BIO-DATA



								11/	106/			
1.		Name			Dee	epak Devasagayam						
2.		Designation		Assistant Professor								
3.		Contact Address			Mechanical Engg. Dept., FCRIT, Vashi							
4.		Website			http	os://fcrit.ac.in/faculty/40/m	r-deepal	k-devasagayam				
5.		Total Exp	erience		19	years						
		Teaching				years						
ii	i.	Industrial			4.5	years						
6.		Qualificat	ions									
	Ī		Exam	Ye	ar	Institution/ University	Branc	h/Specialization				
			Passed	201	16	0110 '' 11'	,					
			M. E.	200)6	Old Dominion Univ, USA		Mechanical				
			B. E.	200	\1	DMCOE, Airoli		Engineering Mechanical				
			D. E.	200)1	(Mumbai University)		Engineering				
						(Mullibal Chiversity)	1	angineering				
		Additiona	l Qualifica	tion	:							
7.		Employment Record										
		Institution				Year (From To)		Designation				
		Fr. C. Rodrigues Institute of technology, Vashi				June 2011 – Till Date		Assistant Professor				
		Martin	Innovations USA	s, NC	Ξ,	July 2007 - Dec 20	010	Manufacturing Er	ngineer			
		Amada	s Industries USA	s, VA	١,	September 2005 – May 2	2006	Engineering In	tern			
		Stihl	Inc., VA, U	JSA		March 2005 – June 20	05	Engineering In	tern			
8.		Undergra	duate / Pos	tgra	dua	te Teaching Experience a	nd Sub	jects Taught				
	Subjects Taught at UG level											
			NI					C4				

Sr. No.	Name of Subject	Semester
1.	Environmental Studies	I
2.	Production Process - I	III
3.	Materials & Metallurgy	IV
4.	Production Process – II	IV
5.	Environmental Studies	V
6.	Production Process – III	V
7.	Design of Jigs & Fixtures	V
8.	Press Tool Design	VI
9.	Manufacturing, Planning and Control	VII
10.	Operation Research	VII
11.	Logistics & Supply Chain Management	VII
12.	Product Design and Development	VIII

9.	Research Experience									
	Technical Collaboration / Lab Funding with Industries									
	Sr.	Name of the Funding	Name of Project	Amount (Rs.)	Year					
	No.	Organization								
	1.	Tata Institute of	Design of Laser	Rs. 30000	2017-18					
		Fundamental Research	Wall System							
		(TIFR), Mumbai								
10.	Profess	ional Societies Fellowship	Membership							
	1.	ISHRAE	_							
	2.	IEI								
	3.	IIW								

11. Achievements / Awards / Position

- 1. "Design and Fabrication of Solar Water Purifier" 2014-15, **Best Project** award at Fr. CRIT, Vashi
- "Design & Development of Laser Wall Systems" 2018-19 which was awarded First Prize in Mechanical Engineering Group (Degree) of IEI BLC Silver Jubilee Award, on 28th February, 2020
- 3. GATE 2024 Mechanical Engineering Cleared (AIR 6791)
- 4. GATE 2024 Production and Industrial Engineering Cleared (AIR 484)

12. Projects guided in UG/PG level

- 1. "Eco-Friendly Campus with Green Technology" 2011-12
- 2. "Data Acquisition System for Internal Combustion Engine" 2011-12
- 3. "Effects of Parameters on Oil content and Growth of Algae " 2012-13
- 4. "Design and Fabrication of Scissor Lift Trolley" 2012-13
- 5. "Design and Fabrication of Solar Water Purifier" 2014-15
- 6. "Design and Construction of Solar Powered Agricultural Pesticide Sprayer" 2014-15
- 7. "Design and Fabrication of Solar Desalinator" 2015-16
- 8. "Design and Fabrication of Keyway Cutting Fixture" 2015-16
- 9. "Automatic Drilling Machine" 2016-17
- 10. "Design and Fabrication of Laser Wall" 2017-18
- 11. "Design and Development of Laser Wall System" 2018-19
- 12. "Design and Fabrication of Fruit Sorting and Packaging Machine" 2019-20
- 13. "Design and Development of Thermal Battery Management System for Li ION Batteries" 2020-21
- 14. "Design and Development of Water Cleaning Hovercraft" 2020-21
- 15. "Design and Development of Solar Water Heating using Plastic Waste" 2020-21
- 16. "Simulation of Manufacturing Process of a Cupboard" 2021-22
- 17. "Design and Development of Solar Panel Cleaning Robot" 2021-22
- 18. "Toothpaste Refilling Device" 2021-22
- 19. "Autonomous Mobile CNC Robot for Plasma Cutting" 2021-22
- 20. "Road Divider Cleaner" 2022-23
- 21. "Design and Development of Thermal Battery Management System Using Liquid Cooling Method" 2022-23
- 22. "Design and Fabrication of Underwater Drone for Cargo Transportation" 2022-23
- 23. "Design and Development of App for Fastener Recognition" 2023-24
- 24. "Design and Development of Autonomous Underwater Vehicle for Cargo Transportation" 2023-24
- 25. "Design and Development of a Cargo Container Transfer System" 2024-25
- 26. "Time Study Analysis of the Welding Machine" 2024-25
- 27. "Design and Development of Clothes Air Dryer" 2024-25

13. Short Term Training Programmes organized / attended

- 1. "Simulation of Manufacturing Systems" at Fr. CRCE, Bandra, held on 13-14 March, 2015
- "Digital manufacturing using DELMIA" in collaboration with Tata Technologies, at SPCE Andheri (W), held on 23-28 May 2016
- 3. Organized "MEMS & Mechatronics STTP" at Fr. C. Rodrigues Institute of Technology, Vashi, held on Jan 2nd to 7th, 2018
- 4. "Additive Manufacturing Digital Transformation" organized by 3D Engineering Automation LLP, Pune, held on 24 April 2020
- 5. "Advanced Material Characterization Techniques" organized by Department of Mechanica Engineering, Lendi Institute of Engineering & Technology, held on 28-30 May 2020

- 6. "Advanced Research Challenges in Materials Science" organized by Mechanical Department, Sri Vasavi Engineering College & JNTU, held on "1–6 June 2020.
- 7. Organized "Career in Project Management" at Fr. C. Rodrigues Institute of Technology, Vashi, held on 14 June, 2020
- 8. "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 14 June, 2021 to 18 June, 2021.
- 9. Yoga Session from October 13-20, 2022 held at FCRIT Vashi
- 10. IP Awareness/Training program under National Intellectual Property Awareness Mission India on January 06, 2023 held at FCRIT Vashi
- 11. NPTEL 2024 Teaching & Learning (TL) Practices for Python Programming (8 Week FDP Course) January to June 2024
- 12. NPTEL 2024 Welding Application Technology (8 Week FDP Course) Jul-Sep 2024
- 13. NPTEL 2024 Introduction to Machine Learning (8 Week FDP Course) Jul-Sep 2024

14. List of Journal Papers Published

- 1. Deepak Devasagayam (2014) "Solar Water Purifier", International Journal of Innovativ Research in Advanced Engineering (IJIRAE).
- 2. Deepak Devasagayam (2015) "Solar Energy Based Purification of Sea Water A Detailed Review", International Research Journal of Engineering and Technology (IRJET).
- 3. Deepak Devasagayam (2015) "Design and Construction of Solar Powered Agricultura Pesticide Sprayer", International Journal of Innovations & Advancement in Compute Science (IJIACS).
- 4. Deepak Devasagayam (2016) "Solar Desalinator", International Research Journal o Engineering and Technology (IRJET).
- 5. Deepak Devasagayam (2016) "Design and Fabrication of Keyway Cutting Fixture" International Research Journal of Engineering and Technology (IRJET).
- Deepak Devasagayam (2017) "Design and Fabrication of Automatic Wood Drilling Machine", International Journal of Engineering Technology Science and Research (IJETSR) ISSN 2394 – 3386 Volume 4, Issue 4, April 2017

15. List of Papers Published in National and International Conferences

- 1. Nilaj Deshmukh & Deepak Devasagayam (2012) "Data Acquisition System for Internal Combustion Engine" Proceedings of Third Biennial National Conference on Nascent Technologies (NCNTE)
- 2. Bipin Mashilkar & Deepak Devasagayam (2012) "Eco-Friendly Campus with Green Technology" Proceedings of Third Biennial National Conference on Nascent Technologies (NCNTE)
- 3. Deepak Devasagayam (2013) Effects of Parameters on Oil content and Growth of Algae International Conference on Advances & Futuristic Trends in Mechanical and Material Engineering 2013, at Punjab Technical University
- 4. Deepak Devasagayam (2017) "Design and Fabrication of Automatic Wood Drilling Machine" International Conference on Advanced Trends in Engineering (ICATE-2017) Sponsored by The Indian Society for Technical Education (ISTE)
- Deepak Devasagayam (2018) "Design and Fabrication of Laser Wall System" International Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST 2018) April 27th & 28th, 2018 at NIT, Tiruchirappalli
- Deepak Devasagayam (2018) "Design of Modular Multi-Junction PV Concentrator Array International Conference on Frontiers in Engineering, Applied Sciences and Technolog (FEAST 2018), April 27th & 28th, 2018 at NIT, Tiruchirappalli
- 7. Deepak Devasagayam (2019) "Design, Fabrication & Testing of Cooling System for Multi-Junction CPV Cells," 2019 International Conference on Nascent Technologies in Engineering (ICNTE 2019), January 4-5, 2019, at FCRIT, Vashi, Navi Mumbai, India, 2019, pp. 1-7
- 8. Deepak Devasagayam (2019) "Design & Development of Laser Wall System", 2019, 6th International Conference On Production and Industrial Engineering (CPIE-2019), at Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, Punjab, INDIA, 8-10 June 2019
- 9. Deepak Devasagayam (2019) "Design & Development of Fruit Sorting and Packaging Machine", 2019, 5th International Conference on Industrial Engineering (ICIE-2019) At: Surat NIT, 12-14 Dec 2019, pp 875-879
- 10. Deepak Devasagayam (2022), "Analysis of Thermal Battery Management

- Systems for Lithium-Ion Battery Cell", 20th ISME Conference on Advances in Mechanical Engineering, IIT Ropar Punjab, 19th- 21st May 2022, pp 458-463
- 11. Deepak Devasagayam (2023), "Development of a Portable Rapid Prototyping Machine Based on Fused Deposition Modeling Process", 7th International Conference on Production and Industrial Engineering (CPIE-2023), Dr. B R Ambedkar National Institute of Technology Jalandhar, March 10-12, 2023 pp 43
- 12. Deepak Devasagayam (2023), "Road Divider Cleaner", 7th International Conference on Production and Industrial Engineering (CPIE-2023), Dr. B R Ambedkar National Institute of Technology Jalandhar, March 10-12, 2023 pp 129
- 13. Deepak Devasagayam (2023), "Solar Panel Cleaning Robot", 5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE), FCRIT, January 20 21, 2023, pp 1
- 14. Deepak Devasagayam (2024), "Thermal Management of Battery System Using Liquid Cooling Method", Proc. of International Conference on Mechanical Engineering & Technology (ICMET-2024), NIT Kurukshetra, Haryana, India, 1st to 3rd March, 2024.
- 15. Deepak Devasagayam (2024), "Design and Fabrication of Underwater Drone for Cargo Transportation", Proc. of International Conference on Mechanical Engineering & Technology (ICMET-2024), NIT Kurukshetra, Haryana, India, 1st to 3rd March, 2024.

16. International Conference Technical Program Committee Member / Reviewer

- 1. ICNTE 2019 Reviewer, held on January 4-5, 2019
- 2. ICNTE 2021 Reviewer, held on January 15-16, 2021
- 3. INVEST 2022 Organizing Committee, held on December 9 -10, 2022

17. Patents

- 1. Convertible wheelchair having removable side frames, United States US 8196950 B2, Issued June 2012
- 2. Examination table, United States 7774873, Issued August 2010
- 3. Patient examination system US7665166 B2, United States US7665166 B2, Issued June 2006
- 4. Toothpaste Refiller India Patent Published 23 Feb 2022, Application No. 202221009678