AISSMS
COLLEGE OF ENGINEERING
ज्ञानम् सकलजनहिताय
Accredited by NAAC with "A+" Grade

Department of Robotics & Automation Engineering
Faculty Profile

Dr. (Mrs) Priya S Gajjal

PhD (Design Engineering)

M.E (Mechanical Engineering)

Associate Professor

psgajjal@aissmscoe.com

(020) 26058587; Extn: 1901

https://scholar.google.co.in/citations?user=IXoRjlcAAAAJ&hl=en

https://www.linkedin.com/in/priya-gajjal-0053a815b/

https://www.scopus.com/authid/detail.uri?authorId=57200440881

Research Areas / Areas of Interest

Design Engineering, Tribology, Electric Vehicle. Composite Material

Personal Details

Date of Birth :	23 / 06 / 1979	**Domicile:**	Maharashtra
Gender :	Female	**Blood Group:**	B+ve
Contact Details:	Email Id: psgajjal@aissmscoe.com		

Academic Background

S.No	Qualification	Specialization	University	Class/Grade	Year of Passing
1	PhD	Mechanical Engineering	SRMTU Nanded	Awarde	June 2016
2	M.E.	Design Engineering	SPPU Pune	Ist	May 2007
3	B.E	Mechanical Engineering	Nagpur University	1st	June 2000

Work Experience

S. No.	Type of Experience	Years	Months
1	Teaching	22	5
2	Industry	0	0
Total		**22**	**5**

Subjects / Courses Taught

S. No.	Subject	UG/PG	Class (FE/SE/TE/BE/ME)	No of times Subject Taught
1	Advanced Stress Analysis	PG	ME	05
2	Mechanical Measurements and Control systems	PG	ME	03
3	Process Equipment Design	PG	ME	03
4	Material handling Design	PG	ME	03
5	Electric Vehicle	UG	BE	04
6	Mechanical system Design	UG	BE	06
7	Design of Machine Elements	UG	TE	04
8	Solid Mechanics	UG	SE	14
9	Engg Graphics	UG	FE	05

Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals		28		22	06
Conferences	01	07	02		

Publication Details (Conferences)

Sr No	Title of the Paper	Date of Publication	Journal name
1	Utilizing Red Fox method for improvement of engine performance and emission control in hydrogen-cooked oil diesel engines	May 2025	International Journal of System Assurance Engineering and Management
2	CFD Modeling and Analysis of Modified Cold Storage for Precooling Conditions for Tomato	March 2025	Journal of Technology, Vol- 13, Issue 4, 2025, pp 247-259.
3	Intelligent Decision-Based Hydrogen-Biodiesel engine to improve engine performance	July 2024	International Journal of Fuel Vol 367, 1 July 2024, 131449 https://doi.org/10.1016/j.fuel.2024.131449
4	Experimental Exploration of Hydrogen Fuelled Dual Fuelled CRDI Equipped Diesel Engine Coupled with Exhaust Gas Recirculation Using ANN Approach.	Nov 2023	International Journal of Ambient Energy 2024, Vol. 45, No. 1, 2280732 https://doi.org/10.1080/01430750.2023.2280732
5	A novel optimized dielectric fluid electric discharge machine using African buffalo optimization	October 2023	International Journal on Interactive Design and Manufacturing (2023) https://doi.org/10.1007/s12008-023-01591-3
6	An Intelligent Tribological Texture Behavior Analysing and Optimization of Air Bearing	August 2023	Journal of Bio- and Tribo-Corrosion (2023) 9:72 https://doi.org/10.1007/s40735-023-00790-5
7	A novel optimized fault prediction in magnetic bearing using shaft vibration image database	March 2023	International Journal of Dynamics and Control https://doi.org/10.1007/s40435-023-01157-x Volume 11, Issue 3,March 2023
8	A novel optimized vibration analysis system for PG rotatory system	September 2022	International Journal of Dynamics and Control https://doi.org/10.1007/s40435-022-01057-6 11, pages 934–945 (2023)
9	A Novel Optimal Solution for Utilizing Plastic Waste for Making Construction Material	September 2022	International Journal of Engineering Trends and Technology Volume 70 Issue 9, 93-104, September 2022 ISSN: 2231 – 5381 https://doi.org/10.14445/22315381/IJETT-V70I9P209
10	A novel tuned ant lion-grey relational dry sintered bearing for bore application,	2022	Journal of the Brazilian Society of Mechanical Sciences and Engineering https://doi.org/10.1007/s40430-022-03521-y volume 44, 238 2022

11	Fault diagnosis in an optimized rolling bearing using an intelligent approach,	2022	Archive of Applied Mechanics, https://doi.org/10.1007/s00419-022-02134-0 2022
12	Mathematical Model of Planetary Gear Train for Geared Rotary Actuator International	April, 2022,	International Journal of Mechanical Engineering, Vol. 7 No. 4 April, 2022, Pp 619 – 624, ISSN: 0974-5823
13	Optimisation using Taguchi of PEEK material in dry sliding,	2022	Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2022.01.358 Volume 55, Part 2, 2022, Pages 419-424,
14	Wear behaviour of sintered bearings using additives in dry sliding,	2021	Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.01.413 Volume 46, Part 7, 2021, Pages 2483-2488,
15	Design of Planetary Gear Train for Geared Rotary Actuator,	2021	IOP Conf. Ser.: Mater. Sci. Eng. 1170 012005 https://doi.org/10.1088/1757-899X/1170/1/012005
16	Performance evaluation of EN24 for planetary gear transmission of CNC bending machine	2020	Journal of the Brazilian Society of Mechanical Sciences and Engineering, https://link.springer.com/article/10.1007/s40430-020-02392-5 volume 42, Article number: 298 (2020)
17	Taguchi Technique for Dry Sliding Wear Behavior of PEEK Composite Material	2018	Materials Today: Proceedings https://doi.org/10.1016/j.matpr.2017.11.170 Volume 5, Issue 1, Part 1, 2018, Pages 950-957.
18	Investigations of Wear Behavior of Journal Bearing Materials,	2021	Recent Trends in Industrial and Production Engineering. LNME, Springer, https://doi.org/10.1007/978-981-16-3135-1_15. Singapore. pp 133–143
19	Wear Behavior of Polytetrafluoroethylene and Its Composites in Dry Conditions	2021	Advances in Engineering Design. LNME, Singapore. 2021, , https://doi.org/10.1007/978-981-33-4684-0_75 pp 743–750
20	Tribo-Behaviour of Tin-Based Dry Bearing Material	Nov 2020	Advances in Mechanical Processing and Design https://doi.org/10.1007/978-981-15-7779-6_33 Nov 2020, pp 389-397,
21	Tribological Parametric Influence of dry Sintered Iron Bearings	May 2019	Journal of emerging Technologies and Innovative Research
22	Wear Model of Dry Sintered Bearing Material by Dimensional Analysis	May 2019	Journal of emerging Technologies and Innovative Research
23	Low cost 3D printer for Home Users	July 2020	International Journal of Advance Scientific Research and Engineering Trends
24	Tribological Behaviour for friction of composite dry journal bearing	Aug 2017	International journal of Engineering Technology Science and Research
25	Parametric Influence on Tribology of PTFE Materials	2017	International Engineering Research Journal

26	Material and Volume Optimization of Conventional Fuel Tank	2017	International Engineering Research Journal
27	Tribological Behaviour of Dry Bearing Material	2017	International Engineering Research Journal
28	Review: Manufacturing Systems And Industry 4.0	2018	International Journal of Advance Research in Science and engineering

PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	-	10+	90+

Professional Memberships

Professional Body	Level (National/ International)	Type (Fellow/Life/Annual)	Membership No.
SAE	National	Life	7200510079
TSI	National	Life	LM4179
SESI	National	Life	

Patents / IPR Filed / Granted

S.No	Investigator Details	Title	Year	Status (Filed/Granted)	Details
1	Priya Gajjal	Onion Harvesting Machine	2025	Granted	Design
2	Priya Gajjal	Automatic Grass Cutting Machine	2024	Granted	Design
3	Priya Gajjal	Venturi Type Gas CNG machine	2024	Granted	Design
4	Priya Gajjal	A System And Process For Ant Lion- Based Grey Relational Scheme To Regulate Bearing Functions	2023	Granted	Product
5	Priya Gajjal	Directional Approach Method	2021	Granted	Copyright

Books Published

S.No	Title	Name of the Publisher	ISBN/ISSN Number
1	Tribological Behaviour of Bronze and Plastic Material	Lambert Publication	
2	Tribo Behaviour of Dry Sintered Material	LAP, Germany	ISBN; 970-613-9-44952-1
3	Investigations of Wear Behavior of Journal Bearing Materials	Springer	https://link.springer.com/chapter/10.1007/978-981-16-3135-1_15

RESEARCH GRANT RECEIVED

S.No	Program	Duration	Funding Agency	Grant Amount
1	BCUD Project	2005-08	BCUD, SPPU, Pune	INR 1.5 Lacs
2	BCUD Project	2007-09	BCUD, SPPU, Pune	INR 1.5 Lacs
3	AICTE Project	2008-10	AICTE Delhi	INR 3.5 Lacs
4	STTP AICTE	2019	AICTE Delhi	INR 3.80 Lacs

Details of Worshop / STTP / FDP / Seminar / Conferences Organized

S.No	Title	Type	Duration	Level (State/National/ International)	Sponsoring Agency
1	Advances in Tribology	STTP	One week	National	AICTE Delhi
2	Electric Vehicle	FDP	03 Days	National	Institute

Contribution as Resource Person

S. No.	Place/ Organization	Topic	Level(National/Int/ State/Regional)	Date
1	Reviewer	International Journal Papers	International	Continuation

Details of Worshop / STTP / FDP / Conferences Attended

S.No	Title	Type	Duration	Organizer	Sponsoring Agency
1	NEP 2020 Orientation and Sensitization Programme under MMTPP	NEP	Two Week	CIT Coimbatore	MMTPP
2	FDP on Innovative Teaching Learning Practices for Engineering Education	FDP	One Week	SNDCER Nashik	AICTE
3	Faculty Development Programme on Industry 5.0 for Society 5.0	FDP	One Week	VIIT Pune	AICTE
4	National Level Faculty Development Program on "Imroving 21st Century Teaching Skills Using Technological Tools"	FDP	One Week	SAE Pune	AICTE
5	ATAL FDP on Exploring Perspective of AI & ML in Mechanical Engineering	FDP	One Week	KKWIOEER	AICTE ATAL
6	Faculty Development Programme on, "Advanced Pedagogy	FDP	Two week	NITTR Kolkatta	NITTR
7	NATE: NBA Accreditation in Teaching Learning in Engineering, NPTEL,	FDP	12 Week	NPTEL Swayam	NPTEL
8	What's App Outcome Based Education FDP	FDP	Three Weeks 8 credit course	D Y Patil Akurdi	AICTE and NEP

9	Innovations in ICT Teaching Learning- A Step Towards Digital India	FDP	Two Week	VIT Pune	AICTE
10	Introduction to Research	FDP	12 Week	Swayam	NPTEL
11	Pedagogical Innovations and Research Methodology	FDP	08 Week	Swayam	NPTEL
12	Fundamentals Of Artificial Intelligence	FDP	04 Week	Swayam	NPTEL
13	Effective Engineering Teaching In Practice	FDP	08 Week	Swayam	NPTEL
14	Patent Drafting For Beginners	FDP	04 Week	Swayam	NPTEL
15	National Level Faculty Development Program On "Innovation, Research And Ipr -Journey Towards Excellence	FDP	One Week	Sardar Patel College of Engineering, Mumbai	AICTE
16	Emerging Technological Advancements and Practical Applications of Data Science	FDP	One Week	SITS Lonavala	AICTE
17	AICTE-ISTE approved Five days FDP on “Advances in Engineering”	FDP	08th – 14th December 2021	AISSMSCOE Pune	AICTE
18	IP awareness/Training program under National Intellectual Property Awareness Mission	W/S		June 28,2022	Intellectual Property Office and MoE's Innovation Cell, India
19	14th Summer school in Tribology	FDP	14-18 June 22	IIPM Gurgaon, TSI	TSI

Major Professional Responsibilities Handled

S. No.	Role and Responsibilities
1	Dept Academic Coordinator
2	NAAC Coordinator
3	NBA Coordinator
4	Coordinator, Vishaka Cell

5	Coordinator, ICC cell
6	Coordinator, Women's Grievance Cell
7	Subject Chairman, SPPU
8	Subject member, SPPU
9	Ph.D Review committee member at dept.
10	Laboratory In charge for Tribology and Strength of Materials.

Awards Received

S. No.	Awards
1	IARDO Award of Excellence 2018
2	Outstanding Woman in Engineering, VIWA-2018
3	Appreciation Letter for Best Teacher, SCOE Vadgaon Pune in 2007 and 2012

Declaration: I hereby declare that all the statement made above are correct to the best of my knowledge and belief.

Dr. (M) Priya S Gajjal