# SRI SAI RAM ENGINEERING COLLEGE

## DEPARTMENT OF MECHANICAL ENGINEERING

Name: Dr.N.Vinayaga Muruga Pandy				
Designation:	ASSOCIATE PROFESSOR			
Qualification:	M.E. Ph.D			
Area of Specialization:	MANUFACTURING SYSTEMS AND			
	MANAGEMENT			
Experience:	Teaching- 7 YEARS			
	Industry:- 2 YEARS			
Number of Workshops/	WORKSHOP- Nil			
Conferences/ FDP Attended:	FDP:27			
	NATIONAL/INT. CONFERENCE- 4			
Publication:	Journal:			
	National : Nil			
	International: 4			
	Conference:			
	National: 2			
	International: 4			
General	Completed NPTEL Domain in Robotics			
Contact Details:-	Email:- nvmp.mech@sairam.edu.in			
	Phone:- 9941313387			
Staff Achievement	1. Achieved class topper in M.E. Manufacturing			
	Systems and Management batch of 2010-2012			

- with GPA of 9.9, 9.95 and 10 (Out of 10) in first, second and third semester respectively and finally won Gold Medal award for securing First rank in the batch.
- Received Gold Medal from CEG Alumni
   Association, Anna University for Best Outgoing
   Student in M.E. Manufacturing Systems and
   Management batch of 2010-2012.
- 3. Received Lean Six Sigma Green belt holder certificate.
- 4. Achieved class second topper in fifth Semester of B.E. Mechanical Engineering.
- 5. Obtained a final step score of 9.4 out of 12 in Stepathon 6 (Standardized test of English proficiency from THE HINDU group) which corresponds to Advanced level of English typical Global MNC's.

#### **Professional Experience:**

Sl. No	College/Organization	Designation	Period From To	Total period	Nature of work
1.	Sri Sai Ram Engineering College	Associate Professor	09.06.2022 – Till Date	3 year 1 Month	Teaching
2.	Dr.Mahalingam College of Engineering and Technology	Assistant Professor	03.09.2019 – 31.05.2022	3 Years	Teaching
3.	Thiagarajar College of Engineering	Assistant Professor	14.06.2012 – 26.07.201	1 Year 1 Month	Teaching
4.	Sterlite Industries India Limited	Engineer	30.06.2008- 10.07.2010	2 Years	Maintenance Engineer

#### **PATENTS:**

Applicant / Inventor	Title	Patent Adoption	Filed/ Published/ Granted	PatentNumber
Applicant – N.Vinayaga Muruga Pandy Department of Mechanical Engineering, Sairam Engineering College	"DESIGN AND DEVELOPMEN T OF AUTOMATIC TOILET CLEANER"	-	Filed	202341025631

#### PAPERS PUBLISHED IN THE NATIONAL CONFERENCES:

- **1.** Vinayaga Muruga Pandy N, Pandithevan P, 2017 Experimental investigation and analysis of torque in drilling human femoral bone. In Proceedings of the Indian Conference on applied mechanics (INCAM) 2017, MNNIT, Allahabad, 5-7 July 2017.
- 2. Raghavanantham S, Sampathkumar S, Vinayaga Muruga Pandy N, Srinivasan R. 2012. Online monitoring of grinding wheel loading using Infrared technique. In Proceedings of the National conference on Emerging Research and Advances in Mechanical sciences, Vellamal Engineering College, Chennai, March 23, 2012.

#### PAPERS PUBLISHED IN THE INTERNATIONAL CONFERENCES:

- **1.Vinayaga Muruga Pandy N.** Experimental study and analysis of torque in drilling human femur cortical bone. In Proceedings of the Third International conference on Robotics, Intelligent Automation, and Control Technologies organized by SMEC, VIT Chennai on 23-25<sup>th</sup> September 2022.
- 2.Pandithevan P, Prasannavenkadesan V and **Vinayaga Muruga Pandy N**. Reconstruction of patient-specific human femur with surgical drilling temperature data: A methodology applicable for robotic surgery. In: Proceedings of the International Conference on Applied and Computational Mathematics, November 23-25, 2018, IIT Kharagpur, India.
- 3.Pandithevan, P. and **Vinayaga Muruga Pandy N**., 2017. Reconstruction of subject-specific human femur with surgical drilling force data: an experimental study to operate in the radial direction: In Proceedings of the XXVI Congress of the International Society of Biomechanics (ISB) Brisbane Australia July 22-27.
- 4.Pandithevan P, Vinayaga Muruga Pandy N. 2016. Modelling and analysis of metal drilling process using experimental study and finite element method. In Proceedings of the Sixth International Congress on Computational Mechanics and Simulation, IIT Bombay, India, June 27-July 1.

#### INTERNATIONAL CONFERENCES ATTENDED:

- **1.**Vinayaga Muruga Pandy N. presented a paper titled "Experimental study and analysis of torque in drilling human femur cortical bone". In Proceedings of the Third International conference on Robotics, Intelligent Automation, and Control Technologies organized by SMEC, VIT Chennai on 23-25<sup>th</sup> September 2022.
- 2. Vinayaga Muruga Pandy N presented a paper titled "Modelling and analysis of metal drilling process using experimental study and finite element method" In Proceedings of the Sixth International Congress on Computational Mechanics and Simulation, IIT Bombay, India, June 27-July 1, 2016.

#### PAPERS PUBLISHED IN THE INTERNATIONAL JOURNALS:

- 1. Vinayaga Muruga Pandy N.,2023 "Experimental study and analysis of torque in drilling of human femur cortical bone". In AIP Conference Proceedings Vol. 2946, No. 1. AIP Publishing.
- 2. Pandithevan P and Vinayaga Muruga Pandy N.,2020 Multi-objective optimization for surgical drilling of human femurs with experimental validation: A methodology for strongest implant fixation, Journal of Mechanics in Medicine and Biology 2020 February; 20(01):1950072. (Indexed in SCI Expanded; Impact Factor 0.9).
- **3.** Pandithevan P, **Vinayaga Muruga Pandy N** and Prasannavenkadesan, V., 2018 Investigation of bone drilling for secure implant fixation in human femurs: Taguchi optimization and predictive force models with experimental validation. Journal of Mechanics in Medicine and Biology. 2018 September; 18(06):1850061. (Indexed in SCI Expanded; Impact Factor 0.9).
- **4.** Pandithevan P, **Vinayaga Muruga Pandy N** and Palanivel C., 2018 Development of In-situ Temperature prediction models from cadaveric human femur for bone drilling. Journal of Mechanics in Medicine and Biology. 2018 May; 18(03):1850026. (Indexed in SCI Expanded; Impact Factor 0.9).

#### Faculty/Staff Development /Training Program (Orientation programmes) Attended:

S.	Name of the	Attended/	Venue	Date	Type of	
No.	Conferences/ Seminar	Presented		(From –	conferences/	
				To)	Seminar	
					(State	
					level/National	
					/International)	
ACAI	ACADEMIC YEAR 2019-2020					
1	"Design for	Attended	MCET	25.11.19 to	State level	
	Manufacturing,			07.12.19	FDP	
	Assembly, Environment					
	for Product Innovation					
	& Optimization"					

3 4	Lean Six Sigma Green Belt Course  Python 3.4.3  Effective and Efficient Online Teaching in the	Attended  Attended  Attended	MCET  VIT Chennai  IIT Bombay	19.08.2019- 21.08.2019 & 26.08.2019- 27.08.2019, 5.5.2020 to 9.5.2020 to	Organized at MCET, Department of Mechanical Engineering (COURSE) National Level FDP National Level
	Age of Corona: A Hands-On Workshop".			16.05.2020	Workshop
ACAL	DEMIC YEAR 2020-2021				
1.	Advanced Manufacturing Systems	Attended	Sri Vasavi Engineering College	10.08.2020 to 14.08.2020	National Level FDP
2.	Emerging Research Areas in Aerodynamics	Attended	Bannari Amman Institute of Technology	03.08.2020 to 08.08.2020	National Level FDP
3.	Failure and Damage Mechanics of High Performance Engineering Materials- Phase-II	Attended	Anil Neerukonda Institute of Technology and Sciences	10.08.2020 to 15.08.2020	National Level FDP
4.	AnyLogistix Academic Workshop	Attended	anyLogistix supply chain software	20.03.2021 to 21.03.2021	International Level Seminar
5.	AnyLogistix training course	Attended	anyLogistix supply chain software	28.07.2020 to 31.07.2020	International Level Couse
6.	Reliability,Maintainabili ty and Quality Issues in Process Industries	Attended	Dr.B.R.Ambedkar National Institute of Technology	04.08.2020 to 08.08.2020	National Level FDP
7.	Computational and Experiments Studies on Failure of Materials	Attended	MCET	13.09.2020 to 17.09.2020	National Level FDP
8.	Computational Tools for Analysis of Biological Systems	Attended	Dr.B.R.Ambedkar National Institute of Technology	02.09.2020 to 06.09.2020	National Level FDP
9.	Contemporary Material Technologies	Attended	Dr.B.R.Ambedkar National Institute of Technology	08.09.2020 to 12.09.2020	National Level FDP
10	. TEQIP-III Sponsored One Week Short Term	Attended	Dr.B.R.Ambedkar National Institute	22.09.2020 to	National Level STTP

1	Data Analytics and Machine Learning Using	Attended	Rajiv Gandhi Proudyogiki	12.07.2021 to	National Level FDP
	DEMIC YEAR 2021-2022				
20	3D Printing & Design	Attended	Maharshi Dayanand University	23.11.2020 to 27.11.2020	National Level FDP
19	Advanced Manufacturing Systems	Attended	Sri Vasavi Engineering College	10.08.2020 to 14.08.2020	National Level FDP
18.	Technology for Industrial Automation Process	Attended	Sathyabama Institute of Science and Technology	05.10.2020 to 10.10.2020	National Level FDP
17.	Online FDP on 3D Printing and Design	Attended	Sathyabama Institute of Science and Technology.	24.08.2020 to 28.08.2020	National Level FDP
16.	Online FDP on Bio- Mimetics	Attended	Kavayitri Bahinabai Chaudhari University	15.09.2020 to 19.09.2020	National Level FDP
15	. Impact and Strategies for Higher Education:Comprehensi ve Research Pedagogy, Methodology and Design	Attended	Dr.B.R.Ambedkar National Institute of Technology	17.08.2020 to 21.08.2020	National Level FDP
14	. Non-Traditional Algorithm:Efficacious for Multi Objective Optimization	Attended	Park College of Engineering and Technology	03.08.2020 to 08.08.2020	National Level FDP
13.	. Modern Tools and Techniques for Effective Research and Publications	Attended	Dr.B.R.Ambedkar National Institute of Technology	21.08.2020 to 25.08.2020	National Level FDP
12.	Recent Trends in Product Development	Attended	Jyothi Engineering College	10.08.2020 to 16.08.2020	National Level FDP
11.	Techniques	Attended	Hindusthan College of Engineering and Technology	07.09.2020 to 10.09.2020	National Level FDP
	Course on Data Analytics Tools and		of Technology	26.09.2020	

	Python		Vishwavidyalaya	16.07.2021	
2	3D Printing and Design	Attended	Dr. Mahalingam College of Engineering and Technology	06.07.2021 to 10.07.2021	National Level FDP
3	Data Science	Attended	Punjab Engineering College	07.06.2021 to 11.06.2021	National Level FDP

### MEMBERSHIP IN PROFESSIONAL SOCIETIES:

1. Member in "Institute of Electrical and Electronics Engineers (IEEE)".