

Dr. ROHINI D



Designation Assistant Professor

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Joining Date 02-02-2026

Educational Qualifications

- B.E., Aeronautical Engineering – PSN College of Engineering and Technology, Tirunelveli - 2012
- M.E., Aeronautical Engineering - Park College of Engineering and Technology, Coimbatore - 2014
- Ph.D., Aeronautical Engineering – Anna University, Chennai - 2026

Past Experience

Field	Positions held	Name of the institution	From	To
Academic Experience	Assistant Professor	Park College of Engineering and Technology, Coimbatore	25.06.2014	30.05.2018
	Assistant Professor	Bannari Amman Institute of Technology, Erode	04.06.2018	31.01.2026

Areas of Interest

- Flight Dynamics
- Hydrodynamics
- Aircraft Systems
- CFD, CATIA

Professional Memberships

- IFERP - Institute For Engineering Research and Publication membership

Subjects Handled

UG Programme:

- Elements of Aeronautics
- Flight Dynamics
- Hydrodynamics
- Aircraft systems
- Aircraft production Technology
- Aircraft Maintenance
- Engineering drawing

B.E., M. Tech, PhD Projects guided

B.E: 25plus projects guided in PARK college of Engineering and Technology and Bannari Amman Institute of Technology

Patents:

- Patent filed for "ENHANCED PAPER HOLDING TRAY WITH DUAL TRAILING EDGE CLAMPS FOR SECURING DOCUMENTS WITH PRECISION" No.397367-001 on 12/04/2024.
- Patent filed for "AIRCRAFT WING USING CARBON FIBER COMPOSITE REINFORCED POLYMER FOR INCREASING THE STRUCTURAL LIFE" No: 202341005301 on 27/01/2023.

International Journal :

1. **Rohini Dharamaraj**, Amarkarthik Arunachalam, Sivaraj Gurunath & Haran Pranatharthy Athmanathan 2025, Computational analysis of high speed super-cavitating projectiles for reduction of hydrodynamic drag using cavitator optimisation', Progress in Computational Fluid Dynamics, vol. 25, no. 1, pp. 1-15, ISSN :1741-5233, Impact Factor: 0.6.
2. "Design and analysis of two wheeler bumper made from alkali treated natural fibers reinforced epoxy composites" Kandasamy Kannan, Ramesh Kumar Shanmugam, **Rohini**, Suresh Stanley, Naveenkumar Karuppusamy, Nanthakumar Nallathambi, Sudhin Selvam, Mohammed Yaseen Abdul Kani, Stanly Tennison Mohammed Sulthan , AIP Conference Proceedings, 2782, 020174 (2023), DOI: <https://doi.org/10.1063/5.0154749>, Published: June 2023.
3. "Design & analysis of solid rocket using open rocket software" **D.Rohini**¹ ,C.Sasikumar², P.Samiyappan³, B.Dakshinamurthy⁴, NeerajaKoppula⁵ , International Conference on Advanced Materials for Innovation and Sustainability – 2022,materials today proceedings , published online 6 May 2022, Volume 64, Part 1, 2022, Pages 425-430, <https://doi.org/10.1016/j.matpr.2022.04.787>.
4. "Buckling analysis of a commercial aircraft wing box and its structural components using Nastran & Patran" **D.Rohini**¹, A.AmarKarthik², R.Abinaya³, A.Mathan⁴, S.Midhun⁵, D.Dhushyanth⁶ , International Conference on Advances in Materials Research 2021 (ICAMR 2.0),material today proceedings, published online 2 May 2022, Volume 66, Part 3, 2022, Pages 895-901, <https://doi.org/10.1016/j.matpr.2022.04.521>.
5. "Impact of Baffle on Liquid Structure Connection in Fuel Tank Sloshing" **D Rohini**¹,R Abinaya²,D Lokesharun³,K Karthik⁴, V Sovishnuchringth⁵,P Sivaprakash⁶ , International Conference On Mechatronics In Energy And Environment Protection (ICMEEP 2020)- Oct 16,17 2020,IOP Conf. Series: Materials Science and Engineering, Published online: 14 December 2020 - Volume 995, doi:10.1088/1757-899X/995/1/012044.
6. "Flow conditions analysis of Gas Turbine Combustor" R Abinaya¹, **D Rohini**², B Soundarya³, S Balakrishnan⁴, B Dakshinamurthy⁵ and P Rajeshwari⁶, International Conference on Mechatronics In Energy And Environment Protection (ICMEEP 2020)- Oct 16,17, 2020, IOP Conf. Series: Materials Science and Engineering, Published online: 14 December 2020 - Volume 995, doi:10.1088/1757-899X/995/1/012043.
7. "Numerical Analysis of Circular Dimple Effects of An Aircraft Wing NACA 2412" Hari Krishnan A¹, Jeevanantham R², Madhan kumar M³, **Rohini D**⁴, International Research Journal of Engineering and Technology (IRJET) , e-ISSN: 2395-0056, p-ISSN: 2395-0072, Volume: 07 Issue: 05 | May 2020.
8. "Analysing the Performance of Solar Powered Wing (UAV)" **Rohini D**¹, RajKumar E², Karthick V³, Dhayanandh R⁴, International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056, p-ISSN: 2395-0072, Volume: 07 Issue: 03 | Mar 2020.
9. **D. Rohini**, and P. Samiyappan, "Design and numerical analysis of carbon fiber composite aircraft wing" - International Conference on Materials, Manufacturing and Machining 2019 AIP Conf. Proc. 2128, 020021-1–020021-14; <https://doi.org/10.1063/1.5117933> , Published by AIP Publishing. 978-0-7354-1870-7.
10. "Comparison of Rotating Piccolo Tube with Fixed Piccolo Tube by Using CFD", Jour of Adv Research in Dynamical & Control Systems, Vol. 11, 01-Special Issue, 2019. **Rohini D**, D. Lokesharun, R. Naveen, P. Samiyappan.
11. "Design and Analysis of Roof Top Wind Turbine for Household Purpose", **Rohini. D**¹, Samiyappan. P², Lokesharun. D³ and Gokulnath. E⁴ IJISSET - International Journal of Innovative Science, Engineering & Technology, Vol. 5 Issue

Conferences and Presentations:

1. **Rohini D** presented a paper on "Performance Analysis of Kerosene Heaters Under Vitiated Conditions" International Conference on Innovative Trends in Engineering & Sciences (ICITES-2024) March 2024.
2. **Rohini D** presented a paper on "Design Studies on the Effect of Stress Concentration in A Sandwich Panel" in National Conference on Multidisciplinary Approaches in Engineering, Science & Management (ESM-2023) organized by Trinity Academy of Engineering, Pune, Feb 2023.
3. **Rohini D¹**, Abinaya R², presented a paper on "Lift Augmentation by Vortex Generators" in International Conference on Innovative Trends in Engineering and Sciences (ICITES) 2022 organized by School of Mechanical Science at Bannari Amman Institute of Technology, Sathyamangalam held on 07 & 08 November 2022.
4. Yamuna N, Karthick Sreenivasan V, Rajeshwaran J, **Rohini D**, presented paper on "Conceptual Design of Quadcopter for Artificial Pollination" , in 2nd International Conference on Mechatronics in Energy and Environment Protection (ICMEEP 2021) held during December 10-11, 2021
5. **D.Rohini¹**, A.AmarKarthik², R.Abinaya³, A.Mathan⁴, S.Midhun⁵, D.Dhushyanth⁶ , Presented paper on "Buckling analysis of a commercial aircraft wing box and its structural components using Nastran patran in International Conference on Advances in Materials Research 2021 (ICAMR 2.0) held on December 03rd & 04th 2021,organized by Department of mechanical engineering ,Bannari Amman Institute of Technology, Sathyamangalam.
6. **D Rohini¹**, R Abinaya², D Lokesharun³, K Karthik⁴, V Sovishnuchringth⁵, P Sivaprakash⁶ Presented paper on "Impact of Baffle on Liquid Structure Connection in Fuel Tank Sloshing" in national conference advances in materials, manufacturing and simulation held on November 26th & 27th 2020, organizrd by Department of aeronautical engineering, Bannari Amman institute of technology, Sathyamangalam.
7. R Abinaya¹, D **Rohini²**, B Soundarya³,S Balakrishnan⁴,B Dakshinamurthy⁵ and P, Rajeshwari⁶ Presented paper on "Flow conditions analysis of Gas Turbine Combustor" in national conference advances in materials, manufacturing and simulation held on November 26th & 27th 2020, organizrd by Department of aeronautical engineering, Bannari Amman institute of technology, Sathyamangalam.
8. **Rohini D¹**, RajKumar E², Karthick V³, Dhayanandh R⁴ Presented paper on "Analysing the Performance of solar Powered Wing (UAV)", in 2nd International conference on recent trends in engineering and scientific technology – 2020 held on 21st March 2020 organised by Rathinam Technical Campus in association with organization of science and technology, Chennai, India.
9. **D. Rohini**, and P. Samiyappan, Presented paper on "Design and numerical analysis of carbon fiber composite aircraft wing" in International Conference on Materials, Manufacturing and Machining 2019 AIP Conf. Proc. 2128, 020021-1–020021-14; <https://doi.org/10.1063/1.5117933> , Published by AIP Publishing. 978-0-7354-1870-7, organized by Bannari Amman Institute of Technology, Sathyamangalam.
10. Presented paper on "Design and Analysis of 2D steady flow over an underwater vehicle with different cavitator", in CSIR sponsored International Conference on Advances in Material Research (ICAMR-2019) December 5th & 6th 2019 organized by Bannari Amman Institute of Technology, Sathyamangalam.
11. Presented paper on "Design and Analysis of Axi-Symmetric Bodies for Super-Cavitating Gun Launched Projectiles and Self Propelling Hydro Ramjets" in ICIRET organized by PARK College of Engineering and Technology, Coimbatore.
12. Presented paper on "Analysis and Reduction of Cavitation Effect on Submerged Hydrofoils" in ICIRET organized by PARK College of Engineering and Technology, Coimbatore.

Book Chapter Published:

1. Book Chapter Title "Design and Analysis of 2D Steady Flow Over an Underwater Vehicle with Different Cavitators" ' **D. Rohini**, S. Vignesh, D. Nivitha, P. Preetha, and K. P. Arulshri published in Advances in Materials Research, Springer Proceedings in Materials 5, on 05 February 2021 ,5, https://doi.org/10.1007/978-981-15-8319-3_6.

Certified Courses (NPTEL Courses)

1. Completed certified 12 weeks NPTEL AICTE online Course on "Wind Energy" conducted by Prof. Ashoke De, Department of Aerospace Engineering, IIT Kanpur
2. Completed certified 04 weeks NPTEL AICTE online Course on "Development of Sociology in India" conducted by Prof. Ashish Saxena, IIT Kanpur
3. Completed certified 12 weeks NPTEL AICTE online Course on "Introduction to air breathing propulsion" conducted by Prof. Ashoke De, Associate Professor in the Department of Aerospace Engineering, IIT Kanpur.
4. Completed certified 08 weeks NPTEL AICTE online Course on "Advance Aircraft maintenance" conducted by Prof. A.K. Ghosh, faculty of Aerospace Engineering, IIT Kanpur.

Faculty Development Programs

1. Successfully completed 12 weeks online FDP on "Wind Energy" conducted by Prof. Ashoke De, Department of Aerospace Engineering, IIT Kanpur.
2. Successfully completed 12 weeks online FDP on "Introduction to air breathing propulsion" conducted by Prof. Ashoke De, Associate Professor in the Department of Aerospace Engineering, IIT Kanpur.
3. Successfully completed 12 weeks online FDP on "Advance Aircraft maintenance" conducted by Prof. A.K. Ghosh, faculty of Aerospace Engineering, IIT Kanpur.
4. Successfully completed AICTE-ISTE sponsored one week FDP on Nonlinear and Evolutionary Optimization Techniques in Engineering held during 21.02.2022 to 26.02.2022.
5. Attended Webinar series on Aircraft materials, from 20.06.202 to 24.06.2020, Organized by Department of Mechanical Engineering, Rohini College of Engineering and Technology (Five days).
6. Attended two-week FDP on METAHEURISTICS & TRIZ-EMERGING PARADIGM in engineering problem optimization, from 20.11.2017 to 02.12.2017, Sponsored by Anna University, Chennai.
7. Attended one week FDP on Engineering Mechanics, from 10.12.2014 to 16.12.2014, Sponsored by Anna University, Chennai.

Achievements/Awards

1. Received outstanding coordinator award for organizing Basic Leadership Camp 2TN Air squadron NCC, Coimbatore in November 2024
2. Received Best in Academics Award for Outstanding Performance during PRCN course conducted by Airforce station Tambaram on December 2023.
3. Successfully completed and cleared visual welding inspector level 1 exam conducted by CSWIP.
ID No :0000758343
4. Guinness World Record organized a campaign on "Support Aeromodelling and Space Modeling" an official attempt, held at PARK College of Engineering and Technology on 24th Feb 2018.
5. Organized FLIEGEN'18 National level Symposium on "Aerospace applications" conducted at PARK College of Engineering and Technology on 23rd Feb 2018.
6. Conducted two days' workshop on Quadcopter in association with ARK Techno solutions on 27 & 28 September 2014.

7. Organized "Mangalyan Mahotsav", held at PARK College of Engineering and Technology on 01.12.2014.
8. NBA & NAAC Coordinator for the department during the year 2016 and successfully got Accreditation.
9. Got the first prize titled, "AEROMODELLING WORKSHOP" at Jaya Engineering College of Technology, Chennai.