Name :Dr. B.Satyanarayana

B.E., M.Tech.,Ph.D.,MASME, LMISTE

Designation :Professor

Department :Mechanical Engineering

Mail.I.D : satyanarayana_b@vnrvjiet.in

Experience (in years): Teaching: 21 **Research: 10**

Industrial: 04

1. Educational / Technical qualifications:

S. No.	Level (UG / PG / Ph.D.)	Year of passing	Specialization
1	BE	1994	Mechanical Engineering
2	M.Tech.	2002	Production Engineering
3	Ph.D.	2014	Machining

2. Teaching and Learning:

a. Teaching Interests:

Metrology, Production Technology, Metal Cutting and Tool Design, Mechanics of Solids, Operations Research, Numerical Methods, CAM, SMP, AMP and Computer Programming in 'C'.

b. Novel Teaching & Learning Techniques adopted:

a) PPT and Video b) Wit and Will c) POGIL d) Seminars

c. Involvement in curriculum updating / Design:

Involved in updating the syllabus for four subjects- SMP, MP and MP Lab

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies:

a) To promote work efficiency and good attitude towards work, in organizations.

b) Social service and playing a few games.

3.2 CCA/ECA Organized:

▪Organized Telangana State Level Sports & Cultural Meet for Polytechnic Students at VNR VJIET from 19th December 2019 to 20th December 2019.

3.3 CCA/ECA participated:

Discipline Committee member, Sintillashunz, at VNRVJIET

3.4 Counseling and Mentoring Activity:

- Conducting counseling and mentoring activities every year for Diploma Students
- Conducted class review meetings with student representatives

3.5. Committees involved in:

Department level: ECA/CCA, DPRC-PG

Institute Level: Member- Institute Academic committee

4. Conference / Workshop / Seminar / Guest Lectures:

4.1. Conducted: 05

4.2 .Attended: 25

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: Nil

5.2. Articles / Chapters published in Books: Nil

5.3. Books published as single author or as editor:

S.No	Title with page nos.	Type of Book & Authorship	Publisher & ISSN/ ISBN No	Whether Peer reviewed
1	Optimization of Controllable Turning Parameters for HSM of Inconel 718 Pg.Nos: 113	Text book & both Author and Publisher	LAMBERT Academic Publishing West Germany ISBN: 978-3-659-88251-7	Yes
2	Experimental Investigations on Machinability Parameters of Inconel 718 Pg.Nos: 91	Text book & both Author and Publisher	LAMBERT Academic Publishing West Germany ISBN: 978-3-659-91338-9	Yes

5.4. Projects Guided:

a) UG: 30

b) PG: 13

5.5. Research Interests: Manufacturing Processes

5.6. Ph.D students:

a) Enrolled: Nil

b) Submitted: Nil

c) Awarded: Nil

5.7. Papers published in reviewed International Journals:

S.No.	Title	Journal	ISSN/ISBN NO.	Whether Peer Reviewed Impact Factor, if any
1	Functional testing and evaluation of additively manufactured hand drill body prototype	Materials Today: Proceedings - *in production*.	2214-7853	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.
2	Manufacturing of Complex Components Using Photogrammetry in Association with Additive Manufacturing	Materials Today: Proceedings - *in production*.	2214-7853	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.
3	Making of Religious Components Using Reverse Engineering Technology	IOP conference series-Material Science and Engineering-*in press*	ISSN:1757-8981 E-ISSN:1757-899X	indexed in Scopus, Thomson Reuters and COMPENDEX
4	Characterization of Hyper elastic Material Using Experimental Data and Finite Element Simulation	Materials Today Vol. 24 (2020) 1660-1669	2214-7853	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.
5	Characterization of Hyper elastic Material by Experimental Tests and Curve Fitting	Materials Today Vol. 24 (2020) 1670-1679	2214-7853	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.

6	Eyeball Movement based Cursor Control using Raspberry Pi and OpenCV	International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-7, 392-395, May 20220	2278-3075	Peer Reviewed and Indexed in Scopus
7	Optimization of controllable turning parameters for high speed dry machining of a super alloy	Materials Today Vol. 5 (2018) 4878–4886	2214-7853	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.
8	Design and Fabrication of Hybrid 3D Printing Machine	International Journal of Engineering Technology Science and Research (IJETSR), Volume 4, Issue 8 August 2017	ISSN 2394 – 3386	Yes, Indexed by Google scholar and UGC approved journal, IF : 2.12
9	Fabrication, Mechanical Characterization and Analysis of Carbon Fiber Reinforced Composite used for Aircrafts	International Journal of Advanced Research in Science and Engineering, Vol.6, Issue 7, July 2017, pg. 269-275	ISSN: 2319-8354	Yes Indexed by Google Scholar, IF : 2.83
10	Optimization of Controllable Turning Parameters for High Speed Dry Machining of Super Alloy: FEA and Experimentation	Materials Today Vol. 4 issue 2(2017) 2203-2212 ***published by Elsevier***	2214-7853	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.
11	**Manufacturing of a Powerless Amplifier using 3d Printing Technology**	International Journal on Mechanical Engineering and Robotics, Vol 4, Issue 2, 2016, pg. 35-38.	ISSN (Print) : 2321-5747	Yes, Indexed by Google scholar, Impact Factor 1.95
12	Design and manufacturing of a chess coin through CAD/CAM integration	Science and Technology (The International quarterly journal)	ISSN 2394-3750 EISSN 2394-3769	Indexed in Google Scholar, [ISI (Thompson Reuters), ,SCOPUS, Chemical Abstracts

		Vol.2, Issue 7, 2016, pp 370-377.		Service (CAS)- *under process*] and Impact factor is under evaluation
13	Optimization of CNC Laser Cutting Process Parameters	International Advanced Research Journal in Science, Engineering and Technology. Vol.3, Issue 5, May 2016.	ISSN(O): 2393-8021 ISSN(P): 2394-1588	Peer Reviewed and Indexed in Google Scholar, Cross Ref. with Impact Factor 3.943
14	Optimization of Controllable Turning Parameters for High Speed Dry Machining of Super Alloy: FEA and Experimentation	Materials Today *published by Elsevier*	1369-7021 DOI:10.1016/j.matpr.2017.02.067	Peer Reviewed and Indexed in Scopus ,Thomson Reuters, Web of Science.
15	Simultaneous Optimization of Multi Performance Characteristics in Dry Turning of INCONEL 718 using NSGA-II	Materials Today Vol. 2(2015) 2423-2432 *published by Elsevier*	1369-7021 doi:10.1016/j.matpr.2015.07.182	Peer Reviewed and Indexed in Scopus (Elsevier) and the CPCI (Thomson Reuters, Web of Science)
16	Component Replication using 3D Printing Technology	Procedia Material science, Vol. 10 (2015) 263-269 *published by Elsevier*	2211-8128 doi:10.1016/j.mspro.2015.06.049	Peer Reviewed and Indexed in Google scholar
17	Optimization Of Controllable Turning Parameters For High Speed Machining Of Inconel 718 By Measurement Of Surface Roughness	International Journal of Scientific & Engineering Research (IJSER), Volume 7, Issue 2,Feb 2016	2229-5518	Peer Reviewed and Indexed by Thomson Reuters, Google scholar with Impact Factor 3.8
18	Modeling and Analysis of Steam Turbine Blade by Varying Its Profile	International Journal for Scientific Research & Development| Vol. 3, Issue 09, 2015 , pp. 1010-1013	2321-0613	Peer Reviewed and Indexed in Google scholar with Impact Factor 2.39
19	Multi-Response Optimization of CNC WEDM Process	International Journal of Mechanical & Production Engineering (IJMPE) Vol. 2,	ISSN (P): 2320-2092; ISSN (O):	Peer Reviewed and Indexed in Google scholar

	Parameters for Machining INCONEL 718 using Taguchi Grey Relational Analysis (TGRA)	Issue 10, 2014, pp. 35-41	2321-2071	with Impact Factor 3.05
20	Analysis, Simulation and Fabrication of the Remote Terminal Unit for Automated Commando Training System	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) Vol. 3, Issue 5, 2013, pp. 125-132	ISSN (P): 2249-6890; ISSN (E): 2249-8001	Peer Reviewed and Indexed in Index Copernicus with Impact Factor 5.3403
21	Optimized high speed turning on Inconel 718 using Taguchi method based Grey relational analysis	Indian Journal of Engineering & Materials Sciences (IJEMS) Vol. 20, Aug. 2013, pp.269-275	ISSN: 0975-1017 (Online); 0971-4588 (Print)	Peer Reviewed and Indexed in Google Scholar etc. with Impact Factor 0.641
22	Modeling and Optimization of Cutting Parameters in High-Speed Dry Machining of Inconel 718 Alloy	International Journal of Advanced Research in Engineering and Technology(IJARET), Vol. 4, Issue 4, 2013, pp242-252	ISSN Print: 0976 -6480 ISSN Online: 097 6-6499	Peer Reviewed and Indexed in Thomson Reuters' Research ID : H-3771-2015 with Impact Factor 5.8376
23	Prediction of Optimal cutting parameters for high speed dry turning of Inconel 718 using GONNS	International Journal of Mechanical Engineering & Technology(IJMET), Vol. 3, Issue 3, 2012, pp.294-305	ISSN Print: 097 6 – 6340 ISSN Online: 097 6– 6359	Peer Reviewed and Indexed in Thomson Reuters' Research ID : H-3771-2015 with Impact Factor 3.8071
24	Study on the Machinability Characteristics During High-Speed Turning of Inconel 718 With PVD Coated Tool	Journal of Manufacturing Engineering Vol. 7, Issue 2, pp. 58-66	ISSN: 0973-6867	Peer Reviewed
25	Development of Mechanical System for Automated Commando Training System	International Journal of Advances in Science and Technology, Vol. 4, Issue 2, 2012, pp. 81-92	ISSN: 2229-5216	Peer Reviewed and Indexed in Google Scholar
26	Experimental Investigations for Optimized High Speed Turning on Inconel 718 Using Taguchi Method Based Grey Relational Analysis	International Journal of Manufacturing Science and Engineering (IJMSE), Vol 2, Issue 2, 2011, pp. 73-80	ISSN 0976-6812	Peer Reviewed

27	Multi-Response Optimization Of Inconel 718 High Speed Turning Using Taguchi Method Based Grey Relational Analysis	Journal on Manufacturing Technology Today, CMTI, Bangalore, Vol. 10, Issue 6, 2011, pp. 11-19	ISSN 0972-7396	Peer Reviewed
28	Experimental Investigations on Turning of Inconel 718	International Journal on Mechanical & Automobile Engineering, Vol. 11, Issue 01, 2010, pp. 18-25	ISSN 0974-231X	Peer Reviewed
29	Multi-Response Optimization of High Speed Turning Parameters of Superalloy Inconel 718 Material Using Taguchi Method Based Grey Relational Analysis	i-manager's Journal on Mechanical Engineering, Vol. 1, Issue 3, 2011, pp. 48-59	ISSN-2230-9055	Peer Reviewed and Indexed in Google Scholar

5.8. Papers presented at National / International Conferences:

S.No.	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Development of Semi-Automated Wall Plastering Machine	International Conference on Science, Engineering and Technology (ICSET-2019) organized by Pallavi Engineering College, Nagole, Hyderabad in association with IFERP.	International	One, 27th-28th September 2019
2	Characterization of Hyper elastic material using Experimental data and Finite Element Simulation	International Conference on Advances in Material and Manufacturing Applications (IConAMMA-2018), organized by AMRUTA UNIVERSITY,Bangolre	International	16th -18th August 2018
3	Characterization of Hyper elastic material by Experimental tests and Curve Fitting	International Conference on Advances in Material and Manufacturing Applications (IConAMMA-2018), organized by AMRUTA UNIVERSITY,Bangolre	International	16th -18th August 2018
4	3D Printing of Various Components using Custom made 3D Printer	International Conference on Contemporary Design Analysis of Manufacturing and Industrial Engineering Systems (CDAMIES-2018), **NIT, Tiruchy.**	International	18th-20th January 2018

5	Development of Hybrid 3D Printer	3rd International conference on "Innovative Design, Analysis and Development Practices in Aeronautical and Automobile Engineering" (IDAD 2018).	International	22nd to 24th February 2018
6	Design and Fabrication of Hybrid 3D Printing Machine	6th International conference on Recent Trends in Engineering, Applied Science and Management (ICRTESM-2017)	International	6th August 2017
7	Fabrication, Mechanical Characterization and Analysis of Carbon Fiber Reinforced Composite used for Aircrafts	10th International Conference on Recent Innovations in Science, Engineering & Management (ICRISEM-17)	International	7th July 2017
8	Simultaneous Optimization of CNC WEDM Process for Machining Inconel 718 using Taguchi Grey Relational Analysis (TGRA)	International Conference on Advanced in Materials and Product Design (AMPD-2015), NIT Surat	International	10th - 11th January 2015
9	Modelling and Optimization of Cutting Parameters in High-Speed Dry Machining of Inconel 718 Alloy using ANN and GA	4 International & 25 All India Manufacturing Technology Design & Research 2012 (AIMTDR 2012), Jadavpur University, Kolkata, India	International	14th – 16th December 2012
10	Design and modeling of the Remote Terminal Unit for Automated Commando Training System	International Conference on Materials Processing and Characterization (ICMPC 2012), GRIET	International	8th -10th March 2012
11	Optimization of Temperature during High Speed Turning of Inconel 718	International Conference on Computational Methods in Manufacturing IIT, Gawahati	International	15th -16th December 2011
12	Review of Developments towards the Machinability Characteristics of Inconel 718 Alloy	National Conference on Advances in Mechanical Engineering (NCAME 2010), VNR VJIET	National	18th December 2010

13	Optimization of controllable turning parameters for high speed dry machining of a super alloy	7th International Conference on Materials Processing and Characterization (ICMPC-2017)	International	17 - 19 March 2017
14	Design, Modeling & Fabrication of a Screw Jack using 3D Printing Technology	International Conference on Advances in Materials and Manufacturing (ICAMM-2016)	International	8th to 10th December 2016
15	Design and Manufacturing of a Chess Coin through CAD/CAM Integration	International Conference on Trends in Industrial and Mechanical Engineering (IC TIME-2016), NIT, Bhopal	International	4th – 6th February 2016
16	Manufacturing of a Powerless Amplifier using 3d Printing Technology	International Conference on Technological Innovations in Mechanical Engineering (TIME-2016), CBIT, Hyderabad	International	10th – 11th February 2016
17	Optimization of CNC Laser Cutting Process Parameters	International Conference on Research Advancements in Engineering, Science and Information Technology(ICRAESIT-2015), B.V. Raju Institute of Technology, Hyderabad	International	15th -16th December 2015
18	Parametric Modeling and Dynamic Characterization of Steam Turbine Blade Test Rig	International Conference on Emerging Trends in Science Technology Engineering and Management(ICETSTEM-2015), Malla Reddy Engineering College, Hyderabad	International	9th – 10th October 2015
19	Simultaneous Optimization of Multi Performance Characteristics in Dry Turning of INCONEL 718 using NSGA-II	4th International Conference on Materials Processing And Characterization (ICMPC-2015), GokaRaju Ranga Raju Institute of Engineering & Technology, Hyderabad	International	14th- 15th March 2015
20	Experimental Investigations on Residual Stress and Surface Roughness in dry Turning of INCONEL 718	International Conference on Emerging Technologies in Mechanical Sciences (ICEMS-2014), Malla Reddy College of Engineering & Technology, Hyderabad	International	26th – 27th December 2014
21	AWJM Process Optimization using Principle Component Analysis (PCA)	International Conference on Advanced Materials and Manufacturing Technologies (AMMT), JNTU College of Engineering, JNTU, Hyderabad	International	18th – 20th December 2014

22	Multi-Response Optimization of WEDM Process using TGRA & PCA	International Conference on Advances in Design & Manufacturing (ICAD&M'2014), National Institute of Technology, Tiruchirappalli	International	5th – 7th December 2014
23	Component Replication using 3D Printing Technology	2nd International Conference on Nano Materials and Technologies (CNT-2014), Vardhaman College of Engineering, Hyderabad	International	17th – 18th October 2014
24	Optimization of Abrasive Water Jet Machining Process Parameters using Taguchi Grey Relational Analysis (TGRA)	13th International Conference on Research and Development in Engineering & Technology (ICRDET), IRAJ Research Forum	International	20th July 2014
25	Experimental Investigations during high speed turning of Inconel 718 using CVD coated tool	5th International academic conference on electrical, electronics and computer engineering (IACEECE), Institute of Research and Journals	International	22nd September 2013
26	Experimental Investigations to study the Influence of Machinability Factors in Turning of Inconel 718	3rd International and 24th AIMTDR Conference, AU, Vizag	International	13th – 15th December 2010
27	Machinability study of Nickel base super alloy using CBN Cutting Tools in High Speed Machining	National conference on Advances in Manufacturing & Industrial Engineering (NCOAIMAIE-2007), VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad	National	12th- 14th July 2007

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
1	Optimization of controllable turning parameters in high speed dry turning of super alloys for minimization of Tool Wear	UGC- Minor Research Project	2 Years	Rs. 3.5 lacs	**Completed**

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
1	Machining of Super alloys	AICTE	1 Year	15	Completed
2	Automated Commando Training System (ACTS)	AP Grey Hounds	2 Years	9	Completed
3	Automated Commando Training System (ACTS)	National Police Academy (NPA)	2 Years	28	Completed

6.Awards / Honors received:

- Guided II best B.Tech Final Year Project in the State Level B.Tech. Final year project Presentations held at Engineering Staff College of India, Gachiboli, Hyderabad in May 2012.
- Received Best Paper Publication Award in an International Conference for the paper titled "Experimental Investigations on Residual Stress and Surface Roughness in dry Turning of INCONEL 718", International Conference on Emerging Technologies in Mechanical Sciences (ICEMS-2014), December 26-27, 2014, pp. 73-78, organized by Department of Mechanical, Aeronautical & Mining Engineering, Malla Reddy College of Engineering & Technology, Hyderabad.
- Chaired two sessions for the 4th International Conference on Materials Processing and Characterization (ICMPC- 2015), 14th – 15th March 2015, organized by Department of Mechanical Engineering, Gokaraju Ranga Raju Institute of Engineering & Technology, Hyderabad.
- Chaired one session for the 5th International Conference on Materials Processing and Characterization (ICMPC- 2016), 12th – 13th March 2016, organized by Department of Mechanical Engineering, Gokaraju Ranga Raju Institute of Engineering & Technology, Hyderabad in collaboration with Maulana Azad National Institute of Technology, Bhopal, M.P.
- Chaired one session for the 7th International Conference on Materials Processing and Characterization (ICMPC- 2017), 17th – 19th March 2017, organized by Department of Mechanical Engineering, Gokaraju Ranga Raju Institute of Engineering & Technology,

Hyderabad in collaboration with Maulana Azad National Institute of Technology, Bhopal, M.P.

- Chaired one sessions for the 9th International Conference on Materials Processing and Characterization (ICMPC- 2019), 8th – 10th March 2019, organized by Department of Mechanical Engineering, Gokaraju Ranga Raju Institute of Engineering & Technology, Hyderabad.

7. Motto:

To produce citizens with human values and right attitude towards their profession