

Biodata of Indu Tucker Sidhwani



- **Name** :Indu Tucker Sidhwani
- **Department** :Chemistry
- **Designation** :Associate Professor
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Educational Qualifications			
Qualification	Title/Course	University	Year
Undergraduate	BSc (H) Chemistry	University of Delhi, Delhi	1971
Postgraduate	MSc (Inorganic Chem)	University of Delhi, Delhi	1973
M.Phil.	-----	-----	-----
Ph.D.		University of Delhi, Delhi	1978
Any other			
	Post-Doctoral Research	Electrochemistry of some complexes of platinum metals with polysulphides	August 1978 - August 1979 University of Regina, Canada
	Post-Doctoral Research	Synthesis & cyclic voltammetry of mixed-valent complexes	September 1979 - September 1980 University of Lincoln, Nebraska (USA)
	Research Associate	Mixed-valent organometallic complexes	April 1981 - July 1981 University of Lincoln, Nebraska (USA)
	Research Associate	Mixed-valent organometallic complexes	April 1982 - August 1982 University of Lincoln, Nebraska (USA)
	Research Associate	Synthesis & characterization of coordination compounds	1981-1986 National Associate ship of University Grants Commission
	Supervision of two thesis for M. Sc. in Environmental Sciences	1) Survey of Delhi's air and occurrence of respiratory ailments in school children 2) Survey of the status of Delhi's water and land environment awareness in school children	1998 Institute of Ecology & Environment (Deemed University at Delhi)
	Post-doctoral fellow at University of Delhi	1) Synthesis of porphyrins and their complexes 2) Development of green experiments for undergraduate and post graduate students	July 2006 - April 2008
	Conducting Research	Green chemistry experiments for under	2005 - till date

	on Chemistry Education	graduate students	
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Career profile		
Teaching Experience in years	Area of Specialization	Courses and Subjects taught
42	Inorganic Chemistry	1. Analytical Chemistry, Environmental Chemistry, Coordination Chemistry, Physical Chemistry and General Chemistry to B.Sc (H) and B.Sc (Programme) students and to undergraduate students of IGNOU. 2. Guest Faculty for teaching "Green & Sustainable Chemistry" and "Laboratory for Green Experiments" to M. Tech (CSPT) students at the University of Delhi. 3. Kuvempu university, Madras, honorary MSc. Practical (2004) 4. IGNOU BSc. Practical from 1995 to till date. 5. University of Petroleum Practical for engineering students 2003

Current Research Experience:

- 1 "Synthesis and characterization of novel nano materials via green method for antimicrobial studies". In collaboration with Department of Physics, 2012-13
- 2 "A Green chemistry approach to combat stress in the undergraduate chemistry laboratory". In collaboration with Department of Psychology 2013-14
- 3 A Green and Sustainable Chemistry Laboratory...A Distant Dream... or a Reality. In collaboration with Department of Psychology 2015-16

Under star status grant, also involved in improving the existing lab experiments and also designing new green experiments for undergraduate and post graduates students

Awrds/Prizes:

- 1 Conferred "Meritorious Teacher Award of Higher Education" 2013, Government of NCT of Delhi.
- 2 Teaching Excellence Award for Innovation (2015) of University of Delhi.

Books written

1. Green Chemistry Experiments, Rakesh K. Sharma, Indu Tucker Sidhwani and Mihir K. Chowdhuri, FNA, Published by Tucker Prakashan on behalf of the Green Chemistry Network Centre (ISBN 81-904152-5-5, 2008).
2. Indian Subcontinent adaptation of Inorganic Chemistry by Gary L. Miessler and Donald A. Tarr, Indu Tucker Sidhwani and Sushmita Chowdhury, Pearson Education Inc. (ISBN 97801-303-54716), 2008.

Chapters written

1. One of the contributors to the "Book of Excellence" published by Gargi College, University of Delhi in 2013.
2. In-charge of Inorganic Section of the Lab Manual for Undergraduate Students of the University of Delhi, Portal for E-book launched in 2010.
3. Contributed, as a member of the Delhi Team, towards the monograph on Green Chemistry Laboratory Experiments by the Green Chemistry Task Force (DST, Government of India), 2007.
4. Did value addition to the first year course content in Inorganic Chemistry developed by the Institute of Life Long Learning, University of Delhi, 2009.
5. Contributed an article on Green Chemistry in "The Seed Within", Gargi College Publication, 2004.
6. Contributed, as a member of the Delhi Team, towards the monograph on Green Chemistry Laboratory Experiments by the Green Chemistry Task Force (DST, Government of India), 2007.

Research Papers published

1. Wealth from waste: a green method to produce biodiesel from waste cooking oil and generation of useful products from waste further generated" a social awareness initiative" Indu Tucker Sidhwani, Geeta Saini, Sushmita Chowdhury, Dimple Garg, Malovika, Nidhi Garg *DU Journal of Undergraduate Research and Innovation, Vol 1, Issue 1, Pg.131-151, 2014, ISSN 2395 – 2334.*
2. Synthesis, Characterization and Investigations of Antimicrobial Properties of Silver Nanoparticles Via a Green Method Using Mulberry (*Morus Alba L*) Tree Leaves, *Nano Biomaterials, pp 179-184 (2012).* R.Rubia, Yashika, Remy, Namrata, Rajeshwari, Indu Tucker Sidhwani, Kavita Vasdev, Mangala Joshi, Shubha MGokhale and Vandna Luthra.
3. Solventless and One Pot Synthesis of Copper (II) Pthalocyanine Complex- A Green Chemistry Experiment; Rakesh K. Sharma, Chetna Sharma and Indu Tucker Sidhwani; *J.Chem.educ.*, 2011, 88, 86-87. **ISSN:** 0021-9584
4. A New One Pot and Solvent Free Synthesis of Nickel Porphyrin Complex, R.K. Sharma, Gauri Ahuja and Indu Tucker Sidhwani; *Green Chemistry Letters and Reviews*, 2009, 2, 101-105. **ISSN:** 1751-8253
5. Greener Alternatives to Qualitative Analysis for Cations without H₂S and other Sulphur Containing Compounds, Indu Tucker Sidhwani and Sushmita Choudhury; *J.Chem.educ.* (American Chemical Society), 2008,85,1099. **ISSN:** 0021-9584.
6. Destabilisation of Electrochemically Produced Cations of Arenetricarbonylchromium Complexes by Trifluoroacetic acid; R.D. Rieke, S.N. Milligon, Indu Tucker, *Inorganic Chemistry*, 1983, 22, 987. **ISSN:** 0020-7333

7. Electrochemical Generation of Stable Cations of Arene tricarbonyl chromium complexes. Studies on the Non-interaction of the tricarbonyl groups in Bis and Tris Complexes; R.D. Rieke, Indu Tucker et al.; *Organometallics*, 1982, 1, 938-950. **ISSN:** 0276-7333.
8. The Electrochemical Generation of Stable Cations of Arenetricarbonylchromium complexes; R.D. Rieke, S.N. Milligon, Indu Tucker et al. *J. Organomet. Chem.*, 1981, 218, C 25-30. **ISSN:** 0022-328X
9. Some New Tetragonal Ni (II) complexes of Substituted Thioureas; Indu Tucker, R.P. Singh and P.S. Zacharias, *J. Inorg. Nucl. Chem.*, 1979, 41, 1381-83. **ISSN:** 0020-1902
10. New Tetrahedral Cobalt (II) complexes of Substituted Thioureas; Indu Tucker, R.P. Singh and P.S. Zacharias, *Ind. J. Chem.*, 1979, 18A, 60-61. **ISSN:** 0376-4710
11. Some New Cobalt Key Complexes of Triazene-1-oxide; Indu Tucker, R.P. Singh and P.S. Zacharias, *Ind. J. Chem.*, 1979, 17, 368-70. **ISSN:** 0376-4710