

PROFORMA FOR BIO-DATA (to be uploaded)

1. Name and full correspondence address : Dr. CH. Shilpa Chakra
Assistant Professor of Nanotechnology
BoS Chairperson for Nanotechnology
Centre for Nano Science and Technology
Institute of Science and Technology
JNTUH, Kukatpally, Hyderabad-500085
Telangana
2. Email(s) and contact number(s) : shilpachakra.nano@jntuh.ac.in & 040-23151100
3. Institution : Institute of Science and Technology, Jawaharlal Nehru Technological University
Hyderabad
4. Date of Birth : 09-04-1986
5. Gender (M/F/T) : F
6. Category Gen/SC/ST/OBC : OBC
7. Whether differently abled (Yes/No) : No
8. Academic Qualification (Undergraduate Onwards)

S. No	Degree	Year	Subjects	University/ Institution	% of Marks
1.	B. Tech	2007	Biotechnology	JNTUH	71%
2.	M. Tech	2009	Nanotechnology	JNTUH	85%
3.	Ph. D.	2016	Nano Science and Technology	JNTUH	Awarded

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

“Study of functionalized Metal/Metal Oxide Nanocomposites for Biomedical Application”. Dr. K. Venkateswara Rao, Centre for Nano Science and Technology, IST, JNTUH, 2016

10. Work experience (in chronological order).

S.No	Organization	Designation	Department	Duration	
				From	To
1	Institute of Science and Technology, JNTUH	Assistant Professor	Centre for Nano Science and Technology	07-07-2010	Till Date

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency	Year
1	Young Faculty	Venus International Foundation	2016

12. Publications (*List of papers published in SCI Journals, in year wise descending order*).

S.No	Author (s)	Title	Name of Journal	Volume	Page	Year
1.	CH. Shilpa Chakra, Srikanth Mateti	Structural, Antimicrobial and Electrochemical Properties of Cu/TiO ₂ Nanocomposites	Journal of Nanoscience and Technology	4	331–334	2018
2.	Satish Bykkam, Bikshalu Kalagadda, Venkateswara Rao Kalagadda, Niveditha Reddy, Ch. Shilpa Chakra	A Novel Ultrasonic Assisted Synthesis of Few Layered Graphene/SnO ₂ Nano composite and Its Electrochemical Properties	International Journal of Current Science, Engineering & Technology	1	1-8	2018
3.	Eubert P. Mahofa, Tumma Bala Narsaiah, Chidurala Shilpa Chakra	Catalytic Soot Oxidation Using Ceria, Cobalt And Copper Nanocomposites	Materials Research Society	3	1-8	2018
4.	K. Vijay Kumar, Ch. Shilpa Chakra, K. Rama Krishna, A. Rajesham	Syntheis and chatacterization of zinc aluminate(ZnAl ₂ O ₄) spinle by citrate gel auto combustion method	Materials for specific applications	1	77-79	2018
5.	Ramya Annam,	Synthesis of Silver Nanoparticles via	International Journal of Current	1	35-38	2018

	Supraja Sankeshi, Niveditha Reddy Barray, Shilpa Chakra Chidurala, Sriharsha Boini, Basheer Abdullah Md	Capsicum annuum L extract and their antibacterial studies	Science, Engineering & Technology			
6.	K. Vijay Kumar, CH. Shilpa Chakra, K. Rama Krishna, A. Rajesham	Synthesis & Structural Characteristics of ZnBi ₂ O ₄ Nanoparticles Prepared by Citrate-Gel Auto Combustion Method	International Journal of Nanoparticle Research (IJNR)	2	1-7	2018
7.	Satish Bykkam, Bikshalu Kalagadda, Venkateswara Rao Kalagadda, Mohsen Ahmadipour, Ch. Shilpa Chakra, V. Rajendar	Effect of few-layered Graphene-based CdO nanocomposite enhanced power conversion efficiency of Dye-Sensitized Solar Cell	Journal of Electronic Materials	47	620-626	2018
8.	V. Rajendar, Y. Raghu, B. Rajitha, C.S. Chakra, K.V. Rao, S. H. Park	Synthesis, characterization, and photocatalytic behaviour of nanocrystalline ZnO, TiO ₂ and ZnO/TiO ₂ nanocomposites	Journal of Ovonic Research	13	101 - 111	2017
9.	C. S. Chakra, K. V. Rao, V. Rajendar	Nanocomposites of ZnO and TiO ₂ have enhanced antimicrobial and antibacterial properties than their disjoint counterparts	Digest Journal of Nanomaterials and Biostructures	12	185 - 193	2017
10.	CH. Ashok, K. Venkateswara Rao, CH. Shilpa Chakra	Comparison of Metal Oxide Nanomaterials: Humidity Sensor Applications	Materials, Engineering and Environment Enginerring		267-275	2017
11.	B. Satish, V. Rajendar, K.	Enhanced power conversion efficiency	Digest Journal of Nanomaterials	12	67 - 72	2017

	V. Rao, C. S. Chakra	of dye synthesized solar cell by few layered graphene/Cuo nanocomposite as a working electrode	and Biostructures			
12.	K. Vijaya Kumar, CH. Shilpa Chakra	Synthesis and Structural Characterization of ZnCr ₂ O ₄ Nano Particles Prepared by Citrate-gel Auto Combustion Method	Asian Journal of Physical and Chemical Sciences	2	1-7	2017
13.	V.Rajendar, C.H.Shilpa Chakra, B.Rajitha, K.Venkateswara Rao, Si-Hyun Park	Role of Tween 80 as surfactant in the solution combustion synthesis of TiO ₂ nanoparticles	J Mater Sci: Mater Electron	28	3394-3399	2017
14.	V.Rajendar, C.H.Shilpa Chakra, B.Rajitha, K.Venkateswara Rao, Si-Hyun Park	Effect of TWEEN 80 on the morphology and antibacterial properties of ZnO nanoparticles	J Mater Sci: Mater Electron	28	3272–3277	2017
15.	CH.Shilpa Chakra, K. Venkateswara Rao, Tambur Pavani	Antimicrobial activity of pure Cu nano particles synthesized by surfactant varied chemical reduction method	Environmental Nanotechnology, Monitoring & Management	6	88-94	2016
16.	CH. Ashok, K.V. Rao, CH. Shilpa Chakra, K.G. Rao	MgO Nanoparticles Prepared By Microwave-Irradiation Technique and Its Seed Germination Application	Nano Trends: A Journal of Nanotechnology and Its Applications	18		2016
17.	R. Durga, K. Venkateswara Rao, CH.	Green synthesis and Characterization of silver nanoparticle	Journal of NanoScience, NanoEngineering	6	01 to 12	2016

	Shilpa Chakra, T. Dayakar, N. Jaya Rambabu	using leaves of Lawsonia inermis: Antibacterial, Antifungal and antioxidant activityactivity	& Applications			
18.	Vivek Dhand, L. Soumya, S. Bharadwaj, Shilpa Chakra, Deepika Bhatt, B. Sreedhar	Green synthesis of silver nanoparticles using Coffea arabica seed extract and its antibacterial activity	Materials Science and Engineering C	58	36-43	2016
19.	Ch. Shilpa Chakra, K. Venkateswara Rao, Tambur Pavani, and Naga Venkatesh Kollu	Microbial Synthesis of ZnO Nano Particles by Lactobacillus Sporogenes and Effect of Size of Nano Particles by Temperature Variation and Antibacterial Studies	Nanomedicine and Nanobiology	2	01 to 09	2015
20.	Tambur Pavani, K. Venkateswara Rao, CH.Shilpa Chakra, Y.T.Prabhu	Synthesis and Characterization of γ -ferric oxide nanoparticles and their effect on Solanum lycopersicum	Environmental Science and Pollution Research	23	9373-9380	2015
21.	Mamata Reddy Tokala, Balaji Padya, P.K. Jain, C.H. Shilpa Chakra	Preparation and characterization of graphene nano-platelets integrated polyaniline based conducting nanocomposites	Superlattices and Microstructures	82	287-292	2015
22.	Vanga Rajendar, Beerelli	Systematic approach on the fabrication of Mn doped ZnO	Rendiconti Lincei SCIENZE FISICHE E		1 to 11	2015

	Rajitha , T. Dayakar, C. H. Shilpa Chakra , K. Venkateswara Rao .	semiconducting nanoparticles by mixture of fuel approach for antibacterial applications	NATURALI			
23.	CH. Ashok, K. V. Rao, CH. Shilpa Chakra	Synthesis and Characterization of MgO/TiO ₂ Nanocomposites	Nanomedicine & Nanotechnology	6	01 to 05	2015
24.	Tambur Pavani, K. Venkateswara Rao, CH.Shilpa Chakra, Y.T.Prabhu	Microbial Synthesis of ZnO Nanoparticles by Yeast: Sacchromyces cerevisiae.	Journal Of Nanoscience, Nanoengineering & Applications	5	01 to 05	2015
25.	Ch. Ashok, K. Venkateswara Rao,Ch. Shilpa Chakra, V. Rajendar	Tio ₂ Nanoparticles: Synthesized By Simple Microwave – Assisted Method Using Roomtemperature Ionic Liquids	International Journal Of Multidisciplinary Advanced Research Trends	2	241-246	2015
26.	G. Alekhya, Ch. Ashok, K. Venkateswara Rao,Ch. Shilpa Chakra	Process For Detection Of Metal- Containing Nanoparticles In Wastewater Treatment	International Journal Of Multidisciplinary Advanced Research Trends	2	54-70	2015
27.	K. Ganapathi Rao, Ch. Ashok, K. Venkateswara Rao, Ch. Shilpa Chakra, V. Rajendar	Synthesis Of Tio ₂ Nanoparticles From Orange Fruit Waste	International Journal Of Multidisciplinary Advanced Research Trends	2	82-90	2015
28.	CH Ashok, K. Venkateswara Rao, CH. Shilpa Chakra	Temperature Effects on MgO/TiO ₂ Nanocomposite Rods	International Symposium on Semiconductor Materials and Devices			2015
29.	Satis Bykkam,Sow mya Narsingam, Moshen	Few layered graphene sheet decorated by ZnO Nanoparticles for anti-bacterial	Superlattices and Microstructures	83	776–784	2015

	Ahmadipour, T. Dayakar, K. Venkateswara RaCh. Shilpa Chakra, Shankar Kalakotla	application				
30.	Tambur Pavani, K. Venkateswara Rao, Ch. Shilpa Chakra and Y.T. Prabhu	Ayurvedic synthesis of γ -Fe ₂ O ₃ nanoparticles and its Characterization	International Journal of Current Engineering and Technology	5	321-324	2015
31.	Tambur Pavani, K. Venkateswara Rao, Ch. Shilpa Chakra, Y.T. Prabhu	Synthesis of Lauha bhasma: γ -Fe ₂ O ₃ nano particles and its Phase transformation studies	Journal of Chemical, Biological and Physical Sciences	5	1417- 1424	2015
32.	Tambur Pavani, K. Venkateswara Rao, CH. Shilpa Chakra, Y.T. Prabhu	A facile method of Synthesizing Ayurvedic medicine: Lauha bhasma (iron oxide nanoparticles) & its Characterization	Scholars Academic Journal of Pharmacy (SAJP)	4	51-53	2015
33.	Tambur Pavani, K. Venkateswara Rao, CH. Shilpa Chakra, Y.T. Prabhu	A Novel Ayurvedic Synthesis Of γ -Fe ₂ O ₃ Nanoparticles, Characterization: Antimicrobial Activity	Journal of Atoms and Molecules	4	822-828	2014
34.	A Raj Kumar, KVGR Kumar, Ch Shilpa Chakra, K Venkateswara Rao	Silver doped manganese-zinc- ferrite nano flowers for biomedical applications	International Journal of Emerging Technology and Advanced Engineering	4	209-214	2014
35.	Hamed Sadabadi, Adel eh Aftabtalab, Shirzad Zafarian, CH. Shilpa Chakra, K.	Influence of fuel and condition in combustion synthesis on properties of copper (II) oxide nanoparticle	Advanced Materials Research	829	152-156	2014

	Venkateswara Rao ,Sarah Shaker					
36.	Sara Shaker, Shirzad Zafarian, CH. Shilpa Chakra K. Venkateswara Rao, Khashayar Badii, Adele Aftabtalab , Hamed Sadabadi.	Fabrication of super paramagnetic nanoparticles by sol-gel method for water purification	Advanced Materials Research	829	808-812	2014
37.	Tambur Pavani, K. Venkateswara Rao, Ch. Shilpa Chakra and Y. T. Prabhu	Comparative study of ancient and modern procedures-Synthesis of Bhasma	International Journal of Green and Herbal Chemistry	3	1210-1214	2014
38.	CH. Ashok, K. Venkateswara Rao, CH. Shilpa Chakra, V. Rajendar, R. Lakshmi Narayanan	Fabrication and Characterization of CdS Thin Films for the Solar Cell Applications	International Journal of ChemTech Research	6	3367-3370	2014
39.	CH. Ashok, K. Venkateswara Rao, CH. Shilpa Chakra and V. Rajendar	Structural Properties of CdS Nanoparticles for Solar Cell Applications	International Journal of Pure and Applied Sciences and Technology	23	08 to 12	2014
40.	Ashok Ch., Venkateswara Rao K. and Shilpa Chakra Ch.	Structural properties of CdS nanoparticles prepared in the presence of organic solvent	Advances in Applied Science Research,	5	99-105	2014
41.	CH. Ashok, K. Venkateswara Rao, CH. Shilpa Chakra	Structural Analysis Of CuO Nanomaterials Prepared By Novel Microwave Assisted Method	International Journal of Atoms and Molecules	4	803-806	2014
42.	V. Rajendar, T. Dayakar, C. H. Shilpa Chakra, and K. Venkateswara	Systematic Approach on the Fabrication of Ag Doped ZnO Nanoparticles by Novel Auto	Nanomedicine and Nanobiology	1	01 to 07	2014

	Rao.	Combustion Method for Antibacterial Applications				
43.	T. DAYAKAR , K. VENKATESWARA RAO, CH. SHILPA CHAKRA	Preparation and Characterization of MgFe ₂ O ₄ /TiO ₂ Nano particles by Combined Process for Sensor Applications	Invertis Journal of Renewable Energy	4	87-92	2014
44.	K. GANAPATHI RAO, K. Venkateswara Rao, Tambur. Pavani, CH. Ashok, CH. Shilpa Chakra	Green Synthesis of TiO ₂ Nanoparticles Using Aloe Vera Extract	International Journal of Advanced Research in Physical Science (IJARPS)	10	28-34	2014
45.	CH. Ashok, V. Rajendar, K. Ganapathi Rao, K. Venkateswara Rao, CH. Shilpa Chakra	Microwave-Assisted Method for ZnO Nanoparticles Synthesis Using Ionic Liquids	International Journal of Advanced Research in Physical Science (IJARPS)	10	104-111	2014
46.	K. GANAPATHI RAO, CH. Ashok, K. Venkateswara Rao, CH. Shilpa Chakra, V. Rajendar	Green Synthesis of TiO ₂ Nanoparticles Using Hibiscus Flower Extract	Malla Reddy College of Engineering & Technology		79-82	2014
47.	K. Ganapathi Rao, CH. Ashok, K. Venkateswara Rao, CH. Shilpa Chakra	Structural properties of MgO Nanoparticles: Synthesized by Co-Precipitation Technique	International Journal of Science and Research (IJSR)		43-46	2014
48.	CH. Ashok, M. Kiran Kumar, K. Venkateswara Rao, CH. Shilpa Chakra , T. DAYAKAR	Calcium Oxide Nano Particles Synthesized From Chicken Egg Shells by Physical Method	International Conference on Emerging Technologies in Mechanical Sciences		72-75	2014
49.	CH. Ashok, K.	Structural and	International		26-30	2014

	Venkateswara Rao, CH. Shilpa Chakra, K. Ganapathi Rao	Optical Properties of CdS Thin films for the Solar Cell Applications	Journal of Science and Research (IJSR)			
50.	Satish bykkam, K.Venkateswara Rao, Ch.Shilpa Chakra, V.Rajendar, Rotte Naresh kumar, J.Ananthaiah	Graphene oxide thin films: A Simple profile meter for thickness measurements	International Journal of Engineering and Advanced Technology	2		2013
51.	T.Dayakar, K.Venkateswara Rao, Ch.Shilpa Chakra,	Synthesis and Characterization of MgFe ₂ O ₄ (0.5)/TiO ₂ (0.5) Nano Ceramic pigment by mechano-chemical synthesis	International Journal of Nano Science and Technology	1	01 to 08	2013
52.	S. Vinay Kumar, K. Venkateswara Rao, CH. Shilpa Chakra	PLZT Composite Synthesis to Study the Material Characteristic	International Journal of Innovative Research in Science, Engineering and Technology	2	4118-4125	2013
53.	Rameshwar Rao, CH. Shilpa Chakra, K. Venkateswara Rao,	Eco-friendly Synthesis of Silver Nanoparticles Using Carica Papaya Extract for Anti-Bacterial Applications	Advanced Materials Research	629	279-283	2013
54.	Satish Bykkam, Venkateswara Rao K., Shilpa Chakra CH. and Tejaswi Thunugunta	Synthesis and characterizations of Graphene oxide and its anti-microbial activity against klebsiella and staphylococcus	International journal of advanced bio-technology and research	4	142-146	2013
55.	Tambur Pavani, Ch.Shilpa Chakra, K. Venkateswara Rao	A Green approach for the synthesis of nano-sized iron oxide, by Indian ayurvedic modified bhasmikaran method	American journal of biological, chemical, pharmaceutical sciences	1	01 to 07	2013
56.	Sudheer	Tribological	International	4	2095-	2013

	Kumar.N , Venkateswara Rao.K, Chakraverti.G, Shilpa Chakra.CH	Properties Of Epoxy/Al ₂ O ₃ Nanocomposites	Journal of Engineering Trends and Technology (IJETT)		2098	
57.	Adeleh Aftabtalab, Hamed Sadabad, CH. Shilpa Chakra and K.Venkateswa ra Rao	Hexavalent Chromium Treatment by High Adsorption Magnetite (Fe ₃ O ₄) Nanoparticle	International Journal of Thermal Technologies	3	135-138	2013
58.	G. Venkaiah, K. Venkateswara Rao, V. Sessa Sai Kumar, CH. Shilpa Chakra	Solution Combustion Synthesis and Characterization of Nano crystalline Lanthanum Ferrite using Glycine as a fuel	International Journal of Materials, Methods and Technologies	1	01 to 07	2013
59.	Sara Shaker, Shirzad Zafarian, CH. Shilpa Chakra,K.Ven kateswara Rao	Preparation And Characterization Of Magnetite Nanoparticles By Sol-Gel Method For Water Treatment	International Journal of Innovative Research in Science, Engineering and Technology	2	2969- 2973	2013
60.	V. Rajendar, K. Venkateswara Rao, K. Shobhan, C.H. Shilpa Chakra	Effect of Co Doping on Structural and Magnetic Properties of ZnO Nanoparticles Synthesized by Novel Combustion Synthesis	Journal of Nano- and Electronic Physics	5	01022-1 to 01022- 3	2012
61.	V. Sessa Sai Kumar, K. Venkateswara Rao, Ch. Shilpa Chakra, A. Shiva Kishore Goud & T.Krishnaveni.	Synthesis of Nanocrystalline Bismuth Ferrite by Solution Combustion Synthesis Method	Journal of Nano Science, Nano engineering & Applications	1	52-58	2011

13. Detail of patents.

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/Country	Status
1	Study of green synthesized nanomaterials for seed germination	Dr. Ch Shilpa Chakra	E-106/361/2017/CHE-2017	-	India	Filed
2	Extraction of Lignin from fresh manure of herbivorous animals	Dr. Ch Shilpa Chakra	E-1/46251/2017-CHE-2017	-	India	Filed

14. Books/Reports/Chapters/General articles etc.

S.No	Title	Author's Name	Publisher	Year of Publication
1	Magnetic Nanoparticles: Synthesis and Characterization	Tambur Pavani Ch. Shilpa Chakra K. Venkateswara Rao	Lambert Academic Publishing ISBN No. 978-3-659-35864-7	2013
2	Modern Ayurvedic Method: Iron oxide Nanoparticles	Ch. Shilpa Chakra K. Venkateswara Rao	Lambert Academic Publishing ISBN No. 978-3-659-37779-2	2013
3	Hexavalent Chromium removal by high adsorption Magentite nanoparticles	Adeleh Altabtalab Ch. Shilpa Chakra	Lambert Academic Publishing ISBN No. 978-3-	2014

			659-80573-8	
4	Innovative Technologies for the treatment of industrial wastewater- A sustainable Approach	Ch. Shilpa Chakra	CRC Press	2017

15. Any other Information (maximum 500 words)

Area of Specialization:

- Synthesis of nano materials
- Biomimetic and Biological Inspired Materials
- Characterization of Nano Materials
- Bio-Medical application of nano materials
- Green Nanotechnology
- Carbon based material (Graphene, CNT's etc)
- Nanoayurveda
- Nanotechnology for Agriculture Application
- Nanotechnology for Environmental Application
- NanoBio-sensors

Hands on Experience :

- X-Ray Diffractometer (XRD)
- UV- Visible spectrometer (UV)
- Fourier-transform infrared spectroscopy (FTIR)
- Thermogravimetry -Differential thermal analysis (TG-DTA)
- Particle Size Analyzer (PSA)
- Zeta Potential
- Cyclic Voltmeter (CV)
- Chemical Vapor Deposition (CVD)

Memberships:

- Life Member of Indian Science Congress (L32488)
- Life Member of Electron Microscope Society of India (LM-1480)
- Life Member of Nano and Molecular Society (NMS/2014/LM/060)
- Life Member of Indian Crystallographic Association
- Life Member of Nano Science and Technology Consortium
- Life Member of Powder Metallurgy Association of India (804)
- Life Member of Society for Materials Chemistry (LM1023)