

Name of Faculty Dr. T. RATNA REDDY
 Designation Associate Professor
 Nature of Job/Appointment Regular
 Date of Joining 11-11-1986
 E-mail tratnareddy_mech@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Mechanical)	Awarded
PG	M. Tech. (CAD/CAM)	Distinction
PG	M. Tech. (Production Engineering)	Second
UG	B. E. (MECH)	First

Work Experience

Teaching	33 Years (Includes Research Experience)
Research	06 years
Industry	--
Others	--

Area of Specialization CAD/CAM, PRODUCTION ENGG, CFD

Professional Memberships
 Member, ISTAM Number: 809
 Member, ISTE

- Responsibilities held at InstitutionLevel
- Assistant controller of examinations (Evaluation), from 10-07-2014 to 09-07-2016
 - Member, Board of Studies from 2015 to till date
 - Coordinator, Performance Assessment Committee from June 2020 to till date
- Responsibilities held at DepartmentLevel
- Member, Course Expert Group, from June 2020 to till date
 - Course Coordinator for ME(CAD/CAM), from 2009 to 2016
 - In charge EG&D Lab from 2018 to till date

Research Guidance --
 Awards Received --

Courses Handled at Under Graduate /Post Graduate Level.
 Computational Fluid Flow, Finite Element Method, Fluid Mechanics, Engineering Mechanics, Engineering Graphics, Structured programming, Object oriented programming with C++, Programming and Problem Solving, Metal Casting Technology, Welding Technology, Heat Transfer. Computational Fluid Dynamics, Finite Element Techniques, Computer Aided Design, Programming Methodology and Data Structures

National Journals – 04 International Journals 33

No. of Papers Published National Conference – 02 International Conference – 04

Projects Carried out --

Patents 1 patent published, Application No.: 202141044969, 2021

Technology Transfer --

- Invited Speaker
- Expert Lecture on "Complex Stresses", CMR Engineering College, Hyderabad, November 2019
 - STTP on "Engineering Mechanics", CMR college of Engineering, Hyderabad, April 2018
 - Expert Lecture on "Finite Element Method", Shreya college of Engineering, Hyderabad, March 2017
 - Resource person for FDP on "Engineering Graphics", VJIT, Hyderabad, January 2017

No. of Books/Chapter Published with details
 1, R. Navaneetha, Ch. Indira Priyadarsini, and T. Ratna Reddy, Research Developments in Science and Technology Vol. 5, Chapter 5, DOI: 10.9734/bpi/rdst/v5/6135F, B P International, Print ISBN: 978-93-5547-670-8, eBook ISBN: 978-93-5547-671-5, May 2022

- Details of Short-Term Training Programs/Faculty Development Programs / Seminars / Workshops / Other Trainings (Attended and/or Organized).
- A National level FDP on MOODLE-Learning Management System (LMS), 10-15 June, 2020, by JNTUH Sultanpur, Spoken Tutorial Project- an initiative National Mission on Education through ICT, MHRD, Government of India, IIT Bombay, Pandit Madan Mohan.

Malviya National Mission on Teachers and Teaching-Government of India.

2. One week STTP on MATLAB based Teaching-Learning in Mathematics, Science & Engineering, by the Department of Electronics Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai in collaboration with DesignTech Systems Pvt. Ltd., Mumbai during 18th to 22nd May 2020
3. National Level One Week Online Short Time Training Program on "MATLAB for ALL" 4-8 June, 2020 organized by the Department of Electrical and Electronics Engineering, SIR M VISVESVARAYA INSTITUTE OF TECHNOLOGY, Bangalore.
4. One week FDP on "Outcome Based Education: A Step Towards Excellence" conducted by Govt. Engineering college, Karad, Maharashtra from 11th to 15th May 2020.
5. FDP On Outcome based education and NBA Accreditation process (UG), 28 May to 1 June, by Chaitanya Bharathi Institute of Technology.
6. FDP on Artificial Intelligence, 22-26 May 2020 by the Department of Information Technology, CMR Engineering College, Hyderabad, in collaboration with NYCI & Brainvision Solutions India Pvt. Ltd Supported by AICTE, IIC, ISTE and Institute of Engineers.

International/National Journals from the Year 2017

1. T.Ratna Reddy, Ch.Indira Priyadarsini, "Intake Manifold Flow Study using Numerical Method with all Runners Opened", International Journal of Scientific Research in Science and Technology, Print:2395-6011 | Online: 2395-602X, <https://doi.org/10.32628/IJSRST229358>, Vol.9, No.3, pp.232-238 May-22.
2. Ch.Indira Priyadarsini, Dr.T.Ratna Reddy, Kiran Kumar Ammireddy, "Numerical analysis of interchangeable battery container", International journal of research and analytical reviews, ISSN Approved Journal No: E-ISSN 2348-1269, P- ISSN 2349-5138, <http://doi.org/10.1729/Journal.30123>, Vol.9, No.2, pp.173-180, May-22.
3. Ch.Indira Priyadarsini, Dr.T.Ratna Reddy, P.Anjani Devi, "Design and Performance Analysis of Automotive Radiator using Computational Fluid Dynamics", International Journal of Mechanical Engineering, Published By: Kalahari Journals, Cite Score:5.2, Impact Factor : 2.1, Vol.7, No.3, pp. 522-527, Mar-22
4. T.Ratna Reddy, Ch.Indira Priyadarsini, "Effect of nanofluid volume fraction on heat transfer rate in a pipe flow", GIS SCIENCE JOURNAL, Vol.9, No.3, pp. 1589-1595, March-22
ISSN NO : 1869-9391, DOI:20.18001.GSJ.2022.V9I3.22.3925.
5. T.Ratna Reddy, Ch.Indira Priyadarsini, N.Chandra Sekhar, "Slosh and squish effect of fluid level in a tank with baffles", NOVIY MIR Research Journal, ISSN No: 0130-7673, DOI:16.10098.NMRJ.2022.V7I2.256342.2019, Vol.7, No.2, pp. 51-58, Feb-22
6. T.Ratna Reddy, Ch.Indira Priyadarsini, M.V.S.Murali Krishna Guide Vane Height Effect on Performance of Sheer Wind Turbine", Journal of Xi'an University of Architecture & Technology, publisher: science press Vol.XIII, No.V, pp.482-489, May 21, 1006-7930, <https://doi.org/10.37896/JXAT13.5/30947>
7. Dr.T.Ratna Reddy, Ch.IndiraPriyadarsini, Penyalahareesh Kumar, " Performance Evaluation of Invelox Wind Turbine using CFDTechnique", Journal of Information and Computational Science, ISSN:1548-7741, DOI:16.10090.JOICS.2020.V13I12.287391.4131, Vol.13, No.12, pp.66-72, Dec-2020.
8. Ch.Indira Priyadarsini, T.Ratna Reddy, Rajesh chitimireddy, "Strut flame holder performance for supersonic combustion using computational fluid dynamics", International Journal of Research and Analytical Reviews, E-ISSN 2348-1269, P- ISSN 2349-5138, <http://doi.org/10.1729/Journal.23995>, Vol.7, No.3, pp.639-635, July-20.
9. T.Ratna Reddy, Ch. Indira Priyadarsini, "Effect of Fin Cross Section on Shell and Tube Heat Exchanger using CFD", International Journal of New Innovations in Engineering and Technology, ISSN: 2319-6319, Thomson Reuters ,Web of Science: RID: G-4542-2016, UGC-47645, Vol.14, No.1, pp.62-66, Jun-20
10. Dr.T.Ratna Reddy, Ch.Indira Priyadarsini, A Akhil, "Effect of Air Flow Rate on Performance of Natural Draft Wet Cooling Tower", International Journal of Management, Technology And Engineering, Vol.IX, No.1, ISSN NO : 2249-7455, 16.10089/IJMTE, SCOPUS SUGGESTED JOURNAL ID: 50E4CF07B9164F83, Thomson Reuters' Research ID : H-2418-20173, Jan-19
11. Dr. T. Ratna Reddy, Ch.Indirapriyadarsini, Analysis of Slosh in Tank with Different Filling Percentage, International Journal of Management, IT & Engineering, ISSN: 2249-0558, Vol. 8, Issue 5, pp. 130-140, May-18
12. Ch. Indira Priyadarsini, Dr. T.Ratna Reddy, "Strut Flame Holder Performance for Supersonic Combustion using Computational Fluid Dynamics Approach", IJRAR, E-ISSN 2348-1269, July 2020, Volume 7, Issue 3 pp 631-635
13. Dr.T.Ratna Reddy, Ch.IndiraPriyadarsini, A Akhil, Effect of Air Flow Rate on Performance of Natural Draft Wet Cooling Tower, International Journal of Management, Technology And Engineering, Volume IX, Issue 1, JANUARY/2019, ISSN NO : 2249-7455
14. N.Venkateswarrao, M.V.S.Muralikrishna, R.PeraiahChowdary, N. Janardhan, VVR Sheshagirirao, and T. RatnaReddy, Experimental Investigations on Pollution Levels from Supercharged Partially Adiabatic Diesel Engine with Tamarind Biodiesel Blended with Diethyl Ether, journal of EM International, Aug- 2018.
15. Dr. T. Ratna Reddy, Analysis of Slosh in Tank with Different Filling Percentage, International Journal of Management, IT & Engineering, Vol. 8, Issue 5, May 2018, ISSN: 2249-0558, pp. 130-140.

International/National Conferences from the Year 2017

1. Ch.Indira Priyadarsini, Dr.T.Ratna Reddy, P.Anjani Devi, Design and Performance Analysis of Automotive Radiator using Computational Fluid Dynamics, International Multidisciplinary Conference on Research, Technology & Engineering [ImCReTE-2022] organized by KJEI's Trinity Academy of Engineering, Pune [Accredited by NAAC with 'A' Grade] in Collaboration with Conference World and IARDO, ISBN:978-93-91535-28-5, 7-8, April 2022.

2. Dr.T.Ratna Reddy, Ch.Indira Priyadarsini, R.Navaneetha, Design and Analysis of Impeller using Corrosion Resistant Materials, AIP Conference Proceedings 2317, 040003, <https://doi.org/10.1063/5.0036476>, Feb 2021.
3. Dr.T.Ratna Reddy, Ch.IndiraPriyadarsini, Penyalahareesh Kumar, " Performance Evaluation of Invelox Wind Turbine using CFDTechnique", 5th International multi disciplinary conference, IMRC-2020, ISBN-978-81-948668-1-7, Dec 2020.
4. Dr. T.Ratna Reddy, Ch.Indira Priyadarsini, A Akhil, "Effect of Air Flow Rate on Performance of Natural Draft Wet Cooling Tower", 4th international conference, OU, ICMR-2019-Feb-2019, ISBN-978-93-87793-67-5.
5. T.Ratna Reddy, Manish Sharma, Ch.Indira Priyadarsini, Flow Analysis over an F-16 Aircraft Using Computational Fluid Dynamics, National Conference on Innovations in Mechanical Engineering, 2013 , ISBN: 978-93-82163-00-8, MITS, Madanapalle, 2013.

