

CURRICULAM VITAE

Dr. D. Sirisha,

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Ph.D. (2007): from Centre for Environment IST, JNTUH, Hyderabad

Title of Thesis: A Comprehensive Study of Removal of Sulphur Dioxide From industrial Emissions

M.Phil (1997): from Centre For the environment IPGSR, JNTU, Hyderabad.

Title of Thesis: Potentiometric studies on complexation behavior of biologically active SNO donor triazene Ligand

M.Ed (1994): from Sultan Ul Uloom college of education

B.Ed (1992): from Panineeya Mahavidyalay Hyderabad

M.Sc (1991): from Government college Rajamundry.

PGDCA (1990): from Indotronix Institute of Informatics, Hyderabad

Experience : 20 years of teaching experience in the field of Chemistry and Environmental sciences.

10 years of research Experience in the field of physical chemistry and environmental sciences.

Proven in house experience:

- (1) Published 53 research papers on analysis and controlling technologies of Fluoride, Chromium, Sulphur dioxide, and Nitrogen dioxide
- (ii) 3 Research Scholars are working on
 - (a) Controlling technologies of Fluoride, Chromium, Arsenic in Surface and ground waters
 - (b) Analysis of air pollutants in industrial areas and controlling technologies.
 - (c) Green and microwave synthesis of nanoparticles and controlling water pollutants by nanoparticles.

- (d) Lake quality analysis in twin cities of Hyderabad and controlling pollutants in lake by biological methods.
- (e) 20 Students completed their M.Tech and M.Sc projects.
- (f) Completed 5 minor research projects (Co-investigator).
- (g) One research scholar completed Ph.D in JNTUA under the guidance of Dr D.Sirisha.

Areas of Research Work

- (1) Analysis of air, water and soil samples
- (ii) Synthesis of nanoparticles
- (iii) Controlling technologies of air, water and soil pollutions by adsorption, coagulation Technologies
- (iv) Applications of nanoparticles for controlling water pollutants

Publications (in the field of Environmental science).

1. **N.Gandhi, D.sirisha and K.B.Chandra Sekhar**, *Bioremediation of waste water by Using Strychnos Potatorumseeds (clearing nuts) as bio adsorbent and natural coagulant for removal of Fluoride and Chromium* **Accepted by Journal of Int.academic research for multidisciplinary (impact factor-1.393)**
2. **N.Gandhi, D.sirisha and K.B.Chandra Sekhar**, *Adsorption of Chromium (VI) from aqueous solution by using Multani Mitti* **Accepted by Int.Jou.of Research in Pharmacy and chemistry (impact factor-0.51)**
3. **N.Gandhi, D.Sirisha and Chandra Sekhar** *Adsorption of Chromium (VI) from aqueous solution by using brickpowder* ,**Asian Academic Research Journal of Multidisciplinary**, 1(15).112-133,2013.(impact factor-2.01)
4. **N.Gandhi, D.Sirisha and Chandra Sekhar** *Removal of Chromium(VI) from industrial waste water by coagulation process using Pithecellobium Ducle seeds as natural coagulant* **Accepted by continental journal of water ,air, soil pollution.**
5. N.Gandhi, D.Sirisha and Vikas Chandra., *Microwave-Mediated Green synthesis of Silver nanoparticles using Ficus Elastica leaf extract and Applications in air pollution controlling Studies*, **Int.Journal of Engineering Research and Applications**,4(1),01-12,2014(impact factor-1.69).
6. **K, Anthony Mary, .D.Sirisha and Y.Vatsala.**, *Analysis of water quality parameters in Nalgonda district –Andhrapradesh-India-* *Journal of energy and environment, Photon*, 127,,374-

- 379,2013.(impact index-3.23)
7. **N.Gandhi, D.Sirisha and K.B Chandra Sekhar** *Adsorption of fluoride from aqueous solution by using chalk powder*, **World Journal of Pharmacy and Pharmaceutical sciences**, 2(5),3897-3914,2013.(impact factor-0.629)
 8. **N. Gandhi, D.Sirisha and K.B Chandra Sekhar** *.Biodepollution of paint manufacturing industry waste water containing chromium by using coagulation studies*, **Research world Journal of Arts Science and commerce**.2013. (impact factor -0.479)
 9. **N.Gandhi D.Sirisha and K.B.Chandra Sekhar**, *Phyto remediation of Chromium and Fluoride in industrial waste water by using aquatic plant ipomoea* **South Pacific Journal of Pharma and biosciences Vol (1)1-4,2013.(international journal)**
 10. **N. Gandhi, D. Sirisha and K.B. Chandra Sekhar**, *Adsorption studies of Chromium by Using Low Cost Adsorbents. . Our Nature*, Vol. 11(1), 11-16, 2013 (Nepal)
 11. **D. Sirisha, K. Mukkanti and N. Gandhi**, *Adsorptive Removal of SO₂ by using Magnesium Carbonate (MgCO₃)*. **International Journal of Green and Herbal Chemistry**. Vol. 2, 576-580,2013.
 12. **Smita Asthana, Dr.D D Sirisha and N. Gandhi** ,*Heavy Metal Analysis in Soil Samples of Heavy Traffic Zones of Hyderabad*, **A.P Journal of Chemical, Biological and Physical Sciences**. Vol. 3(3), 1376-1381, 2013
 13. **D. Sirisha, K. Mukkanti**, *Adsorption Studies on Alum Sludge- Advances in Applied Science Research*, 2012, 3(5): 3362-3366.
 14. **Priyamvada devi,,D.Sirisha and N.Gandhi**, *Characterization of fish pond in and around Bhimavaram, West Godavari A.P India” – International Journal of Research in chemistry environment*. Vol.2 (1), 251-254, 2013.
 15. **Priyamvada devi,,D.Sirisha and N.Gandhi**, *Study on the quality Of water from fish pond in around Bhimavaram West Godavari District AP International Research Journal of environmental sciences* 2(1),58-62,2013
 16. **N. Gandhi, D. Sirisha, V.M. Priyanka, and S.R. Arthi Sree** ,*Adsorption Studies on Mixed algae to control SO₂ and NO₂ pollution- International Journal of Pharma and Bio sciences*, Vol.3(4): (B) 304-310, 2012.(impact factor 0.67)
 17. **N. Gandhi, D. Sirisha, V. M. Priyanka and Smita Asthana** *Controlling of SO₂ by using low cost Adsorbents” – International Journal of Pharmaceutical and Chemical Sciences*. . 2013, 2 (1), 191-194

18. **V.M. Priyanka, D. Sirisha and N.Gandhi**, *Sulphur dioxide adsorption using Macrotyloma Lam seed powder* – **Proceeding of the International Academy of Ecology and Environmental Sciences**. 2012, 2(4): 251-254
19. **N. Gandhi, D. Sirisha, Smita Asthana and A. Manjusha** *Adsorption studies of fluoride on Multani matti and Red soil*, **Research Journal of Chemical Sciences**. Vol-2(10) – 2012. (Impact factor-0.3725)
20. **N. Gandhi, D. Sirisha, K.B. Chandra Shekar and Smitha Asthana** *Removal of fluoride from water and waste water by using low cost adsorbents* – **Journal of Chemtech Research** vol – 4 (4) – 2012 – ISSN: 0974 – 4290.(Impact factor-0.338)
21. **S.R. Arthi sree, D. Sirisha and N. Gandhi** *Adsorption of Aqueous solution of NO₂ by Neem Bark dust*, **International Journal of Chemtech Research** vol – 4(4) 2012, ISSN: 0974 – 4290.
22. **Priyamvada Devi, D. Sirisha, and N. Gandhi** *Quantitative and Qualitative Analysis of zooplankton from Aquaculture ponds in and around Bhimavaram, West Godavari District.– Nature Environment and Pollution Technology*, vol.2, (3) 2012, ISSN: 0972-6268.
23. **S.R. Arthisree, and D. Sirisha** *Adsorption of NO₂ from aqueous solution by using mango bark powder* .**Universal journal of Environmental research and technology**. 2(1),1-4, 2012,
24. **Manjusha, N. Gandhi, D. Sirisha** *Adsorption of chromium from aqueous solution by using mangifera indica bark dust*. **Universal Journal of Environmental research and technology**. 2(!) 2012.
25. **Manjusha, N. Gandhi and D. Sirisha**, *Removal of Chromium from Paint manufacturing industry waste water by using Papaya peel powder* **International journal of Pharma world research**,3(2) 2012.
26. **V. Mary Priyanka, D. Sirisha and N. Gandhi**, *Adsorption studies on Mangifera indica controlling of SO₂ Pollution*, **Journal of Chemical and Pharmaceutical Research**, 4(3), 1768-1771,2012
27. **D.Sirisha, Arthi Shree S.R, A.Manjusha** *Adsorption of NO₂ by brick powder controlling technologies of NO₂ by batch adsorption process*, , **Asian Journal of Research in Chemistry** 5 (1) 2012, ISSN 0974-4169.
28. **K.Mamatha, N.Gandhi, D.Sirisha** *Adsorption of Aqueous Solution of NO₂ by certain waste materials*, , **Asian Journal of Research in Chemistry** 5 (1) 2012, ISSN 0974-4169
29. **Sirisha, K. Mukkanti, and N. Gandhi** *Controlling of SO₂ by marble chips* . **International journal of Chemical Sciences** 10(2),847-854,2012.

30. **Priyamvada Devi, Dr.D. Sirisha, and N. Gandhi** *Characterization of prawn pond in around bhimavaram west Godavari District A.P. India..* **International Journal of Research in Chemistry and Environment-2**(1),58-62,2012.
31. **Smita Asthana, D.Sirisha Soghra bargees, K. Mukkanti and Shasidhar** *Effect of fertilizers on germination of seeds in industrially polluted soil samples. .* **International Journal of Research on Crops 2012**
32. **Smita Asthana, D.Sirisha ,Soghra bargees ,** *Soil analysis in industrial areas of Hyderabad.* **Environment pollution control journal**,10(5),2007
33. **D.Sirisha and P.Saritha,** *Adsorption of SO₂ by Wood Charcoal,* **Environmental Pollution Control Journal** 10 (2),74-76, 2007.
34. **K.Mukkanti and D.Sirisha** *Controlling technologies of SO₂ by adsorption technologies,* **Current World Environment**, 1(2),169-172, 2006.
35. **D.Sirisha and K.Mukkanti** *Controlling SO₂ by certain waste materials ,***International journal of chemical sciences** ,5(2),169-172,2006.
36. **K.Mukkanti and D.Sirisha.** *Adsorption of SO₂ by iron ore, .* **Environmental pollution control journal** 2006,
37. **K.Mukkanti and D.Sirisha** *Effect of temperature on adsorption of SO₂ by Dolomite and Gypsum,* **oriental journal of chemistry**,21(2),339-344, 2005.
38. **K.Mukkanti and D.Sirisha** *Adsorption of SO₂ by Bauxite,* **Nature, Water and pollution technologies** ,4(4),575-578,2005
39. *Germination of seeds in soil samples of heavy traffic zones of Hyderabad, Telangana, India.* **N. Gandhi, D. Sirisha and Smita Asthana** **Environmental Science ESAIJ** 10(6), 204 – 214, 2015.
40. *Bio adsorption of Alizarin Red using immobilised saccharomyces cerevisiae* **N. Gandhi, D. Sirisha and Smita Asthana,** **International Research Journal of Natural and applied Sciences** 2(3), 2015.
41. *Adsorptive removal of aqueous SO₂ by using Orange peel powder.* **Sirisha D, Smita Asthana, Gandhi.N and Haseena.**

42. Eco friendly method for synthesis of copper nano particles and application for removal of aqueous sulphur dioxide and Nitrogen dioxide. **D. Sirisha, N. Gandhi, Haseena and Smita Asthana, International Journal of Engineering Research and Technology 3(11), 2014.**
43. Fourier transforms infra red spectroscopic analysis of medicinal plant from Duvva Village, West Godavari District, Andhra Pradesh, India: CVR Journal of Science and Technology, 7, 2014.
44. Green synthesis of nanoparticle of zinc and treatment of nano beads for waste water of alizarin red Dye Smita Asthana, . **D. Sirisha and Afiya Mary. International Journal of Environmental Research and Development 6(1), 2016, 11-16.**
45. Effect of heavy metals on seed germination on soil samples from industrially polluted and heavy traffic areas **Smita Asthana, D. Sirisha and Nazia Sultana**, Global Journal of Research Analysis 2016.
46. Controlling of NO₂ by adsorbing technique adsorbing using natural adsorbent, **Dr. D. Sirisha, P. Saritha, N. Gandhi and Smita Asthana**, Research Journal of Chemical and Environmental Sciences 4(1), 2016.
47. Impact of microwave heated water on germination of seeds and growth of plant systems **K. Radha, B.V. Mrudula Rao, M. Sujatha and Dr. D. Sirisha.**
48. Adsorption of Fluoride from aqueous solution by using Horse Gram seed powder **N.Gandhi, D.Sirisha K.B .ChandraSekhar International Journal of engineering and Technical Research 54-56,2016.**
49. Adsorption of Fluoride from aqueous solution by using Ragi seed powder **N.Gandhi, D.Sirisha K.B .ChandraSekhar Journal of chemical and Pharmaceutical Research 8(7),127-141,2016.**
50. Adsorption of chromium(VI) from from aqueous solution by using Ragi seed powder **N.Gandhi, D.Sirisha K.B .ChandraSekhar International Journal of latest research in engineering and Technology 2(7), 35-47,2016.**
51. Phyto remediation of Fluoride from water using germinated seeds. **International journal of advanced research in engineering and applied sciences 5(7), 2016.**
52. Adsorption of Flouride from aqueoussolution by using Pineapple peel and Orange peel powders. **N.Gandhi, D.Sirisha K.B .ChandraSekhar, International Journal of Environmental bioremediation and biodegradation 4(2),55-67,2016.**
53. **Air Pollution In Industrial Area** Sr. K. Anthonanna, D. Sirisha, K. Radha **International Journal of Environmental & Agriculture Research (IJOEAR),2(5),2016..**

54. Adsorption of Flouride (F) from aqueous solution by using Horse gram seed powder.
55. Germination, seedling growth and biochemical responses (Amaranthus tricolour α) and sesame (Sesamum Indicum α) at varying Chromium concentration **International Journal of plant and soil science. N.Gandhi, α Prudhi Raj, M.Maheshwar, D.Sirisha.**
56. Adsorption of Fluoride (F) from aqueous solution by using pineapple (Anana Comosus)Peel and orange (Citrus Sinesis) peel powder. N.Gandhi, D.Sirisha and K.B.Chandra Sekhar. **International journal of Environmental Bioremediation and biodegradation 4(2), 55-67, 2016.**
57. Adsorptive removal of chromium (VI) from synthetic waste water by using chalk powder as cost effective adsorbent, **N.Gandhi, D.Sirisha and K.B.Chandra Sekhar. International Journal of engineering and applied sciences 3(7), 2016.**
58. Removal of turbidity of waste water by adsorption technology, **Nazia Fatima, Uzma Baig, Dr.Smitha Asthana and D.Sirisha. International Journal of innovative Research in Science, Engineering and technology 5(11), 2016**
59. Selection of Coagulants for controlling Flouride in water samples of Nalgonda district – Telangana India, **D.Sirisha, N.Gandhi, P.Saritha** Continental J.applied Sciences 10(2), 26-34, 2015.
60. Noise pollution – A case study in Mehdipatnam area in Hyderabad, B.Japamala Rani and Sirisha David. **Inderanational journal of innovations in Engineering and technology 7(4), 367-373, 2016**
61. Removal of Turbidity of water by Banana peel using adsorption technology. Beverly John **Uzma Baig, Nazia Fatima smitha Asthana and D.Sirisha** Journal of chmical and pharmaceutical research 9(4), 65-68, 2017.
62. Studies on physic chemical parameters of lakes in and around Hyderabad, Andhra Pradesh, India **Sayed Tasin, Shaikh Parveen R. and Sirisha.D** 8(11), Research 2016.
63. Effective teachning aids to improvise the quality of mathematics Education. **Sirisha David and Santhoshi Mishra.**
64. Controlling Arsenic from coal mining area water samples by using mixed Algae, **Mallesh Kumar and D.Sirisha,** Global Journal of research analysis 730-731, 2017

Presented Papers:

1. **Adsorption studies on Iron oxide nanoparticles,** at International Symposium on Environmental Impacts, Health Implications and Therapeutic Approaches and Special

- symposium on Water Quality and Aquatic Biotechnology, organized by Vikrama Simhapuri University- Nellore during July 15 – 17th 2012. Shajahan, Smita Asthana and Dr.D. Sirisha
2. UNESCO workshop on Bioethics, Biodiversity and making a repository of Ethical world views of Nature Organized by Loyola Institute of Frontier Energy (LIFE) and UNESCO, Bangkok during 10th to 12th October 2012
 3. ***Adsorptive Removal of Aqueous SO₂ solution by using Orange peel powder***, at International Symposium on Environmental Impacts, Health Implications and Therapeutic Approaches and Special symposium on Water Quality and Aquatic Biotechnology, organized by Vikrama Simhapuri University- Nellore during July 15 – 17th 2012. N. Gandhi and D. Sirisha
 4. ***Adsorption of Aqueous NO₂ solution by Mixed Algae and correlation between Human Health***, at National Conference on Biomarkers for Diseases-prospects & Challenges, organised by Centre for Biotechnology and Bioinformatics, JNIAS, Hyderabad, Arthi sree and D. Sirisha, 2012.
 5. ***Controlling of Chromium Pollution by using mixed Algae***, at National Conference on Biomarkers for Diseases-prospects & Challenges, organised by Centre for Biotechnology and Bioinformatics, JNIAS, Hyderabad, Manjusha, N. Gandhi and D. Sirisha, 2012.
 6. ***Adsorption Studies on Mixed Algae*** at National Conference on Biomarkers for Diseases-prospects & Challenges, organised by Centre for Biotechnology and Bioinformatics, JNIAS, Hyderabad, V. Mary Priyanka, D. Sirisha and N. Gandhi, 2012.
 7. ***Adsorption of Aqueous solution of NO₂ by certain waste materials*** at National Conference on Prospective of Drug and Chemical Research conducted by Telegana University, Nizamabad
 8. ***"The Role of Students in municipal Solid Waste Management"*** at National Conference on Emerging Trends in Solid Waste management Technologies conducted by JNIAS, D.Sirisha, Hyderabad, 2011.
 9. ***Weather Withers Health and Wealth*** at international conference on green summit- Climate change issues and concerns conducted by St. Ann's College for Women, Hyderabad D. Sirisha and Kaiser Jamil **2010**
 10. ***Environmental Awareness among Rural Women- A case study in Andhra Pradesh, India,*** international conference on green summit- Climate change issues and concerns conducted by St. Ann's College for Women, Hyderabad D. Sirisha, S. Ammanni Das, K. Bhagya Lakshmi **2010**
 11. ***Adsorption Studies of Sulphur dioxide on Multani Mati*** at international conference on green summit- Climate change issues and concerns conducted by St. Ann's College for Women, Hyderabad K. Bhagya Lakshmi, D. Sirisha, and T. Sirisha in Dec-2010
 12. ***"Impact of Climate Change on Agriculture- An over view"*** on a National Seminar, Climate change-its impact factor on different sectors in India at V.S.R & N.V.R college, Tenali **2010**.
 13. ***"Air Pollution in Industrial Area- A Case Study"*** at National Seminar on Climate Change Perspectives and Projections- A Systems Approach. **2010**
 14. ***Soil in West Godavari district"*** at National Seminar, B I R C R Reddy College, Eluru **2008**
 15. ***Effect of Particle size on adsorption of SO₂ by marble chips*** National level Seminar on Nano materials and their applications, Loyola college, Madras. **2006**
 16. ***Solid waste management in Khammam and Hyderabad***, National level Seminar conducted by Siddhartha College of Science and Arts Vijayawada, **2006**

17. **Adsorption of Aqueous solution of SO₂ by certain adsorbents**, International Conference on Chemistry and Environment, 2005 in Indore.
18. **Controlling technologies of SO₂ by certain waste materials** International Conference on Environmental Pollution Control Technologies conducted by JNTU, Hyderabad, 2005.
19. **Adsorption of SO₂ by iron oxide**, PG College of Science and arts, Hyderabad 2005

REVIEWER FOR JOURNALS

1. Wilourd Journal Nigeria.
2. South pacific journal of Pharma and bioscience
3. International journal of environment pollution and solution
4. World journal of environment pollution
5. Scientific journal of environment pollution and protection.
6. Continental journal of water, air and soil pollution
7. Reviewer for American journal of zoological society
8. Reviewer for Sky Journal of Soil Sciences
9. Atmospheric environmental journal
10. Reviewer for food and nutrition research
11. Reviewer for Journal of natural science and environment science

List of Projects in which Dr. Sirisha is actively involved: - 4 minor research projects

Sl. No.	Title of the project Role (PI/CI)	Sanction No.	Total cost	Agency	Present status
1.	Soil pollution studies in Hyderabad and east and west Godavari district	-70,000	UGC/MRP-931/06	LINK NO-1931	Coinvestigator-completed.
2.	Study on the quality of water and soil from aquaculture ponds in around Bhimavaram West Godavari district	1, 50,000	UGC/MRP/2758/09		Co investigator-completed.
3.	Air pollution studies in industrial areas of Hyderabad and controlling technologies	UGC/MRP-3982/11-1	75,000		completed.
4.	Analysis of Fluoride in Nalgonda region and developing controlling technologies	UGC/MRP/1,05000			Completed.
5.	Impact of coalmining on water resources	UGC/MRP			Completed as coinvestigator
6.	Impact of coal mining on women's health – A case study of Singareni collieries				Completed as co Investigator.
7.	Analysis of arsenic in ground waters of Hyderabad and developing controlling technologies				Funded by GSFC.

8. Analysis of copper in ground waters in Uppal area and removal of zinc by nanoparticles.
Funded by CPE/UGC funds.

INVITED SPEAKER

1. Resource person in the National conference on integrated genomics, 11-12 February 2014 in Shri Shankaracharya Mahavidyalaya Bhilai.
2. Invited Speaker in Global summit on Emerging Science and Technologies: Impact on environment and human health August 1-3, 2014 in Vikrama Simhapuri University.
3. Chair person for session on synthesis and application of nanomaterials in the national conference on the impact of nanomaterials on health and environment on JUNE 13-14, 2014 in JNIAS.
4. Resource person for session on role of medicinal plants in controlling water pollution Andhra Loyola College on 28TH August 2014.

Co-convener

1. National conference on Emerging trends in solid waste management on June 5th 2011 conducted by centre for Environment and Climate Change (CECC) JNIAS.
2. National conference on impact of nanomaterials and nanoparticles on human health and environment conducted by JNIAS on 13-14th 2014.