

# Curriculum Vita: Indu Saxena

## PERSONAL INFORMATION

Name **INDU SAXENA**  
Address **B-13/E, SECTOR-J, ALIGANJ, LUCKNOW, 226024**  
Telephone **(+91) 94153 44457, (+91) 94151 18971**  
E-mail **[indusaxena@cetglad.org](mailto:indusaxena@cetglad.org)**  
Nationality **Indian**  
Date of birth **03<sup>RD</sup> APRIL, 1970**

## CURRENT WORK

**Assistant Professor, Lucknow University - Lucknow**

## EDUCATION

**M.Sc. (Physical Chemistry), Ph.D.**

## HIGHEST DEGREE

Ph.D.

• Name of Organization

Lucknow University, Lucknow

• Principal subjects

Thesis entitled “ **Introduction of New Circuitry and New Operational Controls in Magnatic Float Densitometer and hence Study of Apparent Molal Volume of Some Electolytes in Non-Aqueous Mixtures**”

• Year awarded

2001

## TECHNICAL EXPERIENC

Teaching Graduate and Undergraduate Students since 1995 –  
Department of Chemistry, Lucknow University - Lucknow

## RESEARCH AREA

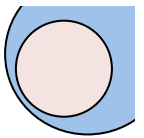
Ion –Ion Interactions; Solution Chemistry; Surface Chemistry; Nano Particles; Ultrasonics; Bio Degradable Polymers; Water Analysis; Environmental Chemistry

## CONTRIBUTION TO THE CORPORATE LIFE OF THE INSTITUTION

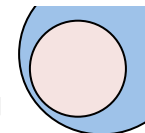
**Coordinator – Ph.D. Course Work,**  
**Assistant Coordinator in M.Sc. Semester Exam**

## PUBLICATION

- \* Indu Saxena, Vijay Kumar and Rikkam Devi, “Influence of Tetra Alkyl Ammonium Cation and Temperature on Molecular Interactions Involves in Binary Liquid Mixtures of Dioxane and DMF at Various Temperatures” *IOSR J. App. Chem. (IOSR-JAC)*, 4 (2017) p.p. 26-36 (ISSN/ ISBN No.2278-5736)
- \* Indu Saxena, Anoop Kumar, Rikkam Devi, Vijay Kumar and Sadhana Gautam, “Study of the Influence of Alkyl Chain Cation Solvent Interactions on the Slope of  $\phi v$  v/s  $\sqrt{C}$  Curves in 1, 3-Butanediol-DMF Solvent Mixtures by Apparent Molar Volume Measurements/” *Chem. Sci. I. Journal*, p.p. 2456-706X (ISSN/ ISBN No. 19 (2017) 1-10)

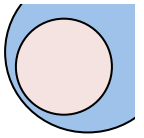


- \* Indu Saxena, Rikkam Devi and Vijay Kumar, "Study of the Densities of Some R<sub>4</sub>NI - Solutions in Water - Isopropyl Alcohol Solvent Mixtures at 313.15 K by Magnetic Float Densitometer and Then Study Masson's Equation from  $\Phi_V$  Data" *I. J. Ad. Eng. Management and Science (IJAEMS)* , 3 (2017) p.p. 186-191 (ISSN/ ISBN No. 2454-1311)
- \* Indu Saxena, and Neelam Nigam, "Impact on Ground Water Quality Around Waste Disposal Site in Southern part of Patna Urban" *Int. J. Sci. Environment and Technology*, 6 (2016) p.p. 3686-3694, (ISSN/ ISBN No.2278-3687)
- \* Indu Saxena, Rikkam Devi, Vijay Kumar and Sadhana Gautam, "Determination of Densities of some R<sub>4</sub>NI- Solution in NMF-DMF Solvent Mixtures at 25°C by Magnetic Float Densitometer and Study Masson's Equation from  $\phi_V$ -Data" , *I. J. Eng. Research and General Science*, 3 (2016) p.p. 60-66, (ISSN/ ISBN No.2091-2723)
- \* Indu Saxena, Rikkam Devi, Vijay Kumar and Sadhana Gautam, "Study of Ionic Interactions in Solution and Influence of Alkyl Chain Cation – Solvent on Water Structure in Ethanol – Water Mixture by Magnetic Float Densitometer", *A.C.S. Journal*, 15 (2016) p.p. 1-6, (ISSN/ ISBN No.2249-0205)
- \* Indu Saxena, Rikkam Devi, Vijay Kumar, Sadhana Gautam and Jaya Tripathi, "Modified Magnetic Float Densitometer", *I. J. Current Research*, 10 (2016) p.p. 39800-39804, (ISSN/ ISBN No.0975-833X)
- \* Indu Saxena, Neelam Nigam and Rikkam Devi "Ground Water Quality: Its Environmental Impact of Aligarh City (U.P.)" *I. J. New Tech. Sci. Engineering* - 8 (2016) p.p. 1-4, (ISSN/ ISBN No.2349-0780)
- \* Indu Saxena, RN Pathak, Vijay Kumar and Rikkam Devi, "Introduction of Ultrasonic Interferometer and Experimental Techniques for determination of Ultrasonic Velocity, density, viscosity and various thermodynamic parameters", *I. J. Applied Research* - 9 (2015) p.p. 562-569, (ISSN/ ISBN No.2394-5869)
- \* Indu Saxena, Vijay Kumar and Rikkam Devi, "Determination of Densities of Solvent Mixture By Magnetic Float Densitometer and Study Volume Change ( $dV$ ) and Some Acoustical Parameters From Ultrasonic Velocity ( $u$ )", *Golden Research Thoughts* - 9 (2015) p.p. 1-12, (ISSN/ ISBN No.2231- 5063)
- \* Indu Saxena, Rikkam Devi and Vijay Kumar, "Determination of Magnetic Float Densitometer Densities of Some R<sub>4</sub>NI Salt – Solution in DMSO-Dioxane Solvent Mixture at 25° C ", *I. J. Applied Research* - 3 (2015) p.p. 518-519, 2249- 555X
- \* Indu Saxena, Rikkam Devi and Vijay Kumar, "Study of the Ionic Interaction in Solutions of Some Tetra-alkylammonium Iodides in N-Methylformamide-T-Butanol Mixtures by Magnetic Float Densitometer", *I. J. Chemical and Physical Science* - 1 (2015) p.p. 60-67, (ISSN/ ISBN No.2219-6602)
- \* RN Pathak, Indu Saxena, Archana, Rahul Kumar and Narendra Singh, "Study of Influence of Alkyl Chain Cation-Solvent Interactions on the Slope of  $\phi_V$  Vs. Curves in 1,5-Pentane Diol-DMF Solvent Mixture by Apparent Molar Volume Measurements",



*Chemical Science Transactions* - 1 (2014) p.p. 87-92, (ISSN/ ISBN No|2278-3313)

- \* RN Pathak, Indu Saxena, AK Mishra, R. Kumar and N. Singh, "Introduction of an Auto Circuit in Magnetic Float Densitometer using Semiconductor Device", *I. J. Chem. and Physical Science* - 4 (2013) p.p. 1-9, (ISSN/ ISBN No.2319-6602)
- \* Indu Saxena, "Climate Resilience Evaluation and Analysis of Water Pollution and Ecosystem Health in Ganga River Basin" *Munich Personal RePEc Archive* - 2 (2012) p.p. 705-719, Paper No. 66353
- \* RN Pathak, Indu Saxena, Archana and A. Mishra, "Study of The Influence of Alkyl Chain Cation Solvent Interactions on Water Structure in 1,3 Butanediol- Water Mixture by Apparent Molar Volume Data" *E. Journal of Chemistry* - 3 (2011) p.p. 1323-1329, (ISSN/ ISBN No.0973-4995)
- \* RN Pathak, Indu Saxena, Archana and A. Mishra, "Study of the Influence of Alkyl chain- Cation Solvent Interactions On Water Structure In 1,5- Pentane diol-Water Mixture by Apparent Molar Volume Data" *J. Ind. Council Chem.* (2009)
- \* Indu Saxena, "Environmental Impact on Ground Water Quality of Aligarh City (UP)", *Chemical and Environmental Research* -2 (2005) p.p. 179-187, (ISSN/ ISBN No.0971-2151)
- \* RN Pathak and Indu Saxena, "Magnetic Float Densitometer – A modified Version", *Indian Journal of engineering and Materials Science* - 5 (1998) p.p. 278-284, (ISSN/ ISBN No.0975- 1017)
- \* RN Pathak, Indu Saxena and Archana, "Ion – Ion and Ion Solvent Interaction in various Solvent and Solvent Mixture", *Indian Journal of Engineering and Material Science* - 1 (2003) p.p. 129-135, (ISSN/ ISBN No.0971-4588)
- \* Indu Saxena, Vijay Kumar and Rikkam Devi, "Influence of Tetra Alkyl Ammonium Cation on Thermo-Physical Properties of N, N - Dimethyl Formamide with 1, 4 – Dioxane at Different Temperatures" *Russian Journal of Physical Chemistry B* - (1, pp. 17-27, 2018), (ISSN/ ISBN No.1990- 7931)
- \* Indu Saxena and Vijay Kumar, "Influence of Quaternary Alkyl Ammonium Cation in 1, 4-Dioxane-DMSO-Water Ternary Liquid Mixtures Using Ultrasonic Technique at Different Temperatures" *Ind. J. Chem. Sec. A* - (57A, pp. 1454-1463, 2018), (ISSN/ ISBN No.0975-0975)
- \* Indu Saxena, Rikkam Devi and Vijay Kumar, "Verification of Masson's Equation by the Density and Apparent Molar Volume Prediction in Some Ternary Electrolyte Solutions." *I. J. Chemical and Physical Science*, (ISSN/ ISBN No.2319-6602)
- \* Indu Saxena and Vijay Kumar, "Effect of tetra alkyl ammonium chain length and dielectric constant on molecular interaction studies in ternary liquid mixture of Dioxane, DMSO and H<sub>2</sub>O using ultrasonic technique", *J. Pure & Appl. Ultra-* (41, pp. 36-43, 2019.), (ISSN/ ISBN No. 0256-4637)
- \* Indu Saxena, Rikkam Devi, Vijay Kumar and Jaya Tripathi, "Determination of Densities of Some R<sub>4</sub>N<sup>+</sup> Salt Solution in Isopropyl Alcohol-DMF Mixtures and Study the Nature of Ionic Interactions from Apparent Molar Volume Data" *Ind. Chem. Soc.*-313.15K,



(ISSN/ ISBN No. 00194522)

- \* I. Saxena, J. Triathi, V. Kumar and S. M. Ejaz, "Biodegradability Enhancement of Polymer Polylactic Acid (PLA) by using Ultrasonic and Rheological Techniques" *I. J. Eng. Sci. Invention* -(8 (08), PP. 49-58, 2019)

