

**Mohammed Rabius Sunny**  
**Assistant Professor**  
**Department of Aerospace Engineering**  
**Department of Ocean Engineering and Naval Architecture (Associated)**

**Professional Experience (Starting from Last Job)**

<b>Sl. No</b>	<b>Employer</b>	<b>Type of Job</b>	<b>Duration</b>	<b>Date of Joining</b>	<b>Date Of Leaving</b>
1	IIT Kharagpur	Visiting Assistant Professor, Department of Ocean Engineering and Naval Architecture	6 months	December, 2013	June, 2014
2	Aliah University, Kolkata	Assistant Professor, Department of Civil Engineering	1 year and 6 months	July, 2012	December, 2013
3	Virginia Polytechnic Institute and State University	Postdoctoral Research Associate, Department of Aerospace and Ocean Engineering	2 years	July, 2010	June, 2012

## Academic Qualification

Sl No	Examination / Degree	Board/ University/ Institution	Important Subject Taken / Specialization	Year
1	Ph. D	Virginia Polytechnic Institute and State University	Aerospace Engineering (Structures)	June, 2010
2	M. Tech	Indian Institute of Technology Kanpur	Aerospace Engineering (Structures)	July, 2005
3	B.E.	Regional Engineering College, Durgapur	Civil Engineering	May, 2003

## Sponsored Research Projects:

**Project Title :** Structural Health Monitoring of Adhesively Bonded Composite Joints Using The electromechanical Impedance Method

**Principal Investigator :** Mohammed Rabius Sunny

**Sponsor :** SRIC, IIT Kharagpur

## PhD Thesis Guidance

Serial No.	Title of the Thesis	Name of Student	Remarks
1.	Nonlinear Aeroelastic Analysis and Active Control of Large Wind Turbine Blades	Praveen Shakya	Ongoing
2.	Active Control of Marine Cycloidal Propellers	SubhashisNandy	Ongoing

3.	Vibration Control Using Active Materials	Mohamed Nishad	Ongoing
4.	Stress Release Through Vibration During Welding	RururajanPradhan	Ongoing
5.	Analysis of Nanocomposites using Molecular Dynamics	Thamarai Kannan	Ongoing
6.	Impact Analysis of Sandwich Composites	Arun Rajpuit	Ongoing
7.	Damage Detection in Adhesively Bonded Composite Joints Using the Electromechanical Impedance Based Technique	Umakanta Meher	Ongoing
8.	Active Vibration Control of Lifting and Control Surfaces	Chinta Sandip	Ongoing

### Publications:

1. Sunny, M.R., Kapania, R.K. "Modified dynamic Preisach model for hysteresis", AIAA Journal, Vol. 48, No. 7, 2010, pp. 1523-1530.
2. Sunny, M.R., Kapania, R.K., Moffitt, R., Mishra, A., Goulbourne, N., "A modified fractional calculus approach to model hysteresis", Journal of Applied Mechanics, Vol. 77, Issue 3, 2010.
3. Sunny, M. R., and Kapania, R. K., "Artificial-Neural-Network-Based Identification of a Modified Dynamic Preisach Model," International Journal for Computational Methods in Engineering Science and Mechanics, Vol. 15, Issue 1, 2014, pp. 45 – 53.
4. Sunny, M. R., Kapania, R. K., Sultan,C., "Solution of the nonlinear transverse vibration problem of a prestressed membrane using the Adomian decomposition method," AIAA Journal , Vol. 50, No. 8, 2012, pp. 1796 – 1800.
5. Sunny, M. R., Sultan, C., Kapania, R. K., "Energy harvesting from a membrane attached to a tensegrity structure," AIAA Journal, Vol. 52, No. 2, 2014, pp. 307-319.
6. Sunny, M. R., Kapania, R. K., "Damage detection in a prestressed membrane using a wavelet-based neuro-fuzzy system," AIAA Journal, Vol. 51, No. 11, 2013, pp. 2558-2569.
7. Jrad, M., Sunny, M. R., and Kapania, R. K., "Global–Local Analysis of Composite Plate with Thin Notch," Vol. 51, No. 3, 2014, pp. 967-974.