

# AISSMS COLLEGE OF ENGINEERING



#### ज्ञानम् सकलजनहिताय

An Autonomous Institute Affiliated with Savitribai Phule Pune University

Accredited by NAAC with "A+" Grade | NBA - 7 UG Programmes

#### **Department of Mechanical Engineering**

#### **Faculty Profile**

#### Prof. (Dr) M M Sayyad

PhD (Mechanical- Design Engineering)

**Assistant Professor** 

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**(**020) 26058587; Extn: 1801

https://scholar.google.co.in/citations?user= CvZfziAAAAAJ&hl=en&authuser=1

https://www.linkedin.com/in/mannan-sayyad-4768a666

https://www.researchgate.net/profile/Mannan\_Sayyad



Material Characterization, Composite Materials, Fracture Mechanics

#### **Personal Details**

**Date of Birth**: 11/01/1981 **Domicile**: Maharashtra

Gender: Male Blood Group: B+ve

Contact Details: B5/202, Kumar Palms, Kondhwa (Bk),

Pune - 411048

## Academic Background

S. N0.	Qualification	Specialization	University	Class/Grade	Year of Passing	
1	Ph.D.	Mechanical	IIT Kanpur	Ist class with	May 2018	
		Engineering  Mechanical –		distinction  Ist class with		
2	M.Tech	Design Engg.	IIT Kanpur	distinction	May 2006	
3	B.E.	Mechanical	Pune	Ist class with	May 2003	
		Engineering		distinction		

Work Exp	erience xperience	Years	Months
1	Teaching	08	0
2	Research	06	0
3	Industry	05	0
4.	Others		
	Total	19	0

# Subjects / Courses Taught

S.	Subject	UG/PG	Class	No of times
No.	Subject	UG/FG	(FE/SE/TE/BE/ME)	Subject Taught
1	Design of Machine Elements – I	UG	TE (Mechanical)	1
2	Strength of Materials	UG	SE (Mechanical)	1
3	Strength of Materials	UG	SE (Mechanical S/W)	1
4	Analysis and Synthesis of Mechanisms	PG	SYME (Mechanical)	1
5	Finite Element Method	PG	SYMT (Mechanical – Design)	1
6	Product Design and Engineering	UG	TYBT(Mechanical)	1

7	Mechanical System Design	UG	BE (Mechanical)	3
8	Industrial Fluid Power	UG	BE (Mechanical)	1
9	Engineering Mechanics	UG	FE	1
10	Theory of Machines	UG	SE (Mechanical S/W)	1
11	Solid Mechanics	UG	SE (Mechanical)	5
12	Solid Mechanics	UG	SE (Mechanical S/W)	2
13	Kinematics of Machinery	UG	SE (Mechanical)	02
14	Numerical and Statistical Methods	UG	TE (Mechanical)	01
15	Composite Materials	UG	TE (Mechaical)	04
16	Dynamics of Machinery	UG	BE (Mechaical)	01

## **Research Publications**

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals	00	12	00	10	02
Conferences	00	05	00	05	

## **Publication Details (Journals)**

S. No	Document Details	Authors	Year	Source Details	ISBN/ ISSN	Publisher
1.	Measurement of microfibril angles in bamboo using Mueller matrix imaging	Sayyad Mannan, Mohammad Zaffar, Asima Pradhan, Sumit Basu	2016	Applied Optics	ISSN: 1559-128X (print), 2155-3165 (online)	Optical Society of America
2.	Correlations between axial stiffness and microstructure of a species of bamboo	Sayyad Mannan, J. Paul Knox and Sumit Basu	2017	Royal Society Open Science	ISSN:2054- 5703	The Royal Society
3.	Stiffness and toughness	Sayyad Mannan, Venkitanarayanan	2018	International Journal of	ISSN:	Elsevier

	gradation of bamboo from a damage tolerance perspective	Parameshwaran and Sumit Basu		Solids and Structures	0020-7683	
4.	Predicting Tensile Behaviour of Bulk Bamboo using Weibull Statistics for Progressive Failure	Mannan Sayyad	2020	Advanced Materials Letters	ISSN: 0976-3961	International Association of Advanced Materials (IAAM)
5.	Flaw resistance and mode-I fracture energy redistribution in bamboo- a Correlation	Mannan Sayyad	2020	Advanced Materials Letters	ISSN: 0976-3961	International Association of Advanced Materials (IAAM)
6	Experimental generation and analysis of Lamb waves in aluminium and glass/epoxy composite plates	Mannan Sayyad	2021	Journal of Institution of Engineers India Ser. C	Electronic ISSN 2250-0553 Print ISSN 2250-0545	Springer
7	Asymmetric behaviour of elastic waves in anisotropic plate having graded properties: A fast Fourier transformbased spectral analysis	Mannan Sayyad	2022	Journal of Institution of Engineers India Ser. C	Electronic ISSN 2250-0553 Print ISSN 2250-0545	Springer
8	Investigations into multi-scale mechanical characterization of bamboo- a natural material	Mannan Sayyad	2022	Journal of Institution of Engineers India Ser. C	Electronic ISSN 2250-0553 Print ISSN 2250-0545	Springer
9	Development Techniques for Energy Efficient Electric Motors – A Review	Mohammad Saad Khan, Avinash Somatkar, Piyush Mathurkar, Vishal	2023	Indian Journal of Technical Education	0971-3034	-

		Ambhore, Mannan Sayyad				
10	Evaluation of Inter-laminar Shear Performance of Carbon Fibrereinforced Composite under Quasistatic and High Strain-rate Loading	Mannan Sayyad	2023	Journal of Materials Engineering and Performance	1059-9495	Springer
11	Towards Characterizing Continuum Damage in Glass Fibre- Reinforced Composite	Mannan Sayyad	2024	Journal of Institution of Engineers India Ser. C	Electronic ISSN 2250-0553 Print ISSN 2250-0545	Springer
12	Stiffness and Stability of Bamboo Stem- A Optimal Design Perspective	Mannan Sayyad, Bhanudas Bachchhav, Sachin Salunkhe, Lenka Cepova, Jiri Struz, Emad Abouel Nasr, Khaled M. S. Gad El Mola	2024	Heliyon	2405-8440	Elsevier

## **Publication Details (Conferences)**

S.	Document	Authors	Year	Conference	ISBN	Organised
No	Details	Authors	rear	Details		by
1.	Structure, stiffness and fracture toughness of bamboo	Mannan Sayyad, Sumit Basu	2016	16th International Conference on New Trends in Fatigue and Fracture Dubrovnik, Croatia	-	University of Zagreb Faculty of Mechanical Engineering and Naval Architecture
2.	Correlations between stiffness and microstructure	Mannan Sayyad, Sumit Basu	2016	Sixth International Congress On Computational Mechanics	-	IIT Bombay

	of a species of bamboo			And Simulation		
3.	Structure, Stiffness and Fracture Toughness of a Species of Bamboo	Mannan Sayyad, P Venkitanarayanan, Sumit Basu	2017	Proceedings of 3rd Indian Conference on Applied Mechanics- 2017 (INCAM- 2017)	-	MNNIT Allahabad
4.	Multiscale modelling of naturally functional gradient material- bamboo	Mannan Sayyad, Sumit Basu	2015	Proceedings of the 60th Congress of the Indian Society of Theoretical and Applied Mechanics	-	IIT Kharagpur
5.	Analysis of laser generated lamb waves using wavelet transforms	S Mannan, T Pramila, V Raghuram, NN Kishore	2006	Proceeding of ASNT Fall Conference, Houston, Texas USA	-	American Society for Nondestructive Testing

## PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	0	1	28

## **Professional Memberships**

Professional	Level	Туре	Membership
Body	( National/ International)	(Fellow/Life/Annual)	No.
SESI	National	Life	LM/2565/2021

## Patents / IPR Filed / Granted

S.	Investigator	Title	Year	Status	Details
No	Details			(Filed/Grante	
				d)	
1	-	-	-	-	-

#### **Books Published**

S.	Title	Name of the	ISBN/ISSN
No		Publisher	Number
	-	-	-

#### **Research Grants Received**

S.	Program	Duration	Funding	Grant Amount	
No			Agency		
1.	National Technical Textiles	24	Ministry of Textiles	INR 2128800	
	Mission	months			

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

S.	Title	Туре	Duration	Level	Sponsoring
No				(State/National/	Agency
				International)	
01	Advances in Measurement and Analysis of Vibration and Noise	Workshop	2 days	National	SPPU
02	Lean Six SigmaYellow Belt	Certificate Program	3 days	National	Binghamton University

## **Contribution as Resource Person**

S.	Place/	Topic	Level(National/Int/	Date	
No.	Organization	Торіс	State/Regional)	Date	
1	ARAI Pune	Evaluation of a Continuum Damage Mechanics Material Model of a Glass Fiber- reinforced Plastic	National	01-08-2019 to 31-07-2020	
2	AICTE Training and Learning (ATAL) Academy	Shape Memory Alloy Modelling, its Applications to Wearable Devices	National	03/01/2022 to 07/01/2022	

		and Smart		
		Structures		
3	Koncranes	University Thesis	International	01/01/2021-31-
3 Koncianes		Program Phase- I	International	03/2022
4	Koncranes	University Thesis	National	01/04/2022-
4		Program Phase- II	INauOHal	continue

## Details of Worshop / STTP / FDP / Conferences Attended

S. N	Title	Туре	Duration	Organizer	Sponsoring Agency
1	Use of Mathematics in Inductry	Work shop	January 3-5, 2019	Vishwakarma Institute of Information technology, Pune	SPPU
2.	Recent Trends in Solar Thermal Systems and its Scope in India	Semi nar	February 21- 22, 2019	AISSMS College of Engg, Pune	SPPU
3.	NDT and its applications in Aerospase	Work shop	February 25, 2019	AISSMS College of Engg, Pune	ASM
4.	Problem based learning	STTP	21-30 May 2019	AISSMS Instt. Of Information Technology, Pune	AICTE
5.	Vision-Mission-PEO-PSO-PO-CO: Framing, Mapping, Assessment and Attainment	FDP	10-15 June 2019	AISSMS College of Engg, Pune	ISTE
6	Green Technology & Sustainability Engineering	ATAL FDP	Oct 2020	ATAL FDP	AICTE
7	3D Printing & Design	ATAL FDP	Dec 2020	ATAL FDP	AICTE
8	Design, Synthesis and Characterization of Novel Materials	ATAL FDP	Dec 2020	ATAL FDP	AICTE
9	Robotics	NPT EL- AICT E FDP	Jul 2024	NPTEL-AICTE FDP	AICTE
10	NEP 2020 Orientation and Sensitization Program	STTP	May 2025	UGC	UGC
11	Recent Advances in Mechanical Engineering (RAME-23)	FDP	Jul 2023	ISTE	ISTE

12	Advanced Trends in Mechanical Engineering	-	Dec 2023	ISTE	ISTE
13	Advances in Engineering	Refre sher Progr am	Dec 2021	ISTE	ISTE
14	Augmented Reality & Virtual Reality	FDP	Jun 2021	ISTE	ISTE
15	Outcome-based Education Software	FDP	Jun 2020	Organized by VIIT, Pune	Other
16	Advances in Electrical Vehicle Industry	FDP	Nov 2022	SAEINDIA Western Section	Other
17	Computer Aided Engineering Analysis using Ansys	FDP	Jul 2023	Brigadier Academy, Pune	Other
18	Sustainability and Sustainable Goals	FDP	May 2024	Sandip Foundation	Other

#### **Major Professional Responsibilities Handled**

5. No.	Role and Responsibilities
1.	Co-ordinator of National Level Workshop
2	Department coordinator of NBA criterion 9.0

#### **Awards Received**

S. No.	Awards
1.	Travel award from Department of Biotechnology, Gov. of India

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

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Dr M M Sayyad Assistant Professor Mechanical Engineering Department AISSMS CoE, Pune