


FACULTY PROFILE to be submitted by each of the faculty

DEPARTMENT OF MECHANICAL ENGINEERING

Name of the Faculty	Designation/ Affiliation	Address/Contact	Email (Institute) @kitsw.ac.in	
Dr P.PRABHAKARA RAO	ASSOCIATE PROFESSOR	Room No 105; Block- III, Machine Tools LAB, Mobile:9440143262	ppr@kitsw.ac.in	

EDUCATION

Degree	Details (specialization)	Institute/University	Month , Year of Register ed	Month , Year complete d
B.Tech	Mechanical Engineering	JNTU Anantapur/JNTU Hyderabad.	feb 1994	Feb1998
M.Tech	Foundry and Forge Technology	NIFFT Hatia/Ranchi	August 1998	Feb 2000
Ph.D	Mechanical Engineering	JNTU Hyderabad.	August 2004	April 2013

ACADEMIC AFFILIATION

CURRENT: Assistant professor

Details	From (Month, Year)	To (Month, Year)	Name of the Organization
Associate Professor	Jul 2019	Till date	KITS Warangal
Assistant professor	Aug2008	09/07/2019	KITS Warangal
Assistant professor	Jan 2004	Jul 2008	V.R.S.E.C Vijayawada
Assistant professor	Mar 2001	Jan 2004	J. B. Institute of Engg. and Technology, Yenkapally, Hyderabad

RESEARCH INTERESTS

Foundry and Forge technology

Welding

Composite materials

Powder metallurgy

SEMINARS /WORKSHOPS ATTENDED	
1	One week Faculty Development programme on "Strategies and ICT Tools For Hybrid Vehicles Organized by the E&ICT Academy, Department of Mechanical Engineering NITW ,during 7 th -12 th Feb2019.
2	Participated in the A One week Short term training programme on "Hands on Programme on ANSYS Software(HPAS-18)" Organized by Department of Mechanical engineering,KITSW during12-16 th November 2018.
3	Participated in the One week Faculty Development programme on "Engineering Drawing" .Organized by Department of Mechanical engineering,KITSW during12-16 th November 2018.
4	Participated in the A Two week Faculty Development programme on "Contemporary Advantages in Material and Manufacturing Engineering"(CAMME-2017)" Funded by AICTE Organized by UCEK(A),JNTK Kakinada during 27 th Feb-15 th of March 2018.
5	Participated in the One week Faculty Development programme on "3D Printing Technology In Engineering Education" Organized by NIT W during 05th-10th of june 2017.
6	Participated in the Two week Faculty Development programme on"Intelligent Signal Processing and Control System Design using Bio Inspired Algorithms" Organized by the E&ICT Academy, during 22nd May-31st May,2017
7	Participated in the two week programme on " World Class Manufacturing " during DEC 12-24,2011 held at Institute of Public Enterprise, Hyderabad.
8	Participated in Three day Faculty programme in Engineering Mechanics organized by JNTUK,Kakinada from 25.5.2015 to 27.5.2015.
9	Participated in Two day workshop on Applications of Flexsim Software To Manufacturing Systems Organized by KITS Huzurabad During20-21 Feb 2015
10	Participated in Two day workshop on Effective Fuctioning of an Autonomous Institutions Organized by KITSW During17-18 Jan 2015
11	Participated in Three day workshop on Advances in Computer Simulation of Solidification Process(ACSSP-2014) 18-20 December 2014 Organized by NIT
12	Participated in One day workshop on New Paradigms in Manufacturing Organized by NIT W on 30th may 2013.
13	Three day workshop on Recent advances in fiber reinforced composite material, 26 th - 28 th July, 2007 conducted at V.R.S.E.C, Vijayawada.
14	A two day national work shop Clean I.C Engines & fuels 12 th -13 th Oct 2007at V.R.S.E.C, Vijayawada
15	A two day national work shop Clean I.C Engines & fuels 12 th -13 th Oct 2007at V.R.S.E.C, Vijayawada
16	A Two Days Training Programme on Effective Teaching methodology at V.R.S.E.C.

PUBLICATIONS	
Publications in Refereed Journals	
1.	Dr P.Prabhakara Rao J. Laxman ¹ , K. Eswaraiah. "Experimental study of drilling process parameters on aluminum metal matrix composites" JETIR June 2018, Volume 5, Issue 6, pp1601-1606
2.	P.Prabhakararao, Dr.G.Chakraverti, Dr.ACS.kumar & G.Srinivasarao "Computerized simulation of sand casting process" transactions of 57th Indian Foundry Congress, pp 33-36
3.	Dr P.Prabhakara Rao B. Shradesh Kumar "Predicting the Casting Defects through Simulation" ISSN 2394 - 3386 Volume 4, Issue 12 December 2017,, pp919-926.
4.	Dr. P. Prabhakara Rao ¹ J. Pranay Kumar ² "Production of Copper Metal Matrix Composite through Powder Metallurgy Route" International Journal pp855-864 Engineering Technology Science and Research December 2017 Volume 4, Issue 12
5.	Dr. P. Prabhakara Rao "Characterisation of Ceramic Matrix Composites by Powder Metallurgy" International Journal of Engineering Technology, Management and Applied Sciences July 2017, Volume 5, Issue 7, ISSN 2349-4476, pp619-626.
6.	Dr Prabhakara rao Peek ¹ , Saideepika reddy Vemula ² , Jeevan Pasunuti ³ "Characterisation of AL MMC reinforced with B4C AND B4C-SiC particulate Composite" International journal of science and innovative engineering & technology may 2017 issue volume 4 ISBN 978-81-904760-9-6
7.	Dr. P. Prabhakara Rao, Study of Epoxy Based Hybrid Composite Leaf Spring with Aluminium Powder And E-Glass Fibres. International Journal of Scientific Research(IJSR)-Volume 4, Issue 11, November 2015, pp 91-95. ISSN No 2277 - 8179
8.	Dr. P. Prabhakara Rao, B. Ravi Kumar Characterisation and Processing of Sago Particle Reinforced Composite. International Journal of Engineering Trends and Technology (IJETT) - Volume 24, 2015 Number 3 pp151-154, ISSN:2231-5381.
9.	Dr.P.PrabhakaraRao & Sri Sampath.V "CFD Analysis on Airfoil at High Angles of Attack" International Journal of Engineering Research, Volume No.3, Issue No.7, pp : 430-434. ISSN:2319-6890(online), 2347-5013(print) 01 July 2014
10.	P.Prabhakararao, Dr.G.Chakraverti, Dr.ACS.kumar " Application of Casting Simulation for Sand Casting of a Crusher Plate" International Journal of Thermal Technologies, Vol.1, No.1 (Dec. 2011), pp 107-113. ISSN : 2277 - 4114
11.	P.Prabhakararao, Dr.G.Chakraverti, Dr.ACS.kumar & G.Srinivasarao "Modeling and Simulation of Solidification in Alloy Steel Sand Castings" International Journal of Engineering, Science and Metallurgy Vol.1, No.1 (Dec. 2011), pp 310-316. ISSN:2249-7366.
12.	P.Prabhakararao, Dr.G.Chakraverti, Dr.ACS.kumar "Residual stress in aluminum alloy sand castings" . Journal of Manufacturing Technology Today Vol 8, No 1. Jan 2009, pp22-27. ISSN0972-7396
13.	P.Prabhakara rao, G.Dilli Babu, P.B.Dhanish 'Determination of Surface Roughness of Milled Surfaces using Machine Vision' Journal of Manufacturing Technology Today Vol 8, No 3. March 2009, pp9-17. ISSN0972-7396
Publications in Refereed Conference Proceedings	
1.	Dr P.Prabhakara Rao J. Laxman ¹ , K. Eswaraiah. "Experimental study of drilling process parameters on aluminum metal matrix composites" (ICITEASM-2018) held at Osmania

	University Campus,Hyderabad, on 24th June 2018, pp430-435
2	Dr P.Prabhakara Rao B. Shradesh Kumar " Predicting the Casting Defects through Simulation " (ICAIETM2017) held at Joginpally B.R. Engineering College, Hyderabad, India. on 28th & 29th December 2017, ISBN: 978-93-87433-06-9
3	Dr. P. Prabhakara Rao ¹ J. Pranay Kumar ² "Production of Copper Metal Matrix Composite through Powder Metallurgy Route"(ICAIETM2017) held at Joginpally B.R. Engineering College, Hyderabad, India. on 28th & 29th December 2017, ISBN: 978-93-87433-06-9
4	Dr. P. Prabhakara Rao " Characterisation of Ceramic Matrix Composites by Powder Metallurgy " (ICRTEEM-2017) at Institution of Electronics and Telecommunication Engineers, 62 Indiranagar, Erandwane, Pune, Maharashtra, India on 23rd July 2017 ISBN: 978-81-934083-8-4
5	Dr Prabhakara rao Peekka ¹ , Saideepika reddy Vemula ² , Jeevan Pasunuti " Characterisation of AL MMC reinforced with B4C AND B4C-SiC particulate Composite " 7 th International Conference on Recent Engineering and technology 7th April 2017, Hyderabad
6	Dr. P.Prabhakara Rao, Sampath .V " Fabrication and Performance Evaluation Of Mixed Fuel Fired Furnace for Aluminum Melting " Proceedings of The Intl. Conf. on Information, Engineering, Management and Security 2014 [ICIEMS 2014] pp59-66ISBN : 978-81-925233-3-015-17 th may2004
7	Dr.P. Prabhakara Rao and P. Anitha " Finite Element Analysis of Powered Roof Support Used in Long wall Mining " Advance Research and Innovations in Mechanical, Material Science, Industrial Engineering and Management - ICARMMIEM-2014pp57-62 ISBN 978-93-82338-97-0.
8	P.Prabhakararao,Dr.G.Chakraverti,Dr.ACS.kumar " Casting Quality and Yield Improved by Simulation " ICCOMIM-2012, at MSRIT, Bangalore, held on 11th -13th July 2012,pp312-17,ISBN978-93-82338-04-8.
9	P.Prabhakararao,Dr.B.Balakrishna,A Balaram Naik,S.M Swamy. " Biodiesel from Jetropa oil as an alternate fuel for diesel engine " ICAEM-2012, at RITS, Hyderabad, held on 28th -29 th Feb 2012,pp95
10	P.Prabhakararao,Dr.B.Balakrishna,A Balaram Naik,S.M Swamy. " Combined Non Luminous flame radiation and surface tension effects during Low Reynolds number Methanol droplet combustion " ICAEM-2012, at RITS, Hyderabad, held on 28th -29 th Feb 2012,pp96
11	P.Prabhakararao,Dr.B.Balakrishna,A Balaram Naik,S.M Swamy. " Partial Premixing Mixing Effect of Fuel Jet with Air Burner temperature Field in a swirl Intensity Burner " ICAEM-2012, at RITS, Hyderabad, held on 28th -29 th Feb 2012,pp96
12	P.Prabhakararao,Dr.G.Chakraverti,Dr.AC.Skumar&G.Srinivasarao. " Validation of Pro Cast simulation of the sand casting process " International Conference All India Manufacturing Technology,Design and Manufacturing and Research Conference December 13-15 th 2010, pp 513-518.
13	P.Prabhakararao,Dr.G.Chakraverti,Dr.AC .kumar&G.Srinivasarao. " Defect detection in IS1030&2644 alloy steel sand castings using NDT methods " International Conference All India Manufacturing Technology, Design and Manufacturing and Research Conference December 13-15 th 2010,pp 499-504.
14	P.Prabhakararao,Dr.G.Chakraverti,Dr.A CS kumar&G.Srinivasarao " Use of simulation in the production of sand casting components " International Conference ICCS-2010.Held at CMERI Durgapur during 22-24 January 2010.
15	PrabhakaraRao,Dr.G.Chakraverti, Dr.A.C.S.Kumar " Analysis of Residual stress in

	Sand cast and die cast AL alloy by X-ray Diffractometry," 68 th WFC-World Foundry Congress 7 th -10 th February 2008, pp.387-393.
16	P.PrabhakaraRao,Dr.G.Chakraverti,Dr.A.C.S.Kumar "Analysis of Residual stress in Sand cast al-alloy X-ray Diffractometry," International Conference On Recent Developments in Mechanical Engineering23-25 January,2008 SUS College of Engineering & Technology Tangori, Mohali (Punjab) INDIA
17	P.Prabhakararao,Dr.G.Chakraverti,Dr.AC S.kumar&G.Srinivasarao "Mould filling and solidification studies of an aluminum bar castings" TIME2010. pp 106-109
18	P.Prabhakararao,Dr.G.Chakraveti,Dr.A C S.kumar&G.Srinivasarao "Mould filling and solidification simulation of co₂ sand casting components" AMTM2010.30-31 st August. held at JNTU Hyderabad.
19	P.Prabhakararao,S. Chandra mouli, J.Laxman. "Investment Casting of Metal Matrix Composites Development For Engineering Applications" 30th December 2010 TIME2010,pp223-226
20	P.Prabhakara rao,S.Rajesh,A.M.Rao and C.V.Sriram. "Identification of End -Effector Positioning Errors of 2-Link Robot Arm Using Back Propagation Neural Networks" NCAME-2008, pp.288-308

RESEARCH GUIDANCE (Ph. D) Ongoing : 02				
S. No	Name of the scholar	Title of Thesis/ Area of Research	University	Status
1	K.Sudheer Kumar	Investigation of External Chills Performance on Mechanical and Thermal Properties of Aluminum Silicon Alloy Castings	Kakatiya University	Pursuing
2	M. Nataraju	Some studies on dynamic characterization of metal matrix composites and its optimization	Kakatiya University	Pursuing

Student Projects Supervised: M. Tech. Projects: 7

B. Tech. Projects: 22

SPONSORED PROJECTS			
S.No	Details	Value(Rs.)	Status
1			

PATENTS		
S.No	Details	Status

AWARDS	
S.No	Details

PROFESSIONAL AFFILIATION			
S.No	Details		
1	MISTE (LM32690)		
COURSES TAUGHT			
Undergraduate Level			
Courses Taught		Currently Teaching	
Course	Semester, Year, Branch	Course	Semester, Year, Branch
U14ME603 PRINCIPALS OF METAL CUTTING	VI, Mechanical Engineering	Metrology & Instrumentation	V, Mechanical Engineering-I
U14OE601D RURAL TECHNOLOGY AND COMMUNITY DEVELOPMENTS	VI, Mechanical Engineering	Material Science and Metallurgy	III. Mechanical Engineering-I
<i>Basic mechanical Engineering Engineering Metallurgy</i>	<i>I Sem I/IV B.Tech II Sem, II/IV ME</i>	Metrology & Instrumentation	<i>V Sem, III/IV, ME</i>
Engineering Graphics	<i>I /IV, B.tech</i>	Manufacturing Process	<i>III Sem II/IV, ME</i>
<i>Design of Machine Elements-I</i>	<i>ISem III/IV ME</i>		
<i>Design of Machine Elements-II</i>	<i>II Sem, III/IV ME</i>		
<i>Machine Drawing</i>	<i>I Sem, II/IV ME</i>		
Metallurgy and Material Science			
Mechanical Measurements			
Production Technology-I			
Production Technology-III			
Hydraulics Machines and Systems Prime Movers and Pumps Automobile Engineering Design of Transmission Elements			

Signature of the faculty