Centre	University
			Guide), Principal KVN College of Engg, Nashik		Raisoni College of Engg, Nagpur	Maharaj Nagpur University
7	Prediction of mechanical behaviour of Material subjected to fatigue	Ghanshyam Rameshchanda Boob	Dr. Ashish B. Deoghare	03/01/2020	Department of Mechanical Engineering, G.H. Raisoni College of Engg, Nagpur	Rashtrasant Tukadoji Maharaj Nagpur University
8	Development of bio-composite materials from Cashewnut, Rubber and Walnut seed shells	Sumit Das Lala (15-3-02-102)	Dr. Ashish B. Deoghare & Dr. Sushovan Chatterjee (Jt Supervisor), Cooch Behar Govt. Engg College, W Bengal	21/10/2019	Department of Mechanical Engineering, NIT Silchar	NIT Silchar

**Journal Publications (List of papers published in SCI Journals, in year wise descending order).**

No.	Author(s)	Title	Journal	Volume	Pages	Year	DOI
1	Sapam Ningthemba Singh, Ashish B. Deoghare	Deposition stability and enhanced microhardness of laser shock peened Ti6Al4V alloy manufactured by high layer thickness laser additive manufacturing	Manufacturing Letters	44	33–36	2025	<a href="https://doi.org/10.1016/j.mfglet.2025.03.004">10.1016/j.mfglet.2025.03.004</a>
2	Sapam Ningthemba Singh, Amdadul	Surface micro-cracks and microstructures of Ti6Al4V	Scientia Iranica	In Press	–	2024	<a href="https://doi.org/10.24200/sci.2024.64669.9069">10.24200/sci.2024.64669.9069</a>

No.	Author(s)	Title	Journal	Volume	Pages	Year	DOI
	Mahmun, Ashish B. Deoghare, Yadaiah Nirsanametla, Sohini Chowdhury	alloy fabricated by high-layer thickness multi-laser directed energy deposition additive manufacturing process					
3	Amdadul Mahmun, Sapam Ningthemba Singh, Ashish B. Deoghare	An investigation on purity enhancement through hydrofluoric acid treatment in graphite powder derived from coconut shell	Diamond and Related Materials	147	111358 (1-8)	2024	<a href="https://doi.org/10.1016/j.diamond.2024.111358">10.1016/j.diamond.2024.111358</a>
4	Sapam Ningthemba Singh, Ashish B. Deoghare	Enhanced fatigue performance of laser directed energy deposition fabricated Ti6Al4V alloy using laser shock peening	Procedia Structural Integrity	56	11–18	2024	<a href="https://doi.org/10.1016/j.prostr.2024.02.031">10.1016/j.prostr.2024.02.031</a>
5	Amdadul Mahmun, Ashish B. Deoghare	A comparative study on coconut shell-derived graphene oxide and reduced graphene oxide	Current Applied Physics	62	12–21	2024	<a href="https://doi.org/10.1016/j.cap.2024.03.009">10.1016/j.cap.2024.03.009</a>
6	Sapam Ningthemba Singh, Ashish B. Deoghare	Microstructure, microhardness, tensile and fatigue investigation on laser shock peened Ti6Al4V manufactured by high layer thickness directed energy deposition additive manufacturing	Optics & Laser Technology	177	111132 (1-11)	2024	<a href="https://doi.org/10.1016/j.optlastec.2024.111132">10.1016/j.optlastec.2024.111132</a>
7	Papari Das, Ashish B. Deoghare, Saikat Ranjan Maity	Enhanced Morphological, Mechanical and Dielectric Properties of Paraffin Wax	Diamond and Related Materials	139	110361 (1-12)	2023	<a href="https://doi.org/10.1016/j.diamond.2023.110361">10.1016/j.diamond.2023.110361</a>

No.	Author(s)	Title	Journal	Volume	Pages	Year	DOI
		Incorporated with Polyaniline (PANI) and Reduced Graphene Oxide (RGO) nanocomposites					
8	Sapam Ningthemba Singh, Ashish B. Deoghare	High layer thickness laser directed energy deposition of Ti6Al4V alloy: Microstructure, fatigue behavior and fractography	Engineering Failure Analysis	148	107208 (1-11)	2023	<a href="https://doi.org/10.1016/j.engfailanal.2023.107208">10.1016/j.engfailanal.2023.107208</a>
9	Payel Deb, Emon Barua, Ashish Bhalchandra Deoghare, Sumit Das Lala	Physico-Mechanical and Biological Analysis of Composite Bone Scaffold Developed from Catla catla Fish Scale Derived Hydroxyapatite for bone tissue engineering	Arabian Journal for Science and Engineering	49	27-41	2023	<a href="https://doi.org/10.1007/s13369-023-07872-z">10.1007/s13369-023-07872-z</a>
10	V.S.S. Venkatesh, Kalapala Prasad, Ashish B. Deoghare	Characterization of Microwave Sintered Aluminium Composite Reinforced with Hydroxyapatite Extracted from Rihu Fish Scales	Archives of Metallurgy and Materials	68(2)	617–624	2023	<a href="https://doi.org/10.24425/amm.2023.142442">10.24425/amm.2023.142442</a>
11	Sapam Ningthemba Singh, Ashish B. Deoghare	Microstructure, micro-hardness and tensile properties of Ti6Al4V manufactured by high layer-thickness wire-feed multi-laser directed energy deposition	Materials Letters	340	134207 (1-5)	2023	<a href="https://doi.org/10.1016/j.matlet.2023.134207">10.1016/j.matlet.2023.134207</a>

No.	Author(s)	Title	Journal	Volume	Pages	Year	DOI
12	Singh, Sapam Ningthemba, and Ashish B. Deoghare	Macro dimensional accuracy of Ti6Al4V parts manufactured by wire-feed high layer thickness continuous laser directed energy deposition	Journal of Laser Applications	35	012003 (1-12)	2023	<a href="https://doi.org/10.2351/7.0000870">10.2351/7.0000870</a>
13	Emon Barua, Apurba Das, Ashish Bhalchandra Deoghare, Payel Deb, Sumit Das Lala	Performance of ZnO incorporated HA/PMMA tri-component composite bone scaffolds fabricated from varying sources of HA	Journal of Materials Engineering and Performance	32	9649–9664	2023	<a href="https://doi.org/10.1007/s11665-022-07789-y">10.1007/s11665-022-07789-y</a>
14	Singh, S.N., Deoghare, A.B.	Laser Shock Peening of Laser Based Directed Energy Deposition and Powder Bed Fusion Additively Manufactured Parts: A Review	Metals and Materials International	29, Issue 6	1563-1585	2022	<a href="https://doi.org/10.1007/s12540-022-01334-1">10.1007/s12540-022-01334-1</a>
15	Sumit Das Lala, Emon Barua, Payel Deb, Ashish B. Deoghare, Sushovan Chatterjee	A comparative study on mechanical, physico-chemical and thermal properties of Rubber and Walnut seed shell reinforced epoxy composites and prominent timber species	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	237(5):	1165-1177.	2023	<a href="https://doi.org/10.1177/09544062221128528">10.1177/09544062221128528</a>
16	V.S.S. Venkatesh, Ashish B. Deoghare	Fabrication and mechanical behaviour of Al-Kaoline metal matrix composite fabricated through powder metallurgy technique	Materials Today: Proceedings	38	3291–3296	2021	<a href="https://doi.org/10.1016/j.matpr.2020.10.021">10.1016/j.matpr.2020.10.021</a>

No.	Author(s)	Title	Journal	Volume	Pages	Year	DOI
17	V.S.S. Venkatesh, Ashish B. Deoghare	Effect of controllable parameters on the tribological behaviour of ceramic particulate reinforced aluminium metal matrix composite: A review	Journal of Physics: Conference Series	1451	012025 (1-6)	2020	<a href="https://doi.org/10.1088/1742-6596/1451/1/012025">10.1088/1742-6596/1451/1/012025</a>
18	V.S.S. Venkatesh, Ashish B. Deoghare	Effect of microwave sintering on the mechanical characteristics of Al/Kaoline/SiC hybrid composite fabricated through powder metallurgy techniques	Materials Chemistry and Physics	287	126276 (1-11)	2022	<a href="https://doi.org/10.1016/j.matchemphys.2022.126276">10.1016/j.matchemphys.2022.126276</a>
19	V.S.S. Venkatesh, Ashish B. Deoghare	Effect of sintering mechanisms on the mechanical behaviour of SiC and Kaoline reinforced hybrid aluminium metal matrix composite fabricated through powder metallurgy technique	Silicon	14	5481-5493	2021	<a href="https://doi.org/10.1007/s12633-021-01333-8">10.1007/s12633-021-01333-8</a>

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year	DOI
20	Papari Das, Ashish B. Deoghare, Saikat Ranjan Maity	Synergistically improved thermal stability and electromagnetic interference shielding effectiveness (EMI SE) of in-situ synthesized polyaniline/Sulphur doped reduced graphene oxide (PANI/S-RGO) nanocomposites	Ceramics International	48 (8)	11031-11042	2022	<a href="https://doi.org/10.1016/j.ceramint.2021.12.323">10.1016/j.ceramint.2021.12.323</a>

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year	DOI
21	V.S.S. Venkatesh, Ashish B. Deoghare	Effect of Boron Carbide and Kaoline Reinforcements on the Microstructural and Mechanical Characteristics of Aluminium Hybrid Metal Matrix Composite Fabricated Through Powder Metallurgy Technique	Advances in Materials and Processing Technologies	8 (sup2)	1007–1028.	2021	<a href="https://doi.org/10.1080/2374068X.2021.1945314">10.1080/2374068X.2021.1945314</a>
22	Sapam Ningthemba Singh, Vavilada Satya Swamy Venkatesh, Ashish Bhalchandra Deoghare	A review on the role of 3D printing in the fight against COVID-19: safety and challenges	Rapid Prototyping Journal	27	407–420	2021	<a href="https://doi.org/10.1108/RPJ-08-2020-0198">10.1108/RPJ-08-2020-0198</a>
23	V.S.S. Venkatesh, Ashish B. Deoghare	Microstructural Characterization and Mechanical Behaviour of SiC and Kaoline Reinforced Aluminium Metal Matrix Composites Fabricated Through Powder Metallurgy Technique	Silicon	14	3723-3737	2021	<a href="https://doi.org/10.1007/s12633-021-01154-9">10.1007/s12633-021-01154-9</a>
24	V.S.S. Venkatesh, Ashish B. Deoghare	Modelling and Optimization of Wear Parameters for Spark Plasma Sintered Al–SiC–Kaoline Hybrid Composite	Advances in Materials and Processing Technologies	8(sup3),	1286–1304.	2021	<a href="https://doi.org/10.1080/2374068X.2021.1939561">10.1080/2374068X.2021.1939561</a>
25	Sumit Das Lala, Emon Barua, Payel Deb, Ashish Bhalchandra Deoghare	Physico-chemical and biological behaviour of eggshell bio-waste derived nano-hydroxyapatite matured at different aging time	Materials Today Communications	27	102443 (1-12)	2021	<a href="https://doi.org/10.1016/j.mtcomm.2021.102443">10.1016/j.mtcomm.2021.102443</a>

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year	DOI
26	Papari Das, Ashish B. Deoghare, Saikat Ranjan Maity	A Novel Approach to Synthesize Reduced Graphene Oxide (RGO) at Low Thermal Conditions	Arabian Journal for Science and Engineering	46	5467-5475	2020	<a href="https://doi.org/10.1007/s13369-020-04956-y">10.1007/s13369-020-04956-y</a>
27	Babar Pasha Mahammod, Emon Barua, Payel Deb, Ashish Bhalchandra Deoghare, Krishna Murari Pandey	Investigation of Physico-mechanical Behavior, Permeability and Wall Shear Stress of Porous HA/PMMA Composite Bone Scaffold	Arabian Journal for Science and Engineering	45	5505-5515	2020	<a href="https://doi.org/10.1007/s13369-020-04467-w">10.1007/s13369-020-04467-w</a>
28	Emon Barua, Apurba Das, D. Pamu, Ashish Bhalchandra Deoghare, Payel Deb, Sumit Das Lala, Sushovan Chatterjee	Effect of thermal treatment on the physico-chemical properties of bioactive hydroxyapatite derived from caprine bone bio-waste	Ceramics International	45	23265–23277	2019	<a href="https://doi.org/10.1016/j.ceramint.2019.08.023">10.1016/j.ceramint.2019.08.023</a>
29	Emon Barua, Ashish Bhalchandra Deoghare, Sushovan Chatterjee, Pranav Sapkal	Effect of ZnO reinforcement on the compressive properties, in vitro bioactivity, biodegradability and cytocompatibility of bone scaffold developed from bovine bone-derived HAp and PMMA	Ceramics International	45	20331–20345	2019	<a href="https://doi.org/10.1016/j.ceramint.2019.07.006">10.1016/j.ceramint.2019.07.006</a>
30	Emon Barua, Ashish Bhalchandra	Characterization of Mechanical and Micro-Architectural Properties of Porous	Arabian Journal for Science and Engineering	44	7707–7722	2019	<a href="https://doi.org/10.1007/s13369-019-03877-9">10.1007/s13369-019-03877-9</a>

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year	DOI
	Deoghare, Sushovan Chatterjee, Vivek R. Mate	Hydroxyapatite Bone Scaffold Using Green MicroAlgae as Binder					
31	Payel Deb, Emon Barua, Ashish Bhalchandra Deoghare, Sumit Das Lala	Development of bone scaffold using Puntius conchonus fish scale derived hydroxyapatite: Physico-mechanical and bioactivity evaluations	Ceramics International	45	10004–10012	2019	<a href="https://doi.org/10.1016/j.ceramint.2019.02.044">10.1016/j.ceramint.2019.02.044</a>
32	Payel Deb, Ashish Bhalchandra Deoghare	Effect of pre-treatment processes on physico-chemical properties of hydroxyapatite synthesized from Puntius conchonus fish scales	Bulletin of Materials Science	42 (3)	1-9	2019	<a href="https://doi.org/10.1007/s12034-018-1684-1">10.1007/s12034-018-1684-1</a>
33	Payel Deb, Ashish Bhalchandra Deoghare	Effect of acid, alkali and alkali-acid treatment on physicochemical and bioactive properties of hydroxyapatite derived from Catla catla fish scales	Arabian Journal for Science and Engineering	44	7479–7490	2019	<a href="https://doi.org/10.1007/s13369-019-03807-9">10.1007/s13369-019-03807-9</a>
34	Sumit Das Lala, Shaik Sadikbasha, Ashish B. Deoghare	Prediction of elastic modulus of polymer composites using Hashin–Shtrikman bound, mean field homogenization and finite element technique	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	234	1653–1659	2020	<a href="https://doi.org/10.1177/0954406219895791">10.1177/0954406219895791</a>
35	Sumit Das Lala, Ashish B. Deoghare,	Effect of Dual Pre-treatment on Mechanical, Morphological, Electrical and Thermal	Arabian Journal for Science and Engineering	44	845–856	2019	<a href="https://doi.org/10.1007/s13369-018-3302-3">10.1007/s13369-018-3302-3</a>

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year	DOI
	Sushovan Chatterjee	Properties of Rubber Seed Shell-Reinforced Epoxy Composites					
36	Suraj B. Shende, Ashish B. Deoghare, Krishna M. Pandey	Characterization of harmonic response of human middle ear using finite element approach	Journal of Computational Science	29	94–98	2018	<a href="https://doi.org/10.1016/j.jocs.2018.10.003">10.1016/j.jocs.2018.10.003</a>
37	Sumit Das Lala, Ashish B. Deoghare, Sushovan Chatterjee	Effect of Reinforcements on Polymer Matrix Bio-composites—An Overview	Science and Engineering of Composite Materials	vol. 25, no. 6,	1039-1058.	2018	<a href="https://doi.org/10.1515/secm-2017-0281">10.1515/secm-2017-0281</a>
38	G.R. Boob, A.B. Deoghare, P.V. Walke	Effect of turning process parameters on fatigue life of steel AISI 304L	International Journal of Materials Engineering Innovation	8 No(3/4)	186-205	2017	<a href="https://doi.org/10.1504/IJMATEI.2017.090233">10.1504/IJMATEI.2017.090233</a>

### Publications and conference presentations

S.No.	Title	Authors	Publication/Conference	Date	Link
1	The Impact of Hydrofluoric Acid in Enhancing the Purity of Coconut Shell-Derived Graphite Powder	Amdadul Mahmum, Sapam Ningthemba Singh, Ashish B. Deoghare	5th International Conference on Recent Advancements in Mechanical Engineering (ICRAME), National Institute of Technology Silchar	February 2024	<a href="#">Link</a>
2	A Data Assisted Prediction of Fatigue Life for Aluminum Alloys Using Machine Learning Approach	Allamaprabhu S. Ani, Ashish B. Deoghare	5th International Conference on Recent Advancements in Mechanical Engineering (ICRAME), National Institute of Technology Silchar	February 2024	<a href="#">Link</a>

<b>S.No.</b>	<b>Title</b>	<b>Authors</b>	<b>Publication/Conference</b>	<b>Date</b>	<b>Link</b>
3	Study of Thermal Behavior During the Directed Energy Deposition (DED) of Ti6Al4V Alloy Using Finite Element Modeling (FEM)	Sapam Ningthemba Singh, Ashish B. Deoghare, Yadaiah Nirsanametla	Materials Today: Proceedings	2022	<a href="#">Link</a>
4	Fabrication and Characterization of Polyaniline (PANI) Modified with Reduced Graphene Oxide (RGO) Nanosheets	Papari Das, Ashish B. Deoghare, Saikat Ranjan Maity	Materials Today: Proceedings	2022	<a href="#">Link</a>
5	Effect of Controllable Parameters on the Tribological Behavior of Ceramic Particulate Reinforced Aluminium Metal Matrix Composites: A Review	V.S.S. Venkatesh, Ashish B. Deoghare	Journal of Physics: Conference Series	2020	<a href="#">Link</a>
6	Fabrication and Mechanical Behaviour of Al-Kaoline Metal Matrix Composite Fabricated Through Powder Metallurgy Technique	Venkatesh Vavilada, Ashish B. Deoghare	Materials Today: Proceedings	2020	<a href="#">Link</a>
7	Exploring the Potential of Graphene as an EMI Shielding Material – An Overview	Papari Das, Ashish B. Deoghare, Saikat Ranjan Maity	Materials Today: Proceedings	2020	<a href="#">Link</a>
8	Permeability Quantification of Porous Polymer Scaffold for Bone Tissue Engineering	Babar Pasha Mahammad, Emon Barua, Ashish B. Deoghare, K.M. Pandey	Materials Today: Proceedings	2020	<a href="#">Link</a>
9	Evaluation of Hemodynamic Parameters to Study the Variation of Artery Wall Properties	Anushka, Ashish B. Deoghare, Krishna M. Pandey	Materials Today: Proceedings	2020	<a href="#">Link</a>
10	Modeling of Human Airways CAD Model Using CT Scan Data	Vijaysinh Mohite, Ashish B. Deoghare, K.M. Pandey	Materials Today: Proceedings	2020	<a href="#">Link</a>

<b>S.No.</b>	<b>Title</b>	<b>Authors</b>	<b>Publication/Conference</b>	<b>Date</b>	<b>Link</b>
11	Parametric Analysis of WEDM to Optimize Cutting Parameters for Inconel 800	Payel Deb, Prasenjit Dutta, Bikash Choudhuri, Ashish B. Deoghare	Materials Today: Proceedings	2020	<a href="#">Link</a>
12	Effect of Pre-treatment and Calcination Process on Micro-Structural and Physico-Chemical Properties of Hydroxyapatite Derived from Chicken Bone Bio-waste	Emon Barua, Ashish B. Deoghare, Payel Deb, Sumit Das Lala, Sushovan Chatterjee	Materials Today: Proceedings	2019	<a href="#">Link</a>
13	Synthesis of Hydroxyapatite from Labeo Rohita Fish Scale for Biomedical Application	Payel Deb, Emon Barua, Sumit Das Lala, Ashish B. Deoghare	Materials Today: Proceedings	2019	<a href="#">Link</a>
14	Characterization of Hydroxyapatite Derived from Eggshells for Medical Implants	Sumit Das Lala, Payel Deb, Emon Barua, Ashish B. Deoghare, Sushovan Chatterjee	Materials Today: Proceedings	2019	<a href="#">Link</a>
15	Development of Computational Tibia Model to Investigate Stress Shielding Effect at Healing Stages	Emon Barua, Saurav Das, Ashish B. Deoghare	Materials Today: Proceedings	2018	<a href="#">Link</a>

Book Chapter Details

No.	Particulars	Other information	Source	year	Publisher
1	Sadikbasha, S. & Deoghare, A.B. (2023). <i>In-silico Analysis of Expandable Radiofrequency Electrode for Ablation of Hepatic Tumors</i> . In: Guha, K., Dutta, G., Biswas, A., & Srinivasa Rao, K. (Eds.), <i>MEMS and Microfluidics in Healthcare</i> (LN in Electrical Eng., Vol. 989). Springer, Singapore. DOI: 10.1007/978-981-19-8714-4_7	Book Chapter (Lecture Notes in Electrical Engineering)	Springer, Singapore	2023	Springer
2	Venkatesh, V.S.S. & Deoghare, A.B. (2023). <i>Taguchi Optimization of Mechanical Properties in Al-Kaoline Metal Matrix Composite Fabricated Through Powder Metallurgy Technique</i> . In: Sudarshan, T.S., Pandey, K.M., Misra, R.D., Patowari, P.K., & Bhaumik, S. (Eds.), <i>Recent Advancements in Mechanical Engineering</i> (LN in Mechanical Eng.). Springer, Singapore. DOI: 10.1007/978-981-19-3266-3_24	Book Chapter (Lecture Notes in Mechanical Engineering)	Springer, Singapore	2023	Springer
3	Das Lala, S., Deb, P., Barua, E., & Deoghare, A. (2022). <i>Investigation on Effect of Reinforcing Fillers and Matrix on Polymer Bio-composites—A Review</i> . In: Parwani, A.K., Ramkumar, P., Abhishek, K., & Yadav, S.K. (Eds.), <i>Recent Advances in Mechanical Infrastructure</i> (LN in Intelligent Transportation & Infrastructure). Springer, Singapore. DOI: 10.1007/978-981-16-7660-4_30	Book Chapter (Lecture Notes in Intelligent Transportation & Infrastructure)	Springer, Singapore	2022	Springer
4	Purohit, D.M. & Deoghare, A.B. (2022). <i>Computational Analysis of the Effect of Boron and Nitrogen Dopants on the Mechanical Properties of Graphene with Single Vacancy Defects</i> . In: Kumari, R., Majumdar, J.D., & Behera, A. (Eds.), <i>Recent Advances in Manufacturing Processes</i> (LN in Mechanical Eng.). Springer, Singapore. DOI: 10.1007/978-981-16-3686-8_16	Book Chapter (Lecture Notes in Mechanical Engineering)	Springer, Singapore	2022	Springer
5	Singh, S.R. & Deoghare, A.B. (2021). <i>Relative Power Variation in Frequency Sub-bands of the EEG Signal During Painful Stimuli</i> . In: Kalamkar, V. & Monkova, K. (Eds.), <i>Advances in Mechanical Engineering</i> (LN in Mechanical Eng.). Springer, Singapore. DOI: 10.1007/978-981-15-3639-7_32	Book Chapter (Lecture Notes in Mechanical Engineering)	Springer, Singapore	2021	Springer

### **Membership of Professional Bodies: -**

- Life member of “The Indian Society for Technical Education” ISTE, New Delhi, (India) Membership No LM 50506
- Life member of “Association for Machines and Mechanisms” AMM, IIT Madras, (India) Membership No A20120012

### **Recognition**

- Nominated as Board of Studies Members, for Programme of Mechanical Engineering, Faculty of Engineering and Technology at Assam downtown University for the academic year 2022-23 and 2023-24.
- Appointed as Adjunct Faculty in Research at Datta Meghe Institute of Medical Science (DMIMS), Deemed University(DU), Sawangi (Meghe) Wardha Maharashtra since 24 September 2021