Curriculum Vitae of Professor. (Dr.) Bijoy Krishna Dolui

Name	: Bijoy Krishna Dolui
Date of Birth	: June 12, 1970
Sex	: Male
Nationality	: Indian
Marital Status	: Married
Present Position	: Professor; Dept. of Chemistry, Visva-Bharati
Date of Joining in Visva-Bharati	: **03.05.2001**
Address	: Department of Chemistry Siksha- Bhavana, Visva-Bharati, Santiniketan; Birbhum; PIN-731235 West Bengal, India
Email	: bijoy_dolui@yahoo.co.in
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Education:

1. **B.Sc. (Honours)**: 1992, Vidyasagar University; Subject: Chemistry; **First Class (60.25%)**.

2. **M.Sc.**: 1994, Vidyasagar University; Subject: Chemistry (Specialization: Inorganic Chemistry); **First Class (62.5%)**.

3. **Ph.D.(Highest Qualification)**: 2005, Jadavpur University; Subject: Chemistry, Thesis Title: *"Ion-solvent Interaction in Isodielectric solvent mixtures of Protic Ethylene Glycol and Dipolar Aprotic N,N-Dimethyl Formamide"*

Fellowships:

1. GATE Qualified; 1995
2. NET (CSIR-JRF) Qualified; 1996

Employment Details:

1. Lecturer in Chemistry: 27.05.2000 – 02.05.2001, Raiganj Govt. Polytechnic College; Govt. of West Bengal; Uttar Dinajpur; West Bengal, India; 03.05.2001– 03.07.2005; Department of Chemistry; Visva-Bharati, Santiniketan.
2. Senior Lecturer: 04.07.2005 – 26.05.2009, Department of Chemistry, Visva-Bharati, Santiniketan.
3. Reader: 27.05.2009 – 26.05.2012, Department of Chemistry, Visva-Bharati, Santiniketan..
4. Associate Professor: From 27.05.2012 - 26.05.2015, Department of Chemistry, Visva-Bharati, Santiniketan.
5. Professor: From 27.05.2015---till date, Department of Chemistry, Visva-Bharati, Santiniketan.

Teaching Experience:

1. Post Graduate Level: 25 years.
2. Undergraduate Level: 25 years

Courses Taught:

1. **Ph.D. Level (Course Work)**: Organo-metallic Chemistry (Carbenes and carbynes)
2. **Post Graduate Level**: Organo-metallic Chemistry (Alkenes, alkynes, allyls, butadienes, cyclo pentadienes, arenes, cycloheptatrienes, COT; Carbenes and carbynes-Metal complexes); Photochemistry (General and Inorganic); Environmental Chemistry; Practical classes.
3. **Undergraduate Level**: VBT and MOT of chemical bonding; Periodic properties; Chemistry of S and P block elements; Atomic structure; Practical classes; For **Five Years Integrated Science and research Course:** Developed concepts of M O T.

<u>Research Fields:</u> Solution chemistry of Biomolecules

Ph.D. Students Supervised:

1. *Sanjay Roy, Awarded in 2014; Thesis Title: "Transfer Energetics of a series of Homologous α-amino acids in some aquo-organic Binary Solvent mixtures"*
2. *Kalachand Mahali , Awarded in 2014, Thesis Title: "Transfer Energetics of a series of Homologous α-amino acids in binary mixtures of some non-aqueous Solvent systems"*
3. *Samiran Mondal (N R G Fellow), Awarded in 2019;Thesis Title: "Evaluation and correlation of solubility and solvation energetics of some biomolecules in aquo-ionic binary solvent mixtures"*
4. *Srabani Ghosh (VB-Non-NET, RET Qualified Fellow), Awarded in 2020; Thesis Title: "Transfer energetics of some DNA and RNA bases in binary aquo organic solvent mixtures"*
5. *Soumen Saha (NET Qualified) Awarded in 2022; Thesis Title: "*Mode of Interactions of Some Biomolecules in binary aqueous non-ionic and ionic solvent mixtures"

Ph.D. Students under Supervision:

1. *Dushila Subba (NET and SET Qualified)*
2. *Sumana Mete (VB-Non-NET, RET Qualified Fellow)*
3. *Bipasha Saha (NET Qualified)*
4. *Debajyoti Halder (VB-Non-NET, RET Qualified Fellow)*
5. *Smruti Pragnya Pani (VB-Non-NET, RET Qualified Fellow)*
6. *Salim Akter (NET Qualified)*

Student Placement

Dr.Kalachand Mahali is an Assistant professor in chemistry of the University of Kalyani, W.B. India.

Dr. Sanjay Roy is Professor in chemistry of Netaji Subhas Open University, Kalyani, Nadia, W.B. India.

Dr. Samiran Mondal is undergoing Post-Ph.D research works.

Dr. Srabani Ghosh is an assistant Teacher in Chemistry in

an H.S., School.

Dr. Soumen Saha is an assistant Teacher in Chemistry in an H.S., School.

Dushila Subba is an Assistant professor in chemistry of Shibpur Dinabandhu Institution (College) W.B. India.

Sumana Mete is an Assistant professor (SACT) in chemistry of Durgapur Women's College; W.B. India.

Training courses attended:

One orientation and two refresher courses had been completed, besides these one Short term programme on "Disaster Management", of one week duration , from March 09-16, 2013; UGC Academic Staff College, The Burdwan University, W. B.; India, has been attended

Participation in Seminars:

1. Science Academies' Education Programmes, Lecturer Workshop on 'Recent Developments in Chemistry, organized by Indian National Science Academy, New Delhi, held in the Dept. of Chemistry, Visva-Bharati, on and from 29.11.2012 to 01.12.2012.
2. 50^{th} Annual Convention of Chemists 2013 held at the Dept. of Chemistry nd Centre for Advanced Studies in Chemistry, Punjab University, Chandigarh during December 04.07.2013.
3. All India Science Conference of Breakthrough Science Society held in Bangalore on 17-19 October, 2014.
4. Science Academies' Education Programmes, Lecturer Workshop on 'Recent Trends in Chemistry, organized by Indian National Science Academy, New Delhi, held in the Dept. of Chemistry, Visva-Bharati, on and from 13.03. 2015 to 14.03.2015.
5. National Conference on "Integrating Science with Society", organized by

Breakthrough Science Society, held in Jadavpur University on and from 15-16 December, 2018.

M. Sc. Student Project Supervised: Total-38

Supervision of Dissertation (Master's level)

Sl. No.	Title	Session	Name of the Students
1.	Chemical thermodynamics of DL-Alanine in aqueous mixture of cationophilic dipolar aprotic N,N-dimethyl formamide.	2010-11	Siddhartha Dutta
2.	Chemical transfer energetics of glycine in aqueous mixture of cationophilic dipolar aprotic N,N-dimethyl formamide.	2010-11	Kajal Mandal
3.	Thermodynamic solvation of α-amino butyric acid in aqueous mixture of cationophilic dipolar aprotic N, N-Dimethyl Formamide.	2011-12	Sirin Akhter
4.	Thermodynamic studies of solvation of DL-Nor-Valine in aqueous mixture of cationophilic dipolar aprotic N, N-Dimethyl Formamide.	2012-13	Rana Chatterjee
5.	Thermodynamic solvation of DL-Alanine in aqueous mixture of cationophilic dipolar aprotic N, N-Dimethyl Formamide.	2012-13	Mithun Mondal
6.	Thermodynamic studies related to the solvation chemistry of DL-α-Amino butyric acid in aqueous solution of sodium chloride.	2013-14	Manilal Murmu
7.	Effect of $NaNO_3$ on solubility of DL-Alanine and related thermodynamic parameters.	2013-14	Rajendraprasad Mondal (M. Sc. Student of Vidyasagar University to perform Summer Internship)
8.	Solubility of α-amino butyric acid in water and in aqueous $NaNO_3$ solution in different temperatures and related thermodynamic parameters.	2013-14	Subhamoy Pal (M. Sc. Student of Vidyasagar University to perform Summer Internship)
9.	Transfer Gibbs free energies of DL-Phenylalanine from aqueous solution to	2014-15	Yen Soren

	aqueous $NaNO_3$ solution at 298.15K.		
10.	Study of the Solubility and Transfer Thermodynamics of D,L-Serine in Aqueous Sodium Nitrate Solutions.	2014-15	Santu Ghosh
11.	Solubility of DL-Serine and DL-Phenylalanine in aqueous Mixtures of Dimethyl Sulfoxide and solvation thermodynamics.	2014-15	Aslam Hossain
12.	Comparative study of solubilities and transfer energies of DL-Phenylalanine in aqueous Ethylene Glycol and N,N-dimethylformamide at 298.15K.	2015-16	Debajyoti Haldar
13.	Comparative studies on solubility and thermodynamic properties of DL-Phenylalanine and DL-Serine in aqueous ethylene Glycol solution at 298.15 K	2015-16	Dushila Subba
14.	Solvation thermodynamics of DL-Tyrosine in aqueous dipolar aprotic acetonitrile system.	2016-17	Pratiti Pal
15.	Transfer energetics of L-Histidine in aqueous dipolar aprotic acetonitrile solution at 298.15K	2016-17	Bapan Samanta
16.	Comparative solubilities and transfer energies of DL-Phenylalanine in aqueous Aprotic dipolar Acetonitrile and aqueous Dimethylsulphoxide at 298.15K.	2016-17	Subhasis Mal
17.	Solvation thermodynamics of L-Proline in aqueous dipolar aprotic DMF system.	2017-18	Sujata Roy
18.	Thermodynamics study of L-Glutamic acid in aqueous mixtures of Dipolar Aprotic Acetonitrile at 298.15K.	2017-18	Anuprava Saha
19.	Comparative study on solubility and thermodynamic properties of L-Histidine and DL-Serine in aqueous Ethylene Glycol solution at 298.15K.	2018-19	Supriyo Haldar
20.	Thermodynamic study of L-Tryptophan in aqueous mixtures of dipolar aprotic dimethyl formamide at 298.15K.	2018-19	Sharmistha Das
21.	Solubilities and stability of L-Glutamic acid and DL- α-amino butyric acid in aqueous KCl solution at 298.15K.	2019-20	Suman Ghosh
22.	Chemical thermodynamics of L-Cystine in aqueous mixtures of dipolar aprotic dimethyl formamide at 298.15K.	2019-20	Md. Munir Mollah

23.	Solvation Phenomena of DL-Tyrosine, DL-Leucine, DL-Isoleucine and DL-Threonine in aqueous binary mixtures of dipolar aprotic Acetonitrile.	2020-21	Trishnendu Roy (From Rahara Ramkrishna Mission to perform Summer Internship)
24.	A review on Peptides.	2020-21	Shreyasi Saha
25.	A Review on Nucleic Acid Bases	2020-21	Subhendu Saha
26.	A Review on Amino Acids	2020-21	Amit Ghosh
27.	Nano materials: A review on methods of synthesis, properties, unique features, and future prospect.	2021-22	Biswajit Majee
28.	A review on amino acids.	2021-22	Arijit Singha Mahapatra
29.	Fluoride and arsenic contamination in drinking water and their removal techniques.	2021-22	Gourav Adhya
30.	Solvation thermodynamics of L-Leucine in aqueous $Mg(NO_3)_2$ solution at 298.15K.	2022-23	Arup Biswas (From Sabitribai Phule Pune University to perform Summer Internship)
31.	Transfer energetics of Adenine and Uracil in aqueous mixtures of Magnesium sulphate at 298.15K.	2022-23	Subhadip Karmakar
32.	Solvation thermodynamics of L-isoleucine in binary aqueous $Zn(NO_3)_2$ solvent mixtures at three equidistant temperatures.	2022-23	Sumi Das
33.	Solvation study of DL-Phenylalanine in aqueous magnesium nitrate solution at 298.15 K.	2022-23	Aisha Afrin
34.	Solvation study of L-Glutamic acid in aqueous $Mg(NO_3)_2.6H_2O$ solution at 298.15K.	2023-24	Tanoy Kanti Panja
35.	Catalytic water oxidation by using earth abundant transition metal complexes.	2024-25	Sourish Chatterjee
36.	Review on the solubility of nucleic acid bases in different binary solvent mixtures at different temperature and the insight into the solution thermodynamics.	2024-25	Mamoni Mandal
37.	A Review on Solvation of aromatic amino acids in the pure and binary solvent mixtures.	2024-25	Salma Sultana
38.	Use of metal complexes in medicinal chemistry.	2024-25	Debolina Paul

Lectures Delivered:

1. National Seminar on the development of modern technology: A catalysis for the advancement of science; 22-23rd February, 2014; BIET, Suri, Birbhum, W. B.; India; Title: *"Study of solvation process of a series of homologous α-amino acids in non-aqueous mixtures of protic ethylene glycol and protophilic dipolar aprotic DMSO",*
2. International Conference on Environmental Biology and Ecological Modeling, February 24 – 26, 2014, Dept. of Zoology, Visva-Bharati, Birbhum, W. B.; India; Title: "*Introduction of Ecological imbalance in the aquatic ecosystem due to stratospheric Ozone depletion: A Review"*
3. National Seminar on "Recent Advances in Chemistry", 9th March, 2014; Dept. of Chemistry, Visva-Bharati, Santiniketan, Birbhum, W. B.; India; Title: "Solvation mechanism of L-Histidine in aquo-organic Mixtures of protic glycerol at 298.15K"
4. International Conference on Nonlinear dynamics and its application in physical and biological sciences; November 01-03, 2014; Dept. of Physics, Darjeeling Govt. College, Darjeeling-734101, W. B.; India; Title: "*Solvation thermodynamics of a series of homologous α-amino acids in some aquo-organic binary solvent mixtures".*
5. UGC-sponsored National Conference on Chemistry for better tomorrow-current trends and opportunity, CBT-2014; December 2-3, 2014, Department of Chemistry, Sidhu-Kanhu-Birsha University; Purulia, W. B. India; Title: "*Chemical transfer energetic of a series of homologous α-amino acids in quasi-aprotic 2-methoxyethanol-water mixtures"*.
6. National Symposium on "Chemistry and its interface with other scientific disciplines, 12th December, 2014, Department of Chemistry, Sitananda College, Nandigram; W. B. India; Title: "Histidine induced solvation in aqueous mixtures of $NaNO_3$".
7. National Conference on Modern Chemistry, An interdisciplinary science; January 19, 2015; Department of Chemistry, Nistarini College; Purulia, W. B. India; Title: "*Solvation thermodynamics of DL-Norvaline in aqueous NaCl and KCl solutions".*
8. International Conference on 'Innovative application of chemistry in pharmacology and technology'; February 6-8, 2015; P G Dept. of Chemistry, Berrhampur University, Odisha, India; Title: "*Solubility and thermodynamics of salvation characteristics of the interactions of DL-Alanine and DL-Serine in aqueous NaCl and KCl solutions".*
9. National Seminar on multifunctional polymer materials; POLY-2015; February 14-15, 2015; Prof. Sukumar Maity Polymer award Foundation in collaboration with Dept. of Chemistry, Visva-Bharati, Birbhum, W. B.; India; Title: "Solubility and *thermodynamics of solvation of DL-Serine in aqueous NaCl and KCl solutions".*
10. National Seminar on "Advanced Spectroscopy, theoretical chemistry, synthesis, reactivity and structural evaluation" on February 19-21, 2015; Dept. of Chemistry, Burdwan University, W. B.; India; Title: "Solvation *thermodynamics of DL-Alanine and DL-Valine in aqueous NaCl and KCl solutions".*

11. UGC-SAP Sponsored National Symposium on Recent Advances in Chemistry Research, Organized by the Dept. of Chemistry, Visva-Bharati on 04 March, 2016.

Membership of Professional and Science Societies:

1. Indian Association for the Cultivation of Science (Life Member).
2.. Breakthrough Science Society (Life Member).

Reviewing Activities:

1. Reviewer, *Journal of Chemical and Engineering Data (ACS)*
2. Reviewer, *Journal of Industrial Chemistry(ACS)*
3. Reviewer, *Journal of Molecular Liquids(Elsevier)*
4. Reviewer, *Journal of Solution Chemistry(Springer)*
5. Reviewer, Asian *Journal of Chemistry*
6. Reviewer, *R S C Advances*
7. Reviewer, *Journal of Biophysical Chemistry*
8. Reviewer, *Indian Journal of Chemistry*
9. Reviewer, *Journal of the Indian Chemical Society*
10. Reviewer, *Journal of Chinese Chemical Society*

Appreciation:

1. Certificate of Appreciation for Valuable Contribution and Dedicated Service in the Peer Review of Manuscripts Submitted to the *American Chemical Society* and Elsevier Journals.

Present Areas of Research Interests:

1. Solvation behavior of nucleobases in aquo-ionic and aquo-nonionic binary solvent mixtures.
2. Solvation thermodynamics of amino acids and peptides in aquo-ionic and aquo-nonionic binary solvent mixtures.

Research Publications

Published papers: Total	**55**
Research Papers in International Journals:	**48**
Research Papers in National Journals:	**06**
Book Chapter:	**01**
Paper Communicated:	**03**
Paper to be Communicated:	**15**

Publications:

List of Publications:

1. "Synthesis and spectral characterization of lead(II), silver(I), palladium(II) and dioxouranium(VI) azoimidazole complexes". P Chottopadhyay, **Bijoy Krishna Dolui** and C Sinha* Indian Journal of Chemistry, 36A, 1997, 429-432, http://nopr.niscair.res.in/handle/123456789/40831
2. "Single-ion transfer Gibbs energies in binary mixtures of isodielectric protic ethylene glycol and dipolar aprotic N, N-dimethyl formamide". **Bijoy Krishna Dolui**, S K Bhattacharya and K K Kundu*; Indian Journal of Chemistry, 45A, 2006, 2607-2614, http://nopr.niscair.res.in/handle/123456789/17997
3. "Autoprotolysis constants of ethylene glycol in isodielectric mixtures of ethylene glycol and N, N-dimethyl formamide at 298.15K and the related Gibbs energies of transfer". **Bijoy Krishna Dolui,** S K Bhattacharya and K K Kundu*; Indian Journal of Chemistry, 46A, 2007, 1081-1089, http://nopr.niscair.res.in/handle/123456789/1218
4. "Solvent effect on Deprotonation Equilibria of Acids of Various Charge Types in Non-aqueous Isodielectric Mixtures of Protic Ethylene glycol and Dipolar Aprotic N, N-dimethyl formamide at 298.15K". **Bijoy Krishna Dolui**, S K Bhattacharya and K K Kundu*; Journal of Solution Chemistry, 37(7), 2008, 987-1003, DOI 10.1007/s10953-008-9281-3
5. "Single-ion transfer entropies in binary mixtures of isodielectric protic ethylene glycol and dipolar aprotic N, N-dimethyl formamide vis-à-vis 3D structuredness of aqueous co-solvents". **Bijoy Krishna Dolui**, S K Bhattacharya and K K

Kundu*; Indian Journal of Chemistry, 48A, 2009, 504-511, http://nopr.niscair.res.in/handle/123456789/3904

6. **"**Thermodynamic Studies of Solvation of a Series of Homologous α-Amino Acids in Aqueous Mixtures of Protic Ethylene Glycol at 298.15K"; S. Roy, K. Mahali and **Bijoy Krishna Dolui**[*]., Biochemistry, An Indian Journal, 3(2), 2009, 63-68, Trade Science Inc./ publisher@tsijournals.com

7. "Transfer Entropies of solvation of a Series of Homologous α-Amino Acids in Aqueous Mixtures of Protic Ethylene Glycol"; S. Roy, K. Mahali and **Bijoy Krishna Dolui**[*], Biochemistry, An Indian Journal, 4(2), **2010**,71-76, Trade Science Inc./ publisher@tsijournals.com

8. "Thermodynamic solvation of a Series of Homologous α-Amino Acids in Non-aqueous Mixture of Ethylene Glycol and *N, N*-Dimethyl formamide"; K. Mahali, S. Roy and **Bijoy Krishna Dolui**[*], Journal of Biophysical Chemistry, Vol-2, No-3, **2011**, 185-193, doi:10.4236/jboc.2011.23022
9. "Solvation Thermodynamics of a Series of Homologous α- Amino Acids in Non-aqueous Binary Mixtures of Protic Ethylene Glycol and Dipolar Aprotic Acetonitrile"; K. Mahali, S. Roy, **Bijoy Krishna Dolui**[*]**.** Journal of Solution Chemistry, 42, , **2013,** 1096-1110, DOI 10.1007/s10953-013-0005-y

10. "Thermodynamic Solvation of α-Amino Butyric Acid in Aqueous Mixture of Dipolar Aprotic *N, N*– Dimethyl formamide"; S. Roy, K. Mahali, S. Akhter, and **Bijoy Krishna Dolui**[*]; Asian Journal of Chemistry, 25(12), **2013,** 6661-6665, www.asianjournalofchemistry.co.in
11. "Thermodynamic Interactions Due to Transfer of Amino Acids, Glycine and DL-Alanine in Aqueous Mixture of Cationophilic Dipolar Aprotic N, N– dimethyl Formamide; S.Roy, K. Mahali and **Bijoy Krishna Dolui**[*]**,** Asian Journal of Chemistry, 25(14), **2013**, 8037-8042, www.asianjournalofchemistry.co.in
12. "Thermodynamic Solvation of a Series of Homologous α- Amino Acids in Aqueous Mixtures of 1, 2-dimethoxymethane"; S. Roy, K. Mahali and **Bijoy Krishna Dolui**[*]**,** Journal of Solution Chemistry, 42(7), **2013**,1472-1487, DOI 10.1007/s10953-013-0046-2

13. "Solvation Chemistry of DL-Nor-Valine in Aqueous Mixture of Dipolar aprotic N, N–Dimethyl-formamide", K. Mahali, S. Roy and **Bijoy Krishna Dolui**[*]**,** Journal of Chinese Chemical Society, 61, 2014, 659-664, www.jccs.wiley-vch.de
14. "Solvation mechanism of DL-nor-Valine in aqueous mixtures of protophilic dipolar aprotic Dimethylsulfoxide", S. Roy, K. Mahali and **Bijoy Krishna Dolui**[*]**,** International journal of Chemical and Pharmaceutical Sciences; 5(1), 2014,11-19, www.ijcps.com

15. "Transfer free energies for solvation of amino acid, L-Histidine in aqueous mixtures of Protic Glycerol at 298.15 K". S. Roy, K. Mahali and **Bijoy Krishna Dolui*,** International journal of Chemical and Pharmaceutical Research, 3(2), 2014, 470-476, www.ijcpr.net
16. "Role of Glycine as a '3D-structure' maker in aqueous mixture of protophilic dipolar aprotic Dimethyl Sulphoxide". S. Roy, K. Mahali and **Bijoy Krishna Dolui*.** J. Chem. Pherm. Res. Vol. 6(5), 2014, 780-790, *www.jocpr.com*
17. "Comparative chemical transfer Gibbs free energy related to solvation of amino acid, L-Histidine in aqueous mixtures of N,N-Dimethylformamide and Protic Glycerol at 298.15 K"**,** S**.** Roy, K. Mahali and **Bijoy Krishna Dolui*** International Journal of Chemistry and Pharmaceutical Sciences, 2(7) 2014, 953-960, www.pharmaresearchlibrary.com/ijcps
18. "Thermodynamic Studies Related to the Solvation Chemistry of Dl-α -Amino Butyric Acid in Aqueous Solution of Sodium Chloride", S. Roy, K. Mahali, M. Murmu and **Bijoy Krishna Dolui*** International Journal of Chemical and Physical Sciences, 3(4), 2014, 29-42, *www.ijcps.org*
19. "Thermodynamics of solvation of DL-α-amino butyric acid in aqueous dimethyl sulfoxide at 298.15 K", S. Roy, K. Mahali, S. Mondal and **Bijoy Krishna Dolui*,** Physical Chemistry: An Indian Journal, 9(8), 2014, 273-282, Trade Science Inc.
20. "Thermodynamics of DL-alanine Solvation in Water-dimethylsulfoxide Mixtures at 298.15 K", S. Roy, K. Mahali, S. Mondal, and **Bijoy Krishna Dolui***, Russian Journal of Physical Chemistry A, Vol. 89, No. 4, **2015**, 654–662. DOI: 10.1134/S00360244150400226

21. "Physico-Chemical Studies of DL-Alanine in Aqueous Sodium Nitrate Solution", S.Roy, K. Mahali, S. Mondal, R. P. Mondal and **Bijoy Krishna Dolui***; Russian Journal of General Chemistry, 85(1) **2015**,162–167. DOI:10.1131/S10700363215010284
22. "Solubility of α-amino butyric acid in water-$NaNO_3$ mixture and analysis of related thermodynamic parameters", S. Roy, K. Mahali, S. Pal, S.Mondal, **Bijoy Krishna Dolui*** , Analytical Chemistry: An Indian Journal; 15(2),**2015,** 65-73. Trade Science Inc.

23. "Thermodynamics and Mechanisms of Glycine Solvation in Aqueous NaCl and KCl Solutions at 298.15 K", S. Roy, A. Hossain , K. Mahali, and **Bijoy Krishna Dolui*** ,, Russian Journal of Physical Chemistry A, 89 (11), 2015, 2111-2119. DOI: 10.1134/S0036024415110151

24. "Solubility and Solvation thermodynamics of a series of homologous α-amino acids in Nonaqueous binary mixtures of Ethylene glycol and Dimethyl sulfoxide" ,Kalachand Mahali, Sanjay Roy, and **Bijoy Krishna Dolui***, Journal of Chemical Engineering Data, 60, **2015,** 1233-1241, DOI:10.1021/je5007899

25. "Solubility and Solvation Thermodynamics of DL-nor-valine in aqueous Solutions of NaCl and KCl ", Sanjay Roy, Partha Sarathi Guin and **Bijoy Krishna Dolui***, Journal of Molecular Liquid, 211, 2015, 294–300 http://dx.doi.org/10.1016/j.molliq.2015.07.030
26. "Solubility and Chemical Thermodynamics of D,L-Alanine and D,L-Serine in Aqueous NaCl and KCl Solution", Sanjay Roy, Aslam Hossain and **Bijoy Krishna Dolui*** Journal of Chemical Engineering Data, 61, 2016, 132-141, DOI:10.1021/acs.jced.5b00351
27. "The chemical stability of L-Isoleucine, L-Threonine, and L-Serine in aqueous solutions of KCl at 298.15 K" Sanjay Roy *and* **Bijoy Krishna Dolui*** Russian Journal of Physical Chemistry A, 90(6), 2016, 1175-1180, DOI: 10.1134/S0036024416060224
28. "Thermodynamics of DL-α-Amino butyric acid induced solvation Mechanism in aqueous Potassium Chloride Solution at 298.15-308.15K", S. Mondal , S. Ghosh , A. Hossain , , K. Mahali , S. Roy* and **Bijoy Krishna Dolui***, Russian Journal of Physical Chemistry A; 90(9), 2016, 1798-1805, DOI: 10.1134/S003602441609020X

29. "Solubility of DL-Serine and DL-Phenylalanine in aqueous Mixtures of Dimethyl Sulfoxide and solvation thermodynamics"Aslam Hossain, Sanjay Roy, Srabani Ghosh, Samiran Mondal and **Bijoy Krishna Dolui*** R S C Advances,5, 2015, 69839-69847, DOI:10.1039/c5ra12403d

30. "Study of the Solubility and Transfer Thermodynamics of D,L-Phenylalanine in Aqueous Sodium Chloride and D,L-Serine in Aqueous Sodium Nitrate Solutions"; Samiran Mondal, Sanjay Roy, Srabani Ghosh, Kalachand Mahali, **Bijoy Krishna Dolui***; Journal of Solution Chemistry; 45, 2016, 1755-1772, DOI 10.1007/s10953-016-0527-1
31. "Amino acid solubility under the influence of NaCl at 298.15K"; Sanjay Roy*, Partha Sarathi Guin , Kalachand Mahali, **Bijoy Krishna Dolui*** ; Journal of Molecular Liquids; 218, 2016, 316-318. http://dx.doi.org/10.1016/j.molliq.2016.02.054
32. "Comparative study on solubility of Glycine, DL-alanine, DL-nor-valine and DL-serine in aqueous solutions of NaF and KF at 298.15 K"; Sanjay Roy, Kalachand Mahali, **Bijoy Krishna Dolui*** , Journal of Molecular Liquids; 219, 2016, 815-819. http://dx.doi.org/10.1016/j.molliq.2016.03.081
33. "Chemical Transfer Energetics of a Series of Homologous α- Amino Acids in Quasi-aprotic 2-Methoxyethanol-Water Mixtures", S. Roy, K. Mahali, **Bijoy Krishna Dolui***; Journal of Solution Chemistry; 45, 2016, 574-590. DOI 10.1007/s10953-016-0456-z

34. "Solubility of Glycine and DL-nor-Valine in aqueous solution of $NaNO_3$ and KNO_3 and measurements of transfer thermodynamics"; Sanjay Roy*, Partha Sarathi Guin, Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui *** .Journal of Molecular Liquids; 222, 2016, 313-319. http://dx.doi.org/10.1016/j.molliq.2016.07.060
35. "Role of electrolytes in the solubility of L-Proline and its transfer free energetics"; Sanjay Roy*, Partha Sarathi Guin, Kalachand Mahali, **Bijoy Krishna Dolui*** Journal of Molecular Liquids; 223, 2016, 927-933 http://dx.doi.org/10.1016/j.molliq.2016.09.018
36. "Solubility and solute-solvent interactions phenomenon of succinic Acid in Aqueous Ethanol mixtures". Kalachand Mahali, Partha Sarathi Guin, Sanjay Roy* **Bijoy Krishna Dolui *;** Journal of Molecular Liquids; 229, 2017, 172-177, http://dx.doi.org/10.1016/j.molliq.2016.09.018

37. "Effects of Thermodynamics on the Solvation of Amino Acids in the Pure and Binary Mixtures of Solutions: A Review". Aslam Hossain, Sanjay Roy and **Bijoy Krishna Dolui* Journal of Molecular Liquids, 232, 2017, 332-350.** http://dx.doi.org/10.1016/j.molliq.2016.12.042

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Paper Communicated

1. Solvation thermodynamics of Amino acids with hydrophobic and hydrophilic side chains in aqueous mixtures of dipolar aprotic DMSO; Soumen Saha, Srabani Ghosh, Samiran Mondal and **Bijoy Krishna Dolui***
2. Evaluation and correlation of solubility and solvation thermodynamics of some Nucleobases in Aqueous mixtures of dipolar aprotic DMSO; Srabani Ghosh, Soumen Saha and **Bijoy Krishna Dolui***
3. Mode of hydrophilic and hydrophobic interactions of DL- Tyrosine, DL-Leucine, DL- Isoleucine and DL-Threonine in aqueous and aqueous dipolar aprotic DMSO at 298.15K; Soumen Saha, Srabani Ghosh, Samiran Mondal and **Bijoy Krishna Dolui***

Paper to be communicated

1. Effects on solubilities and energetics of Cytosine due to Na^+ and K^+ ions in NaCl and KCl solutions at 298.15K; Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***
2. Effects on solubilities and energetics of Thymine due to Na^+ and K^+ ions in NaCl and KCl solutions at 298.15K; Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***
3. Transfer energetics of L-Histidine in aqueous aprotic acetonitrile solution at 298.15K.; Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***
4. The change of Solubilities and Stability of DL-Alanine due to Cl^- ions and NO_3^- ions in NaCl and $NaNO_3$ solution at 298.15K**;** Samiran Mondal, Srabani Ghosh Soumen Saha and **Bijoy Krishna Dolui***
5. Hydrophilic and hydrophobic interactions on L-Proline in aqueous Dipolar Aprotic N, N-dimethyl formamide binary solvent mixtures.; Samiran Mondal, Srabani Ghosh, Soumen Saha and **Bijoy Krishna Dolui***
6. Comparative study on solubility and thermodynamic properties of L-Histidine and DL-Serine in aqueous Ethylene Glycol solution at 298.15K.; Samiran Mondal and **Bijoy Krishna Dolui***
7. Relative stability of Glycine and DL-α-amino butyric acid due to presence of an excess hydrophobic $-CH_2-CH_2-$ group in aqueous Dimethyl Sulphoxide solution at 298.15K; Samiran Mondal, Srabani Ghosh, Soumen Saha and **Bijoy Krishna Dolui***
8. Chemical stability of DL-Phenylalanine and DL-α-amino butyric acid in aqueous N,N-dimethyl formamide solvent system at 298.15K.; Samiran Mondal, Srabani Ghosh, Soumen Saha and **Bijoy Krishna Dolui***
9. Effects on solubilities and energetics of Adenine due to Na^+ and K^+ ions in NaCl and KCl solutions at 298.15K.; Samiran Mondal, Srabani Ghosh, Soumen Saha and **Bijoy Krishna Dolui***
10. Solvation mechanism of DNA and RNA bases in aqueous mixtures of protophilic Dimethylsulfoxide.; Srabani Ghosh, Samiran Mondal, Soumen Saha and **Bijoy Krishna Dolui***
11. Comparative solubilities and transfer energies of DL-Phenylalanine in aqueous Aprotic dipolar Acetonitrile and aqueous Dimethylsulphoxide at 298.15K; Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***
12. Transfer energetics of L-Tyrosine and L-Histidine in Aqueous dipolar aprotic Acetonitrile Solutions at 298.15K; Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***
13. Comparative study on solubilities and transfer energies of DL-Phenylalanine in aqueous Ethylene Glycol and aqueous N, N-dimethylformamide at 298.15K; Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***
14. Comparative study on solubilities and transfer energies of DL-Phenylalanine in aqueous Ethylene Glycol and aqueous N, N-dimethylformamide at 298.15K; Samiran Mondal, Srabani Ghosh, Debajyoti Halder and **Bijoy Krishna Dolui***
15. Addition to total transfer energetics due to presence of an excess hydrophobic [$–CH_2-$] group on hydrocarbon backbone of DL-α-amino butyric acid.
Samiran Mondal, Srabani Ghosh and **Bijoy Krishna Dolui***