



PROFILE

Dr. TUMMA BALA NARSAIAH

Professor, Department of Chemical Engineering
JNTUA College of Engineering Anantapur-515 002

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DEGREES OBTAINED:

University	Degree	Year of Passing	Field of specialization
Osmania University	Ph.D.	December 2009	Chemical Engineering
REC Warangal	M.Tech.	August 1998	Chemical Engineering
Osmania University	B.Tech.	May,1996	Chemical Engineering

Ph.D. thesis title	Hydrodynamics & Modeling of Circulating Fluidized Bed
Supervisor	Prof.V.V.Basava Rao, University College of Technology, OU, Hyderabad
M.Tech thesis title	Modeling & Simulation of Fluidized Bed Oxy- chlorination of Ethylene Process
Supervisor	Prof.G.Venkat Reddy, Regional Engineering College, Warangal

EMPLOYMENT RECORD:

University/College	Designation	Period
JNTUH College of Engineering, Hyderabad	Professor (on deputation)	07.01.2021 to till date
JNTUA College of Engineering, Anantapur	Professor	01.02.2016 to 06.01.2021
JNTUA College of Engineering, Anantapur	Associate Professor	24.03.2015 to 31.01.2016
CCST, IST, JNTUH, Hyderabad	Associate Professor (on deputation)	19.11.2013 to 23.03.2015
JNTUA College of Engineering, Anantapur	Associate Professor	25.08.2013 to 18.11.2013
CCST, IST, JNTUH, Hyderabad	Associate Professor (on deputation)	01.08.2010 to 24.08.2013
JNTUA College of Engineering, Anantapur	Associate Professor	01.03.2009 to 31.07.2010
JNTUA College of Engineering, Anantapur	Assistant Professor	09.11.2006 to 28.02.2009
SRTIST, Nalgonda	Associate Professor	01.03.2004 to 08.11.2006
SRTIST, Nalgonda	Assistant Professor	16.12.1998 to 28.02.2004

PAPERS PUBLISHED IN INTERNATIONAL JOURNALS:

1. **“Synthesis and characterization of Nickel Metavanadate ($\text{Ni}_3\text{V}_2\text{O}_8$) application as photocatalyst and supercapacitor”**, Lakshmana Naik Ramavathu, Seshagiri Rao Harapanahalli, Nagaraja Pernapati, **Bala Narsaiah Tumma**, *International Journal of Nano dimension*, Vol. , Issue , 2021
2. **“Adsorption Studies on Removal of Malachite Green Extracted From Pre-treated Rice Straw”**, Vani Gandham, Uma Adepally, Bala Narsaiah.T, *GIS Science journal*, Volume 8, issue 5, 2021
3. **“Evaluation of activated carbon efficacy for the treatment of pharmaceutical wastewater”** Yeddla Gangadhar Reddy, T. Bala Narsaiah, *International Journal of Engineering Research and Applications*, Vol. 11, Issue 5, (Series-VII) May 2021, pp. 31-35
4. **“Exploring anthocyanins, antioxidant capacity and α -glucosidase inhibition in bran and flour extracts of selected sorghum genotypes”**, Palety Kiran Kumari, A.V. Umakanth , T. Bala Narsaiah , Addepally Uma, *Food Bioscience*, Vol 41, 2021
5. **“Cytotoxic Effect of Bromelain on HepG2 Hepatocellular Carcinoma Cell Line”** Sushma S. Murthy and T. Bala Narsaiah, *Applied Biochemistry and Biotechnology*, Volume 193, Issue 3, March 2021
6. **“Removal of Lead (Pb^{+2}) from Waste Water by Using Coal Fly Ash as Adsorbent**, V. Bhavanisree, T. Bala Narsaiah, *International Journal of Research in Engineering and Science (IJRES)*, Volume 9 Issue 2 | 2021 | PP. 34-40

7. **“Molecular Insights into Bromelain Application in Industry and Health Care”**, Sushma S. Murthy and T. Bala Narsaiah, Biosc.Biotech.Res.Comm. Special Issue Vol 13 No 15 (2021) Pp-36-46
8. **“Removal of Arsenic from wastewater by using coal fly ash as adsorbent”**, K. Mohammed Ali, T. Bala Narasaiah, **International Journal of Engineering Research and Development**, Volume 17, Issue 1 (January 2021), PP. 19-25
9. **“Evaluation of polyphenols and antioxidant contents of various sorghum varieties”**, Palety Kiran Kumari,A.V. Umakanth, T. Bala Narsaiah and Addepally Uma, **Research Journal of Chemistry and Environment**, Vol. 25 (2) February (2021)
10. **“Adsorption of lead ions from waste water using nano silica spheres synthesized on calcium carbonate templates”**,Milton Manyangadze, Nyaradzai M.H. Chikuruwo , T. Bala Narsaiah , Ch. Shilpa Chakra , Gratitude Charis , Gwiranai Danha , Tirivaviri A. Mamvura, **Heliyon 6 (2020) e05309**.
11. **Size Controlled Hydrothermal Synthesis and Characterization of Nickel Metavanadate (NiVO₃) Nanoparticles**, Lakshmana Naik.R, P.Justin, Bala Narsaiah.T, *International Journal of Advanced Science and Technology* Vol. 29, No. 5, (2020), pp. 10012-10018
12. **Extraction and Characterization of Lignin from Herbivorous Animal Manure**, Vani Gandham , Uma Adepally , T.Bala Narsaiah, *Journal of Scientific Research*, Volume 64, Issue 3, 2020, DOI: 10.37398/JSR.2020.640310
13. **Evaluation of Total Phenolics and Antioxidants of Fresh and Commercial Fruit Juices**, Kiran Kumari Palety, Umakanth A.V, T. Bala Narsaiah , Uma Addepally , K. Sirisha, Harini A.S, *Journal of Scientific Research*, Volume 64, Issue 3, 2020, DOI: 10.37398/JSR.2020.640310
14. **Fly Ash for Removal of Malachite Green Dye From Wastewater: Kinetic and Isotherm Studies**, K.Chiranjeevi, M. Radha Kumari, M.Vineesha, SaiManasa, SathishNaik, T.Bala Narsaiah, *Journal of Science and Technology*, ISSN: 2456-5660 Volume 5, Issue 3, May-June 2020
15. **Enhancing adsorption capacity of nano-adsorbents via surface modification:A review**, M. Manyangadze, N.H.M. Chikuruwo, T.B. Narsaiah, C.S. Chakra, M. Radhakumari, G. Danha, **South African Journal of Chemical Engineering**, 31(2020) 25-32
16. **“Molecular docking studies of phytocompounds with Transcriptional factors in hepatocellular carcinoma”** Sushma S. Murthy and T. Bala Narsaiah, *Rasayan J of Chem*, Vol. 12 | No. 4 |2030 -2038| October - December | 2019
17. **Removal of Malachite Green Dye from Waste Water Using Rice Husk Ash as an Adsorbent**, Peram Shyamsundar Reddy , D Prasanna Kumar Reddy , Shaik Waqar , K Naveen , T Bala Narasaiah, **The International Journal of Engineering and Science (IJES)**, Volume 8, Issue 7 Series I, Pages PP 51-61,2019, ISSN (e): 2319 – 1813, ISSN (p): 23-19 – 1805
18. **"Synthesis of Nickel Nanoparticles and Application in Malachite Green Dye Colour Removal using Adsorption"** S. Sharada, T.Bala Narsaiah, M.Bharath Kumar Naik, *IJSRD - International Journal for Scientific Research & Development*| Vol. 7, Issue 05, 2019 | ISSN (online): 2321-0613
19. **“Synthesis and Characterization of Copper Oxide (CuO) Nanoparticles”** D.Vandana Reddy, T. Bala Narasaiah, *IJSRD - International Journal for Scientific Research & Development*| Vol. 6, Issue 06, 2018, ISSN (online): 2321-0613

20. **“Treatment of Pharmaceutical Wastewater by using TiO₂ and N-TiO₂ Nanoparticles”** G. Neha Mallika, Dr T. Bala Narsaiah, **International Journal of Engineering & Technology**, Vol 7, 2018
21. **“Experimental RTD Studies in Circulating Fluidized Bed”**,D.Anitha,T.Bala Narsaiah, V.V.Basava Rao, G.Srinivasa Rao, **International Journal of Engineering Research and Development**, Volume 14, Issue 5 (May, 2018), PP.64-69
22. **Catalytic soot oxidation using ceria, cobalt and copper nanocomposites**, Eubert P.Mahofa, **T. Bala Narasaiah**, Ch.Shilpa chakra, **MRS advances**, 2018
23. **“Synthesis of TiO₂ Nanoparticles using Sol-Gel method for the Treatment of Pharmaceutical Wastewater”**, G. Neha Mallika, Dr T. Bala Narsaiah, **IJSRD - International Journal for Scientific Research & Development**| Vol. 5, Issue 06, 2017, ISSN (online): 2321-0613
24. **“RTD studies in liquid-solid Tapered Fluidized bed”** D. Anitha, T.Bala Narsaiah V.V.Basava Rao, **International Journal of Engineering Technology Science and Research (IJETS)**, Volume 4, Issue 9, September 2017, ISSN 2394 – 3386
25. **“Study of Mechanical Properties of Nano-Structured Maraging Stainless Steel (C300)”** Venkatesh Naik Nenavath, Bala Narsaiah. T, Shashi Kumar. A, **IJSRD - International Journal for Scientific Research & Development**| Vol. 5, Issue 06, 2017, ISSN (online): 2321-0613
26. **“Synthesis of metallic element(silver)Nanoparticles in a continuous micro flow reactor using surfactant”** S. Sharada, , Shirish H Sonawane, **T. Bala Narsaiah**, **Journal of Basic and Applied Engineering Research**, Volume 4, Issue 6, pp.397-398, July-September, 2017, eISSN-2350-0255
27. **“Synthesis of Transition metal (Ag)Nanoparticles in a continuous flow microreactor”** S. Sharada, **T. Bala Narsaiah**, Shirish H Sonawane, **Journal of Basic and Applied Engineering Research**, Volume 4, Issue 3, pp.234-236, April-June, 2017, eISSN-2350-0255
28. **“Low cost adsorbents utilization for Treatment of pharmaceutical waste water”**, Yeddla. Gangadhar Reddy, Dr. T. Bala Narsaiah, B. Venkateswar Rao,**International Journal of Civil Engineering Research** ,Volume 8, number 1 (2017), PP.33-42
29. **“Synthesis of palladium nanoparticles using continuous flow microreactor”** S. Sharada, Prashant L. Suryawanshi, Rajesh Kumar P. Sarang P. Gumfekar, **T. Bala Narsaiah**, Shirish H Sonawane, **Collides and surfaces A:Physicochemical and Engineering Aspects**, Volume 498, 2016, pp 297-304
30. **“Efficient Decolorization of Congo red from Aqueous Solutions using Fe₃O₄ Nanoparticles”** Sara Shaker, Shilpa Chakra Chidurala,**Bala Narasaiah Tumma** **“Advances in Bioresearch. Vol. 7 (1), January, 2016**, pp 37-43, ISSN: 2277-1573, IF:0.971
31. **“Effects of Calcination Temperature on properties of Mg-Al mixed oxide Nanoparticle”**. Joseph Govha, **T. Bala Narasaiah**, Ch.Shilpa chakra, Pramod Kumar, **Materials Today: Proceedings**, Volume 2, Issue 9, Part A, (2015) **4328 - 4333 (Elsevier)**

32. "Catalytic removal of soot from diesel engines using CeO₂, CeO₂-CuO₂, and CeO₂-Al₂O₃ Nano composites" Eubert P.Mahofa, **T. Bala Narasaiah**, Ch.Shilpa chakra, Pramod Kumar, **Materials Today: Proceedings**, Volume 2, Issue 9, Part A, (2015) **4451 - 4456 (Elsevier)**
33. "Treatment of pharmaceutical waste water using Coagulation method", Yeddla. Gangadhar Reddy, Dr. T. Bala Narsaiah, B. Venkateswar Rao, **International Journal of Engineering Research and Development**, Volume 11, Issue 11 (November 2015), PP.61-67
34. "Effect of Geometric Configuration on Performance of Uniflow Cyclone" Vighneswara Rao.K, **Bala Narsaiah.T**, Pitchumani.B, **International Journal of Engineering Research and Development**, Volume 11, Issue 01 (January 2015), PP.63-69
35. "Synthesis and Characterization of hollow silica nanoparticles on calcium carbonate for possible removal of lead from industrial waste water", Milton Manyangadze, **T. Bala Narsaiah**, Pramod Kumar, Ch Shilpa Chakra, **IJLTEMAS, Vol III, Issue X, Oct, 2014**
36. "Estimation of Tangential Velocity in uniflow cyclone", Vighneswara Rao.K, **Bala Narsaiah.T**, Pitchumani.B, **IJLTEMAS, Vol III, Issue IX, Sept 2014**
37. 'Design of decentralized Smith predictor for multivariable non-square processes with Multiple time delays' Rajesh Ammathi, **T. Bala Narsaiah** and A. Seshagiri Rao **Int. J. of Modeling, Identification and Control, Vol 21, No.2, 2014 (ISSN: 1746-6172) (I.F:0.778)**
38. "Determination of surface tension of binary mixtures of Methanol, Propanol, iso-Propanol with O-xylene" D.Anitha, D.Subba Rao, Pramod kumar, **T.Bala Narsaiah**, T.E.Vittal Prasad, **International Journal of Emerging Trends in Engineering and Development, Issue 4, Vol.1 (January 2014) (ISSN 2249-6149)**
39. "Structural Characteristics and Catalytic Performance of Ce-Al Nanoparticles in Soot Oxidation" Eubert P. Mahofa, **T. Bala Narsaiah**, **International Journal of Science and Research (IJSR), ISSN (Online): 2319-7064, Volume 3 Issue 9, September 2014**
40. "Synthesis of Nano-Magnesium Ferrite Spinel and its Characterization" Joseph Govha, **T. Bala Narasaiah**, Pramod Kumar , Ch. Shilpa Chakra, **International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 3, Issue 8, August - 2014.**
41. "Catalytic Activity of CeO₂-NiO for Low Temperature Soot Combustion" Eubert P. Mahofa,**T. Bala Narsaiah**, Pramod Kumar, **International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 3 Issue 9, September - 2014**
42. "Kinetics of Fluoride Adsorption on Mixed Oxide Nanocomposites: Analysis", **Joseph Govha,T.Bala Narsaiah**, **Milton Manyangadze**, **International Journal of Scientific and Engineering Research, Volume 5, Issue 10, October 2014, ISSN 2229-5518**

43. "Bioprocess Technology Development and Convalescing Production of L-Lysine in *Corynebacterium glutamicum*" Ramesh Malothu, Dowlathabad MR and **Bala Narsaiah.T**, **International Journal of Biological, Ecological and Environmental Sciences (IJBEES)**, Vol. 1, No.3,2012
44. "Prediction of Falling Solids Film Thickness near the Wall in Circulating Fluidized bed Risers" V.V.Basava Rao, T.Bala Narsaiah and B.V.Reddy, **International Journal of Chemical Engineering and Applications**, Volume 2, No. 2, April 2011

PAPERS PUBLISHED IN NATIONAL JOURNALS:

1. "Municipal Solid Waste Management- A review" M.Chandrasekhar, T.Bala Narsaiah and R.S.Dave, **Journal of the Institution of Public Health Engineers, India, Volume 2013-14, No.2, 2013, ISSN: 0970-3195**
2. "Modeling & Simulation of fluidized bed oxychlorination of ethylene process" T.Bala Narsaiah, G.Karunya and G.Venkat Reddy, **The IUP Journal of chemical Engineering, Vol.IV, No.1, 2012, ISSN: 0975-6337**
3. "Modeling of Flow Structure near the Wall in Circulating Fluidized Bed" E.Santosha, T.Bala Narsaiah & V.V.Basava Rao, **Indian Chemical Engineer, Vol.49 No.1 January-March 2007, pp. 38-44, ISSN: 0019-4506**

PAPER PUBLISHED AS BOOK CHAPTER:

1. Removal of Fluoride in Water Using Amorphous Nano Metal Oxides *Joseph Govha, T. Bala Narsaiah, and Ch. Shilpa Chakra*, **Innovative Technologies for the Treatment of Industrial Wastewater: A sustainable Approach**, by Apple Academic Press, ISBN 978-1-77188-497-6, 2017
2. Removal of Pb²⁺ from Water Using Silica Nano Spheres Synthesized on as a Template-Adsorption Kinetics *Milton Manyangadze, J. Govha, T. Bala Narsaiah, Ch Shilpa Chakra*, **Innovative Technologies for the Treatment of Industrial Wastewater: A sustainable Approach**, by Apple Academic Press, ISBN 978-1-77188-497-6, 2017
3. Effect of Pressure Drop and Tangential Velocity on Vane Angle in Uniflow Cyclone; Vighneswara Rao K, **Bala Narsaiah T**, and Pitchumani B, **Chemical and Bioprocess Engineering: Trends and Developments**, by Apple Academic Press, ISBN 978-1-926895-67-3, pp 37-46, 2015

BOOKS PUBLISHED

1. "Pharmaceutical waste water treatment using TiO₂ & N-TiO₂ nanoparticles, T.Bala Narsaiah, G.Neha Mallika, by LAMBERT academic publishing, ISBN 978-620-0-32243-2, 2020

2. **"Computational Simulation Tools in Engineering"**, V.Ramesh Kumar, T.Bala Narsaiah, K.Ravichand, **BS Publications, ISBN 978-93-8759-304-6, 2018**
3. **"Innovative Technologies for the Treatment of Industrial Wastewater: A Sustainable Approach"**, Shirish H.Sonawane, Y.Pydi Setty, T.Bala Narsaiah, S.Srinu Naik by Apple Academic Press, **ISBN 978-1-77188-497-6, Dec, 2017**
4. **E-Books Published:**"Ethylene Dichloride Production by Ethylene Oxychlorination in FBR",T.Bala Narsaiah, Karunya, by LAMBERT academic publishing, ISBN 978-3-659-70876-3, **2015**

EDITOR FOR CONFERENCE PROCEEDINGS:

1. Proceedings of **International Conference on Trend setting innovations in Chemical sciences & Technology nature inspired chemistry & engineering (TSCST-NICE, 2016)**, October 4-6, 2016, CCST, IST, JNTUH, Hyderabad
2. Proceedings of **International Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry NDCT-2014**), June, 23-25, 2014, Hyderabad

PAPERS PUBLISHED IN INTERNATIONAL/NATIONAL CONFERENCE PROCEEDINGS:

1. Comparative Study on Synthesis of Performic Acid in a Microreactor and Batch Reactor using Amberlite Catalyst, K Peddintaiah, T Bala Narsaiah, S Sharada, 36th NATIONAL CONVENTION OF CHEMICAL ENGINEERS, Theme: Frontier Technologies for 21st Century's Process Industries, Dept. of Chemical Engg, NIT Durgapur, March 6-7, 2021
2. "Nanocrystalline Cobalt Orthovanadate (Co₂V₂O₇) on Graphene Oxide Scaffolds: Size Controllable Hydrothermal Synthesis and Characterization" Lakshmana Naik R and Bala Narsaiah T, Proceedings of DAE-BRNS, 8th Interdisciplinary Symposium on Materials Chemistry (ISMC-2020), June 17-19, 2021
3. **"The Hydrothermal Synthesis and Characterization of Nickel Metavanadate (Ni₃V₂O₈) as Electrocatalysts for Fuel Cell"** Lakshmana Naik R, P. Justin, and Bala Narsaiah T, Proceedings of ICSARQCSMM-19, 11-13 Dec, 2019, JNTUACE, Ananthapuramu, A.P., India. Pp 171-175, ISBN: 9789 3539 16725
4. **"Hydrothermal Synthesis and Characterization of Nanocrystalline Zinc Orthovanadate (Zn₃ V₂ O₈) on Graphene Oxide Scaffolds"**, Lakshmana Naik R, H Seshagiri Rao, Pernapati Nagaraja, Bala Narsaiah T, 35th Indian Engineering Congress (online), December 18-20, 2020 (ISBN 978-81-950662-0-9)
5. **"Cytotoxic Effect of Bromelain on HepG2 Hepatocellular Carcinoma Cell Line"** Sushma S. Murthy and T. Bala Narsaiah, **Biospectrum 2020: International Conference on Biotechnology & Biological Sciences 19 - 21 November, 2020** at University of Engineering & Management, Kolkata (ISBN: 978-93-5426-025-4)
6. **"Effect of Storage on Stability of Antioxidants in commercial Fruit Juices"** by Kiran Kumari Palety, Umakanth A.V, T. Bala Narsaiah and Uma Adepally, 3rd international conference on Environmental Management (ICEM 2017), 27-30, November, 2017 at JNTUH, Hyderabad (**ISBN: 978-93-86819-50-5**)

7. **“Synthesis of Lignin Nanoparticles using Ball Mill Technique”**, Vani G.,T. Bala Narsaiah and A. Uma, 3rd international conference on Environmental Management (ICEM 2017), 27-30, November,2017 at JNTUH, Hyderabad (ISBN: 978-93-86819-50-5)
8. **“Comparative evaluation of antioxidant activity in sorghum grain varieties and fresh fruit juices”** Kiran Kumari Palety, Umakanth A.V, T. Bala Narsaiah and Uma Adepally, international conference on Biotechnology & Bioengineering-Trends(ICBT-2017), 23-25 March,2017(ISBN: 978-93-85518-10-2)
9. **"Preparation of lignin based wood adhesive from bamboo"**, Vani Gandham.,Uma Adepally,T. Bala Narsaiah, P.Kiran kumari, international conference on Biotechnology & Bioengineering-Trends(ICBT-2017), 23-25 March,2017(ISBN: 978-93-85518-10-2)
10. **“Fluidization Studies on Liquid - Solid Tapered Fluidized bed”**, D.Anitha, V.V.Basava Rao,T. Bala Narsaiah, international conference on Biotechnology & Bioengineering-Trends(ICBT-2017),23-25 March, 2017 (ISBN: 978-93-85518-10-2)
11. **“RTD Studies in Liquid - Solid Tapered Fluidized bed”**,D.Anitha, V.V.Basava Rao, T. Bala Narsaiah, 4th International conference, ICNFESMH-2017 at IETE, O.U, Hyderabad (ISBN: 978-81-934288-3-2)
12. **“Effect of particle size on hydrodynamics of an internally circulating fluidized bed with a draft tube”** by Ravi Gujjula, Narasimha M, Priyanka K, and Bala Narsaiah T, 12th international conference on Circulating Fluidized Bed Technology (CFB-12), 23-26, May 2017, Krakow, Poland
13. **“Heterogeneous catalytic hydrogenation of p-nitrobenzaldehyde to p-aminobenzaldehyde using platinum on carbon as catalyst”** by K.Bhagyasri, K. Ravisharma, **T. Bala Narsaiah**, Sunil P Bawane Proceedings of International Conference on Trend setting innovations in chemical sciences & Technology-Applications in Pharma Industry (TSCST-API 2015),16-18,December 2015,CCST, IST, JNTUH, Hyderabad, pp 127-129, Spectrum publications, (ISBN: 978-93-82829-48-5)
14. **“Measurement of pressure flow curves and solid circulation rate in an ICFB”** by K. Priyanka, Ravi Gujjula, **T. Bala Narsaiah**, Narasimha Mangadoddy, Proceedings of International Conference on Trend setting innovations in chemical sciences & Technology-Applications in Pharma Industry (TSCST-API 2015),16-18, December 2015, CCST, IST, JNTUH, Hyderabad, pp 139-144, Spectrum publications, (ISBN: 978-93-82829-48-5)
15. **“Performance of CeO₂, CeO₂-CuO₂, and CeO₂-CoO catalysts for low temperature soot oxidation”** Eubert P. Mahofa,,**T. Bala Narsaiah**, Pramod Kumar, Ch. Shilpa Chakra, Proceedings of International Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT-2014), June, 23-25, 2014, CCST, IST, JNTUH, Hyderabad, pp 328-332, Spectrum publications, (ISBN: 978-93-82829-90-4)
16. **“Synthesis and characterization of hollow silica nano particles on calcium carbonate for the removal of chromium from industrial waste water”**Milton Manyangadze, **T. Bala Narsaiah**, Pramod Kumar, Ch Shilpa

- Chakra, Proceedings of International Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT-2014), June, 23-25, 2014, CCST, IST, JNTUH, Hyderabad, pp 387-393, Spectrum publications, (ISBN: 978-93-82829-90-4)
17. **"Synthesis of Nano crystalline magnesium ferrite spinel by co-precipitation method"** Joseph Govha, **T. Bala Narasaiah**, Pramod Kumar, Ch. Shilpa chakra Proceedings of International Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT-2014), June, 23-25, 2014, Hyderabad, pp 368-371, Spectrum publications, (ISBN: 978-93-82829-90-4)
 18. **"Catalytic hydrogenation of P-Nitro-benzamide to produce P-Amino benzamide over Palladium Catalyst supported on carbon"** Y. Gangadhar Reddy, Sunil P. Bawane, **T. Bala Narasaiah**, K. Ravisharma, Bhagyasri, Proceedings of International Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT-2014), June, 23-25, 2014, Hyderabad, pp 102-105, Spectrum publications, (ISBN: 978-93-82829-90-4)
 19. **"Assessment of the quality of Windrow composting produced from Municipal Solid Resource (Waste)"**, G. Venkatesham, **T. Bala Narasaiah**, R.S. Dave and P. Sharath Kumar, Proceedings of 4th International Conference on Solid Waste Management, January 28-30, 2014, Hyderabad, pp 278-282, Vol I, Waste Management & Resource Utilization, Oxford Publishing house, Kolkata (ISBN: 81-86862-49-8)
 20. **"Municipal Solid Waste Management through Vermicomposting"**, G. Venkatesham, T. Bala Narasaiah, R.S. Dave and P. Sharath Kumar, Proceedings of 3rd International Conference on Solid Waste Management, July 30th to 1st August, 2012, Mysore, pp 313-320, Vol I, Sustainable Waste Management, Oxford Publishing house, Kolkata (ISBN: 81-86862-45-5)
 21. **"Prediction of annular down flow layer thickness in circulating fluidized bed"**, **T. Bala Narasaiah** & V.V. Basava Rao, **Proceedings of 9th international conference on circulating fluidized beds (CFB-9), 13-17, May 2008, Hamburg, Germany** (ISBN: 978-3-30400-57-7), Tu Tech Innovation GmbH, Hamburg

INVITED TALKS DELIVERED

1. Delivered lecture on **"Process calculations & Thermodynamics"** for M.Tech (Bio-Tech) students at Centre for Biotechnology, IST, JNTUH, Hyderabad on 03-11-2018
2. Delivered lecture on **"Unit operations & fluid mechanics"** for M.Tech (Bio-Tech) students at Centre for Biotechnology, IST, JNTUH, Hyderabad on 05-11-2018
3. Delivered lecture on **"Heat transfer"** for M.Tech (Bio-Tech) students at Centre for Biotechnology, IST, JNTUH, Hyderabad on 20-11-2018
4. Delivered lecture on **"Radiation & Heat transfer equipment"** for M.Tech (Bio-Tech) students at Centre for Biotechnology, IST, JNTUH, Hyderabad on 01-12-2018

5. Delivered lecture on "**mass transfer**" for M.Tech (Bio-Tech) students at Centre for Biotechnology, IST, JNTUH, Hyderabad on 06-12-2018
6. Delivered an invited talk on "**Career opportunities and challenges in Chemical Engineering**" for B.Sc. (Chemical Technology) students at Loyola Academy of Degree and PG College, Alwal, Hyderabad on 4th December, 2017
7. Delivered an invited talk on "**Basics of Thermodynamics**" in FDP on **Recent innovations in Unit operations for Pharmaceutical Industries** on 28th November, 2017 at JNTUACE, Anantapur.
8. Delivered an invited talk on "**Basics of Process Control & Instrumentation**" in FDP on **Recent innovations in Unit operations for Pharmaceutical Industries** on 29th November, 2017 at JNTUACE, Anantapur.
9. Delivered an extension lecture on "**Process Instrumentation and heat transfer**" for B.Sc. (MCIC) students at Nagarjuna Govt. Degree College, Nalgonda on 17th March, 2017
10. Delivered a lecture on "**E-waste Management in India**" at national institute for micro, Small and medium Enterprises (ni-msme), Yousufguda, Hyderabad on 27.11.2015
11. Delivered an extension lecture on "**Utilities in Process industries**" for B.Sc. (MCIC) of I,II & III year students at Nagarjuna Govt Degree College, Nalgonda on 19th Feb, 2014
12. Delivered a talk on "**Utilities in Process industries**" for B.Sc. students at Nagarjuna Govt Degree College, Nalgonda on 31st January, 2013
13. Delivered a talk on "**Utilities in Chemical Industries**" for first year B.Sc. students at Govt Degree College for Women, Begumpet, Hyderabad on 11th January, 2013
14. Invited as resource person/Adjunct faculty to deliver guest lectures in "**Instrumentation & Process Control**" at Dept of Biotechnology, SKU College of Engineering & Technology, **Sri Krishnadevaraya University**, Anantapur during 22th June to 20th July, 2010

VIDEO LECTURES DELIVERED

1. Invited as resource person/Adjunct faculty for delivering 30 **video lectures** for B.Tech, Chemical Engineering for the subject "**Process Control & Instrumentation**", at Rajeev Gandhi University of Knowledge Technologies, Hyderabad during 7th June -20th August, 2012

CHAired TECHNICAL SESSIONS IN NATIONAL/INTERNATIONAL CONFERENCES

1. Chaired a session in "**National Conference on Advances in Chemistry And Chemical Engineering (NCACACE-2021)**", on 29th January 2021, Department of Chemistry in Association with Department of Chemical Engineering, JNTUHCEH, Hyderabad

2. Chaired a session in **“International Conference on Biotechnology & Bioengineering-Trends (ICBT-2017)**, on 25th March 2017, CBT, IST, JNTUH, Hyderabad
3. Chaired a session in **“International Conference on Trend setting innovations in chemical sciences & Technology nature inspired chemistry & engineering (TSCST-NICE,2016)**, on 6th October 2016, CCST, IST, JNTUH, Hyderabad
4. Chaired a session in **“ SCHEMCON-2016, 12th Annual Session of Chemical Engineering Congress”** on 10th September,2016 at BVRIT, Narsapur, Medak (Dist)
5. Chaired a session in **“International Conference on Trend setting innovations in chemical sciences & Technology-Applications in Pharma Industry (TSCST-API,2015)**, on 17th December 2015, CCST, IST, JNTUH, Hyderabad
6. Chaired a session on pollution control in **“International Conference on Environment and Energy(ICEE -2014)”** on 17th , December 2014 at JNTUH, Hyderabad
7. Chaired a session on energy efficiency in **“International Conference on Environment and Energy(ICEE -2014)”** on 16th , December 2014 at JNTUH, Hyderabad
8. Chaired a technical session in **“International Conference on Nano Science & Engineering Applications (ICONSEA -2014)”** during 26 -28, June ,2014 at CNST, IST,JNTUH,Hyderabad
9. Chaired a technical session on **“Composting”** in the **4th international Conference on Solid Waste Management(4th IconSWM-2014)**, 30th January, 2014 at ANGRAU, Hyderabad
10. Chaired technical session in **International Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT-2014)**, June, 23-25, 2014, Hyderabad
11. Chaired technical session in **“18th National symposium on Environment (NSE-18)**,Department of Chemical Engineering, JNTUACE, Anantapur on 12th March,2013
12. Chaired technical session in **“National conference on Innovations in Chemical Engineering (ICE-2013)**, BITS Pilani, Hyderabad Campus on 15th Nov,2013
13. Chaired technical session in **“international Conference on Chemical & Bioprocess Engineering- India (ICBPE-IN 2013)”**, Department of Chemical Engineering, NIT Warangal on 16th Nov,2013
14. Chaired technical session in **“National conference on Nano science, Nano engineering & Applications (NCONSEA-2012)**, CNST, IST, JNTUH, Hyderabad on 28th April,2012

LIST OF M. TECH PROJECTS GUIDED:

S.No.	Name of the student	Title of Project	College/University	Year
1.	M.Karunya	Modeling & Simulation of Fluidized Bed Oxy-chlorination of Ethylene Process	JNTUA CE Anantapur	2008
2.	L.Ramya Krishna	Catalytic Hydrogenolysis of glycerol: development of catalyst & studies on reaction kinetics	JNTUA CE Anantapur	2011
3.	M.Anila	Kinetics of leaching of pure pyrite mineral using carbonate solution	CCST,IST,JNTUH, Hyderabad	2012
4.	Kiranmayi	Liquid holdup in Concurrent Gas Liquid Up-flow through Packed column with Corrugated Wire Gauze Structured Packing	CCST,IST,JNTUH, Hyderabad	2012
5.	R.Nagendra Babu (11031D9206)	Dissolution kinetics of pyrite from synthetic mineral mixture using carbonate solution	CCST,IST,JNTUH, Hyderabad & AMD ,BARC	2013
6.	B.Siva Rama Rao (11031D9212)	Dissolution kinetics of a radioactive metal using carbonate solution	CCST,IST,JNTUH, Hyderabad & AMD ,BARC	2013
7.	B.Bhasker (11031D9203)	Optimal Control of a copolymerization reactor using ANNs	CCST,IST,JNTUH, Hyderabad & IICT	2013
8	Joseph Govha (12031D9207)	Fluoride removal from drinking water using nanocomposites	CCST,IST,JNTUH, Hyderabad	2014
9.	Eubert Privilege Mahofa (12031D9204)	Catalytic performance of Ceria based nanocomposites in diesel soot oxidation	CCST,IST,JNTUH, Hyderabad	2014
10	Milton Manyangadze (12031D9205)	Removal of lead from waste water using Nano adsorbents	CCST,IST,JNTUH, Hyderabad	2014
11	Ravi Sharma Karra (12031D9212)	Heterogeneous catalytic hydrogenation of p-nitrobenzamide & 2, 2-dinitrodibenzyl	CCST,IST,JNTUH, Hyderabad	2014

12.	K.Bhagyasri	Catalytic hydrogenation of p-nitrobenzaldehyde to p-Aminobenzaldehyde	CCST,IST,JNTUH, Hyderabad	2014
13.	B.Rajesh	Removal of Fluoride using low cost adsorbents	CCST,IST,JNTUH, Hyderabad	2014
14.	Kaila Sindhuja (13031D9209)	phytotoxic influence of zinc oxide nanoparticles on growth of vigna radiata	CCST,IST,JNTUH, Hyderabad	2015
15.	Anke vannuramma (13031D9217)	Photo degradation of methylene blue dye from Water by using Al ₂ O ₃ nanoparticles	CCST,IST,JNTUH, Hyderabad	2015
16.	Bala Ravi Teja (14001D8104)	Fabrication of organic Photovoltaic cells	IICT, Hyderabad	2016
17.	N.Venkatesh Naik (15001D8115)	Synthesis & study of Mechanical Properties of Novel Nanostructured Maraging Stainless steel	HAL, Bangalore	2017
18.	M. Bharath Kumar Naik (15001D8117)	Removal of Malachite green dye using Nickel Nanoparticles	JNTUACE, Anantapur	2017
19.	G.Neha Mallika (15001D8103)	Treatment of pharmaceutical wastewater using TiO ₂ and N-TiO ₂ nanoparticles	JNTUACE, Anantapur	2017
20.	K.Mohammed Ali (16001D8215)	Removal of Arsenic from waste water using coal fly ash as adsorbent	JNTUACE, Anantapur	2018
21.	V. Bhavani Sree (16001D8202)	Removal of Lead from waste water using coal fly ash as adsorbent	JNTUACE, Anantapur	2018
22.	S.leelavathi (16001D8101)	Removal of Methylene Blue dye from waste water using ZnO & MgO nanoparticles as adsorbents	JNTUACE, Anantapur	2018

23.	D.Vandana Reddy (16001D8109)	Synthesis of copper oxide and cobalt oxide nanostructures for super capacitor electrode applications	JNTUACE, Anantapur	2018
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LIST OF Ph.D.'s SUPERVISED

S. No	Name of the student	Title	University	Year of registration	Year of Award	Registered under the Faculty
1.	K.Vigneshwar Rao (1003PH0312)	Studies in the performance of Uniflow cyclone	JNTUH, Hyderabad	2010	Dec, 2015	Chemical Engineering
2.	G.Venkatesham (1003PH1116)	A comparative study on composting technologies for Municipal Solid Waste Management	JNTUH, Hyderabad	2011	May, 2017	Environmental Science and Technology
3.	S.Sharada (13PH0604)	Studies on micro reactor based processes for selected reactions	JNTUA, Anantapur	2013	Sept,2018	Chemical Engineering
4.	D.Anitha (1103PH0312)	RTD studies in Novel fluidized beds	JNTUH, Hyderabad	2011	May 2020	Chemical Engineering

DETAILS OF PH.D. STUDENTS (WORK IN PROGRESS):

S.No.	Name of the student	Title of Project	University	Year of registration	Faculty
1.	Y.Gangadhar Reddy	Kinetic studies of heterogeneous reactions	JNTUH, Hyderabad	2012	Chemical Engineering
2.	S.Ravinder (14PH0601)	Model based prediction of CDU operations for wide range of feeds tocks.	JNTUA, Anantapur	2015	Chemical Engineering
3.	K.Peddintaiah (15PH0602)	Hydrodynamics and particle segregation / mixing studies in a circulating fluidized bed riser	JNTUA, Anantapur	2016	Chemical Engineering
4.	G.Vani (15PH0601)	Synthesis & Characterization of lignin nanoparticles for various green applications	JNTUA, Anantapur	2016	Chemical Engineering
5.	P. Kiran kumari (Co-supervisor)	Exaction & characterization of antioxidants from different types of sorghum cultivars and their volarization in fruit juices	JNTUA, Anantapur	2016	Chemical Engineering
6.	R.Laxmana Naik (16PH0603)	Electrochemical energy storage devices	JNTUA, Anantapur	2017	Chemical Engineering
7.	Sushma S Murthy (16PH1102)	Pytoanalysis of plants	JNTUA, Anantapur	2017	Bio-Technology
8.	Babu Raja Rammohan Ray (Co-supervisor)	Evaluation and Improvement of Jack fruits processing	JNTUA, Anantapur	2017	Food Technology
9.	G.Neha Mallika (19PH0602)	Synthesis of nano catalysts for waste water treatment	JNTUA, Anantapur	2019	Chemical Engineering

LIST OF B.TECH PROJECTS GUIDED:

S.No.	Name of the student	Title of Project	College/University	Year
1.	Hemasree CG (16001A0805) Gundlapalli	Synthesis of Performic acid using a micro reactor	JNTUA CE, Anantapur	2020

	Adithya Chandrahas (16001A0832) Subramanyam Kalluru (16001A0808) GaddaJyothsna Deepika (16001A0848)			
2.	Shaik Ishrath Jahan (16001A0809) Velpula KrishnaVeni (16001A0816) G. SAIRAJ GUPTA (16001A0835) Chemala Pavani (16001A0844)	Design of fluidized bed combustor for a 50 MW power plant	JNTUA CE, Anantapur	2020
3.	Akuleti harini (16001A0801) Yakama jayshankar (16001A0812) Gagiri nazia tarannam (16001A0841) Gorantla renuka (16001A0843)	Removal of malachite green dye from waste water by using banana coir pith as an adsorbent	JNTUA CE, Anantapur	2020
4.	Y.Likhitha (14001A0808) B.Bharath Kumar (12001A0838) S. Harsha Vardhan Reddy (14001A0854) K. S.Varada Raju (14001A0806)	Extraction of Silica from Rice husk ash	JNTUA CE, Anantapur	2018
5.	P.Shyamsunder Reddy (14001A0812) D.Prasanna Kumar Reddy (14001A0839) SK. Waqar (14001A0824)	Removal of Malachite Green dye from waste water using Rice husk ash as adsorbent	JNTUA CE, Anantapur	2018

	K. Naveen (14001A0836)			
6.	Y.Sai Manasa (13001A0804) M.Vineesha (13001A0851) K.Chiranjeevi (13001A0821) R.Sathish Naik (13001A0820)	Removal of Malachite Green dye from waste water using fly ash as adsorbent	JNTUA CE, Anantapur	2017
7.	P.Rohitha (13001A0860) A.Hari Chandana (13001A0805) A.Dileep (13001A0802) V.V.V.Sagar (14005A0801)	Production of Melamine using low pressure process	JNTUA CE, Anantapur	2017
8.	G.Bhavitha (12001A0833) V.Siva Jyothi (12001A0822) M.Muddu Krishna (12001A0832) M.B.Uday Kumar (12001A0837)	Manufacture of Ethylene Glycol	JNTUA CE Anantapur	2016
9.	B.Srinivasulu (12001A0847) V.Sruthica Reddy (12001A0828) CH.Vedavyas (12001A0850) K.Nagarjuna Reddy (12001A0857)	Manufacture of Maleic Anhydride by Huntsman Process	JNTUA CE Anantapur	2016
10.	B.Rama Raju (06001A0817) S.Arun Kumar (06001A0843) K.Krishna (06001A0847) S.Prakash	Design of Fluidized bed combustor for a 50 MW power plant	JNTUA CE Anantapur	2010

	(06001A0846) K.S.Vishnu Teja (06001A0816)			
11.	S.Nooka Raju (06001A0841) E.Satyanarayana(06001A0839) B.Giri (06001A0838) CH.Ravikishore(0 6001A0825) T.Chittibabu (06001A0807)	Manufacture of Glutamic Acid	JNTUA CE Anantapur	2010
12.	P.Ravi Thej (06001A0836) P.Ram Tej (06001A0832) P.Supriya (06001A0809) JBMVV. Gopala Krishna (06001A0808) P.Deepthi (06001A0829)	Manufacture of Methanol from Synthesis gas	JNTUA CE Anantapur	2010
13.	B.Ramu (05001A0811) V.Tirupati Rao (05001A0847) T.Purnachandra Rao (05001A0819) T.Hemalatha (05001A0827) M.Swaroopa (05001A0805)	Thermal studies on Copper Chromite-A combustion additive in rocket composite solid propellant	SHAR, Sriharikota	2009
14.	G.Eswar Venkatesh (05001A0843) D.Venugopal (05001A0816) S.Naresh Kumar (05001A0823) G.Poorna Chander Naik	Experimental studies on herbal extracts: A case study	Arpan Herbchem, Hyderabad	2009

	(05001A0820) V.Anusha (05001A0802)			
15.	G.Rajasekhar Varchasvi (03001A0823) G.Surendra Babu (03001A0828) CH.Mahipal Reddy (03001A0840) B.Rambabu (01001A0849)	Manufacture of Urea	JNTUA CE Anantapur	2007

PAPERS PRESENTED IN NATIONAL/ INTERNATIONAL CONFERENCES

1. **"Hydrothermal synthesis and characterization of nanocrystalline Zinc Orthovanadate ($Zn_3V_2O_8$) on Graphene oxide scaffolds"**, 35th Indian Engineering Congress conducted by The Institution of Engineers(India) during 18-20 Dec,2020 in virtual mode. **It has been adjudged as Best paper in the Metallurgical & Materials Engineering Division.**
2. **"Synthesis and characterization of cobalt oxide nanoparticles for super capacitor applications"** 2nd International conference on Nano science and Engineering Applications, (ICONSEA-2018) during 4th-6th Oct, 2018 at CNST, IST, JNTUH, Hyderabad.
3. **"Removal of Arsenic from waste water by adsorption using coal fly ash"**, 3rd international conference on Recent advances in engineering sciences, (ICRAES-2018) during 26-27th Sept, 2018 at Ramaiah Institute of Technology, Bangalore.
4. **"Removal of Lead from waste water by adsorption using coal fly ash"**, 3rd international conference on Recent advances in engineering sciences, (ICRAES-2018) during 26-27th Sept, 2018 at Ramaiah Institute of Technology, Bangalore.
5. **"Synthesis and characterization of ZnO nanoparticles and its application for waste water treatment"**, international conference on Research advancements in applied engineering sciences, computer and communication technologies (ICRAAESCCT-2018) during 12-13th July,2018 at BVRIT, Narsapur, Medak, Telangana
6. **"Comparative studies on residence time distribution in circulating fluidized bed and tapered fluidized bed"** international conference on Numerical Heat Transfer and Fluid Flow (NHTFF) during 19-21, Jan, 2018 at NIT Warangal
7. **"RTD studies in liquid-solid Tapered Fluidized bed"**, 4th international conference on new frontiers of engineering, science, management and humanities(ICNFESMH-2017) on 3rd September,2017 at IETE, Osmania University, Hyderabad

8. **“Synthesis of metallic element [Silver] Nanoparticles in a continuous micro flow reactor using surfactant”**, International Conference on Recent trends in Chemical Environmental, Bioprocess, Textile, Mining, Material and metallurgical Engineering (CEBTME-2017), **12th July, 2017**, Jawaharlal Nehru University, New Delhi.
9. **“Effect of particle size on hydrodynamics of an internally circulating fluidized bed with a draft tube”** 12th international conference on circulating fluidized bed technology (CFB-12), **23-26, may 2017**, Krakow, Poland
10. **“Synthesis of nanoparticles by using continuous flow micro reactor-Review”**, International Conference on Biotechnology & BioEngineering-Trends (ICBT-2017), **23rd March , 2017**, CBT, IST, JNTUH, Hyderabad
11. **“A study on quality of Windrow compost produced from different municipal solid wastes in India”**, International Conference on Emerging Trends in Engineering, Science and Technologies(ICETEST-2017), **18-20 March,2017**, SVUCE, Tirupati.
12. **“Catalyst Stability and Activity of Nickel for CO₂ reforming with methane”**, International Conference on Emerging Trends in Engineering, Science and Technologies(ICETEST-2017), **18-20 March,2017**, SVUCE, Tirupati.
13. **“Synthesis of Biodiesel from crude neem oil in a batch reactor”**, International conference on emerging trend in chemical, Pharmaceutical , Environmental Sciences & technology, **25th January 2017**,Department of Chemistry, Pithapur Rajah’s Govt.College , Kakinada
14. **“Measurement of pressure flow curves and solid circulation rate in an ICFB”**International Conference on Trend setting innovations in chemical sciences & Technology-Applications in Pharma Industry (TSCST-API 2015), on 17th December 2015, CCST, IST, JNTUH, Hyderabad
15. **“Synthesis of Nano catalysts for low temperature soot oxidation”** in national conference on “Novel Process Developments for Sustainable industrial Practice” at Department of Chemical Engineering, SVU College of Engineering, Tirupati during 12-13 December,2014
16. **“Catalytic removal of soot from diesel engines using CeO₂, CeO₂-CuO₂, and CeO₂-Al₂O₃ Nano-composites”** in international Conference on Nano Science & Engineering Applications (ICONSEA -2014)” during 26 -28, June ,2014 at CNST, IST,JNTUH,Hyderabad
17. **“Synthesis of Nano crystalline magnesium ferrite spinel by co-precipitation method”** in international Conference on New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT-2014), June, 24, 2014, CCST, IST, JNTUH, Hyderabad,
18. **“Effect of Pressure drop and tangential velocity on vane angle in Uniflow Cyclone”**,in **international Conference on Chemical & Bioprocess Engineering-India (ICBPE-IN 2013)**, Department of Chemical Engineering, NIT Warangal on 16.11.2013

19. "Effect of Tangential Velocity on the Performance of Axial Flow Cyclone", in **CHEMCON-2011, during 27-29, 2011** at M S Ramaiah Institute of Technology, Bangalore
20. "Prediction of annular down flow layer thickness in circulating fluidized bed", **9th international conference on circulating fluidized beds (CFB-9), 13-17, May 2008, Hamburg, Germany**
21. "Modeling of axial voidage variations in CFB risers", **Advances in Chemical Engineering, Nov, 22-24, 2007, University College of Technology, Osmania University, Hyderabad.**
22. "Evaluation of voidage in CFB", **CHEMCON-2005, IIT Delhi, December 14 - 17, 2005, New Delhi**
23. "Modeling of Flow Structure near the Wall in CFB", **CHEMCON-2004, December 27-30, 2004, Mumbai**
24. "Clustering Phenomena in circulating fluidized bed": A Review, All India Seminar on Advances in fluidization engineering, held at SVUCE, Tirupati, Feb, 2004
25. "Flow behavior in liquid-solid circulating fluidized bed regime" **CHEMCON- 2002, Dec'2002, Hyderabad**

REVIEWER OF THE JOURNALS:

1. Chemical Engineering & Processing: Process Intensification (Elsevier)
2. Green Processing and Synthesis (DE GRUYTER)
3. 3 Biotech (Springer)
4. South African Journal of Chemical Engineering (Elsevier)
5. Colloids and Surfaces B: Biointerfaces
6. Applied Water Science (Springer)

EXAMINER FOR Ph.D. THESIS EVALUATION:

1. "Thermodynamic & kinetic studies on crystallization of APIs: Measurement and Modeling", **RMIT University, Australia, June,2021**
2. "Study the effect of nanoparticles on morphological, biochemical and biotechnological aspects in egg plant", **JAIN (Deemed to be University), Bangalore, Sept, 2019**
3. "A feasibility study on production of methyl ester (Biodiesel) from Castor oil and Microalgae oil" **Andhra University College of Engineering, Visakhapatnam, Sept,2019**
4. "Studies on biosorption of Congo Red and methyl red dyes in batch process using *Pterocladia Lucida* and *Sargassum Vulgare* algae powders", **Andhra University College of Engineering, Visakhapatnam, Sept,2018**
5. "Recovery and Regeneration of Carboxylic Acids from Aqueous Solutions Using Process Intensification", **RMIT University, Australia, Oct,2017**

6. "Adsorption of methylene blue dye from aqueous solution using industrial waste: batch and column studies", Andhra University College of Engineering, Visakhapatnam, March, 2017
7. "Experimental and theoretical evaluation of bio-sorption of lead and chromium onto gracilaria corticata and morinda tinctoria", Andhra University College of Engineering, Visakhapatnam, Dec, 2016
8. "Studies on ionic mass transfer in the presence of rotating two stage flat blade turbine in an open electrolytic cell", Andhra University College of Engineering, Visakhapatnam, Oct, 2016
9. "PID control of integrating systems with time delay" Department of Chemical Engineering, Andhra University College of Engineering, Visakhapatnam, August, 2015

EXTERNAL EXAMINER FOR Ph.D. VIVA-VOCE:

1. Appointed as external examiner to the final PhD viva-voce at Andhra University College of Engineering, Visakhapatnam, August, 2015
Topic: **"PID control of integrating systems with time delay" Department of Chemical Engineering,**
2. Appointed as external examiner to the final PhD viva-voce at Andhra University College of Engineering, Visakhapatnam, August, 2019
Topic: **"Studies on biosorption of Congo Red and methyl red dyes in batch process using Pterocladia Lucida and Sargassum Vulgare algae powders"**

EXAMINER FOR M.TECH THESIS EVALUATION

1. "Hydrodynamic studies on inverse fluidization" University College of Technology, Osmania University, Hyderabad in Jan, 2019
2. "Studies on formation of Ketazine and its effluent treatment" University College of Technology, Osmania University, Hyderabad in Nov, 2018
3. "Artificial Neural Network based control for wood and berry distillation column" University College of Technology, Osmania University, Hyderabad in Feb, 2018
4. "Studies on cost effective ultrafiltration aided electrolyser device for production of healthy alkaline drinking water", University College of Technology, Osmania University, Hyderabad in Jan, 2018
5. "Kinetics of the Fisher esterification Process for the synthesis of Benzocaine" University College of Technology, Osmania University, Hyderabad in Dec, 2017
6. "Mathematical Modeling and Simulation studies on control of Acetylene Hydrogenation Process" University College of Technology, Osmania University, Hyderabad in July, 2017

7. "Equilibrium and kinetic studies on reactive extraction of Succinic acid" University College of Technology, Osmania University, Hyderabad in July,2017
8. "Modelling and design of chemical looping combustion and reforming using Aspen Plus", University College of Technology, Osmania University, Hyderabad in June,2017
9. "Equilibrium studies for reactive extraction of free fatty acids from Jatropha oil using Monoethanolamine in methanol" University College of Technology, Osmania University, Hyderabad in June,2017
10. "Equilibrium and kinetic studies on reactive extraction of Succinic acid" University College of Technology, Osmania University, Hyderabad in May,2017
11. "Studies on reactive extraction of Morpholine with Decanoic acid in Toluene", University College of Technology, Osmania University, Hyderabad in April,2017
12. "Drying of food grains in fluidized bed" University College of Technology, Osmania University, Hyderabad in 2016

MEMBERSHIP OF SCIENTIFIC AND PROFESSIONAL SOCIETIES

1. Life member, **ASCI ASSOCIATION**, Hyderabad (Prg/15-16/6/204/60159)
2. Member, International Association of Engineers (IAENG) (165355)
3. Fellow of **Institution of Engineers (FIE) (F-119351-8)**, Kolkata
4. Life member of **Indian Institute of Chemical Engineers (LMIChE)** (LM-19457), Kolkatta.
5. Life member of **Indian Society for Technical Education (LMISTE)** (LM-46133), New Delhi.

AWARDS / HONORS

1. Awarded Certificate of Reviewing in recognition of the review contributed to the "**Colloids and Surfaces B: Biointerfaces** (Elsevier) journal" since Sept-2019
2. Awarded Certificate of Reviewing in recognition of the review contributed to the "**Chemical Engineering & Processing: Process Intensification** (Elsevier) journal" since Dec-2017
3. Awarded Certificate of Reviewing in recognition of the review contributed to the "**South African Journal of Chemical Engineering** (Elsevier) journal" since May-2017
4. Received "**State Teacher Award**" in University level from Hon'ble Chief Minister Sri.Y.S.Jagan Mohan Reddy, Government of Andhra Pradesh on 05.09.2019 at Amaravathi,Vijayawada
5. **ISTE A.P. State Award**: RGM CET State Award for "**Best Engineering Teacher Award**" in A.P Sponsored by R.G.M. College of Engineering and Technology, Nandyal for the year 2018.

6. Admitted as **Associate Fellow of AP Akademi of Sciences (APAS)** on 7th Feb, 2015
7. Member, E-Waste Committee, **Telangana Pollution Control Board (TSPCB)**, Hyderabad from Jan, 2015
8. Received award as Chairman, IChE Student Chapter of Anantapur has won *"Ambuja's 2nd Best student chapter award"* for the year 2008
9. Received award as Coordinator, IChE Student Chapter of Anantapur has won *"Pidilite Best student chapter award"* for the year 2007
10. Received as Coordinator, IChE Student Chapter of Anantapur has won *"Ambuja's 2nd Best student chapter award"* for the year 2006
11. Received **"Best Teacher Award"** from Swami Ramananda Tirtha Institute of Science Technology, Nalgonda for the year 2006
12. **Member, Executive Council**, JNT University, Hyderabad from October, 2004 to November, 2006, **nominated by Govt. of A.P.**

REFRESHER COURSES/ FDP ORGANIZED:

1. Coordinator, AICTE-Two-week faculty development programme on **"Mathematical Modeling & Simulation for Scientists & Engineers"** at JNTUA College of Engineering, Anantapur from 24-02-2020 to 07-03-2020
2. Coordinator, **three-week Refresher course on "Mathematical Modeling & Simulation for Scientists & Engineers"** at UGC-Academic Staff College, JNTUH, Hyderabad during 02-12-2013 to 21-12-2013
3. Coordinator, **three-week Refresher course on "Recent Trends in Chemical Engineering"** at UGC-Academic Staff College, JNTUH, Hyderabad during 05-09-2011 to 24-09-2011

SEMINARS / WORKSHOPS/ CONFERENCES ORGANIZED

1. **Coordinator**, Two-day program on **"Waste Management"** during 13-14 Nov, 2019, Department of Chemical Engineering, JNTUACEA, Anantapur
2. **Coordinator**, one-day program on **"Career awareness & opportunities in Industrial Safety"** on 17th March, 2017, Department of Chemical Engineering, JNTUACEA, Anantapur
3. **Convener**, Two-day workshop on **"Stepping into Advanced Flow Reactors"** during 25th -26th Feb, 2015 at CCST, IST, JNTUH Hyderabad under TEQIP-II
4. **Co-Convener**, one-day workshop on **"Safety in Chemical & Pharmaceutical Industries"** 30th July, 2014, CCST, IST, JNTUH, Hyderabad
5. **Local Organizing Secretary**, International Conference on **"New Dimensions in Chemistry & Chemical Technologies-Applications in Pharma Industry (NDCT- 2014)"** June, 23-25, 2014, CCST, IST, JNTUH, Hyderabad
6. **Co-convener**, One-Day Workshop On **"Industrial Wastewater Treatment Technologies- Zero- Discharge"** on 21st March, 2014, CCST, IST, JNTUH, Hyderabad

7. **Co-convener**, One-Day Workshop On “Emerging Trends in Chemical Sciences & Technology” under TEQIP-II on 9th January, 2014, CCST,IST,JNTUH
8. Coordinator, a two-day workshop on “**Combating Climate Change**” at JNTUACEA, Anantapur during 18-19 ,March, 2010 which was sponsored by **AP Pollution Control Board, Zonal office, Kurnool.**
9. Coordinator, **FUSION-2009**, A National Level Chemical engineering students Symposium, 10th Sept, 2009, JNTUACE, Anantapur.
10. Coordinator, awareness programme on “**Energy, Environment & Water conservation**” a community service program under TEQIP on 26th Oct 2007
11. Convener, a two- day workshop on “**Advances in Chemical Engineering**” at JNTUCE, Anantapur during 23-24 ,Feb 2007 under TEQIP networking
12. Convener, **iChescon-2005**, A National Level Chemical Engineering students meet , 25th & 26th February 2005 at SRTIST, Nalgonda
13. Coconvener, **ENVIRON-2004**, a Two-day State Level Conference on Environmental Science, 19-20, March 2004 at SRTIST, Nalgonda.
14. Convener, **CHEMPODIUM-2001**, a State level Chemical Engineering Students Technical Quiz Competition, 12th October, 2001 at SRTIST, Nalgonda
15. Member, Physical arrangements committee, **CHEMCON-2002**, Hyderabad.

CONFERENCES/WORKSHOPS ATTENDED

1. TEQIP workshop on “**Energy Conversion and Storage**” at Indian Institute of Technology Hyderabad during 2-7 Dec, 2019
2. A national level two day workshop on "**Digital Pedagogy for Effective Teaching and Learning**" during **23-24, Nov , 2019**, JNTUACEA, Anantapur
3. Orientation workshop on “**Accrediting Unaccredited Institutions in South Eastern Region**” organized by UGC, SERO, Hyderabad & NAAC, Bangalore on 1st October,2018 at Dr.B.R.Ambedkar open University, Hyderabad
4. International conference on Research advancements in applied engineering sciences, computer and communication technologies (ICRAAESCCT-2018) during 12-13th July,2018 at BVRIT, Narsapur, Medak, Telangana
5. International Conference on Biotechnology & BioEngineering-Trends (ICBT-2017), **during 23-25, March , 2017**, CBT, IST, JNTUH,Hyderabad
6. International Conference, **CompFlu@Hyd** at International Institute of Information Technology during 12-14 December,2016
7. International Conference on “Trend setting innovations in Chemical sciences & Technology nature inspired chemistry & engineering (TSCST-NICE, 2016)”, October 4-6, 2016, CCST, IST, JNTUH, Hyderabad

8. Two-day National Workshop on “Applications of Advanced Analytical techniques in Pharmaceutical Sciences and Nanotechnology”, at IST, JNTUH, Hyderabad during 16-17 September, 2016
9. One day national workshop on ‘**Innovations in Technology**’ at JNTUA, Anantapur on 9th December, 2015
10. One day national workshop on ‘**Indian Constitution-Role of a citizen**’ at JNTUA, Anantapur on 26th November, 2015
11. One day national workshop on ‘**Cyber Security**’ at JNTUA Anantapur on 8th October, 2015
12. Two-day national workshop on “Technological Advances in Chemical Sciences” at CCST, IST, JNTUH during 14-15 September, 2015
13. “**Green Processes for Energy Conversion (GEC-2014)**” at Indian Institute of Technology Hyderabad during 29 -30 Dec, 2014
14. One day seminar on “**Recent trends in process intensification methods**” on 29th September, 2014 at University College of Technology, Osmania University, Hyderabad
15. International Conference on “**Sustainability of Digital Libraries**”, during 25-27, September, 2014 at JNTUH, Hyderabad
16. One-day national workshop on ‘**Safety in Chemical and Pharmaceutical industries**’ at CCST, IST, JNTUH on 30th July, 2014
17. SERB School on “**Rheology of Complex Fluids: Advanced Computational Methods**” at Department of Chemical Engineering, IIT Delhi during 16-18, December, 2013
18. Two-day workshop on ‘**Air pollution Control and Monitoring Issues & Solutions for SME sector**’ at ni-MSME, Yousufguda, Hyderabad during 5-6 September, 2013
19. **International Conference on Chemical & Bioprocess Engineering-India (ICBPE-IN 2013)**, Department of Chemical Engineering, NIT Warangal 16-17, November, 2013
20. Workshop on “**Sono Process Engineering & Reactors for Nanomaterials**”, Department of Chemical Engineering, NIT Warangal, 23-24, Feb, 2013
21. Workshop on “**MATLAB for Chemical Engineers**”, BVRIT, Narsapur, Medak, 4-5, Feb, 2011
22. Workshop on “**Design of Experiments for Scientists and Engineers**”, Aug 6-17, 2007, Indian Institute of Chemical Technology, Hyderabad
23. Workshop on “**Bioprocess Engineering : Design, Operation and Analysis of Bioreactors**” 22-23 Dec, 2006, Centre for Bio-Technology, IST, JNTU, Hyderabad
24. 4th National work shop & conference on “**CFB Technology and Rebamping of Boilers in India & Course**” 2-4 January 2003 at Bengal Engineering College, Mechanical Engineering Department., Howrah, West Bengal, India.

REFRESHER /ORIENTATION COURSES ATTENDED:

1. Three week Refresher course on **“Recent advances in Chemistry and its Teaching Methodology with reference to Drug Design and Computational Techniques”**, 07-12-2011 to 27-12-2011, UGC-Academic staff college ,JNTUH, Hyderabad
2. Three week Refresher course on **“Introduction to Nanomaterials: Synthesis, Characterization and their Applications”**,13-09-2010 to 04-10-2010,UGC-Academic staff college ,JNTUH, Hyderabad
3. Three week Refresher course on **“Enterprise Resource Planning (ERP) & e-Commerce”**, 11-06-2007 to 30-06-2007, UGC-Academic staff college, JNTU, Hyderabad
4. **Orientation course** from 07-05- 2007 to 02-06-2007, UGC-Academic staff college , JNTU, Hyderabad

SHORT TERM TRAINING PROGRAMMES ATTENDED

1. GIAN course on **“Cancer Theranostics”**, during **8-12, July , 2019** at JNTUH, College of Engineering, Hyderabad
2. **“Professional Development Training”** at Indian Institute of Management, Raipur under TEQIP-III during 26-30 November,2018
3. GIAN course on **“Multiscale Modeling and Simulation of Heterogeneous Catalytic Reactors”**, Department of Chemical Engineering, NIT Warangal, 8-12, Jan, 2018
4. Short Term Training Program on **“Sustainable Waste Management”** during 6-9 March,2017 at Department of Chemical Engineering, S.V University College of Engineering, Tirupati
5. Faculty Development Program on **“Big Data Analytics”** during 20-22, Feb,2017 at JNTUA College of Engineering, Anantapur
6. GIAN course on **“Composite and Nano composite Materials - Metal, Ceramic, Polymer Matrix, as New Engineering and Structural Materials during 11 - 22, July, 2016”** at JNTUHCEH, Kukatpally, Hyderabad
7. GIAN course on **“Sonoprocess Engineering”**, Department of Chemical Engineering, NIT Warangal, 22-26, Feb, 2016
8. **Leadership Workshop on “Digital / e-Learning”** for the faculty of Public Universities of Andhra Pradesh at ASCI, Hyderabad during 18-22, Jan,2016
9. Three day short term training programme (STTP) on **“Process Intensification”**, Department of Chemical Engineering, NIT Warangal, 18-20, Dec, 2015
10. Faculty development programme on **“Entrepreneurship”** at JNTUA College of Engineering, Anantapur during 6-18 July,2015
11. Workshop on **“Internal Quality Assurance Mechanisms”** at Teaching Learning Centre, IIT Madras during 28 -30 Oct, 2014.

12. **“Design, Operation & Maintenance of STPs /CETPs and CBMWTF”** at Engineering Staff College of India, Gachibowli, Hyderabad during 10-14 , March,2014
13. **“5th Batch of Padagogical Training on Core Module”** under TEQIP-II at Engineering Staff College of India, Gachibowli, Hyderabad during 20-25 , January,2014
14. AICTE / STTP on **“Time series Modeling & spectral Analysis - Theory & Applications”** 12-17, July, 2010, Department of Chemical Engineering, IITMadras, Chennai.
15. ISTE-STTP on **“Computer Control of Chemical Processes”** June 11th to 23rd 2001 at Department of Chemical Engineering, Regional Engineering College, Warangal.

ACADEMIC & ADMINISTRATIVE EXPERIENCE:

1. Appointed as **Head of Chemical Engineering**, JNTUH College of Engineering, Hyderabad from 12/07/2021
2. External **BOS Member** for Department of Chemical Engineering, Chaitanya Bharati Institute of Technology(CBIT), Hyderabad from March,2021
3. Appointed as member, Technical Committee, CHEMCON-2020 during 27-29 Dec, 2020 held online mode.
4. Appointed as **Vice-Principal** for JNTUA College of Engineering, Anantapur from 12/12/2019 to 30/08/2020
5. **Member, Board of Studies**, Chemical Engineering, JNTUA, Anantapur from 15.10.2019
6. **Chairperson**, Departmental Research Committee (DRC) of Chemical Engineering to conduct RRM's and Pre-submission open seminars, JNTUA, Ananthapuramu from 25.07.2019
7. Member, Engineering Curriculum Development Committee, APSICHE, 2018
8. **Member, Academic council**, Sree Vidyaniketan Engineering College (Autonomous), A Rangampet, Near Tirupati, Chittoor Dist from 24.12.2018
9. Overall coordinator for NBA committee of JNTUACEA, Anantapur from 29.11.2018
10. **Member, Board of Studies**, Chemical Engineering, JNTUHCEH (Autonomous), Hyderabad from June, 2018
11. **Member, PG Board of Studies**, Chemical Engineering, JNTUA, Anantapur from 28.10.2017
12. **Governing body Member**, Sree Vidyaniketan College of Pharmacy, Tirupati from 09.08.2017
13. **Governing body Member**, Chaitanya Bharathi Institute of Technology, Proddatur from 09.08.2017
14. **Member, Board of Studies**, Chemical Engineering, JNTUACEA, Anantapur from 08.06.2017
15. **President, Teachers Association**, JNTUA College of Engineering, Ananthapuramu from 01.02.2017

16. **Chairman, Research Advisory Committee**, Food Technology, JNTUA, Ananthapuramu from 09.01.2017
17. **Governing body Member**, Dr.K.V.Subba Reddy Institute of Pharmacy, Kurnool from 06.12.2016
18. **Head, in charge** , Department of Chemical Engineering, JNTUACE, Anantapur from 28.11.2016 to 17.12.2016 (3 weeks)
19. **Chairman, UG Board of Studies**, Chemical Engineering, JNTUA, Anantapur from 14.11.2016 to till date
20. **SC/ST Coordinator**, JNTUA College of Engineering, Anantapur from 25.07.2016
21. **Member, Academic council**, JNTUA College of Engineering, Anantapur from 16.07.2016
22. **Member, Board of Studies** of M.Tech(Chemical Technology), CCST,IST, JNTUH, Hyderabad from Oct, 2015
23. **Member, Board of Studies**, Chemical Engineering, JNTUH, Hyderabad from Aug, 2015
24. **Member, Board of Studies**, Chemical Engineering, JNTUH CEH (Autonomous), Hyderabad from July, 2015
25. Member & University Nominee, **Board of Studies**, Chemical Engineering, Gaytri Vidya Parishad College of Engg, Visakhapatnam from 2014
26. **Executive committee member of Indian Institute of Chemical Engineers (IICChE)**, Hyderabad regional centre from the year 2012-2015.
27. Member & University Nominee, **Board of Studies**, Chemical Engineering, BVRIT from 03.07.2014
28. Nominated as **Expert member, purchase committee for Chemical Engineering by JNTUH, Hyderabad from 24.03.2014 to 23.03.2015**
29. **Chairman, Board of Studies**, Chemical Engineering, JNTUH, Hyderabad from Nov,2013 to March, 2015
30. **Member, Selection Committee, Centre for Materials for Electronics Technology (C-MET), Cherlapally, Hyderabad on 07.09.2013**
31. Invited as **expert committee member** to evaluate the AQIS project proposals at AICTE HQ, New Delhi, 12-14th March,2013
32. Nominated as **selection panel committee member, for Aarogyasri health care Trust by JNTUH, Hyderabad from 01.03.2013 to 23.03.2015**
33. Member, **Board of Studies**, Chemical Engineering, JNTUA, Anantapur from June,2013
34. **Chairman, Board of Studies**, Chemical Engineering, JNTUH, Hyderabad from Sept,2012 to August,2013
35. **Course coordinator**, PG diploma in industrial safety, SCDE, JNTUH,Hyderabad from 25.10.2012 to 24.08.2013

36. Worked as **Coordinator** in Addl.controller-V office, JNTUH,Hyderabad during May & June-2012
37. **Officer-in charge examination, Institute of Science & Technology**, JNTUH, Hyderabad from March, 2012 to May 2013
38. Worked as **Coordinator** in Addl.controller-IV office, JNTUH,Hyderabad during May & June-2011
39. **Deputy warden** of Ellora hostel ,JNTUACEA, Anantapur from a period of one year in 2009-2010
40. **Officer in-charge academic section** of JNTU CE, Anantapur from Aug 2007 to 2009
41. **Coordinator for IChE Students' Chapter**, JNTUACEA, Anantapur from Nov 2006 to July 2010
42. **Deputy warden** of Amaravathi hostel ,JNTUCE, Anantapur from a period of one year in 2007-2008
43. **Training & Placement officer** at SRTIST, Nalgonda for a period of one year in 2005-2006

INDUSTRIAL TRAINING:

- Undergone vocational training at Bharath Heavy Plate & Vessels(BHPV), Visakhapatnam from 10-05-1997 to 04-07-1997

ACADEMIC PROGRAMS INITIATED:

1."**PG Diploma in Industrial Safety**" was initiated by me to start at SCDE, JNTUH, Hyderabad in the year 2013 when I was working at IST, JNTUH, Hyderabad

2."**B.Tech, Chemical Engineering**" was initiated by me to start at JNTUH College of Engineering, Kukatpally, Hyderabad when I was working at IST, JNTUH, Hyderabad and it was permitted by JNTUH from year 2014

INTERESTED RESEARCH AREAS

1. Fluidization Engineering
2. Waste water treatment
3. Environmental & Energy Engineering
4. Synthesis & Applications of Nano materials
5. Microreactor Technology
6. Waste Management
7. Process Modeling & Simulation

SUBJECTS TAUGHT

❖ **UG Level**

❖ **B.Tech (Chemical Engineering)**

1. Chemical Engineering Thermodynamics -I
2. Chemical Engineering Thermodynamics -II
3. Process Heat Transfer
4. Process Dynamics & Control
5. Process Modeling & Simulation
6. Chemical Engineering Fluid Mechanics
7. Computer Applications in Chemical Engineering
8. Optimization of Chemical Processes
9. Organic Chemical Technology
10. Inorganic Chemical Technology

❖ **PG Level**

❖ **M.Tech (Chemical Engineering/Technology)**

1. Optimization Techniques in Chemical Engineering
2. Process Modeling & Simulation
3. Advanced Chemical Engineering Thermodynamics
4. Energy Conservation in Chemical Process Industries

❖ **M.Sc. (Organic Chemistry/ Industrial Chemistry/Analytical Chemistry)**

1. Principles of Chemical Engineering
2. Process Engineering Principles

LABORATORIES HANDLED

❖ **UG Level**

❖ **B.Tech (Chemical Engineering)**

1. Fluid Mechanics
2. Mechanical Unit Operations
3. Process Dynamics & Control
4. Chemical Reaction Engineering
5. Chemical Technology

❖ **PG Level**

❖ **M.Tech (Chemical Engineering/Technology)**

1. Advanced Chemical Engineering
2. Process Simulation

DECLARATION

I hereby declare that all the information presented above is true to the best of my knowledge



(T.BALA NARSAIAH)