



## **Dr. Prattipati Prasanna**

Ph.D (JNTU)

**Associate Professor & Addl. Controller of Examinations(Academics), JNTUH**

Mechanical Engineering

### **Areas of Interest:**

• Machine Design, Composite Material

Specialized in Machine Design. Research interests include Composites and Machine design.

### **-> At JNTUH**

- > Assistant professor, JNTUCE, Hyderabad (2006 - 2020)
- > Associate professor, JNTUCE, Hyderabad (2020 - Till Date)

### **-> Patents**

-> Dr.PRASANNA PRATTIPATI, *MECHANICAL CHARACTERIZATION STUDIES ON LOAM SANDY MIXED MICRO SILICA FOR STRUCTURAL APPLICATIONS.* , 2022

### **-> Publications**

- > P.Mallikarjuna, Dr.P.Prasanna, *Comparison of turning process performance using modified cutting inserts under minimum quantity lubrication*, Taylor & Francis, Vol No.39, Issue No.5, 2024
- > M. Siva reddy, Dr. Prasanna Prattipati, *Optimisation of friction spectral process parameters on aa8011 reinforced with titanium diboride (tib2) and zirconium oxide (zrO2, metal hybrid matrix*, IJMET, ISBN No.0976-6340/0976-6340, Vol No.15, Issue No.2, IJMET, March, 2024
- > M. Siva reddy, Dr. Prasanna Prattipati, *â€œEXPERIMENTING AND OPTIMISING CUTTING PARAMETERS FOR A HIGH-SPEED MACHINE ON AA8011 REINFORCED WITH TiB2 AND ZrO2â€œ*, IEJ, ISBN No.0970-2555/0970-2555, Vol No.15, Issue No.1, IEJ, September, 2024
- > Saidulu. G. Dr. P. Prasanna, *â€œoptimization of technological process parameters for wire electric discharge machining on nimonic 75 alloyâ€œ*, THE INDIAN JOURNAL TECHNICAL EDUCATION (ISTE), Vol No.47, Issue No.1, ISTE, JUNE, 2024
- > Saidulu. G. Dr. P. Prasanna, *Optimization and comparison of process parameters for machining Nimonic alloy 75 using Wire cut EDM by molybdenum and brass wires*, The International journal of analytical and experimental modal analysis, ISBN No.0886-9367, Vol No.XVI, Issue No.I, pp.252-270, The International journal of analytical and experimental modal analysis, January, 2024
- > M. Siva reddy, Dr. Prasanna Prattipati, *TRIBOLOGICAL CHARACTERISATION AND OPTIMISATION OF AA8011 ALUMINIUM ALLOY REINFORCED WITH ZIRCONIUM OXIDE AND TITANIUM BORIDE*, INTERNATIONAL JOURNAL OF MANUFACTURING, MATERIALS, AND MECHANICAL ENGINEERING (IJMME), ISBN No.2940-6442/2940-6442, Vol No.2, Issue No.1, pp.1-12, INTERNATIONAL JOURNAL OF MANUFACTURING, MATERIALS, AND MECHANICAL ENGINEERING (IJMME), JUNE, 2024
- > M. Siva reddy, *INVESTIGATION OF SURFACE ROUGHNESS IN MILLING OF AA8011 USING SOLID CARBIDE END MILL TOOL*, INTERNATIONAL JOURNAL OF DESIGN AND MANUFACTURING TECHNOLOGY (IJDMT), ISBN No.0976-6995/0976-6995, Vol No.15, Issue No.1, pp.13-21, INTERNATIONAL JOURNAL OF DESIGN AND MANUFACTURING TECHNOLOGY (IJDMT), JUNE, 2024
- > Saidulu. G, *Optimization of Machining Parameters for Wire-Cut EDM on Various Nickel Alloysâ€œA Review*, International Journal of Research Publication and Reviews, ISBN No.2582-7421, Vol No.4, Issue No.12, pp.5016-5022, International Journal of Research Publication and Reviews, December, 2023
- > *Microstructure and Mechanical Properties Of B4C And ZrO2 Reinforced AZ91D Magnesium Matrix Hybrid Composite In Friction Stir Processing (FSP)*, JOURNAL OF CRITICAL REVIEWS ISSN- 2394-5125 VOL 07, ISSUE 13,2020 2960
- > Sairam Ambati1, Dr. Prasanna Prathipati, Singaiah Gali *Influence of B4C and ZrO2 Particles on Mechanical Properties and Microstructure of AZ91D Magnesium Composite-The International journal of analytical and experimental modal analysis Volume XIII, Issue XII, December/2021 ISSN NO:0886-9367*
- > Singaiah Gali1, Dr. Prasanna Prathipati2 *Study of Microstructure and Mechanical Properties of AZ91D Magnesium Metal Matrix Composite Reinforced With B4C and ZrO2. The International journal of analytical and experimental modal analysis Volume XIII, Issue XII, December/2021 ISSN NO:0886-9367*
- > Singaiah Gal, Dr. Prasanna Prathipati. *Recent studies on development in fabrication of Mg-metal matrix Hybrid composites - A research review* Â© 2021 JETIR December 2021, Volume 8, Issue 12 www.jetir.org (ISSN-2349-5162)
- > Saikrishna Methuku, Dr. Prasanna Prathipati,,Singaiah Gali, *Wear Test Parameters ptimization for Tribological Characteristics of AZ91D Magnesium Metal Matrix Composite Reinforced with Boron Carbide and Zirconia*, International Journal of Scientific Research and Engineering Development-â€œ Volume 5 Issue 1, Jan-Feb 2022
- > P Prasannaa\*, Tallapragada V S S P Sashankb, Bhaviriseti Manikantac, Pruthvi Alurid *Optimizing The Process Parameters Of Electrical Discharge Machining On AA7075 - SiC Alloys*, ScienceDirect Materials Today: Proceedings 4 (2017) 8517â€œ8527
- > B. Siva kumara\*, P. Prasanna, J. Sushmac, K.P. Srikanthd *Stress Analysis And Design Optimization Of A Pressure Vessel Using Ansys Package. ICMPC 2017, Science Direct Materials Today: Proceedings 5 (2018) 4551â€œ4562*
- > P.Prasanna G. Shraavan,V.Gopinath, *Optimization of Mechanical Properties on Hybrid Composites by Topsis Technique International Journal of Research Available at e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 06 March 2018*
- > Singaiah Gali\*, Prasanna Prathipati *MICROSTRUCTURE, MECHANICAL PERFORMANCE AND WEAR BEHAVIOR OF AZ91D-B4C-ZrO2 HYBRID COMPOSITES.:* 2084-6096 ISSN (online): 2299-128X *Composites Theory and Practice* 22: 4 (2022).
- > Swathi Gopika Godhumala1 , Dr. Prasanna Prathipati2 , Singaiah Gali3 *FABRICATION AND MECHANICAL CHARACTERISTICS OF MAGNESIUM MATRIX REINFORCED WITH B4C AND ZrO2 COMPOSITES DURING FRICTION STIR PROCESSING. The International journal of analytical and experimental modal analysis Volume XIV, Issue XI, November/2022 ISSN NO: 0886-9367*
- > Rangubhotla Teja, Dr. Prasanna Prathipati, Singaiah Gali *STUDY ON TRIBOLOGICAL POPERTIES OF AZ91D MAGNESIUM COMPOSITE REINFORCED WITH B4C AND ZrO2 . International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 10 Issue: 05 | May 2023 www.irjet.net p-ISSN: 2395-0072*
- > Bheem Rao.P, Prasanna.P, *â€œFabrication and Estimation of Mechanical Properties of Aa6061 Matrix Reinforced with Al2O3 and Stainless Steel 316 Powderâ€œ*, International Journal of Science and Research (IJSR), Volume 9 Issue 1, January 2020,pp.58-64
- > Rashmi Maharaja, P.Prasanna, *â€œDamage Detection and Severity Assessment of Composite Rotor Blade Materials using Modal Analysis for SHMâ€œ*, International Journal for Research in Applied Science & Engineering Technology(IJRASET) (December 2019) Volume 7, Issue X, pp.68-87.
- > Girish Kopur, Dr. P Prasanna, *â€œ Modal Analysis of Silicon Carbide - Banana Fiber Epoxy Composites using an Experimental Set Upâ€œ*, International Journal for Research in Applied Science & Engineering Technology (IJRASET)Volume 7,IssueIX,(Nov 2019),pp.750-754.
- > Chelagolla Prudhvi, Dr. P. Prasanna, *â€œExperimental Analysis of Fiber Reinforced Composite Beam with Crack by varying Process Parametersâ€œ*, International Journal for Research in Applied Science & Engineering Technology (IJRASET) Volume 7, Issue IX,(Nov 2019),pp.741-746.
- > Aneundi Durga Praneetha; S.Ramesh Kumar Patnaik; Ganji Prashanth; Dr.P.Prasanna, *â€œElectron beam welding-influence of weld bead geometry on mechanical properties of stainless steel ss 304l alloyâ€œ*, International Journal of Scientific Research and Review(Nov 2019) 8(7):pp.308-320.
- > Ganji Prashantha, Shaik Sana Samreen, Dr. P Prasanna, *â€œUltra-Grain Refinement and Optimization of Aluminum Material Properties using Equal Channel Angular Pressing (ECAP) in DEFORM Softwareâ€œ*, International Journal of Scientific Research and Review(Nov 2019) 8(7):pp.145-157.
- > Dr. P Prasanna, Manja Abhishek, *â€œExperimental Investigation and Analysis of Wear Characteristics of Aluminium A6061 Reinforced with Red Mudâ€œ*, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 7 Issue XI, Nov 2019,pp. 816-819
- > P. Divya vani and P. Prasanna, *â€œExperimental Investigation of Mechanical Properties of Banana and Glass Fiber Reinforced Epoxy Based Hybrid Composites with Filler Materialsâ€œ*, International Journal of Science and Research (IJSR) Volume 7 Issue 6,(June 2018),pp.1759-1764.
- > Kummari Mahesh, P.Prasanna, *â€œOptimisation of Drilling Parameters Using Grey Relational Grade on AA7075 Plates Using Coated and Cryogenically Treated Drillsâ€œ*, International Journal of Science and Research (IJSR) Volume 7 Issue 6, (June 2018):pp.1619-1625.
- > K. Akhil Kumar, Dr. P. Prasanna, *â€œPerformance Evaluation of Solid Lubricants under MQL in Hard Turning of EN-31 Steel Using Coated Carbide Insertsâ€œ*, International Journal of Science and Research (IJSR) Volume 7 Issue 6, (June 2018):pp.1626-1632.
- > P.Prasanna, V Y Manu Sharma *â€œOptimization of Drilling Process Parameters during the Drilling of Ti-6Al-4V Alloy Using Carbide Drill bitâ€œ*, International Journal for Research in Applied Science & Engineering Technology (IJRASET) (JAN 2018) 6(1):pp.754-762.
- > A.Seshappa, B.Venkatesh, T.Vijaybabu, P.Prasanna,*â€œOptimization Of Significant Parameter On Mechanical Activities Of Almg Isicu Fusion Metal Matrix Composites With Taguchi Included Fuzzy Approachâ€œ* International Journal of Mechanical Engineering and Technology (IJMET) Volume 8, Issue 12, (December 2017), pp. 1089â€œ1095.
- > A.Seshappa,P.Prasanna,B.subbaratnam,S.NareshKumar,*â€œInventionWithAutomatic Categorization Of Al-7075-T6 With Fly Ash Combined By Swirl Cast Hot Die Pattern Procedureâ€œ*, International Journal of Mechanical Engineering and Technology (IJMET) Volume 8, Issue 12, (December 2017), pp. 1057â€œ1065.
- > N. Dheera Dr. P. Prasanna *â€œEffect On Surface Roughness And Tool Wear During Turning Of AISI 1020 Steel Using Coated Carbide Insertsâ€œ* IJSRD - International Journal for Scientific Research & Development| Vol. 5, Issue 04, 2017 | ISSN (online): 2321-0613.
- > Kavya Aileni,P.Prasanna, *â€œBuckling Analysis of Ring Stiffened Circular Cylinders Using ANSYSâ€œ*, International Journal for Research in Applied Science & Engineering Technology (IJRASET) (Nov2017) 5(X):pp.1587-1600.
- > G Vamsidhar Reddy, P Prasanna, D Mani Kumari, *â€œCondition Monitoring of Low Pressure Steam Turbine Bladesâ€œ*, International Journal for Research in Applied Science & Engineering Technology (IJRASET) (Nov2017) 5(IX):pp.1587-1600.
- > Reethi Mukaharjee,P.Prasanna,Harika,Dhruiya Rathod, *â€œEffect of Stacking Sequence on Bending Stiffness with respect to 600 Angle Plyâ€œ*, International journal of applied research,ISSN0973-4562 vol.10 No68(2015).
- > P.Prasanna, Ch.Penchalayya, Gopi, Sharnya, *â€œInfluence of Processes parameters and Optinization of FSW on AA6061-T6 Aluminium alloy using PCA analysis based Taguchi Methodologyâ€œ*, Indo-American Journal of Mechanical Engineering,ISSN 2321-9416,vol 2, Vo.1,March 2014.
- > P.Prasanna, Dr.Ch.Penchalayya, Dr.D. Anandhamohana Rao *â€œEffect of Tool Pin Profiles and Heat Treatment Process in the Friction stir welding of AA 6061 Aluminium Alloyâ€œ* American Journal of Engineering Research(AJER),2013, VOL.02, PP-07-15.
- > P.Prasanna, Dr.Ch.Penchalayya, Dr.D. Anandhamohana Rao *â€œInfluence of Process Parameters on Mechanical Properties of Copper Alloys in Friction stir weldingâ€œ* International journal of Engineering Sciences Research(IJSR),2013, VOL.04.
- > P.Prasanna, Dr.Ch.Penchalayya, Dr.D. Anandhamohana Rao *â€œOptimization and Validation of Process Parameters in Friction stir welding on AA 6061 Aluminium Alloy using Grey Relational Analysisâ€œ* International journal of Engineering Research and Applications(IJERA), 2013, VOL.03,pp 1471-1481.
- > B. Anjaneyas Prasad, P.Prasanna *â€œ Experimental Comparison of the MIG and Friction stir welding processeses for AA 6061 aluminium alloyâ€œ* International journal mining, metallurgy Engineering( IJMME) Vol1,Issue2(2013).
- > P.Prasanna, B. Subba Rao, G. Krishna Mohana Rao *â€œFinite element modeling for maximum temperature in friction stir welding and its validationâ€œ* Int J Adv Manuf Technol (2010) 51:925-933.
- > P.Prasanna, B. Subba Rao, G. Krishna Mohana Rao *â€œExperimental and Numerical evaluation of Friction stir welds of AA6061-T6 Aluminium Alloyâ€œ* APRN Journal of Engineering and Applied Sciences ,VOL. 5, N0.6,2010
- > Dr. Prasanna Prathipati, Singaiah G , Venugopal C,*METALLURGICAL AND MECHANICALCHARACTERIZATION OF AA7075 HYBRID METAL MATRIX COMPOSITE.Mukt Shabd Journal Volume XII, Issue VI, JUNE/2023,ISSN NO : 2347-3150,*

## **International Conference**

- > P.Prasanna, G.Shravan, V.Gopinath, *Optimization Of Mechanical Properties On Hybrid Composites By Topsis Technique* in International Conference On Research In Engineering Technology and Management, to be Held on 24- February-2018.
- > 7th International conference on Materials Processing and characterization (ICMPC-2017) Paper name: Stress analysis and Design Optimization of a Pressure Vessel Using ANSYS Package. Participating and Presenting 17-19th March 2017. 4 day conference GRIET&MANIT
- > P.Prasanna, *Optimization the process parameters of EDM on AA7075-SiC alloys*, International conference on Advancements in Aeromechanical materials for manufacturing held on 7-9th July 2016.
- > P.Prasanna, et.al *Optimizing the Process Parameters of Electrical Discharge Machining on AA7075 SiC Alloys* International Conference on Advancements in Aero Mechanical Materials For Manufacturing, July 2016 - MLRIT Hyderabad.
- > Raghurami Reddy, P.Prasanna, G.Shravan, K.Raju, *Influence of Parameters and optimization of EDM Performance measures on MDN steel using PCA Taguchi based method*, proceedings of international conference on Advanced Materials and Manufacturing Technologies(AMMT) held on Dec 18th<sup>th</sup> 20th 2014. 978-93-82163-46-6, PgNo.233-241
- > P.Prasanna, Dr G. Krishna Mohan Rao, B. Subbarao, *Development of Mathematical Model for Friction Stir Welding of 304L Stainless Steel* International Conference on Mechanical and Electrical Technology (ICMET), 2009.

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## **National Conference**

- > P.Prasanna, et.al *Analysis of Forces and Tool Wear In Turning Operation Using Minimum Quantity Lubrication (MQL) System* National Conference on Design and Manufacturing Of Product Life Cycle, March 2016 - BITS Hyderabad.
- > P.Prasanna, Reethi Mukaharjee, Harika, *Effect of Stacking Sequence on Bending Stiffness with respect to 600 Angle Ply*, National Conference on trends and innovations in mechanical Engineering(TIME) held on 17th April 2015 at MGR educational and Research Institute, Chennai.
- > P.Prasanna, Dr G. Krishna Mohan Rao, B. Subbarao, *Development of Generalized Equation for Obtained the Maximum Temperature during Friction Stir Welded Joints of Aluminium Alloys*, National Conference on Aerospace Engineering (NCAE-09).
- > P.Prasanna, Dr.Ch.Penchalayya, *A comparison of 2D and 3 D dynamic stresses and estimation load factors of spur gear- A computer Aided study*, National conference on Recent trends in CAD/CAM- 30th March 2002.
- > **Events Participated/Organized**

## **- Organized**

- > Organized a Workshop on 2 weeks workshop organized on Composite and Nano composite materials "metal, ceramic, polymer matrix as New engineering & Structural materials sponcerd by GIAN,MHRD &JNTUHCEH(11th-july to 22nd July 2016)., Hyderabad,
- > Organized a Workshop on One day work shop on Innovative Avenues for Advanced Engineering Design Applications - 2019 (IAAEDA-19) sponcerd by TEQIP-III JNTUHCEH., Hyderabad,
- > Organized a Workshop on TWO days Student Work shop on RC aircraft 2019 JNTUHCEH., Hyderabad,
- > Organized a Workshop on TWO days Student Work shop on Ornithopter 2020 JNTUHCEH., Hyderabad,
- > Organized a Workshop on Student Technical symposium Connassaince 2015,17,19& 2020 ME,JNTUHCEH., Hyderabad,

## **- Participated**

- > Participated in a Conference on International conference &XX National conference on IC engines and combustion, Hyderabad, 06-12-2023 to 09-12-2007
- > Participated in a Workshop on One week work shop on Progrmme on Training need analysis and Imapact Evaluation (23rd-27th March 2009)., Hyderabad,
- > Participated in a Workshop on Two day work shop on YOU &ME organized by TEQIP-II under JNTUH. (30-31st October 2013)., Hyderabad,
- > Participated in a Workshop on Two day workshop On Advanced cognitive and other optimization techniques(ACOOT 2016) orgnised by Mechanical Engg Dept JNTUH CEH, Hyd 8-9th Jan 2016., Hyderabad,
- > Participated in a Workshop on Two Day training course On Smart Technologies and Emerging trends organized by SPFU & JNTUHCEH,HYD, (22-26 Feb 2016)., Hyderabad,
- > Participated in a Workshop on Three day work shop on Quality initiative in Technical and Higher educational institutions organized by Engineering Staff College of India (16-18th Dec 2015)., Hyderabad,
- > Participated in a Workshop on One week Work Shop on Aspects of Pneumatics, Hydraulics and Roboticsorgnised by TEQIP-III JNTUHCH. (14-20th Dec 2017)., Hyderabad,
- > Participated in a Workshop on One week Workshop on CFD organized by TEQIP-III JNTUHCH., Hyderabad,
- > Participated in a Workshop on One day work shop on outcome based Education(3rd Feb 2014)., Hyderabad,
- > Participated in a FDP on One week FDP on SCILAB "An Open-Source Substitute for MATLAB organized by JNTUH Sulatanpur.( 25-30th May2020)., Hyderabad,
- > Participated in a FDP on One Week FDP on "Open Source Tools for Research" organized by MHRD & Phadit Madan Mohan Malaviya National Mission on Teachers and teaching(08th-14th June 2020)., Hyderabad,
- > Participated in a Refresher Course on 3 weeks UGC sponsored Refresher course on Design and application of Robotic system and Advanced mechanisms - JNTUH College of Engineering, Hyderabad (08-31st March-2010)., Hyderabad,
- > Participated in a Refresher Course on 3 weeks UGC sponsored refresher course on Internet of things - JNTUH Hyderabad(09th -30th October 2017)., Hyderabad,
- > Participated in a Training on One Week Short term course on Soft Computing Techniques "Renewable and Electrical System" organized by UGC-Human Resource Development Centre (HRDC), JNTUH,(01st-06th June 2020)., Hyderabad,

## **- Honors & Professional Activities**

### **- Professional Activities**

- > 1. P.Prasanna was appointed as a Advisory committee member for Three day international conference on Advanced Materials and Manufacturing Technologies(AMMT) held on Dec 18<sup>th</sup> 20<sup>th</sup> 2014. 978-93-82163-46-6, PgNo.233-241
- 2. P.Prasanna was appointed as a Advisory committee member for Two day National conference On Recent trends in Mechanical engineering (NCRTME 2018) 26-27<sup>th</sup> Feb2018 at Mechanical Engineering Dept, JNTUH College of Engg, Hyderabad.
- 3. P.Prasanna was appointed as a Advisory committee member for International Conference on Advances in Mechanical Engineering (ICAME 2018), 21-22<sup>nd</sup> Dec 2018.

### **- Adminstrative Positions Held**

- > Addl. Controller of Examinations (Academics)., JNTUH
- > Boys Hostel Warden (General & Mess) from 2006-2012 and 2018 To 2022., JNTUH
- > Deputy Warden, Kinnera Boys Hostel., JNTUH
- > Work shop in charge for Department 2017 to 2018., JNTUH
- > PG Diploma (Industrial safety) for University Coordinator from 2016-Till date ., JNTUH
- > Faculty coordinator for CONAISSNACE (student symposium)- 2015,2018,2020&2023., JNTUH
- > NSS Programme officer from 2014 to 2018., JNTUH
- > M.Tech (AMS) Coordinator 2013-Till Date., JNTUH
- > Department Coordinator for M.Tech (AMS)(full time & Part time) Admissions 2013-Till date., JNTUH
- > Officer in charge of examinations for college from 2010 to 2012., JNTUH
- > University TEQIP-III Nodal officer., JNTUH
- > Center of Excellence for CAD(Co ordinator)., JNTUH

- **Students**

Student Name	Title	Year	Download
SINGAIAH GALI	Synthesis and characterization of mechanical and tribological properties of hybrid magnesium composites (AZ91D + B4C + ZrO2)	2025	
POTTA MALLIKARJUNA	Thermal load management for enhanced machinability of EN24 and Nimonic alloys under MQL Conditions	2025	
SIVA REDDY MUDIMELA	EXPERIMENTAL INVESTIGATION AND OPTIMIZATION OF CUTTING PARAMETERS FOR HIGH-SPEED MACHINING	0	
SAIDULU G	AN EXPERIMENTAL INVESTIGATION OF PROCESS PARAMETERS ON NIMONIC ALLOY 75 SHEET USING WIRE CUT EDM	0	
KARNATI RAGHAVENDRA	INVESTIGATION OF MATERIAL PROPERTIES THROUGH ADDITIVE MANUFACTURING OF POLYMERS	0	

**Contact :**

**Dr. Prattipati Prasanna**  
Mechanical Engineering

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