

CURRICULUM - VITAE

NAME : Dr. RANJAN DEY
ACADEMIC QUALIFICATIONS : M. Sc.; D. Phil.; PGDMM(Mktg)
FATHER'S NAME : SRI MIHIR KUMAR DEY
DATE OF BIRTH : 21ST JUNE 1969
NATIONALITY : INDIAN
RELIGION : HINDU
CATEGORY : GENERAL
MARITAL STATUS : MARRIED
ADDRESS FOR CORRESPONDENCE : D-63, BITS-PILANI, GOA CAMPUS,
NH-17 B, BYEPASS ROAD,
ZUARINAGAR- 403726, GOA
PERMANENT ADDRESS : 120 LUKERGANJ, TARA KUTIR ROAD
ALLAHABAD-211001, U.P., INDIA.
PHONE NO. :(0832)2580412(O); 2557025 (R):GOA
(0532)2617406, 2615843 :ALLAHABAD.
E - MAIL : drranjan@hotmail.com

R & D AND TEACHING EXPERIENCE

ASSISTANT PROFESSOR IN BITS-PILANI(Chemistry/ Chem. Engg.), GOA CAMPUS & TAUGHT **P.G. AND U.G. FOR SEVEN YEARS** IN THE DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ALLAHABAD, ALLAHABAD.

RESEARCH PUBLICATIONS [IN INDEXED JOURNALS]

PUBLISHED : **39** COMMUNICATED : **7** (DETAILS IN ANNEXURE)
International : 19 National : 20

ACADEMIC ACHIEVEMENTS (In Sequential Order)

1. D. Phil. : 1997 (University of Allahabad, Allahabad)
D. Phil. Thesis Title : THERMODYNAMIC AND TRANSPORT
:PROPERTIES OF LIQUIDS AND LIQUID
MIXTURES".
2. PGD IN MARKETING : 1997, INDIRA GANDHI NATIONAL OPEN
MANAGEMENT UNIVERISTY (IGNOU).
3. M.Sc.(CHEMISTRY) : 1991, 1st Div, **66%**,UNIVERSITY. OF ALLAHABAD,
(Specialisation in ALLAHABAD.
Physical Chemistry)

RESEARCH AREA / FIELD OF INTEREST

- (1) CHEMICAL THERMODYNAMICS
- (2) CHEMICAL ULTRASONICS, TRANSPORT & THERMO ACOUSTICAL
PROPERTIES OF MULTICOMPONENT LIQUID SYSTEMS
- (3) MOLECULAR INTERACTION STUDIES & EXCESS PROPERTIES
- (4) IPR & CONSUMER BEHAVIOUR AND MARKET RESEARCH.

LANGUAGE FLUENCY (Reading , Writing and Speaking)

(1) ENGLISH (2) HINDI (3) BENGALI

ACADEMIC PARTICULARS:

PROFESSIONAL PARTICULARS

University of Allahabad

Chemistry, M. Sc(Physical).

University of Allahabad

Chemistry, D. Phil.

I I T, Bombay

Short Term Visiting Fellow

(8th Sept – 6th Oct,2004)

Indian Law Institute(Deemed Univ.)

Online course in IPR and IT

New Delhi.

POSTS HELD

01/08/2007 -

- **Assistant Professor , BITS- Pilani, Goa Campus.**

20th Jan2006-31st July 2007

Lecturer in BITS- Pilani, Goa Campus.

1999- 2006(Jan)

Departmental RA (UGC-S A P), permanent post,

Through Selection Committee

Department of Chemistry, University of Allahabad,

Allahabad, India.

1997-1998

Lecturer in FIITJEE, Delhi.

1993-1997

Research Scholar,

Department of Chemistry, University of Allahabad,

Allahabad, India.

TOTAL TEACHING EXPERIENCE :

10 YEARS

TOTAL POST DOCTORAL RESEARCH EXPERIENCE :

12 YEARS

TOTAL RESEARCH EXPERIENCE(INCLUDING Ph. D.) :

15 YEARS

ADMINISTRATIVE EXPERIENCE (IN BITS, GOA CAMPUS)

- (1) ADMISSION & REGISTRATION COMMITTEE OF NEW STUDENTS
- (2) ADMISSION AND REGISTRATION OF OLD STUDENTS.
- (3) MEMBER OF FLYING SQUAD FOR PREVENTION OF RAGGING.
- (4) MEMBER OF RESEARCH ADVISORY COMMITTEE.
- (5) HOSTEL WARDEN

LIST OF PUBLICATIONS

1. Thermodynamic and thermoacoustical parameters of pure liquids at elevated pressures, J D Pandey, N. Tripathi & **R Dey**, *Ind J Phys*, **70B(2)**, 147 (1996).
2. Temperature and pressure dependence of thermoacoustical parameters of liquid argon and krypton, J D Pandey, G P Dubey, **R Dey** & S. N. Dubey, *Acta Acustica*, **83**, 90 (1997).
3. Viscosity of multicomponent liquid systems, J D Pandey, A K Shukla, **R Dey** & V Sanguri, *J Int Acad Phys Sci*, **1-2**, 97 (1997).
4. Non-linearity parameter of multicomponent liquid systems, J D Pandey, **R Dey** & M Upadhyaya, *Acoustic Letters*, **21(6)**, 120 (1997).

5. Study of ultrasonic velocity of binary systems, J D Pandey, **R Dey** & D K Dwivedi, *Pramana - journal of physics*, **52(2)**, 187 (1999).
6. Speed of sound, viscosity & refractive index of multicomponent system: Theoretical predictions from the properties of pure components, J D Pandey, P Jain, V Vyas, G P Dubey, N Tripathi & **R Dey**, *J Mol Liq*, **81**, 123 (1999).
7. Thermodynamic and acoustical parameter of tetracycline and allied compounds in aqueous and water + dioxan solution, J D Pandey, N Hassan & **R Dey** *Acoustic Letters*, **23(6)**, 123(1999).
8. Thermal conductivity of liquids and Flory's statistical theory, J D Pandey & **R Dey**, *Ind J Phys*, **74 A (3)**, 319 (2000).
9. Evaluation of thermal conductivity of binary liquid mixtures, J D Pandey, V Vyas, S Mukherjee & **R Dey**, *Ind J Phys*, **74 A(3)**, 315 (2000).
10. Evaluation of non-linearity parameter at elevated pressures, J D Pandey, J. Chhabra, **R Dey** V Sanguri & R Verma, *Pramana-journal of physics* **55(3)**, 433(2000).
11. Interaction studies of Purine based adenine, its riboside adenine & adenosine triphosphate in aqueous urea solutions, J D Pandey, S Haroon, K K Dubey, M Upadhyaya, **R Dey** & K Mishra, *Canad J Chem*, **78(12)**, 1561(2000).
12. Thermodynamic and thermoacoustical properties of liquid ethanol at varying temperature and pressures, J D Pandey, V Vyas, **R Dey** & D K Dwivedi, *Ind J Chem* **39(A)**, 993(2000).
13. Excess internal pressure and excess pseudo Gruneisen parameter of binary liquid mixtures, J D Pandey and **Ranjan Dey**, *Acoustic Letters*, **24(5)**, 105(2000)
14. Excess functions of multicomponent liquid mixtures, J D Pandey, Richa Verma and **Ranjan Dey**, *Acoustic Letters*, **24(5)**, 94 (2000)
15. Heat of mixing of binary liquid systems deduced from internal pressure data, J D Pandey, N Tripathi, **R Dey** and D K Dwivedi, *Phys Chem Liq*, **39(6)**, 781, (2001).
16. Applicability of thermoacoustical parameters for the computation of available volume in liquid systems, J D Pandey, B D Bhatt and **Ranjan Dey**, *Phys. Chem. Comm.*, **5(6)**, 37 (2002).
17. Effective Debye temperature of liquid metal alloys and molten salt mixtures, **Ranjan Dey**, R K Mishra, N.K. Soni and R C Mittal, *Univ Alld Stud(New Mill. Ser.)*, **2(1)**, 15(2003).
18. Thermodynamic Properties of Multicomponent Liquid Mixtures, J D Pandey, **R Dey** and R Verma, *Phys Chem Liq*, **14(2)**, 145 (2003).
19. Computation of intermolecular free length by application of thermoacoustical parameters for multicomponent liquid mixtures, J D Pandey, **Ranjan Dey** and J. Chhabra, *PhysChemComm* **6(14)**, 55-58, (2003).
20. Excess functions of binary liquid mixtures at varying pressures, J. D. Pandey, N.K. Soni, **R. Dey** and Richa Verma, *Fluid Phase Equil*, **215**, 17-22 (2004)
21. Estimation of molecular radius of liquids and liquid mixtures from sound velocity, J. D. Pandey, **Ranjan Dey** and B. Datt Bhatt, *J Mol Liq*, **111**, 67-71 (2004)
22. Non-linearity parameters, B/A , of pure liquids, J D Pandey, V Sanguri & **R Dey**, *J Int Acad Phys Sci*, **3(1-4)** 101-106(1999).
23. Excess thermodynamic parameters for the Pb - Sn alloy at various composition, J D Pandey, S K Shukla, Jyotsna Chhabra and **Ranjan Dey**, *Ind Chem Soc.* **81**, 962- 964 (2004).

24. Effect of isotopy on Thermoacoustical Properties, J D Pandey, A K Singh and **Ranjan Dey**, *Ind J. of Pure & Appl. Ultrason.*, 26,100-104(2004).
25. Viscosity of multicomponent gas mixtures, J D Pandey, S Mukherjee, M.K. Yadav and **Ranjan Dey**, *Ind Chem Soc*, 82,39-41(2005).
26. Novel Approach for the prediction of Ultrasonic velocity in Quaternary liquid mixtures, J. D. Pandey, A. K. Singh, **Ranjan Dey**, *Pramana*, 64(1)135-139(2005)
27. A comparative study of non-linearity parameter for binary liquid mixtures , J. D. Pandey ,**Ranjan Dey**, Vinay Sanguri, Jyotsna Chhabra and T. Nautiyal, *Pramana-journal of physics*,65(3),535-540(2005)
28. An Ultrasonic Study of Multicomponent Liquid Systems , J. D. Pandey, A. K. Singh and **Ranjan Dey** , *Ind J. Chem Tech.*,12,588-592(2005)
29. Effect of Na⁺, K⁺ and Ca⁺⁺ ions on physicochemical properties of Thymine, Cytosine, Thymidine, and Cytidine in Urea Solutions , J. D. Pandey, Shahla Haroon, Jyotsna Chhabra, **Ranjan Dey** and Krishna Misra, *Chinese J. Chem*, 23,1157-1164(2005)
30. Thermodynamic behaviour of ternary liquid mixtures: application of Flory theory with modified expression of characteristic pressure, J D Pandey, Rajesh Mishra and **Ranjan Dey**, *J Mol Liquids.*,123(1),24-28(2006)Available online
31. A New Theoretical Approach for estimating Excess Internal Pressure, **Ranjan Dey**, A K Singh, and J D Pandey, *J Mol Liq*, 124,1-3,121-123(2006)(online)
32. Thermal Conductivity of Ternary liquid mixtures : Application of modified Flory theory and uniform gaseous state model, **Ranjan Dey**, R K Mishra and J D Pandey, *J Mol Liq*, 124,1-3,102-105(2006)(online).
33. Isotopic Effects on non-linearity , molecular radius and intermolecular free length, **Ranjan Dey**, Arvind K Singh, N. K. Soni, B. S. Bisht and J. D. Pandey, *Pramana -journal of physics.* 67(2),389-394 (2006)
34. Modified Flory theory and pseudo spinodal equation of state for the evaluation of isothermal compressibility, isentropic compressibility, internal pressure and pseudo Grüneisen parameter of binary liquid mixtures at elevated pressure J.D. Pandey, **Ranjan Dey**, N. K. Soni, R. K. Mishra and D. K. Dwivedi , *Ind J Pure & Appl Ultrason* 28, 20-28 (2006)
35. Non-linearity parameter(B/A) of cycloalkanes at varying temperatures and pressures, J D Pandey, **Ranjan Dey** ,V Sanguri, , N.K. Soni B. S. Bisht and M K Yadav, *J Ind Chem Soc* , 83,649-651(2006) .
36. A Temperature dependent Viscometric Studies of Binary Liquid Mixtures, **Ranjan Dey**, A. K. Singh and J. D. Pandey, *Journal of Molecular Liquids*137,88-91(2008).
37. Novel method for prediction of Thermal Conductivity of Binary liquid mixtures, J. D. Pandey, **Ranjan Dey**, N. K. Soni, Prakash Chandra & Manoj K Yadav, *Ind J Chem. Tech*, 14, 638-641(2007).
38. Determination of Kirkwood – Buff integrals of multicomponent liquid systems from the speed of sound, **Ranjan Dey**, Richa Verma, Tanuja Nautiyal ,Nitya K Soni and J D Pandey, *Physics & Chemistry of Liquids*, **In Press**(2008).
39. A study of Pb-Sn alloy at variable elevated temperatures through prediction of ultrasonic velocities, excess parameters & molecular interaction parameter, **Ranjan Dey**, Jyotsna Chhabra , S. K Shukla and J D Pandey, *Ind J Pure & Appl Ultrason* , **In Press** (2008).

- .40. Thermochemical, Sonometric and Viscometric studies of the effect of electrolytes on pyrimidine base Uracil with water and aqueous Urea, **Ranjan Dey** J D Pandey, S Haroon, Satyendra Mishra, and K Misra, Communicated.
41. Ultrasonic and interaction studies of Na^+ , K^+ and Ca^{2+} and Mg^{2+} with D(+) glucose And D(+) Mannose at 303.15 K, **Ranjan Dey**, A K Puri and J D Pandey, Communicated
42. Intermolecular free length and Free Volume of Pure Liquids at Varying Temperatures and Pressures, **Ranjan Dey**, Jyotsna Chhabra, M. K. Yadav and A. K. Shukla, Communicated.
43. Comparative Viscometric Study of a Quinary and its constituent Quaternary systems at varying temperatures, **Ranjan Dey**, Niti Pandey, Tanu Srivastava, Prakash Chandra, Rajput Prashant & J. D. Pandey. Communicated.
44. A study of Thermoacoustical and non-linearity parameters of binary liquid mixtures at different temperatures, **Ranjan Dey** and Pranjal Kumar, Communicated.

TEACHING EXPERIENCE

(In reverse chronological order)

BITS-PILANI, GOA CAMPUS

2008-2009

Semester II : Process Plant Safety & Structure and Properties of Materials

Semester I : Chemical Thermodynamics & Corrosion Engineering

2007-2008 :

Semester II : Chem. Kinetics & Reactor Design; Stuc. & Prop. Of Matter.; MT-II.

Semester I : Chem. Engg. Thermodynamics(Inter) and Chemical Thermodynamics

2006-2007

Semester II: Structure & Prop. Of Materials(Multidisciplinary); Chemical Reaction Engg (Interdisciplinary); Instrumental Methods of Analysis

Semester I: Chem. Engg. Thermodynamics(Inter) and Chemical Thermodynamics

2005-06

(SemesterII): Measurement Techniques-II & Chem. Process Calculations (Inter)

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ALLAHABAD (1998-2006)

2005 -2006

THEORY : B. Sc.I and II(Physical) ; M.Sc.(Final)

PRACTICALS: B. Sc. I and II and M. Sc. (Final & Previous).

2004 - 2005

THEORY : B. Sc. I (Physical) : B. Sc. II (Physical)

M. Sc. (Final)

PRACTICALS : M. Sc.(Final and Prev.); B.Sc. II

2003 - 2004

THEORY : B. Sc. I (Physical);

M.Sc.(Prev.) : Electrolytes ;

M. Sc. (Final) : Irreversible Thermodynamics & Electrolysis

PRACTICALS : B. Sc. IIIrd year

2002 - 2003

THEORY : B. Sc. II (Physical) ;
M.Sc. Final (Irreversible Thermodynamics, Electrolytic
Solutions & Electrolysis and Polarisation)

PRACTICALS : B. Sc. IIIrd year ; M. Sc. (Final)

2001 -2002

THEORY : B. Sc. I (Physical)
M. Sc. Final (Irreversible Thermodynamics, Electrolysis and
Polarisation, Electrolytic Solutions and
Thermodynamics of Biological Systems)

PRACTICALS : B. Sc. IInd and IIIrd year ; M. Sc. (Final)

2000 - 2001

THEORY : B. Sc. I(Physical) ; B. Sc. II(Physical)
M. Sc. Final(Irreversible Thermodynamics & Electrolytic Solutions)

PRACTICALS: B. Sc. I ; B.Sc. II, B.Sc. III and M.Sc. (Prev. and Final)

1999 - 2000

THEORY: B. Sc. I (Physical) ; M. Sc. Previous (Electrolytes)
M. Sc. Final (Irreversible Thermodynamics and Electrolytic Solutions)

PRACTICALS : B. Sc. I , M.Sc. Previous & Final

1998 – 1999

THEORY: M. Sc. Final (Irreversible Thermodynamics) ; PRACTICALS: M.Sc. Final

LECTURES/ WORKSHOPS/SEMINARS / VISITS ORGANIZED

1. ORGANIZED LECTURE SERIES ON CORROSION ENGINEERING BY PROF. A. S. KHANNA, IIT-BOMBAY, AN EMINENT PERSONALITY IN THIS FIELD AT BITS-PILANI, GOA CAMPUS FROM 17TH – 21ST OCTOBER 2008.
2. ORGANIZED PLANT VISIT FOR FINAL YEAR CHEMICAL ENGINEERING(2004) BATCH TO SOLARIS CHEMTEK,BILT AT KARWAR, KARNATAKA.

PROJECTS AT UG / PG LEVEL

S No	Name	Title	Branch	Year
1	Pranjal Kumar ID 2005S2P8640	Thermodynamic & Thermoacoustical Parameters of Liquids and Liquid Mixtures	M. Sc. Chemistry (PG)	2007 (Aug-Dec)
2.	Ashok Mittal ID 2005P1PS347	Thermodynamic & Transport Properties of Liquids and Liquid Mixtures	Chemical Engineering (UG)	2008 (Jan-May)
3.	Pranjal Kumar ID 2005S2P8640	Excess Functions of Binary and Multicomponent Liquid Mixtures	M. Sc. Chemistry (PG)	2008 (Jan-May)

Conferences, Symposium and Workshops

1. Conference of the International Academy of Physical Sciences, Mahatma Gandhi Kashi Vidyapeeth, Varanasi, 14th - 15th, Dec. 1996.
2. Conference of the International Academy of Physical Sciences, G G D U, Bilaspur, 13th - 14th December, 1997.
3. National Conference of Thermophysical Properties, Dept. of Physics, Guwahati University, Gauhati, 11th - 13th March, 1999.
4. Conference of The International Academy of Physical Sciences, University of Allahabad, 18th - 20th December, 1999.
5. National Workshop on Radiochemistry And Application Of Radioisotopes, University of Allahabad, 27th March - 3rd April, 2000.
6. National Symposium on Thermodynamics and Reaction Dynamics, D D U, Gorakhpur University, 23rd March - 25th March, 2003.
7. Royal Society of Chemistry, Western India Section Symposium, I I T - Bombay, 24th - 25th September, 2004.
8. International Seminar on Recent Trends In Applied Bio-Informatics and Medi-Informatics at I I I T- ALlahabad, 6th - 7th November, 2005.
9. International Workshop of Biosensors, Bits-Pilani, Goa Campus, Feb. 20 -23, 2006.
10. 63rd Brns- Iancas National Workshop on Radiochemistry And Applications of Radioisotopes in Science, Bits-Pilani, Goa Campus, Jan. 20-28, 2007.
11. Science Conclave: A Congregation of Nobel Prize Winners- Interaction Meet With Young Scientists/ Students With Nobel, Laureates/ Eminent Scientists, Indian Insitute of Information, Technology-Allahabad, Dec. 15-21,2008.

Membership of Professional Bodies, Societies, etc.

1. International Union of Pure and Applied Chemists (I U P Ac).
2. International Academy of Physical Sciences
3. Indian Chemical Society , Kolkata.