



DEPARTMENT OF AERONAUTICAL ENGINEERING

S.No	Name of the faculty	Publication details
1	Dr Premkumar PS	Premkumar P.S., Nadaraja Pillai S., Senthil Kumar C. "Study on oil-cooler location for a pusher type turbo prop aircraft using numerical simulation" Journal of Aircraft Engineering and Aerospace Technology- In Print
2	S. Senthil Kumar	S. Senthil Kumar and G. Anitha (2021). Fuzzy Logic-Based Self-Tuning PID Controllers Using Parameters Adaptive Method for Stabilization of a Two-Axis Seeker Gimbal. IETE Journal of Research, Published online, Oct. 2021, pp. 1-10.
3	S. Senthil Kumar	S Senthilkumar, G Anushree, J Darshan Kumar, R Vijayanandh, R Raffik, K Kesavan, S Indira Prasanth (2022). Design, Dynamics, Development and Deployment of Hexacopter for Agricultural Applications. Proceedings of 2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation, Oct 8-9, 2021, pp. 1-6.
4	R.Arul Prakash	Arul Prakash Raji, Vijayanandh Raja, F Wang, Y Jiang, HAZ AL-bonsrulah, R Murugesan, S Ranganathan, Multidisciplinary Optimizations of Small-Scale Gravitational Vortex Hydropower (SGVHP) System through Computational Hydrodynamic and Hydro-Structural Analyses. Sustainability · Sustainability 2022, 14, 727. https://doi.org/10.3390/su14020727
5	Vijayanandh R	Vijayanandh Raja et al., Comparative Estimations of Hydrodynamic Analysis on Unmanned Aquatic Vehicle's Propeller by using an advanced [CFD with MRF] Approach, AIAA Propulsion and Energy 2021 Forum, August 9-11, 2021, Virtual Event, https://doi.org/10.2514/6.2021-3732 .
6	Naveen Kumar K	Naveen Kumar Kulandaiyaappan et al., Optimization of High Payload Unmanned Aerial Vehicle's Propellers based on Energy Formation by using Computational Vibrational Analyses, AIAA Propulsion and Energy 2021 Forum, August 9-11, 2021, Virtual Event, https://doi.org/10.2514/6.2021-3729 .
7	Vijayanandh R	Vijayanandh Raja, Arul Prakash Raji, Senthil Kumar Madasamy, Feonsa Antonitta Bernard, Vaidegi Rameshbabu, Vijayakumar Mathaiyan, Naveen Kumar Kulandaiyapan, Investigations on Selection of Suitable Propellers for High Payload Based Unmanned Aerial Vehicles Using Advanced Computational Simulations, ASME 2021 Gas Turbine India Conference-December 2-3, 2021, Virtual, Online, Conference Sponsors: International Gas Turbine Institute, ASME 2021 Gas Turbine India Conference, ISBN: 978-0-7918-8553-6, Paper No: GTINDIA2021-68678, V001T05A001; 10 pages, Published Online: December 15, 2021, https://doi.org/10.1115/GTINDIA2021-68678 .



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8	Vijayanandh R	Vijayanandh Raja, Naveen Kumar Kulandaiyappan, Raj Kumar Gnanasekaran, Indira Prasanth Subramaniam, Kesavan Kandasamy, Arul Prakash Raji, Senthil Kumar Madasamy, Lightweight Material Optimization of Aquatic Vehicles' Propeller Based on Fatigue Life Using Hydro Structural Interaction Simulation, ASME 2021 Gas Turbine India Conference-December 2–3, 2021, Virtual, Online, Conference Sponsors: International Gas Turbine Institute, ASME 2021 Gas Turbine India Conference, ISBN: 978-0-7918-8553-6, Paper No: GTINDIA2021-68531, V001T04A001; 9 pages, Published Online: December 15, 2021, https://doi.org/10.1115/GTINDIA2021-68531 .
9	Vijayanandh R	Sai Shankaran Balaji, Vijayanandh Raja, Arul Prakash Raji, Senthil Kumar Madasamy, Naveen Kumar Kulandaiyappan, Raj Kumar Gnanasekaran, Sundararaj Kandasamy, Rajkumar Rajapandi, Nithin Nagarajan, Sri Divyalakshmi Kannan, Bharath Nagarathinam and Vijayakumar Mathaiyan, Conceptual Design and Comparative Power Generations on Unmanned Aerial Vehicle's Wing with Rotors using CFD, AIAA SCITECH 2022 Forum, January 3-7, 2022, San Diego, CA & Virtual, https://doi.org/10.2514/6.2022-0270 . Published Online: 29 Dec 2021.
10	Vijayanandh R	Vijayakumar Mathaiyan, Vijayanandh Raja, Abdul Saleem H, Tharika Ramesh Kumar, Srinivasamoorthy S, Arun Duraisamy, Dong Won Jung, Senthil Kumar Madasamy and Raj Kumar Gnanasekaran, Parametric Study of Interaction Behavior of Laminar Jets, AIAA SCITECH 2022 Forum, January 3-7, 2022, San Diego, CA & Virtual, https://doi.org/10.2514/6.2022-0783 . Published Online: 29 Dec 2021.
11	Vijayanandh R	Vijayanandh Raja, Meenakshi Samy, Keerthana Nachimuthu, Samrithi Sathyamoorthy, Deviparameswari Krishnasamy, Arul Prakash Raji, Raj Kumar Gnanasekaran, Senthil Kumar Madasamy, Naveen Kumar Kulandaiyappan, Vijayakumar Mathaiyan and Jagadeeshwaran Ponmariappan, Material Optimizations on UAV's axial flow compressor blade by using FSI Approach, AIAA SCITECH 2022 Forum, January 3-7, 2022, San Diego, CA & Virtual, https://doi.org/10.2514/6.2022-1090 . Published Online: 29 Dec 2021.



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12	Vijayanandh R	K. Murugesan, R. Vijayanandh, R. Venkatesan, R. Saravanan, S. Senthilkumar and J. Darshan Kumar, "Conceptual Design of High Endurance cum Hybrid Configuration based Personal Air Vehicles with Three-Axis Solar Tracker System," 2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), 2021, pp. 1-7, doi: 10.1109/ICAECA52838.2021.9675683.
13	Vijayanandh R	M. Ramesh. R. Vijayanandh, P. Jagadeeshwaran, K. Deviparameswari, S. Meenakshi, Prisha K. Asher R. Vaidegi, B. Feonsa Antonitta, Impact behavioral studies on various composite materials using Fluid-Structure interaction (FSI), Materials Today: Proceedings, Volume 51, Part 1, 2022, Pages 1134-1140. https://doi.org/10.1016/j.matpr.2021.07.112 .
14	Vijayanandh R	Raja, V.; Solaiappan, S.K.; Rajendran, P.; Madasamy, S.K.; Jung, S. Conceptual Design and Multi-Disciplinary Computational Investigations of Multirotor Unmanned Aerial Vehicle for Environmental Applications. Appl. Sci. 2021, 11, 8364. https://doi.org/10.3390/app11188364 .
15	Vijayanandh R	Raja, V.; Solaiappan, S.K.; Kumar, L.; Marimuthu, A.; Gnanasekaran, R.K.; Choi, Y. Design and Computational Analyses of Nature Inspired Unmanned Amphibious Vehicle for Deep Sea Mining. Minerals 2022, 12, 342. https://doi.org/10.3390/min12030342
16	Raj Kumar G	Raj Kumar Gnanasekaran, Balasubramanian Shanmugam, Vijayanandh Raja, Sakthipandi Kathiresan, Multi-disciplinary Optimizations on Flexural Behavioural Effects on Various Advanced Aerospace Materials: A Validated Investigation, Materiale Plastice, 59 (1), 2022, 214-233, https://doi.org/10.37358/Mat.Plust.1964 .
17	Vijayanandh R	Raja, Vijayanandh, et al. Structural Optimizations of Different Load-Carrying Members Based on Low Structural Performance through Computational Structural Analysis: Structural Optimizations of Sandwich Composite through FEA Approach. Handbook of Research on Advancements in the Processing, Characterization, and Application of Lightweight Materials, edited by Kaushik Kumar, et al., IGI Global, 2022, pp. 262-286. http://doi:10.4018/978-1-7998-7864-3.ch012 .

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18	Arul Prakash R	Arul Prakash R et al., Investigation of Automotive Disc Brake's Material Based on Tribological Parameters by using Computational Structural Analysis, Sarfraj Ahmed and Vinayak S Dakre (eds.) Tribology and Characterization of Surface Coatings, Scrivener Publishing LLC, 10, 211–238, 2022. https://doi.org/10.1002/9781119818878.ch10 .
19	Arul Prakash R	P. Shankara Narayanan, Padma Ganesan, R. Arul Prakash, R. Vijayanandh, and M. Ramesh, Numerical Investigation on Can-Combustor's Performance for Different Alternative Fuels Using CFD, Smart Technologies for Energy, Environment and Sustainable Development, Springer Proceedings in Energy, Vol 1, 10.1007/978-981-16-6875-3_62.
20	Vijayanandh R	Mathaiyan V., Vijayanandh R., Jung D.W. (2022) Theoretical Modelling of Thin Air Film Thickness in Miscible Liquids. In: Govindan K., Kumar H., Yadav S. (eds) Advances in Mechanical and Materials Technology. Lecture Notes in Mechanical Engineering. Springer, Singapore. 73, 2022, https://doi.org/10.1007/978-981-16-2794-1_73
21	Vijayanandh R	R. Vijayanandh, S. Senthilkumar, R. Rajkumar, Adarsh Kumar, M. Senthil Kumar, J. Darshan Kumar, K.M. Krishna Kumar, and R. Arul Prakash, Conceptual design and computational investigations of fixed wing unmanned aerial vehicle for medium-range applications, Autonomous and Connected Heavy Vehicle Technology, 1st Edition - January 18, 2022, 18, Pages 353-374, https://doi.org/10.1016/B978-0-323-90592-3.00020-3 .
22	Vijayanandh R	Mathaiyan, V., Vijayanandh, R., Srinivasamoorthy, S., Kumar, T.R., Sivalingam, S., Jung, D.W. (2022). Theory of Shape for Living and Non-living Things–Based on Thin Fluid Flows in Hele-Shaw Cell. In: Tadepalli, T., Narayanamurthy, V. (eds) Recent Advances in Applied Mechanics. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-9539-1_24
23	Dr. Senthil Kumar M	Senthil Kumar M, Krishnan, A. S. & Vijayanandh, R, (2021). Computational, Experimental and Surface Characterisation of Glass Fibre Reinforced Plastic Composite for Wind Turbine Blade Application, In Journal of Environmental Protection and Ecology (Vol. 22, Issue 2, pp. 602–616).