

# rajvada news

Department of Mechanical Engineering

R.V.R. & J.C. College of Engineering, Guntur-522019

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### The Four Pillars of a Fulfilling Career

Probably we all spend at least 50% of our waking hours *at work, going to work, or thinking about work*. For most of us, work consumes almost 80% of our time and energy. It's on our minds all the time. It's not a surprise that 1 out of 2 people are unhappy with their careers. We trade our precious time for frustration and money. A fulfilling career is about multiple factors that you must get right. Otherwise, you will end up hating your life.

#### How many pillars do you have in place?

**1. Compensation:** How much you earn at your job makes you feel valued—that's what compensation is about. Money is not about status or material things. When you do work that's valuable, you should be rewarded for that. But at the same time, we need to remind ourselves to stay grounded. **Chasing money for the sake of having more money never ends well. Learning how to manage your money is one of the most important things you can do for yourself.**



**2. Work:** When you always prioritize compensation over the type of work, you won't feel good about your career. And sometimes, people can go on for years doing work they hate so they can make enough money. We want to make sure that all the hours we are putting in work, we actually enjoy. And yes, we can also enjoy the hard and uncomfortable things about job. We can train yourself to love hardship. But there's one condition: **We must believe in the work what we do.** Otherwise, we feel like it's all a waste of time. The good news is that *you* give meaning to what you do.

**3. Lifestyle:** Pick a job that fits lifestyle. And that's different for each phase of life. When you're young, you don't mind living in a big city and going out all the time. But when you want to build something real in life, you don't even have time for that. You need to work, eat, sleep, and repeat. In that case, it's better to live cheaply in a smaller city.

**4. Contribution:** We all want to feel valued and important in our careers. You don't have to change the world or help a million people. Most of us only want to make a meaningful contribution. The reality is that only a small group of people are responsible for the majority of the results at most organizations. Once we understand that, we must put ourselves in a position that makes us valuable. Not just because we want to make money or have status. Price's Law is all about making a contribution. We all need to make a valuable contribution to be fulfilled.

### Internal R & D project in progress

- ✦ Dr.C.TaraSasanka, J.P.Karthik was sanctioned Rs.40,000/- for his research project proposal on 'Evaluation and optimization of process parameters during heat transfer of coal water slurry used in coal gasification plant'.
- ✦ Ch. Devaraj was sanctioned Rs.30,000/- for his research project proposal on 'Performance evaluation of Nickel coated Alumina Reinforced AZ91E magnesium composites for alloy wheel applications'.
- ✦ D.Kondalarao, Dr. G. Srinivasarao was sanctioned Rs. 40,000/- for his research project proposal on Experimental investigation of herbal based Nano cutting Fluids with MQL in optimization of turning'.

### Industrial R & D Projects

- ✦ Dr.K.Praveen Kumar, Prof.K.Ravindra Prof.V.Chittaranjan Das, K.Snehita, was sanctioned Rs.5,50,000/- for proposal on 'Mechanical and Electrical behaviour of Boron & vanadium doped Fe-6.5(WT.%) Si soft magnetic alloy ribbons fabricated by direct powder rolling-funded by Sri Venkateswara Electricals Pvt. Ltd, Guntur.
- ✦ Prof.N.V.V.S.Sudheer, Prof.B.RamgopalReddy, Dr.V.Tarachand, Md.Hasheer was sanctioned Rs. 4,50,000 for research proposal on 'Improvement of COP of Air-Conditioning Systems by using different types of insulations and nano-compressor oil'. funded by Design Tribe(India)Pvt. Ltd, Hyderabad.
- ✦ Dr.K.Balaprasad, Prof.G.Srinivasarao, Prof.C.Srinivas, Dr.N.Govind was sanctioned Rs. 4,00,000 for proposal on 'Investigation on performance improvement methods of transformer using nano fluids in the perspective of cooling'- funded by Sri Venkateswara Electricals Pvt. Ltd,Guntur.
- ✦ Dr.C.Tarasasanka, J.P.Karthik, D.Bharat Prasanna, Dr.S.Radhika was sanctioned Rs. 4,00,000 for his research project proposal on 'Evaluation and optimization of process parameters for agitation in concrete mixing'. funded by Design Tribe(India)Pvt.Ltd, Hyderabad.
- ✦ Dr V. Rama Koteswara Rao, Prof. K. Srinivas, Prof. D.V.V.Krishna Prasad, Dr.G.Chaitanya, J.Rangaraya chowdary was sanctioned Rs.4,50,000 for proposal on 'Investigation of insulation and corrosion properties of transformer cores with electrical steel coatings' - funded by Sri Venkateswara Electricals Pvt. Ltd,Guntur.

### Patents

- ✦ Dr.C.Tara Sasanka, Dr.V.Ramakoteswara Rao, Dr. Reddy Sreenivasulu, G. Kishore Chowdari, Ch. Deva Raj, Dr. V. Tara Chand, J. Ranga Raya Chowdary, J. Purushottam Karthik, Sneha. H. Dhoria, Y.N.V. Sairam, Kilari Snehita, D. Bharath Prasanna published a Patent on "Humanoid Robot: Intelligent Humanoid Robot That Includes A Torso, A pair an arms, Two Hands, A Neck, Head, and Logic", on 4-12-2020 at IPR India.
- ✦ Dr. N. Govind, Dr. K. Praveen Kumar , Dr. Radhika Sajja, D. Swapna, K. Lakshmi Chaitanya, M.Vijaya, Mohammad Hasheer Shaik, Kondala Rao Dasari, Kurra

Hari Prasad, T.N.S Rama Krishna, Dr. A. Muddu published a Patent on "Intelligent Manufacturing Process: Computer Intelligent Manufacturing Process And Testing System. (Aid Physical Three-Dimensional Object)", on 4-12-2020 at IPR India.

- ✦ Dr. K. Ravindra,Dr. Kolla Srinivas, Dr. D. V. V. K. Prasad, Dr. V. C. Das, Dr. G. Srinivasa Rao, Dr. C. Srinivas, Dr. N. V. V. S. Sudheer , Dr. B. Ramgopal Reddy, Dr. K. Bala Prasad, Dr. G. Chaitanya published A Patent on "FC Lawn Mover", on 4-12-2020 at IPR INDIA.

### Workshops organized

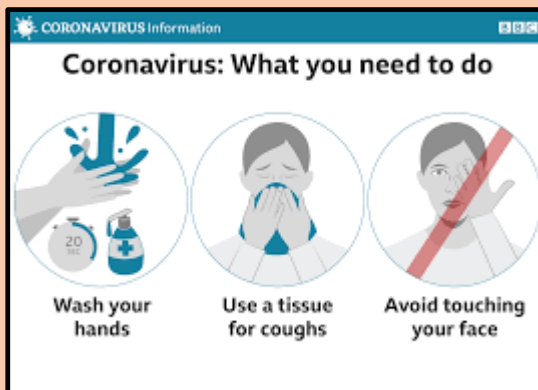
- ✦ An AICTE sponsored two week online FDP on 'Research Methodology, Design of experiments for Engineers and Researchers' was organized for the faculty, research scholars during 07 - 19 Dec, 2020 by Dr.G.Srinivasa Rao Dr.K.Bala Prasad, Dr.C.Tara Sasanka and Dr.A.Muddu

### Guest Lectures Delivered

- ✦ Dr.S.Radhika delivered a guest talk on 'Optimization using Meta-heuristic Techniques' in the IFDP on Multi-objective optimization-Design and Industrial Applications, organized by the Department of Mechanical Engineering at Baba Institute of Technology and Sciences, Visakhapatnam, on 4 Sep. 2020.
- ✦ Prof. N.V.V.S.Sudheer and Dr.S.Radhika delivered a guest talk on 'Case studies on DOE' and 'Evolutionary Optimization' in the AICTE sponsored two week FDP, Department of ME, RVR&JC College of Engineering, Dec. 7-19, 2020.

### Research Paper Publications

- ✦ Purna Kishore, C. Tara Sasanka and Y.N.V. Sairam, 'Mechanical and tribological behaviour of AA 2024 – Titanium Composite', Compliance Engineering Journal, Vol.11(9), 437-445, Sep, 2020.
- ✦ P. GopiKrishna, K.Ravindra, J.P.Karthik 'Design, Analysis and Optimization of a Hip Joint', Compliance Engineering Journal, Vol 11(10), 227-239. Sep, 2020.
- ✦ Sneha.H.Dhoria, V.Durga Prasada Rao, K.Venkata Subbaiah, K.Chaitanya Pranavi, 'Optimization of Multi response parameters in WEDM of Al6351 based hybrid metal matrix composites using Grey relational analysis', Vol.63(2s), 9789-9803, Dec. 2020.
- ✦ P. Ganesh and G. Chaitanya, 'Experimental Determination of Mechanical and Tribological Properties of Glass Fiber Epoxy Filled with Sic Powder Composites' Compliance Engineering Journal, Vol.11(9), 508-517, 2020.
- ✦ K.Siva Prasad, G. Chaitanya, 'Optimization of process parameters on surface roughness during drilling of GFRP composites using taguchi technique' Materials Today: Proceedings,1-6,2020, DOI:10.1016/j.matpr.2020.05.562.
- ✦ Racharla Madhu Kumar, N.V.V.S.Sudheer, and Katam Ganesh Babu, 'Multi-attribute decision making parametric optimization in two-stage hot cascade vortex tube through grey relational analysis' Int. J. Simul. Multidisci. Des. Optim. 11, 21 2020,



- ✦ N. Santhisree, N.V.V.S.Sudheer and P. Bhamara 'Analysis of Closed Loop Pulsating Heat Pipe using optimization techniques', International Journal of Ambient Energy, Taylor & Francis. 2020.
- ✦ Reddy Sreenivasulu, N. Yaswanth Krishna, M. Sukumar, O.N. Gouse Basha, N. ArunKumar, K. Hemanth and M. Vamsi Krishna, ' Modeling and analysis of Helical springs of different cross sections using CATIA-V5R19 and ANSYS 16.0 ' AKGEC International Journal of Technology, Vol.11(2), 41-50, 2020. (Indexed by Google Scholar).
- ✦ Reddy Sreenivasulu and Ch.Srinivasa Rao, 'Optimum combination of machining parameters during drilling of aluminium 7075 alloys using Grey based Taguchi approach' Journal of Mechanical and Energy Engineering, Vol.4(44), No.3,227-238, 2020, DOI: 10.30464/jmee.2020.4.3.227 (Indexed by Google Scholar).
- ✦ Supraja and B. Ramgopal Reddy, 'Investigation of Metallurgical and Mechanical Properties of Dissimilar Friction Stir welded pure copper and AA7075 joint by using various process parameters, Tool Shape and Tool Material', Journal of Solid State Technology, Vol.63(5), 7969-7978, 2020.
- ✦ A J S A V Vara prasad, B. Ramgopal Reddy, 'Evaluation of wear characteristics of Aluminium Alloy (6061-T6) reinforced with Molybdenum Disulphide (MO<sub>2</sub>) Metal Matrix Composites' Compliance Engineering Journal, Vol. 11(9),446-456, 2020.
- ✦ J.P.Karthik, C.TaraSasanka, C.M.Raghuraman, 'Preparation of Coal Water Slurry using Agitation Parameters Involved and their Influence-A Review'. Sigma Journal of Engineering and Natural Sciences 38 (4), 1987-1998, 2020.
- ✦ Saravanbhavan and G.Srinivasarao 'Experimental Study on Machining Characteristics of Ti-6Al-4V using wire-cut EDM', Solid State Technology, Vol. 63(5), 1072-1078, 2020.
- ✦ K. Bala Prasad, OlivaMeduri, V. DhanaRaju, ArunaKumari, Harish Venu, LingesanSubramani & ManzooreElahi M. Soudagar, 'Effect of split fuel injection strategies on the diverse characteristics of CRDI diesel engine operated with tamarind biodiesel', Energy Sources, Part A: Recovery, Utilization, and Environmental Effects,
- ✦ V. Vijaya Bhaskar, K.Srinivas, D. Siva Bhaskara Rao ' Investigation on Physical and Mechanical properties of banana and Palmyra fiber reinforced Epoxy Composites' Strojnicky časopis Journal of Mechanical Engineering, Vol.70(2), 167-180, 2020.
- ✦ V. Vijaya Bhaskar, K.Srinivas, D.Siva Bhaskara Rao 'A novel mathematical correlation for thermal conductivity of hybrid composites reinforced with natural fibers ' Materials Today: Proceedings 26, 2208–2211, 2020.
- ✦ K. Lakshmi Chaitanya, B.Rajesh, K.Srinivas, 'Optimisation of wear behaviour of Aluminium LM26 composite using Taguchi method' Compliance Engineering journal, Vol.11(10), 127-135, 2020.
- ✦ K.C.RatnaBabu, Radhika Sajja , 'Few investigations on Metal Matrix Composites of Aluminum Al7075 alloy ' Compliance Engineering Journal, Vol. 11, issue 9, 2020.
- ✦ B.Praveen, C.Srinivas, 'Evaluation of Mechanical and Wear Properties of Aluminium Alloy (Al-6082) reinforced with Boron Carbide and Silicon Carbide

Hybrid Metal Matrix Composites' Compliance Engineering Journal, ISSN NO: 0898-3577, Vol.11(9), 502-507, 2020.

#### Paper Presentations in Conferences

- ✦ K.Hari Prasad, 'Performance evaluation of direct injection diesel engine using canola and sesame biodiesels' two days Virtual International Conference on Sustainable Energy Solutions for a better tomorrow, School of Mechanical Engineering, Vellore Institute of Technology(VIT) Chennai, July, 23-24,2020.
- ✦ Sneha.H.Dhoria, V.Durga Prasada Rao, K.Venkata Subbaiah ,'Thermal analysis on 6351 Al/Gr/Sic hybrid metal matrix composites by squeeze casting process" 2nd conference on Advances in Modelling, Manufacturing and Materials Engineering, Vignan university, Oct. 30-31, 2020.
- ✦ J.Ranga Raya Chowdary, V.Ramakoteswara Rao, A. Kajavali, 'Mechanical Behaviour of TiB<sub>2</sub> Particle Reinforced AA7075 Metal Matrix Composites' , National Conference on Advancement in Material Processing Technology, NIT, Jamshedpur, 31 Oct. – 2 Nov, 2020.
- ✦ J.P.Karthik, C.TaraSasanka, C.M.Raghuraman, 'Predicting of Two Phase Mixing Uniformity based on the varying power for different Impellers using Hydro Dynamic Simulation',
- ✦ National Conference on advancement in Material Processing Technology, NIT, Jamshedpur, 31 Oct. – 2 Nov, 2020.
- ✦ D.V.V.Krishna Prasad, 'Influence of Heat Treatment on Mechanical Characteristics of Al7075/Al<sub>2</sub>O<sub>3</sub>/TiC Hybrid Metal Matrix Composite' International E- Conference on industry technologies in civil and mechanical engineering(IT14TCME-2020), VVIT, Nambur, Dec. 4 - 5, 2020.
- ✦ D.V.V.Krishna Prasad, ' A scientific study on practical applications of MHD non-Newtonian cassinon fluid flow in engineering and sciences" International Conference, 65 th congress of the Indian society for theoretical and applied mechanics, VVIT, Nambur, Dec. 9-11, 2020.
- ✦ Reddy Sreenivasulu, 'Smart materials for 4D printing: a review on developments, challenges and applications' First international conference on future technologies in manufacturing, automation, design & energy (ICoFT2020 MADE@NITPY),National Institute of Technology Puducherry, Dec. 28 – 30, 2020.

#### Conferences/Workshops Attended

- ✦ K.Balaprasad, one wee FDP 'Advancements in Mechanical Engineering' GATES Institute of Technology, July 4 - 10, 2020.
- ✦ K.Balaprasad, online FDP 'Effective Design and Delivery of Curriculum in Outcome Based Education' Department of Business administration, JIT Nagpur, July 6-10, 2020.
- ✦ Y.N.V.Sairam, one week STTP through ICT Mode 'Theory of CNC Machines' NITTR Kolkata, July 6-10, 2020.
- ✦ Y.N.V.Sairam, one week online STC 'Hybrid Manufacturing Processes: Opportunities and Challenges' Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, July 06 - 10, 2020.
- ✦ K.Balaprasad, one week online FDP 'Recent Developments in Mechanical Engineering(RDME-2020)' KITS Warangal, July 7-11, 2020.

- ✦ Muddu, 5 day online FDP 'Recent advances in process metallurgy' OP Jindal university, SOE in Association with ASM International USA-India Chapter, Indian Institute of Metals (IIM)-Raigarh, July 13-17, 2020.
  - ✦ Sneha.H.Dhoria, online FDP 'Advanced Optimization techniques and hand-on with MATLAB/SCILAB' jointly Electronics and ICT Academies, IIIT DM Jabalpur, MNIT Jaipur, July 13-24, 2020.
  - ✦ C.Srinivas, online course 'EN101x: English for Oral Communication' IIT Bombay, July 15 - Dec. 15, 2020.
  - ✦ N.V.V.S.Sudheer, FDP 'CATIA V5 Chassis Design' APSSDC in Association with Dassault Systems, July 20-24, 2020.
  - ✦ S.Radhika, 'Alternate Fuels and Emissions – Present Scenario' Gayatri Vidya Parishad College for Degree and P.G. Courses (A) Engineering & Technology Program, July, 27-31, 2020.
  - ✦ Sneha.H.Dhoria, one week FDP 'Optimization Techniques for Mechanical Engineers' Vignan Institute of Technology and Science, 27 July - 1 Aug, 2020.
  - ✦ K.Balaprasad, online FDP 'Green Energy for Sustainable Development' Indian Centric Approach, Bheemanna Khandre Institute of Technology, School of Engineering Central University of Karnataka, Green Club, Aug. 10-14, 2020.
  - ✦ K.Balaprasad, online workshop 'Prospects of Biofuels as an Alternative to Fossil Fuels for Future Automobiles' LBRC, Aug. 10-11, 2020.
  - ✦ C.Srinivas, two-week online FDP 'ICT tools for teaching learning process and institute' E&ICT Academics, NIT Patna, MNIT Jaipur, PDPM IITDM Jabalpur, IIT Guwahati and IIT Roorkee, Aug. 10-21, 2020.
  - ✦ S.Radhika, online FDP 'Leadership and Excellence' AICTE Training and Learning (ATAL) Academy, IIT Hyderabad, Sep. 7-11, 2020.
  - ✦ S.Radhika, online FDP 'Design thinking' AICTE Training and Learning (ATAL) Academy, Vellore Institute of Technology, Sep. 14 -18, 2020.
  - ✦ N.V.V.S.Sudheer, online FDP 'Green Technology & Sustainability Engineering' AICTE Training and Learning Academy, NIT Jamshedpur, Sep. 14 - 18, 2020.
  - ✦ K.Ravindra, C.TaraSasanka, FDP 'Robotics' AICTE Training and Learning (ATAL) Academy, P.S.G College of Engineering, Coimbatore, Sep. 21-25, 2020.
  - ✦ K. Praveen kumar, D.Swapna, online FDP 'Additive manufacturing' AICTE Training and Learning (ATAL) Academy, Vasireddy Venkatadri Institute of Technology, Sep. 21-25, 2020.
  - ✦ K.Balaprasad, one week Short Term Course 'Recent Trends in Advanced Materials and Devices' Department of Physics and Electronics & Communication Engineering, Dr B.R. Ambedkar, NIT Jalandhar, Sep. 21-25, 2020.
  - ✦ C.Srinivas, online training programme, 'Digital Tool for writing, Authoring and Reviewing Manuscript' Ministry of Electronics and Information Technology (MeitY), Electronics & ICT Academies, MNIT Jaipur, NIT Patna & IIT Guwahati, Sep. 21 - Oct. 2, 2020.
  - ✦ Muddu, 5 day online FDP 'Design thinking - Finite Element Analysis for Product Design' AICTE Training and Learning (ATAL) Academy, Veermata Jijabai Technological Institute, Sep. 30 - 4 Oct, 2020.
  - ✦ K. Praveen kumar, V.Ramakoteswara rao, online FDP 'Novel Materials' AICTE Training and Learning Academy, Pillai College of Engineering, Oct. 5 - 9 2020.
  - ✦ J.Rangaraya Chowdary, 'Fuel cell hybrid vehicle' School of Mechanical Engineering, Galgotias University, Greater Noida, Uttar Pradesh, Oct. 7, 2020.
  - ✦ S.Radhika, Reddy Sreenivasulu, J.Rangaraya Chowdary, Sneha.H.Dhoria, D.Kondalarao, T.N.S. Ramakrishna, online one week FDP 'Pedagogical Practices of New India under National Education Policy 2020' Tripura University, Manipur University and Assam University, Oct. 7-11, 2020.
  - ✦ K.Snehita, online FDP, '3D Printing & Design' AICTE Training and Learning (ATAL) Academy, University Visvesvaraya College of Engineering, Oct. 5-9, 2020.
  - ✦ J.Rangaraya Chowdary, J.P.Karthik, D.Kondalarao, online FDP 'Emerging Technologies(IOT, Robotics & UAV)' AICTE Training and Learning (ATAL) Academy, Center for development of advanced computing, Oct. 12-16, 2020.
  - ✦ S.Radhika, 3 day Higher Education Conclave, NEP-2020, IEEE Guntur Sub-Section in collaboration, IEEE Education Society, Hyderabad Section, Oct. 15-17, 2020.
  - ✦ Muddu, 5 day online FDP 'Design thinking on development projects related to social and rural program' ATAL, Indian Institute of Information Technology Design and Manufacturing Kurnool, Oct. 17-21, 2020.
  - ✦ C.TaraSasanka, J.Rangaraya Chowdary, J.P.Karthik, D.Kondala rao, online FDP 'Mechatronics' AICTE Training and Learning (ATAL) Academy, G H Patel College of Engineering & Technology, Oct. 19-23, 2020.
  - ✦ K.Snehita, online FDP '3D Printing & Design' AICTE Training and Learning (ATAL) Academy, Indian Institute of Information Technology, Design and manufacturing Kurnool, Oct. 19-23, 2020.
  - ✦ Ramgopal Reddy, online FDP 'Robotics' AICTE Training and Learning (ATAL) Academy, IIT Ropar, Nov. 2- 6, 2020.
  - ✦ Reddy Sreenivasulu, online one week STC 'Current and future scope of surface coatings' Department of Chemical Engg. NIT Jalandhar, Dec. 02-06, 2020.
  - ✦ G.Chaitanya, K.Praveen Kumar, D.Swapna, K.L.Chaitanya, M.Vijaya, Sneha.H.Dhoria, D.Kondalarao, two week online FDP 'Research Methodology, Design and analysis of Experiments for Engineers and Researchers' R.V.R & J.C College of Engineering, Chowdavaram, Dec. 7-19, 2020.
  - ✦ K.Snehita, 2 week FDP 'Frontier of 3D Printing Technology & its Industrial applications' Lakkireddy Bali reddy College of Engineering, Dec. 7-19, 2020.
  - ✦ Reddy Sreenivasulu, online FDP 'Green Technology & Sustainability Engineering' NIT Raipur, Dec. 8-12, 2020.
  - ✦ K. Praveen kumar, V.Ramakoteswara rao, 5 day online Short term course 'Smart Manufacturing Technologies' Department of ME, Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh, Dec. 23-27, 2020.
- Ph.D. Registration**
- ✦ K.Snehita, registered Ph.D in Andhra University in Oct.2020.