



ENLIGHTENMENT TO EXCELLENCE

## UNIVERSITY OF NORTH BENGAL

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Raja Rammohunpur, Dist- Darjeeling, West Bengal, Pin-734013, India.

## Department of Chemistry

Print

**Dr. Rajesh Kumar Das**

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**Contact Addresses:****Phone** +919434459238 (M)**Address(office)** Department of Chemistry, University of North Bengal, Raja Rammounpur, PO-N.B.U., Dist-Darjeeling, West Bengal, Pin-734013, India.**e-Mail** [rajeshnbu@gmail.com](mailto:rajeshnbu@gmail.com)**Subject Specialization:** Inorganic Chemistry**Research Interests:** Inorganic Synthesis, Solution Thermodynamics, Drug Design, Cheminformatics, Computational Chemistry**List of Publications:** (a) (Annexure-I) (Total-14) (b) Book Chapters: 01(Annexure-I)**Administrative Experience:**

- Head, Deptt. of Chemistry, Balurghat College.

**Professional Experience:****Teaching Experience:****Under Graduate:** 26.03.2015 to 24.09.2018**Post Graduate:** From 25.09.2018**Teaching Interests:**

- Atomic Structure
- Coordination Chemistry
- Nuclear chemistry
- Molecular Spectroscopy

**Awards and Achievements:**

- University Medal (secured 1st class second in M.Sc. 2001, NBU)

**Research Profile:****Projects:** Submitted in SERB**Research Experience:** 13 Yrs**Research Publications:** 13 (Annexure-I)**Seminars, Conferences, Workshops attended/organized (Last Five Years):**

- 10 (Annexure-II)

**Professional and Skill development courses attended:**

- O.P =1

**Academic workshop:**

- 5 (Annexure-II)

**Other interests:**

- Administrative work

**List of Publications:**

1. Ion-pair and triple-Ion formation by some tetraalkylammonium iodides in binary mixtures of 1,4-Dioxane + Tetrahydrofuran. J. Chem. Eng. Data; **2008**, 53, 1417–1420
2. Density and viscosity of Acrylonitrile + Cinnamaldehyde, + Anisaldehyde, and + Benzaldehyde at (298.15, 308.15, and 318.15) K. J. Chem. Eng. Data; **2008**, 53, 1431–1435
3. Conductometric study of some alkali metal halides in (dimethyl sulfoxide + acetonitrile) at  $T = 298.15$  K. J. Chem. Thermodynamics 2009, 41, 1187–1192
4. Studies on solution properties of some amino acids in aqueous mixture of catechol. Journal of Dispersion Science and Technology; 2010, 31, 1–9
5. Studies on molecular interactions of oxalic acid and its salts in co-aqueous solutions of 1,3-dioxolane by volumetric and viscometric measurements at  $T = (298.15, 308.15, \text{ and } 318.15)$  K. Journal of Molecular Liquids; 2010, 156, 146–153
6. Apparent molar volume, viscosity  $B$ -coefficient, and adiabatic compressibility of tetrabutylammonium bromide in aqueous ascorbic acid solutions at  $T = 298.15, 308.15, \text{ and } 318.15$  K. Russian Journal of Physical Chemistry A; 2010, 84(13) 2201–2210.
7. Study on solution properties of binary mixtures of some industrially important solvents with cyclohexylamine and cyclohexanone at 298.15 K. Int J Thermophys; 2010, 31, 535–545
8. Densities and viscosities of citric acid in aqueous cetrimonium bromide solutions with reference to the manifestation of solvation. J. Chem. Eng. Data; 2011, 56, 3285–3290
9. Molecular interactions of 1,2-dihydroxyethyl-3,4-dihydroxyfuran-2-one in aqueous N-cetyl-N,N,N-trimethyl ammonium bromide solutions with reference to manifestation of solvation. J. Chem. Thermodynamics; 2012, 45, 1–8
10. Volumetric, viscometric and acoustic studies of ternary systems of tetrahydrofuran+ 1,3-dioxolane with monoalkanoic acids and their corresponding binaries. Physics and Chemistry of Liquids; 2012, 5( 5), 557-578
11. Study on solution-solution interactions prevailing in some liquid mixtures by volumetric, viscometric and acoustic measurements. Physics and Chemistry of Liquids; 2014, 52(1), 55-77
12. Studies of solvation behavior of Lil prevailing in diverse solvent systems conductometrically and spectrometrically supported by ab-initio technique. Accepted in Chemical Physics Letter, DOI: <http://dx.doi.org/10.1016/j.cplett.2017.01.003>
13. Quantum mechanical study of some biological important quorum sensing inhibitors in different solvent media Accepted in International Journal of Pharmaceutical & Biological Archive.
14. Environmental Hazardous- A threat to children and it's prevention ISBN: 978-81-86359-65-6, 2018, The Banaras Marcantile Company Publisher; Book Seller and Explorer.

**Participation in academic seminar/ conference/workshop (Annexure-II):**

1. Sixth CSRI (Kolkata chapter) symposium -2008, Deptt. of chemistry, NBU
2. 45<sup>th</sup> Annual convention of chemists 2008 and International conference on recent advances in chemistry, Indian chemical society
3. Trends in surface science and related areas (TSSRA) V-2008, Deptt. of chemistry, NBU
4. Science academic education programmes-2015, Deptt. of chemistry, UGB
5. Exploring chemistry for the development of North Bengal-2016, Deptt. of chemistry, RGU
6. Recent developments in chemistry-2016, Deptt. of chemistry, Kaliyaganj College
7. International symposium on chemistry for the human welfare-2017, Deptt. of chemistry, UGB

8. Frontiers in chemistry-2017, Deptt. of chemistry, NBU
9. National seminar chemical science horizon-2017, Deptt. of chemistry, RGU
10. Science academic lecture workshop o some modern aspects on chemistry-2017, Deptt. of chemistry, Gangarampur College
11. National seminar on "Role of scientific advancement towards sustainable developments-2017, Deptt. of chemistry, Balurghat College
12. State level seminar on women and leadership: research, theory and practice-2017, Balurghat College
13. UGC sponsored 30<sup>th</sup> Orientation Programme, HRDC, NBU
14. Science academic lecture workshop on new light in the horizon of chemistry-2018, Deptt. of chemistry, Kaliyaganj College

**Other responsibilities:**

1. Project evaluator of 22<sup>nd</sup> National child science congress-2014
2. Subject expert for the selection PG teacher-2015, Kendriya Vidyalaya, Raiganj, Uttar Dinajpur
3. Judge for model competition of District Students' science fair-2015
4. Project evaluator of 23<sup>rd</sup> National child science congress-2015
5. Project evaluator of 24<sup>th</sup> National child science congress-2016
6. Judge for model competition of District Students' science fair-2016
7. Subject expert for the selection PG teacher-2016, Kendriya Vidyalaya, Raiganj, Uttar Dinajpur
8. Project evaluator of 25<sup>th</sup> National child science congress-2017
9. Project evaluator of 26<sup>th</sup> National child science congress-2018
10. Subject expert for the selection PG teacher-2018, Kendriya Vidyalaya, Raiganj, Uttar Dinajpur
11. Subject expert and central nominee for personality test of school teacher conducted by WBRSSC-2017