

CURRICULUM VITAE of PANNUR VENKATESU



Present Address:

Dr. P. VENKATESU

Department of Chemistry

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Personal Data

Date of Birth: June 14, 1966

Nationality: Indian

Marital Status: Married; One daughter and one son

Education

Ph. D. : Physical Chemistry, October, 1995 Thesis entitled,
A Study in Thermodynamic and Physical Properties of Non- Electrolyte Solutions, Sri Venkateswara University, Tirupati - 517 502, **India**.

M. Sc. : Chemistry, First Class, 65%, 1989
Sri Venkateswara University, Tirupati - 517 502, India.

B. Sc. : Chemistry, Mathematics & Physics, First Class, 64%, 1987
Sri Venkateswara University, Tirupati - 517 502, India.

Research Interest

- ❖ **Protein folding / unfolding in Presence of co-solvents (osmolytes, denaturants and Ionic Liquids (ILs)).**
- ❖ **Thermodynamic and physicochemical properties of novel class of liquids (ILs) and liquid mixtures.**
- ❖ **Effect of polymer chain or IL in coexisting liquid phases.**

Currently, I have been working in the area of protein stabilization by naturally occurring osmolytes (such as proline, trimethylamine N-oxide (TMAO), sarcosine, sucrose and urea) and ionic liquids (ILs), a class of environmental friendly solvents, which are used in a wide range of industrial and incredible applications, using the isothermal titration calorimeter (ITC), density meter, differential scanning calorimeter (DSC) and dynamic

light scattering (DLS), circular dichroism (CD), fluorescence spectroscopy and UV-VIS spectrophotometer.

Research Experience: Total period: 16 years and 10 Months

- ❖ **Since April, 2008** working as Assistant Professor, Department of Chemistry, **University of Delhi**, Delhi, India.
- ❖ 3 years 10 months as a Post-Doctoral Fellow with **Professor Ming-Jer Lee**, Department of Chemical Engineering, **NTUST**, Taipei, **Taiwan**, (From May 2004 to March 2008).
- ❖ One Year as Post-Doctoral Fellow with **Professor Ki Wing To**, Institute of Physics, Academia Sinica, **Taipei, Taiwan** (from May 2003 to April 2004).
- ❖ One year as Post-Doctoral Fellow with **Professor D. W. Bolen**, Department of Human Biological Chemistry, The University of Texas Medical Branch (UTMB), **Galveston, TX, USA** (February 2002 to February 2003).
- ❖ One Year as Post-Doctoral Fellow with **Professor Ming-Jer Lee**, Department of Chemical Engineering, **NTUST**, Taipei, **Taiwan**, (From January 2001 to January 2002).
- ❖ Seven Months as Post-Doctoral Fellow with **Professor U. Domanska**, Department of Chemistry, Warsaw University of Technology, 00-664 Warsaw, **Poland** (from October 1997 to April 1998).
- ❖ 4 Years 5 months as **CSIR** Research Associate with **Professor M. V. P. Rao**, Department of Chemistry, Sri Venkateswara University, Tirupati- 517 502, **India** (from January 1995 to September 1997 and from May 1 to January 2000).

On going Research Projects

- ❖ **Project title:** *High molecular weight polymer behavior in coexisting liquid phases* by **Department of Science and Technology (DST)**, New Delhi, **India**, **April 2009 (3 years)**; Amount of Grant: **35 Lakhs**.
- ❖ **Project title:** *Protein folding/unfolding by the addition of co-solvents* by Council of Scientific & Industrial Research (CSIR), New Delhi, **India**, **November, 2009 (3 years)**; Amount of Grant: **21 Lakhs**.
- ❖ **Project title:** *Polymer behavior in coexisting liquid phases and Protein folding/unfolding* by DU/DST – Purse Grant, University of Delhi, Delhi, **December 2009 (3 years)**; Amount of Grant: **10 Lakhs**.

- ❖ **Project title:** *Effect of polymer chain in the critical region of coexisting liquid phases by University Grant Commission (UGC), New Delhi, India, (3 years);*
Amount of Grant: **6 Lakhs.**

Research Publications: Total Research Papers: 100 (Please see the list of publications for details)

1. *International: 92 (One Chemical Reviews 2012; Including a single author papers in J. Phys. Chem. B, 2006, 110, 7339-17346 and J. Chem. Phys., 2005, 123, 024902-024910 and Review in Fluid Phase Equilibria, 2010, 298, 173-191;).*
2. *National : 08*

Academic Honors

1. Best Research paper presentation award received from Global Science and Technology Forum (GSTF), 1st Annual **International Conference on Chemistry, Chemical Engineering and Chemical Process (CCECP-2013)**, Hotel Fort Canning, **Singapore, 25-26 February, 2013.**
2. **Dr. Arvind Kumar memorial award** received from **Indian Council of Chemists**, India, December, 2011.
3. Best paper presentation award by UGC-SAP sponsored National symposium on recent trends in chemical sciences, **Aligarh Muslim University, Aligarh, 2010.**
4. Fast Track Young Scientist project awarded by **Department of Science and Technology (DST)**, New Delhi, **India, September 2006.**
5. Research Associateship awarded by **Council of Scientific and Industrial Research (CSIR)**, New Delhi, **India**, January 1995.
6. University Merit Fellowship, September, 1990.

Memberships in Scientific Bodies:

- ❖ Member in **American Chemical Society**
- ❖ Member in **Royal Society of Chemistry**
- ❖ Life member in **Chemical Research Society of India**
- ❖ Life member in **Indian Chemical Society**
- ❖ Life member and **Executive Member** in **Indian Thermodynamics Society**
- ❖ Life member in **Indian Science Congress**
- ❖ Life member in **Indian Biophysical Society**
- ❖ Life member in **Indian Society for Surface Science and Technology**

- ❖ Life member in **Indian Council of Chemists**
- ❖ Life member in **Ultrasonics Society of India**
- ❖ Life member in **Society of Biological Chemists (INDIA)**

Editorial Board Member:

- ❖ **Member of the Advisory Board of the Journal of Chemical Thermodynamics.**

Research Supervision

- ❖ M. Phil : 01 awarded
- ❖ Ph. D : 02 (awarded); 01 student Submitted)
04 (students are working).

List of Publications (Citation: Over 670; h-index = 19)

1. Awanish Kumar and **P. Venkatesu**
Overview of the stability of α -chymotrypsin in different solvent media
Chemical Reviews, **2012**, 112, 4283-4307, *ISI Impact Factor: 40.197*.
2. Pankaj Attri and **P. Venkatesu**
Exploring the thermal stability of α -chymotrypsin in protic ionic liquids
Process Biochemistry, **2013**, 48, 462-470 *ISI Impact Factor: 2.627*
3. V. Govinda, P. M. Reddy, I. Bahadur, P. Attri, P. Venkatesu and P. Venkateswarlu
Effect of anion variation on the thermophysical properties of triethylammonium based protic ionic liquids with polar solvent,
Thermochimica Acta **2013**, 556, 75-88, *ISI Impact Factor: 2.020*.
4. P. M. Reddy, M. Taha, A. Kumar, **P. Venkatesu** and M. J. Lee
Interruption of hydration state of thermoresponsive polymer, poly(N-isopropylacrylamide) in guanidinium hydrochloride
Polymer, **2013**, 54, 791-797, *ISI Impact Factor: 3.438*.
5. Awanish Kumar and **P. Venkatesu**
Prevention of Insulin Self-aggregation by Protic Ionic Liquid
RSC Advances (Communication) **2013**, 3, 362-367.
6. V. Govinda, P. M. Reddy, Pankaj Attri, **P. Venkatesu** and P. Venkateswarlu
Influence of anion on thermophysical properties of ionic liquids with polar solvent
J. Chem. Thermodynamics **2013**, 58, 269-278. *ISI Impact Factor: 2.794*.
7. T. Vasantha, P. Attri, **P. Venkatesu**, R. S. Rama Devi

- Structural Basis for the Enhanced Stability of Protein Model Compounds and Peptide Backbone Unit in Ammonium Ionic Liquids
Journal of Physical Chemistry B **2012**, *116*, 11968-11978, **ISI Impact Factor: 3.696.**
8. Pankaj Attri, **P. Venkatesu** and Anil Kumar
Water and a protic ionic liquid acted as refolding additives for chemically denatured enzymes
Organic & Biomolecular Chemistry (Communication), **2012**, *10*, 7475-7478, **Highlighted on Cover page, ISI Impact Factor: 3.696.**
 9. Awanish Kumar, P. M. Reddy and **P. Venkatesu**
Effect of structural variations in cation of ionic liquids on the coexistence curve of isobutyric acid and water
New Journal of Chemistry, **2012**, *36*, 2266-2279, **ISI Impact Factor: 2.605.**
 10. T. Kavitha, Pankaj Attri, **P. Venkatesu**, R. S. Rama Devi and T. Hofman
Influence of Alkyl Chain Length and Temperature on Thermophysical Properties of Ammonium Based Ionic Liquids and Molecular Solvent
Journal of Physical Chemistry B **2012**, *116*, 4561- 4574. **ISI Impact Factor: 3.696.**
 11. T. Vasantha, A. Kumar, Pankaj Attri, **P. Venkatesu**, R. S. Ramadevi
Influence of biocompatible ammonium ionic liquids on the solubility of L-alanine and L-valine in water
Fluid Phase Equilibria, **2012**, *335*, 39-45, **ISI Impact Factor: 2.197.**
 12. T. Vasantha, Pankaj Attri, **P. Venkatesu**, R. S. Ramadevi
Ammonium based ionic liquids act as compatible solvents for glycine peptides
J. Chem. Thermodynamics **2013**, *56*, 21-31. **ISI Impact Factor: 2.794.**
 13. T. Kavitha, Pankaj Attri, **P. Venkatesu**, R. S. Rama Devi and T. Hofman
Influence of temperature on thermophysical properties of ammonium ionic liquids with N-methyl-2-pyrrolidone
Thermochimica Acta **2012**, *545*, 131-140. **ISI Impact Factor: 2.020.**
 14. P. M. Reddy, M. Taha, A. Kumar, **P. Venkatesu** and M. J. Lee
Destruction of hydrogen bonds of poly(N-isopropylacrylamide) aqueous solution by trimethylamine N-oxide
J. Chem. Phys. **2012**, *136*, 234904-234914. **ISI Impact Factor: 3.333.**
 15. Awanish Kumar, P. M. Reddy and **P. Venkatesu**
Polyacrylic acid polymer modulates the UCST - type phase behavior of ionic liquid and water
RSC Advances **2012**, *2*, 6939-6947.
 16. Pankaj Attri and **P. Venkatesu**
Influence of Protic Ionic Liquids on the Structure and Stability of Succinylated Con A
International Journal of Biological Macromolecules, **2012**, *51*, 119-128. **ISI Impact Factor: 2.608**

17. P. Attri, **P. Venkatesu**, N. Kaushik and E. H. Choi,
TMAO and sorbitol attenuate the deleterious action of atmospheric-pressure non-thermal plasma jet on α -Chymotrypsin
RSC Advances **2012**, 2, 7146-7155.
18. T. Kavitha, Pankaj Attri, **P. Venkatesu**, R. S. Rama Devi and T. Hofman
Temperature dependence measurements and molecular interactions for ammonium ionic liquid with N-methyl-2-pyrrolidone
J. Chem. Thermodynamics **2012**, 54, 223-237, *ISI Impact Factor: 2.794*.
19. Pankaj Attri and **P. Venkatesu**
Ammonium ionic liquids as convenient co-solvents for the structure and stability of succinylated con A
J. Chem. Thermodynamics **2012**, 52, 78-88 *ISI Impact Factor: 2.794*.
20. P. Attri, **P. Venkatesu**, N. Kaushik, Y. G. Han, C. J. Nam, E. H. Choi, K.S. Kim
Effects of atmospheric-pressure non-thermal plasma jets on enzyme solutions
J. Korean Phys. Society, **2012**, 60, 956-964. *ISI Impact Factor: 1.050*
21. Awanish Kumar, Pankaj Attri, **P. Venkatesu**
Effect of polyols on the native structure of α -chymotrypsin: A comparable study
Thermochimica Acta **2012**, 536, 55-62 *ISI Impact Factor: 2.020*.
22. P. Madhusudhana Reddy and **P. Venkatesu**
Influence of polymer molecular weight and concentration on coexistence curve of isobutyric acid + water
Journal of Physical Chemistry B **2011**, 115, 12065-12075. *ISI Impact Factor: 3.603*
23. T. Vasantha, Pankaj Attri, **P. Venkatesu**, R. S. Ramadevi
Thermodynamic contributions of peptide backbone unit from water to biocompatible ionic liquids at T=298.15 K
J. Chem. Thermodynamics **2012**, 45, 122-136. *ISI Impact Factor: 2.794*.
24. V. Govinda, Pankaj Attri, **P. Venkatesu** and P. Venkateswarlu
Temperature effect on the molecular interactions between two ammonium ionic liquids and dimethylsulfoxide
Journal of Molecular Liquids **2011**, 164, 218-225. *ISI Impact Factor: 1.649*.
25. Pankaj Attri and **P. Venkatesu**
Refolding of urea-induced denaturation of model proteins by trimethylamine N-oxide
Thermochimica Acta **2011**, 526, 143-150. *ISI Impact Factor: 2.020*.
26. Pankaj Attri, **P. Venkatesu** and T. Hofman
Temperature dependence measurements and structural characterization of trimethyl ammonium ionic liquid with a highly polar solvent
Journal of Physical Chemistry B **2011**, 115, 10086-10097.
ISI Impact Factor: 3.603

27. Pankaj Attri, **P. Venkatesu**, Anil Kumar and Nolen Byrne
A protic ionic liquid attenuates the deleterious actions of urea on α -chymotrypsin
Physical Chemistry Chemical Physics (Communication) **2011**, *13*, 17023-17026.
ISI Impact Factor: 4.116.

28. P. Madhusudhana Reddy, K. Sivakumar and **P. Venkatesu**
Densities and ultrasonic studies for binary mixtures of tetrahydrofuran with chlorobenzenes, chlorotoluenes and nitrotoluenes at 298.15 K
Fluid Phase Equilibria, **2011**, *310*, 74-81. **ISI Impact Factor: 2.253.**

29. P. Madhusudhana Reddy and **P. Venkatesu**
Ionic Liquid Modifies the Lower Critical Solution Temperature (LCST) of Poly(*N*-isopropylacrylamide) in Aqueous Solution
Journal of Physical Chemistry B, **2011**, *115*, 4752-4757.
ISI Impact Factor: 3.471.

30. V. Govinda, Pankaj Attri, **P. Venkatesu** and P. Venkateswarlu
Thermophysical properties of dimethylsulfoxide with ionic liquids at various temperatures
Fluid Phase Equilibria, **2011**, *304*, 35-43.
ISI Impact Factor: 2.253.

31. Pankaj Attri and **P. Venkatesu**
Thermodynamic characterization of the biocompatible ionic liquid effects on protein model compounds and their functional groups
Physical Chemistry Chemical Physics, **2011**, *13*, 6566-6575
ISI Impact Factor: 4.116.

32. Pankaj Attri, **P. Venkatesu** and Anil Kumar
Activity and stability of α -chymotrypsin in biocompatible ionic liquids: enzyme refolding by triethyl ammonium acetate
Physical Chemistry Chemical Physics, **2011**, *13*, 2788-2796.
ISI Impact Factor: 4.116.

33. **P. Venkatesu**
Review: Thermophysical contribution of *N,N*-Dimethylformamide in the molecular interactions with other solvents.
Fluid Phase Equilibria, **2010**, *298*, 173-191.
ISI Impact Factor: 2.253.

34. Pankaj Attri, **P. Venkatesu** and Anil Kumar
Temperature effect on the molecular interactions between ammonium ionic liquids and *N,N*-dimethylformamide.
Journal of Physical Chemistry B. **2010**, *114*, 13415-13425.
ISI Impact Factor: 3.471.

35. Awanish Kumar, Pankaj Attri, **P. Venkatesu**

- Trehalose protects urea-induced unfolding of α -chymotrypsin.
International Journal of Biological Macromolecules **2010**, 47, 540-545.
ISI Impact Factor: 2.336.
36. Pankaj Attri, P. M. Reddy, **P. Venkatesu**, Anil Kumar and T. Hofman
 Measurements and molecular interactions for N,N-dimethylformamide with ionic liquid mixed solvents.
Journal of Physical Chemistry B **2010**, 114, 6126-6133.
ISI Impact Factor: 3.471.
 37. Pankaj Attri, Reddy, P. M, **P. Venkatesu**
 Density and ultrasonic sound speed measurements for N,N-dimethylformamide with ionic liquids.
Indian Journal of Chemistry **2010**, 49A, 736-742.
ISI Impact Factor: 0.617.
 38. Pankaj Attri, **P. Venkatesu** and M. J. Lee
 The influence of osmolytes and denaturants on the structure and enzyme activity of α -chymotrypsin
Journal of Physical Chemistry B **2010**, 114, 1471-1478.
ISI Impact Factor: 3.417.
 39. P. G. Kumari, **P. Venkatesu**, T. Hofman and M. V. Prabhaka Rao
 Excess molar enthalpies and vapor liquid equilibrium for N-methyl-2-pyrrolidone with ketones
J. Chem. Eng. Data **2010**, 55, 69-73.
ISI Impact Factor: 1.700
 40. **P. Venkatesu**, M. J. Lee and H. M. Lin
 Counteracting effects of trimethylamine N-oxide and betaine on the interactions of urea with zwitterionic glycine peptides
Thermochimica Acta, **2009**, 491, 20-28.
ISI Impact Factor: 1.742.
 41. **P. Venkatesu**, M. J. Lee and H. M. Lin
 Osmolyte counteracts urea-induced denaturation of α -chymotrypsin
Journal of Physical Chemistry B, **2009**, 113, 5327-5338.
ISI Impact Factor: 3.471.
 42. P. G. Kumari, **P. Venkatesu**, M.V. P. Rao, M. J. Lee and H. M. Lin
 Excess molar volumes and ultrasonic studies of N-methyl-2-pyrrolidone with ketones at T = 303.15 K
J. Chem. Thermodynamics, **2009**, 41, 586-590.
ISI Impact Factor: 1.906.
 43. P. G. Kumari, **P. Venkatesu**, C. T. Hsieh, M.V. P. Rao, M. J. Lee and H. M. Lin

Isobaric vapor-liquid equilibrium for N-methyl-2-pyrrolidone with branched alcohols.
J. Chem. Thermodynamics **2009**, 41, 184-188.
ISI Impact Factor: 1.906.

44. **P. Venkatesu**, M. J. Lee and H. M. Lin
Effect of osmolyte or GdnHCl on volumetric properties of aqueous solutions containing cyclic dipeptides.
Biochemical Engineering Journal, **2008**, 38, 326-340.
ISI Impact Factor: 2.193.
45. M. Radhamma, **P. Venkatesu**, M.V. P. Rao, M. J. Lee and H. M. Lin
Excess molar volumes and ultrasonic studies of dimethylsulfoxide with ketones at T = 303.15 K
J. Chem. Thermodynamics **2008**, 40, 492-497.
ISI Impact Factor: 1.889.
46. M. Radhamma, C.T. Hsieh, **P. Venkatesu**, M.V. P. Rao, M. J. Lee and H. M. Lin
Isobaric vapor-liquid equilibrium for dimethylsulfoxide with chloroethanes and chloroethenes
J. Chem. Eng. Data **2008**, 53, 374-377.
ISI Impact Factor: 1.889.
47. M. Radhamma, W.C. Liao, **P. Venkatesu**, M.V. P. Rao, M. J. Lee and H. M. Lin
Excess enthalpies of dimethylsulfoxide with substituted benzenes at 298.15 K
Fluid Phase Equilibria, **2008**, 264, 23-28.
ISI Impact Factor: 1.699.

Papers Contributions to Academic Conferences:

International

1. 1st Annual International Conference on Chemisrty, Chemical Engineering and Chemical Process (CCECP-2013), Hotel Fort Canning, Singapore, 25-26 February, 2013.
2. International workshop on ionic liquids-Alternative being materials for renewable energy and its applications, January 16-17, 2013, National Chemical Laboratory, Pune, India (**Invited Talk**).
3. International Conference on Innovations in Chemistry for Sustainable Development, December 01-03, 2011, Department of Chemistry, Punjab University, Chandigarh, India (**Invited Talk**).
4. Indo-Brazil-South Africa (IBSA) Workshop on Ionic Liquids, June 29, 2011, Department of Chemistry, Durban University of Technology, Durban, South Africa (**Invited Talk**).
5. 4th Congress on Ionic Liquids (COIL-4), June 15-18, 2011, Hilton Crystal City at Washington, DC, Arlington, USA (**Poster presentation**).
6. International Conference on Chemistry: Frontiers and Challenges, March 5-6, 2011, Aligarh Muslim University, Aligarh, India (**Invited Talk**).
7. 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS), January 30-February 2, 2011, New Delhi, India (**Poster presentation**).
8. 21st IUPAC International Conference on Chemical Thermodynamics (ICCT-2010), July 31-August 6, 2010, Tsukuba, Japan (**Oral Presentation**).
9. 14th ISCB International conference on Chemical biology for discovery: perspectives and challenges, January 15-18, 2010, CDRI, Lucknow, India (**Invited Talk**).
10. The joint Biophysical Society 52nd Annual Meeting and 16th IUPAB International Biophysics Congress, February 2-6, 2008, Long Beach, California, USA (**Poster presentation**).
11. 2007 Taiwan-US soft materials symposium, January 4-6, 2007, Taipei, Taiwan (**Poster presentation**).
12. 19th IUPAC International Conference on Chemical Thermodynamics, (ICCT-2006) July 29-August 4, 2006, Boulder, CO, USA (**Oral Presentation**).

13. **18th IUPAC International Conference on Chemical Thermodynamics, (ICCT-2004)** August 17-21, 2004, **Beijing, China (Invited Talk)**.
14. **Fourth East Asian Biophysical Symposium (EABS)**, November 3-6, 2003, **Taipei, Taiwan (Poster presentation)**.
15. **16th Annual Gibbs Conference on Biothermodynamics**, September 28-October 1, 2002, **Carbondale, Illinois, USA (Poster presentation)**.
16. **International conference and Exhibition on Ultrasonics (ICEU-99)**, December 2-4, 1999, pages 263-266, **New Delhi, India (Oral Presentation)**.

National

1. **100th Indian Science Congress**, January, 3-7, 2011, **University of Calcutta, Kolkata, India (Oral Presentation)**.
2. **7th National Conference on Thermodynamics of Chemical, Biological and Environmental Processes (TCBEP – 2012)**, December 10-12, 2012, **Sri Venkateswara University, Tirupati, India (Invited Talk)**.
3. **49th Annual Convention of Chemists (The Indian Chemical Society)**, December 12-15, 2012, **National Institute of Technical Teachers Training and Research, Hopal, India (Invited Talk)**.
4. **31th Annual Conference of Indian Council of Chemists**, December 26-28, 2012, Department of Chemistry, Saurashtra University, **Rajkot, India (Invited Talk)**.
5. **Chemical Constellation Cheminar – 2012 (An International Conference)**, September 10-12, 2012, **Dr. B R Ambedkar National Institute of Technology, Jalandhar, India (Invited Talk)**.
6. **Third International Multicomponent Polymer Conference (IMPC 2012)**, March 23-25, 2012, Mahatma Gandhi University, **Kottayam, Kerala, India (Invited Talk)**.
7. **Annual Meeting of the Indian Biophysical Society (IBS-2012)**, January 19-21, 2012, University of Madras, **Chennai, India (Invited Talk)**.
8. **30th Annual Conference of Indian Council of Chemists**, December 28-30, 2011, Department of Chemistry, Osmania University, **Hyderabad, India (Invited Talk)**.
9. **48th Annual Convention of Chemists (The Indian Chemical Society)**, December 3-7, 2011, **University of Allahabad, Allahabad, India (Invited Talk)**.
10. **6th National Conference on Thermodynamics of Chemical and Biological Systems**, November 2-4, 2011, Maharshi Dayananda University, **Rohtak, India (Invited Talk)**.

11. National Seminar on Chemistry and Global Perspectives (CGP- 2011), October 24-26, 2011, **Sri Krishnadevaraya University, Anantapur (A.P.), India (Invited Talk).**
12. National Constellation Cheminar, August 20-21, 2011, **Dr. B R Ambedkar National Institute of Technology, Jalandhar, India (Invited Talk).**
13. National Conference on Chemistry in Our Lives, March 29, 2011, **Arya P G College, Panipat, India (Invited Talk).**
14. 3rd National Conference on Recent Advances in Chemical & Environmental Sciences, February 28-March 1, 2011, **Multani Mal Modi College, Patiala, India (Invited Talk).**
15. 98th Indian Science Congress, January, 3-7, 2011, **SRM University, Chennai, India (Invited Talk).**
16. 47th Annual Convention of Chemists (The Indian Chemical Society), December 23-27, 2010, **Pt. Ravishankar Shukla University, Raipur, India (Invited Talk).**
17. 79th Annual Meeting of the Society of Biological Chemists (India), December 13-15, 2010, **Indian Institute of Science, Bangalore, India (Poster presentation).**
18. 5th National Conference on Thermodynamics of Chemical and Biological Systems, November 18-19, 2010, **Manipur University, Manipur, India (Invited Talk).**
19. National Seminar on Membranes, Microemulsions and self-assembled systems (MMASA-2010), September 28-30, 2010, SMIT, Majitar, **Sikkim (Invited Talk).**
20. UGC-SAP sponsored National symposium on recent trends in chemical sciences, 24-25 February, 2010, **Aligarh Muslim University, Aligarh, India (Best Oral Presentation award).**
21. Symposium on recent trends in Biophysics, 13-15 February, 2010, Banaras Hindu University, **Varanasi, India (Oral Presentation).**
22. 97th Indian Science Congress, January, 3-7, 2010, **Indian Space Research Organisation & University of Kerala, Thiruvananthapuram, India (Oral Presentation).**
23. 4th National Conference on Thermodynamics of Living and Non-Living Systems, December 17-18, 2009, **D. D. U. Gorakhpur University, Gorakhpur, India (Invited Talk).**
24. 3rd National Conference on Thermodynamics of Chemical and Biological Systems, October 16-17, 2008, **Nagpur, India (Poster presentation).**

25. The acoustical Society of India, Special issue of the Proceedings of **National symposium on acoustics(NSA-99)**, September 23&24, 1999, Sivakasi, India **(Oral Presentation)**.
26. IX National symposium on ultrasonics, December 14-16, 1998, Pondicherry, India **(Oral Presentation)**.

Scientific Visits and Delivered Lectures

Institute of Materials Research and Engineering, Singapore, February 25, 2013

Plasma Bioscience Research Center, Kwangwoon University, January 9-16, 2012, Seoul, South Korea.

The University of Alabama in Huntsville, Department of Chemistry, August 6-10, 2006, Huntsville, Alabama, USA.

Center for Nano Science and Technology Mahatma Gandhi University, June 24-25, 2009, Kottayam, Kerala, India.

SPW Degree & PG College, Department of Chemistry, March 5, 2010, Tirupati, India.

Dravidian University, Department of Biotechnology, March 6, 2010, Srinivasavanam, Kuppam, Andhra Pradesh, India.

Sri Venkateswara University, Department of Chemistry, March 8, 2010, Tirupati, India.

Guru Nanak Dev University, Department of Applied Chemistry, March 15-16, 2010, Amritsar, India.

Manipur University, Department of Chemistry, March 29-31, 2010, Imphal, India.

Department of Chemistry, Indian Institute of Technology (IIT), Madras, January 4, 2011.

Department of Chemistry, Indian Institute of Technology (IIT, Bombay), March 17-18, 2011.

**Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia,
July 25, 2012, New Delhi.**