

**JNTUA COLLEGE OF ENGINEERING:: ANANTAPUR  
(AUTONOMOUS)**

**BIO DATA**



**Name :** **R.BHAVANI**  
**Date of Birth:** **25-05-1976**  
**Designation :** Professor in Civil Engineering  
**Office Address:** Civil Engineering Department  
JNTUA College of Engineering  
JNTUniversity Anantapur  
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**e-mail address(es):** [rbhavani.civil@jntua.ac.in](mailto:rbhavani.civil@jntua.ac.in)

**Education:**

- Ph.D (Water resources Engineering), JNT University, Anantapur, 2013.
- M.Tech (Water resources Engineering), JNT University, Hyderabad, 2002
- B.Tech Civil Engineering, JNTU College of Engg, Anantapur, 1998.

**Experience:**

- Professor in Civil Engineering Department, JNTU Anantapur since January 2017.  
Associate Professor from January 2014 to December 2016, Assistant Professor  
from November 2000 to December 2013.

**Additional posts:**

- Officer incharge of Academic section from October 2010 to March 2013.
- Additional Controller Of Examinations from September 2014 to March 2018
- Controller Of Examinations from April 2018 to April 2021.
- Head of civil Engg. Dept. JNTUACEA Anantapur from May 2021 to June 2023.
- Vice Principal, JNTUACEA , Anantapur from August 2022 to June 2023.
- UG BOS Chair person since September 2021 to September 2024.
- Worked as TEQIP III Environment Coordinator for JNTU Anantapur
- Participating in Consultancy works of the Department.
- Worked as Fact Finding Committee member for various affiliated colleges of the University.
- Member in State Level Expert Appraisal Committee for the purpose of assisting the State Level Environment Impact Assessment Authority, Andhra Pradesh from October 2024 to till date.

**Memberships in professional societies:**

- Life Member of Indian Society for Technical Education.
- Life member of Indian Association of Hydrologists
- Life member of The Institute of Engineers (India)

**Papers Published in Journals:**

1. R. Bhavani, G. Abbaiah, "Ground Water Irrigation and Agricultural Development A Case Study of AP", Southern Economist, 50(23) 2012, 8- 12.
2. R. Bhavani, K. Madan Mohan Reddy, B. Ajitha, "Melt Densified Post Consumer Recycled Plastic Bags used as Light Weight Aggregate In Concrete", International Journal of Engineering Research & Applications, 2 (4) 2012, 1097- 1101 (UGC).
3. Bhavani, R , 2012. Local Construction And Demolition Waste Used As Coarse Aggregates In Concrete", International Journal of Engineering Research & Applications (IJERA) P.No: 1236 to 1238

4. Bhavani, R., 2013. Construction of Thiessen polygons for rain gauge stations in Anantapuram district. *International Journal of Computational Engineering Research*, 3(6), pp.35-38. (UGC)
5. Bhavani, R., 2013. Comparison of mean and weighted annual rainfall in anantapuram district. *International Journal of Innovative Research in Science, Engineering and Technology*, 2(7), pp.2794-2800.
6. Bhavani, R., 2013. Comparison of Weighted Rainfall obtained Using Thiessen Polygon and Isohyets in Chitravathi Sub basin.
7. Bhavani, R., 2013. Developing an equation for computation of runoff for Jilledubanderu minor basin”, *International journal of Civil, Structural, Environmental and infrastructure Engineering Research and Development (IJCSEIERD)* P.No: 1 to 7
8. Sharada and R. Bhavani , 2013. Water quality index for assessment of water samples of different locations in Tirupati, Chittoor District, A.P, India”, *International journal of Advanced Scientific and Technical Research* P.No: 318 to 324.
9. R. Bhavani, 2014. Mapping River Inundation – A Case Study on River Pennar from Penna Ahobilam Balancing Reservoir (PABR) To Mid Pennar Reservoir (MPR). *International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)*
10. Bhavani.R ,2015. Computation of effective rainfall for wet crops-A case study on 5<sup>th</sup> distributary at Mid Pennar South Canal(MPSC)”, P.No 170 to 176
11. Bhavani.R, 2015. Computation of yield based on weighted normal monsoon rainfall for Kundu sub-basin of Pennar basin”, *International Journal of Advanced Scientific and Technical Research* P.No:25 to 31.
12. Bhavani,R,2016. Comparison of runoff computed by table and dry damp method. *International Journal of Science Technology & Engineering | IJSTE*
13. Bhavani,R,2016. Experimental investigation of drainage water-A case study, *International journal for Scientific Research & Development*. P.No:124 to 127
14. M.Padmaja, R.Bhavani, and R.Pamila, 2018. Adsorption of Cadmium from Aqueous Solutions Using Low cost Materials-A Review, *IJET*. P.No 26 - 29

15. Anil.A, Chandra sekhar Reddy K AND Bhavani.r, 2018. Logarithmic method of groundwater quality index in palar basin at chittoor district, andhra pradesh International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES) , vol 4 pg. 247-253
16. A.Anil, K. Chandra Sekhar Reddy, R.Bhavani,2019. Assessment of Physico Chemical Parameters of Groundwater Quality Index of Palar Basin using Remote Sensing and GIS. ISSN: 2278-3075, Volume-8, Issue-6S4, April 2019 (SCOPUS).
17. Gouse Peera.D and Bhavani .R, 2019. Assessment of rainfall recharge in a basin, IJRAR19K2761 International Journal of Research and Analytical Reviews. Pg. 308-312 (UDC)
18. Gouse Peera.D and Bhavani .R, 2019. Computation of Groundwater Draft for Handri River Basin in Andhra Pradesh, India. Helix, ISSN 2319-5592. (ESCI).
19. Gouse Peera.D and Bhavani .R, 2020. Significant groundwater level decline for Handri river basin, Andhra Pradesh, india. Journal of Indian water works association. PG.NO 295-298 (UGC).
20. M.Padmaja, Dr. R.Bhavani ,” Response Surface Optimization Of Fixed Bed Adsorption Of Cr+6 Onto Low-Cost Adsorbent” Current World Environment ISSN: 0973-4929, , Vol. 15, No. (3) 2020, Pg. 632-639. **Oct 2020** (Web Of Science, UGC Care-II).
21. Gouse Peera.D and Bhavani .R, 2021. Groundwater Investigation by Electrical Resistivity Method in Cheyyeru River Basin, District-Kadapa, Andhra Pradesh. Journal of Indian water works association. PG.NO 31-36 (UGC).
22. .Padmaja, Dr. R.Bhavani,” Green Treatment And Artificial Neural Networks For The Breakthrough Analysis Of Single And Multi-Variant Elements”, Research Journal Of Chemistry And Environment 0972-0626 Volume 25(5),Pp 183- ;**May 2021(Scopus Q4)**
23. M.Padmaja, Dr. R.Bhavani,” Effect Of Carbonization Temperature In The Production And Utilization Of Green Carbons For Chromium (VI) Removal”,

Journal of Civil Engineering and Applications E-ISSN 2707-8396 P-ISSN: 2707-8388 2022; 3(1): 01-04, **Dec,2021** (Peer Reviewed)

24. Gouse Peera.D and Bhavani .R, 2022. Stage of Groundwater Development-A Case study for Handri river basin, Andhra Pradesh, India. Journal of Indian Water Works Association. PG.NO 178-183. (UGC).
25. M.Padmaja, Dr. R.Bhavani Chemically Modified Lignocellulosic Biochars From Vetiver Onto Adsorption Of Pb<sup>+2</sup> And Ni<sup>+2</sup> Advanced Engineering Science ISSN: 2096-3246 Volume 54, Issue 02, **November, 2022** (Scopus)
26. A.Anil, K.Chandra sekhar Reddy,R.Bhavani.”Identification of Groundwater potential areas using Remote sensing and GIS techniques “ published in Journal of Xidian University,ISSN No:1001-2400,Volume 16,Issue 4,2022.
27. Dr. D. Gouse Peera, Dr. R. Bhavani, N.R. Gowthami, Dr. D. Sreenivasulu, N. Kusuma, 2023. An investigation of the biomedical waste ash on cement mortar bricks 2023. (European Chemical Bulletin (**Elsevier SCOPUS**)). Available at <https://eurchembull.com/uploads/paper/cc9f2ef28ef2f9305982ece81c166d8c.pdf>
28. Reddy, P. S., & Bhavani, R. (2023). Assessment of flood in Nandigama, Andhra Pradesh, using hydrological and hydraulic models. World Water Policy, 1–20. <https://doi.org/10.1002/wwp2.12133>. (Scopus)
29. Donthi, R.B.R., Ramannagari, B. Impact of COVID-19 Lockdown on Air Quality and Source Identification During Lockdown in Andhra Pradesh, India. *J Indian Soc Remote Sens* (2023). <https://doi.org/10.1007/s12524-023-01770-5>. (SCIE).
30. Poli SainathReddy., & Bhavani, R. (2023).Assessing future flood in Nandigama through land use, land cover, and rain fall analysis . journal of Water & Climate Change .<https://doi.org/10.2166/wcc.2023.336>. (SCIE).
31. Poli Sainath Reddy, R.Bhavani. Hydrological Modeling of Urban Flooding in Nandigama : Land use Dynamics and climate influence . IOP Conference Series: Earth and Environmental Science, 2023, 1280(1), 012056. <https://doi.org/10.1088/1755-1315/1280/1/012056> (Scopus)

32. Reddy, P.S., Bhavani,R. Impact of Land-Use Changes on the Runoff of Nandigama, Andhra Pradesh, India, *Ecological Engineering and Environmental Technology*, 2024, 25(2), pp, 121-129. <https://doi.org/10.12912/27197050/175958> (Scopus)
33. Donthi, R. B. R., & Ramannagari, B. (2025). Assessment of the geotechnical and environmental reuse potential of soil-like material recovered from Anantapur dumpsite, South India. *Journal of Material Cycles and Waste Management*, 1-16. <https://doi.org/10.1007/s10163-025-02160-4> (SCIE)

### **Papers published in Conferences**

#### **INTERNATIONAL:**

1. D.Gouse Peera, R.Bhavani. A study on assessment of groundwater resources in a basin by rainfall resources in a basin by rainfall infiltration factor method. International conference on “Hydrology and watershed management: Urban water management for sustainable development” conducted by JNTUH in 2019
2. D.Gouse Peera, R.Bhavani. Annual ground water availability in Handri river basin, India. International conference on Advances in Science, Engineering & Mathematics ICASEM 2020 conducted by Annamacharya Institute of Texhnology and Sciences, Rajampet in 2020.
3. A.Anil, K.Chandra sekhar Reddy,R.Bhavani. Comparison between water Quality Index (WQI) And Ccme water Quality Index For Water Quality Assesment in palar sub basin , Chittor Distric, Andhrapradesh , India. International conference on Generic and Pedagogical Research Evaluations in Civil Engineering and its Allied Sciences (IC-GPREC-2023) conducted by G pulla Reddy Engineering College (Autonomous) Kurnool , in association with IFERP on 10<sup>th</sup> & 11<sup>th</sup> November 2023.
4. Poli Sainath Reddy, R.Bhavani. Resilient Urban planning Strategies for Mitigation Flood Risk: A comprehensive Review. Advancements in Sustainable Materials and Infrastructures (ASMI-2023) conducted by Sreenidhi institute of Science and Technology (SNIST), Hyderabad and K.S.R.M College of Engineering , in association with IOP Conference series on 12<sup>th</sup> & 13<sup>th</sup> September 2023.

5. Poli Sainath Reddy, R.Bhavani. Forecasting Flood Inundation in Nandigama : Integrating Hydrological , Hydraulic and Land cover data . International conference on Generic and Pedagogical Research Evaluations in Civil Engineering and its Allied Sciences (IC-GPREC-2023) conducted by G pulla Reddy Engineering College (Autonomous) Kurnool , in association with IFERP on 10<sup>th</sup> & 11<sup>th</sup> November 2023.
6. Poli SainathReddy, R.Bhavani. Land use Land cover Transformation In Nandigama, Andhra Pradesh: A Comprehensive Analysis. International conference on Generic and Pedagogical Research Evaluations in Civil Engineering and its Allied Sciences (IC-GPREC-2023) conducted by G pulla Reddy Engineering College (Autonomous) Kurnool , in association with IFERP on 10<sup>th</sup> & 11<sup>th</sup> November 2023.
7. Poli Sainath Reddy, R.Bhavani. Recognizing Pour point Description on Watershed in Nandigama Taluk by GIS. International Conference on Emerging Research in Science Engineering And Management conducted by SRIT Proddatur in Association with NITTTR Chennai. (ERSEM-2023) on 19<sup>th</sup> & 20<sup>th</sup> MAY -2023.

#### NATIONAL :

1. R.Bhavani,T.Kiran kumar, N.Kumara Swamy, G.Abbaiah, 2007. Sustainable materials and technologies for integrated watershed management. A National conference on “Recent Advances in Structural Engineering,RASE-2007” by Civil Department , JNTU College of Engineering, Anantapur.
2. R.Bhavani,G.V.N .Reddy,V.Venkateshwara Reddy,B.Krishna Rao, Cost Effective containment of industrial waste, A National conference on “Advanced Trends in Mechanical Engineering Research and Development BY JNTUA IN 2001.
3. R.Bhavani,Dr.A.Manjunath, Dr.G.Abbaiah, Multi Linear Regressive Model of Groundwater Quality in Anantapur District of A.P. in India. workshop on “R&D Frontiers in Water and Wastewater Management” BY NEERI in 2006.
4. A.Anil, K.Chandra Sekhar Reddy, R.Bhavani. Statistical Analysis of Physicochemical parameters of water of Palar Sub basin, Chittoor District. National conference on “Recent trends in Science, Engineering & Technology” by Annamacharya Institute of Technology & Sciences: Tirupati in 2019.
5. D.Gouse Peera, R.Bhavani. Recharge assessment from non-rain sources for Handri river basin. ational conference INGWC-2020 on “ground water resources management

for sustainable development: Special emphasis on coastal and urban environment. By Centre for water resources development and management, Kozhikode, Kerala in 2020.

**Published Book Chapters:**

1. D.Gouse Peera, R.Bhavani A Study on Assessment of Groundwater Resources in a Basin by Water Table Fluctuation Method. Groundwater and Water Quality pp 365–369. Springer link. [https://link.springer.com/chapter/10.1007/978-3-031-09551-1\\_29](https://link.springer.com/chapter/10.1007/978-3-031-09551-1_29).

2. Rama Bhupal Reddy, D., Bhavani, R.(2024). Comprehensive Analysis of Impact of COVID-19 Lockdown on Air Quality in Andhra Pradesh, India. In: Mesapam, S., Ohri, A., Sridhar, V., Tripathi, N.K. (eds) Developments and Applications of Geomatics. DEVA 2022. Lecture Notes in Civil Engineering, vol 450. Springer, Singapore.

Doi.org [https://doi.org/10.1007/978-981-99-8568-5\\_7](https://doi.org/10.1007/978-981-99-8568-5_7)

link.springer.com [https://link.springer.com/chapter/10.1007/978-981-99-8568-5\\_7](https://link.springer.com/chapter/10.1007/978-981-99-8568-5_7)

**Patent:**

Patent awarded in the name of Dr. R. Bhavani and Ramesh vattikundala with Title : “System and Methods for Generating high power by utilizing of minimal input power and pressurized water” for the term of 20 years from the 30<sup>th</sup> day of June 2016.

**Details of the various courses attended**

S.No	Name of the course	Organized by	Duration
1	Refresher Course on “Digital image processing and Softcopy Photogrammetry”	UGC Academic Staff College, JNT University, Hyderabad.	3 weeks
2	Refresher Course on “Design and Applications of Robotic Systems and Advanced Mecghanisms”	UGC Academic Staff College, JNT University, Hyderabad.	3 weeks
3	Faculty Development Programme	Centre for Water Resources,	2 weeks



	on“Applications of Geomatics forDisaster Management(AGDM-2013)”	JNT University, Hyderabad.	
4	Certificate Course in Computer Aided Engineering” (ANSYS)	Civil Engineering Department , JNTUA College of Engineering, Anantapur	1 week
5	Faculty Development Programme on “Entrepreneurship” from 06/07/2015 to 18/07/2015	Entrepreneurship Development Institute of India under DST-NIMAT 2014-2015 in association with JNTUA College of Engineering Anantapur, JNTU Anantapur, A.P.	2 weeks
6	Training Course on “Sustainable development & Management of Ground water resources” from 20/07/2015 to 24/07/2015	Ministry of water Resources, River Development & Ganga rejuvenation, Cerntral ground water board, Southern Region.	1 week
7	Faculty development programme on” BIG DATA ANALYTICS”	TATA Consultancy Services Held at JNTUA CEA, Anantapur	3 Day (20 to 22 Feb 2017)
8	Two Day Workshop on “Water resources in Rayalaseema Region :Issues ,Challenges and solutions”.	JNTUA CEA, Anantapur	2 Day (7&8 March 2018)
9	One week faculty development programme on “Reinforcing Professional Communication Skills for Teaching faculty” from 11-15 June 2018.	JNTUA CEA, Anantapur sponsored by TEQIP-III	One week
10	One week faculty development programme on “Soft skills and Personality development”	JNTUA CEA, Anantapur under TEQIP-III	1 week(10-14 Dec, 2018)
11	Two Day National workshop on “Sustainable construction materials and techmiques”	JNTUA CEA, Anantapur under TEQIP	2 day( 8&9 Aug 2019)

12	One week faculty development programme on “Leadership skills”	JNTUA CEA, Anantapur under TEQIP-III	1 week(19-24 August 2019)
13	One week faculty development programme on “Innovative Teaching-Learning Techniques in Higher Education”	JNTUA CEA, Anantapur under TEQIP-III	1 week (04-09 September 2019)
14	One week faculty development programme on “Research methodology and data analysis”	JNTUA CEA, Anantapur under TEQIP-III	1 week(23 to28 SEP 2019)
15	Three Day National workshop on “Pedgogical skills for faculty in outcome based education”.	JNTUA CEA, Anantapur under TEQIP-III	3 Day (6 to 8 Dec 2019)
16	One Day workshop on “Good construction Practices “	JNTUA CEA, Anantapur under TEQIP-III	1 Day (21-12-2019)
17	Five day faculty development programme on” Awareness on Electric/Hybrid Vehicle engineering”.	JNTUA CEA, Anantapur under TEQIP-III	5Day (21 <sup>st</sup> to 25 <sup>Th</sup> Jan 2020)
18	TWO week faculty development programme on” Mathematical modeling and simulation for scientists and engineers	JNTUA CEA, Anantapur – AICTE Sponsered	2Week(24-02-2020 to07-03-2020
19	One week short term training program on Nanotechnology and functional materials (NTFM)	SV College of engineering, Karakambadi Road,Tirupati-AICTE Sponsered	27.07.2020 to 01.08.2020
20	One week short term training program on Earthquake Analysis of Tall Buildings	Srinivasa Ramanujan Institute of Technology(Autonomous) - AICTE Sponsered	06.08.2020 to 12.08.2020
21	Five day National level faculty Development Program for Educators of environmental studies	Dept. of Chemical Engineering, JNTUA CEA, Anantapur	21 to 25 Sept 2020
22	AICTE Training and Learning (ATAL) Academy Faculty Development Program on Emerging Trends in Civil Engineering for Disaster Management	JNTUA College of Engineering	23/12/2024 to 28/12/2024

**Programes conducted:**

1. National level student symposium in 2008.
2. National level student symposium in 2011.
3. Two day workshop on “Water Resources in Rayalaseema Region” on 7<sup>th</sup> and 8<sup>th</sup> March 2018 as convenor.
4. One day workshop on “Bridge: Design, Analysis and fabrication” under TEQIP III on 28.03.2019 as convenor.
5. National level student symposium RACE 2k19 on 29.03.2019 as convenor.
6. One Day seminar on “Over view on Rehabilitation and Retrofitting of Concrete Structures” on 03.12.2021 for Civil engineering students by expert Dr.N.Venkata Ramana , Associate professor, Civil Engineering department, UBDT College of engineering, Davangere Karnataka in Seminar hall in the Department. For Photos <https://photos.app.goo.gl/qjscTmiZ6N17VZWb9>
7. On line seminar on “GATE opportunities for CIVIL Engineering” on 08.12.2021 by R.I.C.E. (Rigorous Intensive Coaching for Engineers) Academy with link <http://meet.google.com/kiz-tgzk-jci>
8. One day workshop on Modern Building Materials by UltraTech on 05.05.2022 as convenor.
9. National level student symposium RACE 2k22 on 06.05.2022 as convenor.

**PhD Supervision Details :**

Four students have received degree and four students are still working under my guidance