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Contents

Editor Message
Research Projects in Progress
workshops/Events organized.
Book Chapter Published
Guest Lectures Delivered
Journal Paper Published
Ph.D Awarded
Conference Paper Published
Academic results
Promotions
Faculty Recruitment

Editor Message



Slovakian flying car company Aero Mobil is ready for liftoff, with the announcement that it's going to launch a production-ready, road-registered aircraft in a week's time. The new flying car, which will debut at Top Marques in Monaco on April 20, will be available for pre-order this year.

Whether this news sends you into fits of excitement or not will likely depend on what you really want from your flying car. If it's vertical take-off and landing (VTOL) Jetsons-style commuting, that's not what the Aero Mobil delivers.

But if it's a vehicle that you can drive from your home to an airstrip, cover some bulk miles in the air, then land on another airstrip and drive to your destination, this thing is designed to meet both road and aircraft regulations and should do the job nicely.

On the road, it's a futuristic looking two-seater, with its broad wings folded back against the tail. From the looks of the new renders, it seems it'll operate as a semi open wheeler on the ground, with wheel arches that extend out sideways in car mode for a wider wheelbase, then retract for better aerodynamics in the air.

If the Aero Mobil 3.0 prototype is anything to go by, the interior will be absolutely stuffed to the gills with flight gauges and dials, looking much more like a cockpit than a dash.

Arriving at an airstrip, the Aero Mobil converts to flight mode at the touch of a button, with the wings folding out and power being redirected from the front wheels back to the pusher prop.

As a roadster or an airplane, it's a tale of compromise. But as one of very few roadable aircraft you can buy, it looks like a tight solution. And unlike many of the others, it looks so damn cool that it'll draw more eyeballs on the road than a Lamborghini. That alone may make it worth the "several hundred thousand Euro" price tag for some buyers.

You will need a pilot's license to fly this thing. Either a Sport Pilot license at a minimum, or a Private Pilot License as Aero Mobil recommends.

We look forward to learning more – including the price – from the official launch on the 20th.

Source: Aero Mobil

Research Projects

- **Dr.K. Ravindra**, Professor, HOD of Mechanical Engineering Department was granted with a twelve-lakh worth AICTE-RPS research project on ‘Development of High Strength Polymer Matrix Composites Reinforced with Metallic Glass Particulates’ in 2014.
- Another UGC-MRP 4 Lakh worth research project of Professor **Dr. K. Ravindra** on ‘Fabrication and Characterization of Nano Al₂O₃ reinforced Magnesium Metal Matrix Composites ‘received in 2014.
- **Dr. K. Ravindra**, Professor & HOD of Mechanical Engineering Department was granted with a forty thousand worth, Institution of engineers UG2015029 Project Design and Fabrication of 3D Printer’. This project is also in progress.
- **Dr. K. Srinivas**, Professor, Mechanical Engineering Department received an 8-lakh worth UGC-MRP research project on ‘Tool Condition Monitoring Based on Acoustic Emission Techniques ‘in 2015.This project is in progress.
- **Smt. D. Swapna**, Assistant professor of Mechanical Engineering Department received a 3-lakh worth UGC Sponsored project on ‘Flow forming behavior of Extra drawn Al6061 under warm deep drawing’. This project is in progress.



- **Dr. N.V.V.S. Sudheer and Dr. C. Srinivas** Associate professors organized a two-day national seminar on ‘Ethics and Human Values in Engineering’ during Jan 05-06, 2017. In this workshop Dr. L.S. Ganesh Professor, Department of Management Studies, IIT MADRAS delivered a lecture on ‘Why Character and Competence should be balanced in Engineering Education’ Dr. KVSG Murali Krishna, Professor, Department of Civil Engineering, JNTUK delivered a lecture on ‘Ethics in Civil Engineering.’
- **Prof. Dr.V. Chittaranjan Das** - Convener, **Dr. B. Ram Gopal** and **Dr. C. Srinivas** Associate professors, Co-Conveners organized a SERB sponsored two-day National Seminar on ‘Advances In Composite Materials’ organized by Mechanical Engineering department on 20-21 March, 2017. In this workshop Dr. B. Ravi Chandra, Scientist ‘F’ ARCI, Hyderabad delivered a lecture on ‘Composite Materials –A review on Metal Matrix Composites. In the afternoon Session Dr.V. Vasu from the Department of Mechanical Engineering, NITW delivered a lecture on ‘Introduction to Nanocomposite –Processing and Applications’ and on the next day Dr.G. Raghavendra from the Department of Mechanical Engineering NITW delivered a lecture on ‘Manufacturing of composites-Primary and Secondary processing of PMC, MMC, CMC.



D. Sameer Kumar, C. Tarasanka contributed a Book Chapter (Chapter 10) on ‘Magnesium and its Alloys for Automotive’ in "Light weight and Sustainable Materials for Automotive Applications" published by CRC Press (Taylor & Francis Group), USA. May 2017
ISBN 9781498756877 - CAT# K27551.



Prof.G.Srinivasa Rao delivered a guest lecturer on ‘Motivation of Faculty’ in a two day ‘Faculty Orientation program’ at Andhra Loyola Institute of Engineering and Technology, Vijayawada, during 8-9 June, 2017.

Journal Papers Publications

- V.RamakoteswaraRao, M. Srinivasa Rao, N.Ramanaiah M.M.M.Sarcar, and G.Kartheek 'Optimization of Process Parameters for Minimum Volumetric Wear Rate on AA7075-TiC Metal Matrix Composite', International Journal of Automotive and Mechanical Engineering, Vol.13(3), pp.3669-3680.
- V.RamakoteswaraRao, N.Ramanaiah and M.M.M.Sarcar 'Optimization of Volumetric Wear Rate of AA7075-TiC Metal Matrix Composite by using Taguchi Technique', Jordan Journal of Mechanical and Industrial Engineering, Vol.10 (3), pp.189-198.
- Dr.C.Srinivas, A.Nagamalleswara Rao, L.SrinivasaNaik, 'Evaluation and Impacts of Tool Profile and Rotational Speed on Mechanical Properties of Friction Stir Welded Copper 2200 Alloy', Elsevier, Science Direct Materials Today Proceedings, Vol.4, Issue 2, Part A, pp. 1225-1229.
- K. Sai Sravani, B. Ram Gopal Reddy and Raffi Mohammed, 'Effect of CaCO₃ and Al₂O₃ Fillers on Mechanical Properties of Glass/Epoxy Composites', International Journal for Modern Trends in Science and Technology (IJMTST), Vol.3(6), pp. 207-214.
- Sameer Kumar D, K.N.S. Suman and Palash Poddar, 'Effect of particle morphology of Ni on the mechanical behavior of AZ91E-Ni coated Nano Al₂O₃ composites', Material Research Express, Vol.4, Issue 6, IOP Science.
- D.Sameer Kumar, K. N.S. Suman, C. Tara Sasanka, K. Ravindra, 'Microstructure, mechanical response and fractography of AZ91E/Al₂O₃ (p) Nano composite fabricated by semi solid stir casting method', Journal of Magnesium and Alloys [ELSEVIER], Vol.5, Issue 1, pp. 48-55.
- Tarasanka C, Ravindra K. 'Analysis and Characterization of Tensile Property of Mg MMC using ANSYS', Trends in Mechanical Engineering & Technology, Vol. 7, issue 1 pp.1-5.
- Reddy Sreenivasulu, 'Design and Fabrication Issues in MEMS', AKGEC International Journal of Engineering and Technology, (ISSN: 0975-9514) Vol.8, No2, pp32-35 (Indexed by Google Scholar)
- Reddy Sreenivasulu, 'Optimum combination of process parameters to optimize surface roughness and chip thickness during end milling of aluminium 6351-t6 alloy using Taguchi grey relational analysis' Independent Journal of Management & Production (ISSN: 2236-269X) Vol.8, No2, pp.287-298.
- S.Radhika and Ch.Srinivasa Rao, 'Teaching Learning Based Optimization Approach for the Development of an Effective Master Production Schedule' in International Journal of Advanced Research in Computer Science and Software Engineering, Vol.7, Issue.5, pp.351-358.
- D.Swapna, Ch.Srinivasa Rao and S.Radhika, 'A Review on Deep Drawing Process' International Journal of Emerging Research in Management & Technology, Vol.6, Issue6, pp.146-149.
- G.Chaitanya, B.Muddu Krishna, 'Work Space Optimization of R-R Planar Manipulator using Particle Swarm Optimization Technique', International Journal of Engineering Science and Technology, Multicraft Publishers, Vol.9, issue1, pp. 46-54.
- G.Chaitanya, Reddy Sreenivasulu, 'Genetic Algorithm Based Optimization of a Two Link Robot Manipulator', International journal of lean thinking, Teknokent publishers, Vol.7, issue2, pp. 1-13.
- Dr. D.V.V. Krishna Prasad 'Characterization of Natural Fiber Reinforced Composites', International journal of engineering and applied sciences, vol.4, issue 6, 2017, pp: 26-32.
- K. Lakshmi Chaitanya, K. Srinivas, 'Crash and Vibrational Analysis of Car Body', Trends in Mechanical Engineering & Technology, STM Journals, ISSN: 2347-9965 (Print), Vol.7, issue2.
- M.Anuradha, C.Sailaja.V.Chittaranjan Das, 'Effect of Tool pin profile and Optimization of process parameters on 6061 by Friction stir welding using Taguchi Method' in International Journal of Mechanical Engineering and Technology (IJMET) Vol.8, issue 6, pp.615-621.

PhD. Awarded

Mr. K.Bala Prasad, Assoc. Professor was awarded Ph.D. for his thesis on 'Investigation of Different Blade Cooling Techniques on the Performance of Gas Turbines Used in Marine Applications' by Andhra University, Visakhapatnam, in Jan, 2017.

Mr.V.RamaKoteswara Rao, Asst. Professor was awarded Ph.D. for his thesis on 'Evaluation of Mechanical and Tribological properties of Aluminum Metal Matrix composites (AA7075/TiC) through stir casting method' by Andhra University, Visakhapatnam, in June, 2017.

Conferences Papers Publications

- and NagarjunaVarma.G published a paper in the conference proceedings titled ‘Numerical Simulation of Heat Transfer in Liquid Lithium Flow Through Elliptical Shaped Cylinder’, Proceedings of the 1st International and 18th ISME Conference (ISME 18) organized by NIT Warangal, Telangana, India, during 23– 25 February 2017.
- Dr.S.Radhika presented a paper entitled ‘Design of GSM based Wireless Controlled Robot’, Pg. 97, Proceedings of the 1st International and 18th ISME Conference (ISME 18) organized by NIT Warangal, Telangana, India, during 23– 25 February 2017.
- Siva Sankar Raju. R, Mk Panigrahi, R I Ganguly, G. Srinivasarao ‘Optimization of tribological behavior on Al- Coconut Shell Ash Composite at Elevated Temperature’, International Conference on Advances in Metallurgy, Materials and Manufacturing, March 6-8, 2017.
- B. Ramgopal Reddy and C. Srinivas, ‘Fabrication and Characterization of Silicon Carbide and Fly Ash Reinforced Aluminium Metal Matrix Hybrid Composites’, International Conference on Emerging Trends in Materials and Manufacturing Engineering, organized by NIT, Trichy, India, during 10-12 March 2017.
- Reddy Sreenivasulu and K.Vijaykumar Reddy et.al, published a paper in the conference proceedings titled ‘Effect of Cutting parameters on Surface Roughness and Chip Reduction Coefficient during CNC Turning of Aluminium 6351–T6 Alloy–Utility Based Taguchi Approach’, National Conference on Advances in Materials and Product Design (AMPD 2017) organized by Department of Mechanical Engineering, SVNIT Surat during 10– 11March 2017. ISBN: 978-93-5268-172-3.
- S.Ravisekhar, V.Chittaranjan Das, D.Govardhan published paper in 5th International conference of Materials Processing and Characterization (ICMPC-2016) on ‘Friction Surfaced Deposits for Industrial Applications’ Proceedings 4(2017) pp.3796-3801.
- Suneel D and Srinivasarao G ‘Parametric optimization of WEDM on α - β titanium alloy using desirability approach’, International Conference on Emerging Trends in Materials and Manufacturing Engineering (IMME2017) organized by National Institute of Technology, Tiruchirappalli, during 10– 12 March, 2017.
- Dr.Kolla Srinivas published a paper entitled ‘Mechanical Characterization of Glass Fiber (Woven Roving/Chopped Strand Mat E-glass Fiber) Reinforced Polyester Composites’ in International Conference on Functional Materials, Characterization, Solid state Physics, Power, Thermal and Combustion Energy (ICSPTC)-2017, at Ramachandra Engineering College, Eluru, during 7-8, April 2017.
- G.Chaitanya, Siva Koteswara Rao, ‘Key improvements in machining Ti6al4v alloy: a review’, International Conference on Functional Materials, Characterization, Solid state Physics, Power, Thermal and Combustion Energy (ICSPTC)-2017, at Ramachandra Engineering College, Eluru, durig 7-8April 2017.

Academic Results

Year	Total Appeared	Total Pass	Pass %
IV/IV B.Tech (VIII Semester)	208	199	95.67
III/IV B.Tech (VI Semester)	199	161	80.90
II/IV B.Tech (IV Semester)	196	133	67.86
I/IV B.Tech (II Semester)	168	104	61.90
I/II M.Tech (II Semester)	17	17	100
I/II M.Tech (I Semester)	17	17	100

Faculty Promotions

Dr. S. Radhika was promoted as Associate Professor in March 2017.



Faculty Recruitment

Mr. Mahendra Singh Chouhan joined as Assistant Professor in the department on 13 June 2017.

