

CURRICULUM VITAE

BIO DATA



NAME: RANJAN DEY, FRSC, FICS, MNASc.
ACADEMIC QUALIFICATIONS: M. Sc.; D. Phil.(Ph.D.); PGDMM (Mktg), Certificate Course in IPR.
Ph.D. UNIVERSITY OF ALLAHABAD (1997)
DESIGNATION: PROFESSOR, CHEMISTRY, BITS PILANI , K K BIRLA GOA CAMPUS
& VISITING ASSOC. PROF. AT NTUST, TAIPEI, TAIWAN.
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URL: <https://www.bits-pilani.ac.in/goa/ranjan-dey>
<https://scholar.google.co.in/citations?user=aaYibisAAAAJ&hl=en>

RESEARCH AND TEACHING EXPERIENCE:

- 25 PLUS YEARS OF P.G. / U.G. TEACHING & 20 YEARS OF RESEARCH (POST Ph.D.)
- TWENTY PLUS INVITED TALKS; TWO INVITED LECTURE SERIES; SEVERAL KEYNOTES
- TAUGHT SUMMER TERM COURSE IN JUNE – JULY 2016 AT NTUST, TAIPEI, TAIWAN.
- ASSOCIATE EDITOR IN EDITORIAL BOARD OF FRONTIERS IN CHEMISTRY- PCCP.
- REVIEWER OF MORE THAN 10 INTERNATIONAL JOURNALS.
- Ph.D.: 4 AWARDED; 4 Ongoing. 1 POST-DOC.

CURRENT AREAS OF RESEARCH:

- a) Thermodynamic, Excess & Transport Properties of Liquid Mixtures.
- b) Prediction of Thermophysical and Thermoacoustical properties.
- c) Renewable, New and Non-Conventional Energy; WATER-ENERGY NEXUS.

RESEARCH PUBLICATIONS:

PUBLISHED: 93

UNDER REVISION: 2

COMMUNICATED: 3

<https://www.bits-pilani.ac.in/goa/publications/?faculty=ranjan-dey>

RECENT NOTABLE ACHIEVEMENTS:

- VICE CHANCELLOR'S AWARD FOR THE HIGHLY CITED PAPER IN STEM IN LAST 5 YEARS, FEB 2026.
- ELECTED TO THE INTERNATIONAL STEERING COMMITTEE OF THE INTERNATIONAL CONFERENCE OF SOLUTION CHEMISTRY (ICSC). First Indian to be Elected to this Council.
- PAPER PUBLISHED IN 2023 IS TOP CITED (500+) In JOURNAL OF MOLECULAR LIQUIDS.
- S T NANDIBEWOOR AWARD 2024 FROM INDIAN COUNCIL OF CHEMISTS (ICC) FOR CONTRIBUTION TO TEACHING AND RESEARCH IN CHEMICAL SCIENCES, AT ICC CONFERENCE IN PUNE, DEC 2024.
- BEST TEACHER AWARD, BITS GOA CAMPUS, 2022.
- TEACHING EXCELLENCE AWARD, BITS GOA CAMPUS, SEPT, 2022.
- LEAD ACADEMICS CERTIFICATION FOR EMPOWERING SENIOR ACADEMIC ADMINISTRATORS WITH NEXT LEVEL OF ACADEMIC LEADERSHIP (AUG 2025- JAN 2026).
- OUTSTANDING REVIEWER AWARD FROM JOURNAL OF MOLECULAR LIQUIDS (I.F.- 6.6) AND INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES (I.F. – 6.95) .
- ELECTED TO THE FARADAY COMMUNITY COUNCIL OF THE RSC- JULY 2023.
- ELECTED AS FRSC- FELLOW OF ROYAL SOCIETY OF CHEMISTRY (SINCE 2018).
- JUDGE AND REVIEWER OF CROATIAN SCIENCE FOUNDATION (HRZZ).
- JUDGE AND REVIEWER OF DST AWSAR AWARDS, GOVT. OF INDIA. (2020 -)
- EDITORIAL BOARD MEMBER OF FRONTIERS IN CHEMISTRY- PHYSICAL CHEMISTRY CHEMICAL PHYSICS, FRONTIERS IN PHYSICS.

- ELECTED CORE COMMITTEE MEMBER OF STATISTICAL MECHANICS AND THERMODYNAMICS GROUP (SMTG) OF THE ROYAL SOCIETY OF CHEMISTRY, AUGUST 2022.
- CERTIFICATE OF REVIEWING: JOURNAL OF MOLECULAR LIQUIDS-2022, JOURNAL OF CHEMICAL THERMODYNAMICS-2022, FLUID PHASE EQUILIBRIA- 2022, CHEMICAL THERMODYNAMICS AND THERMAL ANALYSIS, TAIWAN INSTITUTE OF CHEMICAL ENGINEERS(TICE)-2022, CHEMICAL DATA COLLECTIONS- 2019, HELIYON-2020.
- KEYNOTE AT 6th INTERNATIONAL CONFERENCE: THERMAM 2019 & 8TH ROSTOCKER INTERNATIONAL CONFERENCE, CESME, IZMIR, TURKEY, 22ND – 24TH SEPT, 2019. [https:// www.thermam.org/haber—70.html://](https://www.thermam.org/haber—70.html://)
- KEYNOTE ADDRESS ON “BASIC SCIENCES” AT SCIFFI, PANJIM, GOA IN JANUARY 2019.
- ACADEMIC VISITOR IN SUMMER OF 2018 AT DEPARTMENT OF CHEMISTRY, CAMBRIDGE UNIVERSITY, CAMBRIDGE U.K. UNDER MENTORSHIP OF PROF. DAVID WALES.
- BSCA MAANPATRA SAMMAN, ALLAHABAD, INDIA, FOR DISTINCTION IN HIGHER EDUCATION IN APRIL 2017.

INTERNATIONAL KEYNOTES/ INVITED TALKS/SESSIONS CHAIRED

1. INVITED TALK (11/07/2023) at 38th International Conference on Solution Chemistry (38th ICSC-IUPAC), held at **BELGRADE, SERBIA**, 9TH -14TH JULY, 2023.
2. SESSION CHAIR - Lavender Hall(12/07/2023) at the 38th ICSC(38th ICSC-IUPAC), held at **BELGRADE, SERBIA**, 9TH -14TH JULY, 2023. <https://icsc2023.pmf.uns.ac.rs/>
3. SESSION CHAIR for the Statistical Mechanics and Thermodynamics Group(SMTG), Webinar Series Talk by Prof. DAVID J, WALES, FRS, ScD, FRSC, **Royal Society of Chemistry, U.K.**, 15TH February 2023.
4. INVITED TALK AT International Conference on Advanced Materials Science & Engg and High-Tech Devices Applications; Exhibition (**ICMATSE 2022**), October 27-29, 2022, **Ankara, TURKEY**.
5. INVITED TALK at 9th Rostocker International Conference on Thermophysical Properties, THERMAM 2020(Online), **University of Rostock, Rostock, Germany**, 15th October, 2020 .
6. **KEYNOTE at 6th International Conference: Thermophysical and Mechanical Properties of Advanced Materials-THERMAM 2019 & 8TH Rostocker Intl Conf. Thermophysical Properties for Technical Thermodynamics, Cesme, IZMIR, TURKEY**, 22ND – 24TH Sept, 2019. [https:// www.thermam.org/haber—70.html://](https://www.thermam.org/haber—70.html://).
7. Session CHAIR, Second Technical, **THERMAM 2019**, Cesme, Izmir, Turkey, 22nd Sept, 2019.
8. INVITED TALK at Department of Chemistry, **University of Cambridge, Cambridge, U.K.**, 18th June, 2018.
9. INVITED TALK at Theoretical Chemistry Group, **Heidelberg University, Heidelberg, Germany**, 13TH July, 2017.
10. INVITED TALK at Department of Chemical Engineering, **National Taiwan University of Science and Technology (NTUST) Taipei, Taiwan**, 29th June, 2016.
11. INVITED TALK at Chung Yuan Christian University (CYCU), **Taipei, Taiwan**, 5th July ,2016.
12. INVITED TALK at Yuvabharati International School- Singapore, **Singapore** 14th July, 2016.

KEYNOTES IN INTERNATIONAL CONFERENCES IN INDIA

1. KEYNOTE in **International Workshop on Next Gen Solar Desalination and Energy Storage Systems** in ICFTE 2026 , Jan 19th -22nd , 2026, BITS PILANI, PILANI CAMPUS. <https://www.bits-pilani.ac.in/icfte2026/>
2. KEYNOTE “**Encapsulated PCM-based Magnetic Nanoparticles for Optimizing Separation of Industrial Solvents using Solar Energy & Greener Alternatives to Industrial Solvents**” at ICGHET 2026 , held in SRMIST, CHENNAI, 8TH – 10TH JANUARY, 2026.
3. **OPENING KEYNOTE ON “CUTTING EDGE RESEARCH IN BIOCHEMISTRY AND BIOMEDICAL RESEARCH”** at (ICBBR-2024) 19th -20th September, 2024, Goa, India.
4. KEYNOTE- “**MOVING TOWARDS GREENER AND SUSTAINABLE SOLUTIONS**”, at (GSED-2024, in Collaboration with STELLENBOSCH UNIVERSITY and UNIVERISTY OF CAPE TOWN, SOUTH AFRICA at BITS Pilani, Pilani Campus, 26th -28th September, 2024 Sponsored by SPARC, Govt of India.

COLLABORATIONS (INTERNATIONAL):

INTERNATIONAL:

- 1) Prof. KARSTEN MULLER, Lehrstuhl für Technische Thermodynamik, Rostock University, Rostock, Germany.
- 2) PROF. MIHAIELA C. STUPARU: Assistant Professor, NTU, Singapore.
- 3) PROF. TUNDO BELLO OCHENDE, University of Cape Town, South Africa.
- 4) PROF. JOHAN MAYER, Stellenbosch University, South Africa.

BOOKS/ BOOK CHAPTERS/ EDITORIALS

- **SOLAR RENEWABLE ENERGY SYSTEMS: STUDY AND APPLICATIONS WITH PRESENT AND FUTURE POTENTIAL**, *ENERGY SOURCES: ENVIRONMENTAL AND HEALTH PROSPECTS*, SPRINGER NATURE, ISBN 978-981-95-1208-9, 2026. <https://doi.org/10.1007/978-981-95-1209-6>
- **EDITORIAL – FRONTIERS IN CHEMISTRY, PHYSICAL CHEMISTRY CHEMICAL PHYSICS: *Intermolecular Interaction Studies in binary and Higher Order Liquid Mixtures, ionic Liquids and Deep Eutectic Solvents based systems***, MARCH 2025.
<https://www.frontiersin.org/journals/chemistry/articles/10.3389/fchem.2025.1577620/full>
- **MICROBIAL ELECTROCHEMICAL SYSTEMS: RECENT ADVANCES AND FUTURE PROSPECTS**, *BIO CLEAN ENERGY TECHNOLOGIES*-Vol. 2, Chapter 6, pp107-117, *SPRINGER NATURE*, SINGAPORE. **eBook ISBN: 978-981-16-8094-6; Print ISBN : 978-981-16-8093-9**
- **BINARY MIXTURES AND IONIC LIQUIDS: EFFECT OF THERMODYNAMIC AND THERMOPHYSICAL FACTORS - CHAPTER 15**, pp 267-282(2023).: *IONIC LIQUIDS AND THEIR APPLICATIONS IN GREEN CHEMISTRY*: – Elsevier) **ISBN: 9780323959315**.
- **EDITOR-FRONTIERS IN CHEMISTRY: SOLVATION EFFECTS OF ORGANIC REACTIONS IN IONIC LIQUIDS, DEEP EUTECTIC SOLVENTS AND CONVENTIONAL SOLVENTS**.
<https://www.frontiersin.org/articles/10.3389/fchem.2023.1159357> FEBRUARY 2023.

RESOURCE PERSON

1. TWO DAY WORKSHOP FOR HSSC CHEMISTRY TEACHERS ORGANIZED BY GOA BOARD, 2ND -3RD SEPT, 2026.
2. R&D CELL COORDINATORS ORIENTATION PROGRAMME, DEPT OF HIGHER EDUCATION, GOVT. OF GOA, 26TH JUNE 2026, PANJIM GOA.
3. MHRD SPONSORED REFRESHER COURSE - CHEMISTRY IN THE INDIAN KNOWLEDGE SYSTEM, H S GOUR UNIVERSITY, SAGAR, M.P. 12TH – 25TH SEPT, 2023.
4. **“APPLICATIONS OF CHEMISTRY IN ADVANCED TECHNOLOGY”**, Under DBT STAR College Scheme at CMP Degree College, Prayagraj, 4th December, 2021.
5. **“MOLECULAR INTERACTION STUDIES BASED ON SOLUTION THERMODYNAMICS”**, online Refresher Course, H S GOUR University, Sagar, M.P., India. 11th – 25th NOV, 2021.
6. **“SOLUTION THERMODYNAMICS AND ITS APPLICATIONS”**, RESOURCE PERSON AT UGC- MHRD FACULTY DEVELOPMENT PROGRAMME REFRESHER COURSE IN CHEMISTRY-RECENT TRENDS IN CHEMISTRY EDUCATION AND RESEARCH, 23RD NOV – 5TH DEC, 2020, SGB AMRAVATI UNIVERSITY, Maharashtra, India.
7. UGC Sponsored Refresher Course – RECENT ADVANCES IN CHEMISTRY, H S GOUR University, Sagar, 17th – 29th AUG, 2020.
8. RESOURCE PERSON AT NAVAL EDUCATION SOCIETY SCIENCE WORKSHOP, GOA-2017.

RECENT INVITED TALKS

1. **“THERMOPHYSICAL PROPERTIES OF INDUSTRIAL SOLVENTS AND THEIR GREEN ALTERNATIVES”**, 44th Annual National Conference of the Indian Council of Chemists, KLE TECH UNIVERSITY, 22nd -24th December, 2025, Hubballi, Karnataka.
2. **“ENVIRONMENTALLY GREEN AND SUSTAINABLE SOLVENTS OF THE FUTURE”**, 43rd Annual National Conference of the Indian Council of Chemists, PES Modern College, 26th -28th December, 2024, Pune.
3. **“INTERMOLECULAR INTERACTIONS IN DMSO/NMP IN WATER AT VARYING TEMPERATURES”**, 43rd Annual National Conference of the Indian Council of Chemists, PES Modern College, 26th -28th December, 2024, Pune.
4. **“GREEN SOLVENTS OF THE FUTURE”**, at 18th International Congress of Thermal Analysis and Calorimetry (ICTAC 2024) & 14th National Conference of the Indian Thermodynamics Society (ITS), 2nd – 7th September, 2024, IIT MADRAS, Chennai, India.
5. **“SOLUTION THERMODYNAMICS AND ITS APPLICATIONS TO MOLECULAR INTERACTION STUDIES.”**, at DMR PG College, Ponda, Goa, 16th February, 2024.

6. INVITED TALK on “**New Pathways for Predicting Thermophysical Properties for Binary and Multicomponent Liquid Mixtures**” , National Conference on Thermodynamics of Chemical and Biological Systems(NCTCBS-2023), RMT University, Nagpur, 26th -28th October, 2023.
7. “**NOVEL APPROACHES FOR THERMOPHYSICAL PROPERTIES: PREDICTIVE MODELS AND ANN**”, INDIAN INSTITUTE OF INFORMATION AND TECHNOLOGY-ALLAHABAD(IIIT-A), PRAYAGRAJ, 1ST FEBRUARY, 2023.
8. “**NEWLY DEVELOPED EFFECTIVE MODELS FOR VISCOSITY PREDICTION**”, MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY (MNNIT)-ALLAHABAD, 30TH JAN, 2023.
9. “**SIMPLE AND EFFECTIVE APPROACHES FOR VISCOSITY PREDICTION OF BINARY AND HIGHER ORDER LIQUID MIXTURES**”, 41ST INDIAN COUNCIL OF CHEMISTS (ICC) CONFERENCE, AGRA, 27TH -29TH DEC, 2022.
10. “**IDEAL SOLUTIONS AND THEIR PROPERTIES**”, DARUL ULOOM AUTONOMOUS COLLEGE, HYDERABAD, 17TH NOV., 2021.
11. “**THERMODYNAMICS AND ITS ENGINEERING APPLICATIONS**”, DMR PG COLLEGE, MAPUSA, GOA, 28TH OCTOBER, 2021.
12. “**NEWLY DEVELOPED, SIMPLE YET HIGHLY EFFECTIVE APPROACHES FOR PREDICTING THERMOPHYSICAL PROPERTIES**”, IIT- PALAKKAD, 9TH OCTOBER, 2021.

SPONSORED PROJECTS / COMPETITIVE GRANTS

- GSRF GRANT FOR POST DOCTORAL FELLOWSHIP – JAN 2026- : Rs. 16.40 LAKHS
- CDRF PROJECT OF RS. 50 LAKHS (WITH MANPOWER) – SEPT. 2023- 2025 YEARS; PI
- SPARC PHASE 3 PROJECT WITH STELLENBOSCH UNIVERSITY, & University of CAPE TOWN SOUTH AFRICA - APRIL 2024; 24 MONTHS : FUNDING INR 73,20,000/-.
- UNIVERSITY IMMERSION GRANT IN 2018 (COMPETITIVE GRANT) FROM BITS PILANI UNIVERSITY FOR ACADEMIC EXPOSURE IN A WORLD CLASS UNIVERSITY.
- **RESEARCH PROJECT: CSIR, NEW DELHI, INDIA Completed: 30/11/2015**
- **SANCTIONED AMOUNT: 10.3 LAKHS - P I and Sole Investigator**
- INTERIM RESEARCH GRANT OF Rs. 93,650/- IN 2020 BY SRC, BITS GOA.
- CO – PI OF PROJECT FUNDED BY MINISTRY OF FERTILIZERS (2007-2010);
- FUNDING: 70 LAKHS (Rs. 7 MILLION)
- **2 INTERNATIONAL & 2 NATIONAL projects submitted to Funding Agencies for Approval.**

PATENTS FILED / GRANTED

1. Application Number: **202411069613** (14/09/2024) : FILED “**Realtime Seawater Density Prediction Technology (RSDPT)**”
2. Application Number : **202611005380** dated January 19, 2026. “**METHOD AND SYSTEM FOR PREDICTING ICE MELTING RATE USING SEAWATER THERMODYNAMIC PROPERTIES**”
3. A WELLNESS MONITORING AND CASE MANAGEMENT SYSTEM- 202611081147; 01/07/2026

FELLOW/ MEMBER OF PROFESSIONAL BODIES, SOCIETIES, etc.

1. FELLOW, ROYAL SOCIETY OF CHEMISTRY(FRSC), U.K.
2. MEMBER, NATIONAL ACADEMY OF SCIENCES INDIA (NASI) [Life]
3. MEMBER, AMERICAN CHEMICAL SOCIETY.
4. **INDIAN THERMODYNAMICS SOCIETY [Fellow, Life]; MEMBER- EXECUTIVE COMMITTEE**
5. MEMBER – INTERNATIONAL WATER ASSOCIATION (IWA)
5. CHEMICAL RESEARCH SOCIETY OF INDIA (CRSI) [LIFE]
6. FELLOW OF INDIAN CHEMICAL SOCIETY[Life]
7. FARADAY COMMUNITY FOR PHYSICAL CHEMISTRY(RSC) ; STATISTICAL MECHANICS AND THERMODYNAMICS GROUP(SMTG)-RSC

RECENT ACCOMPLISHMENTS BY RESEARCH SCHOLARS

- **Praseeda P Nair** won the Best Poster Award in the **Goa Research Scholars Meet**, organized by DHE and Goa State Higher Education Council, Aug 21-22, 2026.
- **Eshita Kakodkar** was awarded “ACS Materials – Best Poster” in the “International Conference on Green Hydrogen and Energy Technology (ICGHET 2026)” held at SRM Institute of Science and Technology, Kattankulathur, 8th-10th January, 2026.
- **Praseeda P. Nair** was awarded “Springer Poster Award” in the “International Conference on Green Hydrogen and Energy Technology (ICGHET 2026)” held at SRM Institute of Science and Technology, Kattankulathur, from 8th-10th January, 2026.
- **Praseeda P Nair** was awarded “Best Poster Presentation award by Chemical Engineering Journal - Elsevier” in the “Annual Conference of Indian Council of Chemists” held at KLE Technological University-Hubballi, from 22nd-24th December, 2025.
- Front cover published in ‘JOURNAL OF CHEMICAL AND ENGINEERING DATA’ by Eshita Kakodkar and Praseeda P. Nair, September 2025, Volume 70, Issue 9.
- **ADITI PRABHUNE** won the BEST POSTER AWARD in 38TH ICSC, BELGRADE, SERBIA, 2023.
- Paper published by **Aditi Prabhune** titled “Green and Sustainable Solvents of the Future : Deep Eutectic Solvents” PUBLISHED IN 2023 IS TOP CITED (500+) In JOURNAL OF MOLECULAR LIQUIDS.

COURSES TAUGHT:

1. CORE (CHEMISTRY), a. CHEMISTRY I b. CHEMISTRY II c. CHEMISTRY PROJECT LABORATORY, d. MEASUREMENT TECHNIQUES e. PHYSICAL CHEMISTRY (B.Sc. I, II and III) f. GENERAL CHEMISTRY g. CHEMISTRY LABORATORY h. THERMOPHYSICAL PROPERTIES OF LIQUID MIXTURES BITS F382.	2. HIGHER LEVEL a. CHEMICAL THERMODYNAMICS b. NON-EQUILIBRIUM (Irreversible) THERMODYNAMICS c. ELECTROLYSIS AND POLARIZATION d. ELECTROLYTIC SOLUTIONS e. INSTRUMENTAL METHODS OF ANALYSIS f. PHYSICAL CHEMISTRY I (Redesigned Curriculum) g. STATISTICAL THERMODYNAMICS h. ENVIRONMENTAL CHEMISTRY- CHEM G521 (HD LEVEL / PRE Ph.D.) i. ENVIRONMENTAL CHEMISTRY (M.Tech. ENVIRONMENTAL ENGG.) WILP Professionals. j. M. Tech. –SANITATION SCIENCE TECHNOLOGY & MANAGEMENT
5. INTERDISCIPLINARY a. CHEMICAL REACTION ENGINEERING b. CHEMICAL ENGG THERMODYNAMICS c. CHEMICAL PROCESS SAFETY d. CORROSION ENGINEERING	4. Ph.D. COURSES a. PHYSICAL METHODS IN CHEMISTRY. b. RESEARCH PROJECT 1 c. STUDY IN ADVANCED TOPICS d. ADVANCED PHYSICAL CHEMISTRY.
	3. MULTIDISCIPLINARY a. STRUCTURE AND PROPERTIES OF MATERIALS b. ENGINEERING THERMODYNAMICS. c. INTELLECTUAL PROPERTY RIGHTS d. ENVIRONMENTAL SCIENCE

POSTS HELD:

JAN 2025-	ASSOCIATE DEAN- STUDENT WELFARE DIVISION, GOA CAMPUS.
JAN- FEB 2020	ASSOCIATE DEAN- FACULTY AFFAIRS DIVISION
16/01/2014- 31/08/2018	Associate DEAN-Academics & Resources Planning (Goa Campus)
SUMMER 2018	ACADEMIC VISITOR, UNIVERSITY OF CAMBRIDGE
01/07/2016 -30/09/2016	Visiting Associate Professor- NTUST Taipei Taiwan
01/03/2023 -	PROFESSOR - Chemistry, BITS- Pilani, K K Birla Goa Campus

REVIEWER FOR:

1. JCT 2. JCED 3. JACS 4. JML 5. PCCP 6. Front. in Chemistry 7. FPE 8. JSOL 9. SNAS 10. IJBM
11. JTAC 12. ENV POLL 13. CTTA 14. Heliyon 15. CDC 16. TICE 17. SCIREP 18. JINCS 19. IEEE 20. IJP.

ADDITIONAL ACADEMIC ASSIGNMENTS / ENGAGEMENTS

Visiting Associate Professor to NTUST – Taipei, Taiwan, in June-July 2016, taught a graded Summer Course to M.E. Chemical Engineering and Ph.D. scholars a course entitled “Thermodynamic Applications to Electrochemical Systems.” The entire expense for the travel, lodging and boarding was borne by the NTUST.

RECENT PUBLICATIONS

- **Exatecan-Loaded HSA Nanoparticles for Sustained Release and Enhanced Cancer Treatment**, V Krishnaprasad, V Nayak, **Ranjan Dey**, *ACS Omega*, 2026, *IN PRESS*.
- **Thermophysical behaviour and modeling of properties in (ethyl lactate + dimethyl succinate) binary mixture at different temperatures**, Vani Latha S, Narendra K, Kavitha Ch., **Ranjan Dey**, Ariel Hernandez, *Chemical Thermodynamics and Thermal Analysis*, 23(2026)100354. <https://doi.org/10.1016/j.ctta.2026.100354>
- **Thermal performance analysis of phase Change Materials in spherical encapsulation for solar still applications: melting dynamics and heat transfer optimization**, Praseeda P Nair, Sumit Khatri, Tunde Bello-Ochende, **Ranjan Dey**, Srikanta Routray, Suvanjan Bhattacharyya, *Energy Conservation and Management*, 253(2026)121071. <https://doi.org/10.1016/j.enconman.2026.121071>,
- **Thermophysical Properties of Organic Solvents with Sunflower and Olive Oils at 298.15K**, Amrita Natekar Vetrekar and **Ranjan Dey**, *Chemical Thermodynamics and Thermal Analysis*, 22(2026)100312. <https://doi.org/10.1016/j.ctta.2026.100312>.
- **Deciphering the specific Molecular Interactions for N, N -Dimethylacetamide with Water at varying temperature employing thermophysical and FTIR analysis**, Rolee Verma, Sanjay Kumar, **Ranjan Dey**, *Journal of Molecular Liquids*, 439 (2025) 128826 . <https://doi.org/10.1016/j.molliq.2025.128826>.
- **Intermolecular Interactions studies in binary and higher order liquid mixtures, ionic liquids and deep eutectic solvent based systems**, **Ranjan Dey**, *Frontiers in Chemistry*, 2025. <https://doi.org/10.3389/fchem.2025.1577620>
- **Theoretical and experimental study of molecular interaction between Propylene Glycol and Ether alcohols**, Subhasri Ganji, Ariel Hernandez, T S Krishna , **Ranjan Dey**, D. Ramachandran, *Chemical Thermodynamics and Thermal Analysis*, 209, 100213(2025). <https://doi.org/10.1016/j.ctta.2025.100213>
- **A Multifaceted analysis of Physicochemical properties and molecular interactions in DES mixtures**, Arun Upamanyu, Monika Dhiman, **Ranjan Dey**, D. P. Singh, K.C. Juglan, *Journal of Molecular Liquids*, 425, 128142(2025). <https://doi.org/10.1016/j.molliq.2025.128142>.
- **Molecular Interactions Studies of Dimethyl Sulfoxide, N-Methyl-2-pyrrolidone, and Water Binary Mixtures at Varying Temperatures: Volumetric and Spectroscopic Investigations**, Praseeda P. Nair, Aditi Prabhune, Sanjay Kumar, and **Ranjan Dey**, *Journal of Chemical Engineering Data*, 2025, 70, 2645–2655. <https://doi.org/10.1021/acs.jced.5c00049>.
- **Intermolecular Interactions in a Ternary Mixture of Industrial Solvents (N-Methyl-2-Pyrrolidone + Dimethyl Sulfoxide + Water) Using Spectroscopic and Volumetric Analysis**, Praseeda P. Nair, Eshita Raghunath Kakodkar, Suvanjan Bhattacharyya, and **Ranjan Dey**, *Journal of Chemical Engineering Data*, 2025, 2025 70 (9), 3516-3526; <https://doi.org/10.1021/acs.jced.5c00183>.
- **Thermodynamic Properties of Surface Seawater for Sustainability in Estuarine Systems**, Nisha Dholakiya, **Ranjan Dey**, Anirban Roy, *Journal of Chemical Engineering Data, J. Chem. Eng. Data* 2025, 70, 5, 1891–1906. <https://doi.org/10.1021/acs.jced.4c00722>

- Thermodynamic and transport properties of binary mixtures containing 1,2-propanediol with 2-methoxyethanol and 2-ethoxyethanol at different temperatures, Subhasri Ganji , T.S. Krishna , D. Venkatesan , **Ranjan Dey** , D. Ramachandran, *Journal of Chemical Thermodynamics*, 201 (2025) 107396.
<https://doi.org/10.1016/j.jct.2024.107396>.

RESEARCH PAPERS PRESENTED IN CONFERENCES, SYMPOSIUM AND WORKSHOPS (2013-till date)

INTERNATIONAL

Sr. No.	Name of conference	Place	Title of Presentation	Date
1	THERMAM 2020	ROSTOCK, GERMANY (Webinar)	MODIFIED HIND UBBELOHDE APPROACH	15 th OCT 2020
2	THERMAM 2019	CESME , IZMIR , TURKEY	KEYNOTE	SEPT 22 ND -24 TH ,2019,
3	THERMAM 2017 organized by Institute of Technical Thermodynamics Rostock University, in collaboration with ATU, Baku, Azerbaijan and Dokul Eylul University, Turkey	Institute of Technical Thermodynamics, Rostock University, Germany	NOVEL APPROACHES FOR VISCOMETRIC PREDICTION OF BINARY AND HIGHER ORDER LIQUID MIXTURES.	17 th – 18 th JULY, 2017
4	19 th Symposium on Thermophysical Properties organized by University of Colorado, Boulder in collaboration with NIST and AIChE -ASME.	Colorado University, Boulder, Colorado, USA.	TRANSPORT, OPTICAL, INTERFACIAL AND THERMODYNAMIC PROPERTIES OF BINARY AND TERNARY LIQUID MIXTURES	20 th – 26 th June 2015

INTERNATIONAL AND NATIONAL CONFERENCES IN INDIA (2013-2017)

Sr. No	Name of conference	Place	Title of Presentation	Date
1	INT. CONFERENCE ON EMERGING TRENDS IN MICRO TO NANO (ETMN-2013)	BITS PILANI K K BIRLA GOA CAMPUS	Local Organizing Committee	23 RD -24 TH FEB, 2013
2	INT. CONF. ON EMERGING TRENDS IN CHEMICAL SCIENCES (ICETCS)-2013	CENTRAL UNIV. OF GUJARAT, GANDHINAGAR	Thermodynamic multicomponent liquid mixtures	14 TH –15 TH MARCH, 2013
3	MID YEAR SYMPOSIUM-CRSI	NIT – K SURATHKAL, KARNATAKA	Temperature mixtures	12 TH -13 TH JULY, 2013
4	ICC 32 nd ANNUAL CONFERENCE	KARNATAKA UNIV., DHARWAD	Study of properties .. temperature	28 TH -30 TH NOV, 2013
5	83 RD ANNUAL SESSION OF Natl. Acad. Sciences India (NASI)	GOA UNIV., GOA	A study of..... different temp.	4 TH -6 TH DEC. 2013
6	RSC Symposium	IIT- Bombay		6 th Feb, 2014
7	NSC-CRSI Conference	IIT- Bombay	Study of....liq. mixtures.	7 th -9 th Jan 2014
8	TCBNES-2014	S P Univ, Anand GUJARAT	Thermodynamic....temperatures	17 th -18 th Oct 2014
9	International Symposium on Ultrasonics (ISU – 2015)	Nagpur University, Nagpur, Maharashtra.	Thermophysical and excess mixtures	22 nd – 24 th Jan 2015.
10.	Royal Society of Chemistry Symposium and NSC-CRSI Conference	NCL, Pune, India	Comparative study amines at three temperatures	5 th – 8 th Feb, 2015
11.	New Frontiers in Chemistry- From Fundamentals to Applications NFCFA, Dept of Chemistry, BITS Pilani Goa Campus with RSC	BITS Pilani K K Birla Goa Campus	ONE ORAL and two posters	18 th - 19 th December ,2015

12.	INDO UK WORKSHOP ON ADVANCED MATERIALS AND NANOTECHNOLOGY (AMAN-2016)	BITS Pilani K K Birla Goa Campus	Local Organizing committee	11th-12th Jan, 2016.
13.	RSC RESEARCH SCHOLARS MEET	BITS Pilani K K Birla Goa Campus	Gold Medal (Res scholar) for Best paper	NOV 2016
14.	NFCFA 2017, Department of Chemistry, BITS Pilani Goa Campus in association with RSC	BITS Pilani K K Birla Goa Campus	ONE ORAL AND 3 POSTERS	27TH -28TH JAN 2017

ADMINISTRATIVE EXPERIENCE (BITS-PILANI, GOA CAMPUS)

1. Chairperson – Disciplinary Committee : Jan 2025 - .
2. Member – Examination Sub Committee – Jan 2025 - .
3. Convener – Campus Level Mental Health and Well Being Monitoring Committee (MHWBMC)- March 2026 -
4. Convener- Department Committee of Academics (DCA- Chemistry), July 2022- 24. Member : 2025-
5. Committee Member – Sports Activity Center(SAC) , July 2022- 3 years.
6. Member NAAC Advisory Committee – April 2023 ~.
7. Member IQAC Committee- Goa Campus (April 2023-)
8. Associate Dean (Acting) Faculty Affairs: Jan – Feb 2020.
9. Associate Dean - Academics & Resources Planning, Goa Campus (2014- 2018).
10. Faculty Coordinator- Mess Committee: 2009 – 2016.
11. Member: Faculty Grievance Committee: 2020 – 2022.
12. Member Department Short Listing Committee: 2013 – Till date.
13. Admission & registration committee of new & old students
14. Member of flying squad for prevention of ragging.
15. Member of doctoral advisory committee.
16. Convocation core committee member since 2010.
17. Hostel warden (2007-2015 December)
18. Headed a sub-committee for administrative procedures under internal quality assessment cell (IQAC, 2009-2012)
19. Coordinator for hostel allotment for 2009, 2010, 2011.
20. Faculty Coordinator for **MATRIX** (Mind & Thought in Rapid Information Exchange) club [Jan 2010 - 2014].
21. Coordinator of goa campus in 2013 for golden jubilee celebrations of BITS Pilani University (2013-14). Handled funds of Rs. 33 lakhs (Rs. 3.3million) for various events.
22. Coordinator/Convener for student faculty council (SFC) [2015 –till date]

SHORT TERM COURSES/ SEMINARS/ WORKSHOPS/ VISITS ORGANIZED

- **ORGANIZED ROYAL SOCIETY OF CHEMISTRY- INDIAN DECCAN LOCAL SECTION (RSC-IDLS) WORKSHOP ON NAVIGATING CHEMICAL SCIENCES IN ASSOCIATION WITH GOVT COLLEGE KHANDOLA, 17TH JULY,2026 AT BITS PILANI K K BIRLA GOA CAMPUS.**
- **ORGANIZING COMMITTEE (CONVENER) – INTL CONFERENCE ON THERMAL AND FLUID ENGG IN COLLABORATION IN UNIVERSITY OF CAPE TOWN, STELLENBOSCH UNIVERSITY, SOUTH AFRICA, JAN 19-21, 2026, BITS PILANI , PILANI CAMPUS.**

- **ORGANIZING COMMITTEE MEMBER OF THE INTERNATIONAL CONFERENCE ON FUNCTIONAL NANO MATERIALS (ICFNA-2024) HELD AT BITS PILANI K K BIRLA GOA CAMPUS (16TH -18TH NOV, 2024) WITH DCT's DHEMPE COLLEGE, GOA.**
- **JOINT ORGANIZING SECRETARY, INTERNATIONAL WORKSHOP ON GREEN ENERGY AND SUSTAINABLE DEVELOPMENT, BITS PILANI, PILANI, 26TH-28TH SEPTEMBER, 2024.**
 - 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.
 - Organized lectures on HAZOP/HAZAN (Process Plant Safety) for final year Chemical Engg. Students (2009) by Dr. K. Ponnani, EX DGM, R&D, Chemical Engineering Division, IPCL.
 - Organized plant visit for final year Chemical Engineering (2004) batch to SOLARIS CHEMTEK, BILT at Karwar, Karnataka in October 2007.
 - Organized plant visit for students of process plant safety to BHARAT GAS, Verna, Goa Industrial Development Corporation on 17th April 2010.