

(i). **Name:** Dr. ANJANI KUMAR TIWARI

**Visiting Professor/ Researcher (National Institute of radiological Sciences, Chiba, japan)
(2018-20)**

IAEA Fellow, United Nation fellow

JSPS/MEXT fellow, ICMR-DHR Fellow

Lifetime Member: - ICNM,SNMI,ISN,ISCA

H index: 16, i10-25

RG Score (Research Gate)- 34.84

Email: anjanik2003@gmail.com

Present Position (Designation and organization):

Associate Professor, Department of Chemistry
Faculty Nuclear Medicine
Assistant Director, University sophisticated instrumentation centre (USIC)
BBAU Central University, LUCKNOW-226025, India

Ex Scientist E
Institute of Nuclear Medicine& Allied Sciences (INMAS)
Defence R& D Organization (DRDO)
Ministry Of Defence
Brig. Mazumdar Road Timarpur, Delhi

Areas of Specialisation: Chemical Kinetics, Chelation, Biomedical Sciences, Neuro-receptor quantification (TSPO/AChE/5-HT), Computer added drug design (CADD) and Medicinal Chemistry

International Awards & Fellowships

1. Reviewer panelist of pharmaceutical Sciences section MEXT fellowship, Japan.
2. Commissioned as visiting researcher at quantum medical sciences directorate, NIRS, Department of advanced nuclear sciences from 1 April 2018-31 March 2020.
3. Invited Researcher JAPAN, (MEXT fellow), NIRS, Chiba, Japan, (Invited for 5 weeks to work in the joint programme to work on ligand for 5HT₇ receptor, 2016.
4. International Biomedical Fellow, Department of Health Research (DHR), Indian Council of Medical Research (ICMR) 2015-16.
5. JSPS Invited Researcher, 2014-15 (10 months).
6. Award for NIRS-IAEA-CC meeting 2014 (selected by IAEA as a candidate to represent Asia-Euro region), 20th February, 2014 at Akihabara, Tokyo).

7. Lifetime Membership-Japan Society of Nuclear Medicine, Indian Society of Nanomedicine (founder member), Indian Science Congress Association, Indian Society of Nuclear Medicine, Indian College of Nuclear Medicine

Completed Projects (2003-17)

Title and Project name	My Role	Duration	Total Budget
RD-P1-2003/INM-302 (2003-2005) Radiocomplexation of anti-infective drugs and their evaluation as specific infection imaging agent	Member	2003-05	0.8 Crore
RD-P1-05/INM-306 (2005-2008) Development of radiopharmaceuticals/magnetopharmaceuticals and its evaluation for molecular imaging and therapy.	Member	2005-08	1.9 Crore
RD-P1-08/INM-311(3.1) (2009-14) Development of molecular imaging agents and enhancers for armed forces	Co-PI	2009-14	2.5 Crore (total-13.5 Crore)
Development and quantification of pet ligands for serotonin 5-HT ₇ receptor and phosphodiesterase 10 in brain	PI	2014-15	4.5 Million Yen
RD-TP-15-16/INM (2015-2016) Synthesis and evaluation of acetamida-benzoxazolnederivatised n ₃ system to determine TSPO/PBR [18 kda] expression in stroke/trauma like neuroinflammatory brain conditions	PI	2015-16	0.10 Crore

Current Projects (2017-)

Acetamido -benzoxazolones as a specific marker for translocator protein TD/16-17/INM-321, (2017-21)	PI	2017-21	45 Lakhs
Luminescent nanoprobe for molecular recognition of the translocator protein (TSPO) BT/PR29449/NNT/28/1572/2018	PI	2019-22	70.25 lakhs

Post Ph.D. Research (International)

Name of the award	Year	Level
IAEA (International Atomic Energy Association) award for training in radiochemistry	2012 (16 th to 27 th April 2012)	International (selected as a candidate to represent Asian zone out of five selected candidates)
UN Fellow for advance training in PET radiochemistry in neuroimaging	2013 (1 st April 2013 to 30 th Sep 2013)	International (selected by United for advance training in neuro quantification = only candidate selected from asia-osiana zone)
ICMR-DHR International Biomedical Fellowship	2013-14 (six months)	International
JSPS Invited Researcher	2014-15 (10 months)	International
Award for NIRS-IAEA-CC meeting 2014	2014 (20 th February, 2014 at Akihabara , Tokyo)	International (selected by IAEA as a candidate to represent Asia-Euro region)

MEXT Fellow	2016 (Jan- Feb)	International
Visiting Professor (NIRS)	2018 (Nov) & 2019 (May- June)	International
JSPS Bridge Fellow	2019-20	International

Development, Co-Curricular and Extension Activities

Nature of Activity	
Student related co-curricular, extension and field based activities	
(i)	Extension and dissemination activities (Workshops) Two days workshops on radiation safety in nuclear medicine (2014)
(ii)	Extension and dissemination activities Organization of Society of nuclear medicine india (SNM India 2017) Working as Treasurer
(iii)	Other co-curricular activities (Sports) As an organizational sports officer (2011-13)
(iv)	Extension and dissemination activities (Workshops) 1st Structured workshop on new frontiers in radiation sciences for undergraduaste students of delhi university, june 16 to july 4 ,2008 organised by INMAS and university of delhi
(v)	Extension and dissemination activities (Workshops) 2nd Structured workshop for undergraduaste students of delhi university, june 15 to july 3 ,2009 organised by INMAS and university of delhi
(vi)	Extension and dissemination activities (Workshops) Workshop on Recent advances in Computer added Drug Design at INMAS (2 nd -3 rd Dec 2011)
(vii)	Convener- Summer Training SIC – to trace the Signature of Materials Summer Training School on Instrumentation and Characterizations. May 24-25,2018 , BBAU, Lucknow, U.P., India

(viii)	Organizing Secretary- Celebration of 87 th birth anniversary of Bharat Ratna Dr. A.P.J. Abdul. October 15-16, 2018. BBAU, Lucknow, U.P., India
(ix)	Convener- Winter Training SIC – to trace the Signature of Materials Summer Training School on Instrumentation and Characterizations. Jan 30-31,2019 , BBAU, Lucknow, U.P., India
(x)	Joint Organizing Secretary- Important Techniques for Characterization of Molecules, Faculty of Chemical Sciences, Shri Ramswaroop Memorial University, March 25-29, 2019, Lucknow, U.P., India
(xi)	Organizing Secretary- Organizing Secretary- Global Conference on the Control of Green House Gases at the Source by Physical and Chemical Technology,(GCCGHGSPCT2k19), 22-24 April, 2019, BBA University Lucknow-226 025, U.P., India

Ph.D/ Post doctoral Students

S.N.	Name	Joint Supervision	Period
1	Nisha Saini Guru nanakdevuniversity,Punjab,India	Prof M P S Isher Former Vice Chancellor, Jammu University	(2008-13)
2	Vikas Kumar Department of Zoology, University of Delhi, Delhi	Prof. Neeta Sehgal Department of Zoology University of Delhi	(2010-14)
3	Swati Aggrawal University of Delhi, Delhi	Prof. Gurmeet Singh (VC of Pondicherry University) University of Delhi	(2011-14)
4	Pooja University of Delhi, Delhi	DrR.P.Singh University of Delhi	(2012-15)
5	Nidhi Chadha Department of Chemistry, University of	Prof. M.Milton Department of Chemistry	(2012-15)

	Delhi, Delhi	University of Delhi	
6	NeelamKumari Department of Chemistry, University of Delhi, Delhi	Prof SunitaBhagat Department of Chemistry University of Delhi	(2014 –18) Submitted
7	SoniYadav Institute of Engineering & Technology, Lucknow	Prof. S.K.Singh I.E.T. Lucknow	2012-18
8	Priya Singh BabashahebBhimraoAmbedkar University(A Central university)	Department of Chemistry BBAU Lucknow	(2018-
9	Deepika Singh BabashahebBhimraoAmbedkar University(A Central university)	Department of Chemistry BBAU Lucknow	(2018-
10	Dr AnupriyaAdhikari BabashahebBhimraoAmbedkar University(A Central university)	DS Kothari post doctoral fellow (UGC) Department of Chemistry BBAU Lucknow	(2018-
11	Pooja Srivastava Department of Biotechnology Delhi Technological University, N Delhi	Prof. P.Kumar Department of Biotechnology, Delhi Technical University,Delhi	(2014 –

No. of papers published: 75 (International - 72 + National - 3)

As First Author (Average impact factor- 4.5)

- 1- RSC Adv., 2015, 5, 101447-101454.
- 2- Theranostics 2015; 5(9), 961-969. **(Impact factor-9.2)**
- 3- RSC Adv., 2015, 5, 19752-19759.
- 4- Org. Biomol. Chem., 2014, 12, 9621-9630.
- 5- J Neurochem., 2014, 129(4), 712-20
- 6- Mol Imaging, 2012, 11(3), 240-50.
- 7- Chemical Biology and Drug Design. 2011, 77(5), 388-92.
- 8- Cancer Biotherapy and Radiopharmaceuticals. 2011, 26(3), 389-93.
- 9- Chemical Biology and Drug Design. 2009, 74(1), 87-91.
- 10- Eur J Med Chem, 2007, 42(9), 1234-8.
- 11- Bioorganic and Medicinal Chemistry Letters. 2007, 17(10), 2749-55.
- 12- Bioorganic and Medicinal Chemistry Letters. 2006, 16(17), 4581-5.

As Corresponding Author (Average impact factor -3.5)

1. Radiochemistry, Accepted in April 2019 (In press)
2. Drug Development Research , Accepted 11May 2019,DOI: 10.1002/ddr.21547.
3. New Journal of Chemistry Accepted June 2019, DOI: 10.1039/C9NJ00180H.
4. ChemBiol Drug Des. 2017, 90(4), 511-519.
5. RSC Adv., 2016,6, 114491-114499.
6. RSC Adv., 2015,5, 97102-97112

7. SpectrochimActa A MolBiomolSpectrosc. 2015, 143, 309-18.
8. RSC Adv., 2015, 5, 41977-41984.
9. RSC Adv., 2015,5, 23471-23480.
10. J BiomolStructDyn. 2015,33(3), 573-8317.
11. Chem Biol Drug Des. 2014, 84(6), 704-11.
12. J BiomolStructDyn. 2014, 29, 1-13.
13. Dalton Trans. 2013, 42(14), 4994-5003.
14. Chemical Biology & Drug Design.2013, 82,226–232.
15. Med. Chem. Commun., 2013,4, 542-548 .
16. Medicinal Chemistry Research. 2013,23(3),1114-22
17. Medicinal Chemistry Research. 2013,22(12),5861-67.
18. ChemBiol Drug Des. 2013, 81(3), 343-48.

Other important publications in last ten years

1. Mol. Pharmaceutics, Mol Pharm.(ACS) 2018, 15(4), 1515-1525.
2. Accepted article Jan 2018, Asian Journal of Chemistry 2018, 30(1), 183-190.
3. ACS Appl Mater Interfaces. (ACS) 2017, 9(27), 22195-22211. (**Impact factor-8.2**)
4. Bioorg Med Chem. 2017, 25(13), 3483-3490.
5. Chem Cent J. 2017, 11, 132.
6. New J. Chem., 2016,40, 5846-5854.
7. SpectrochimActa A MolBiomolSpectrosc. 2016, 153, 566-71.
8. Int J Med Chem. 2016, 274,1038.
9. RSC Adv., 2015,5, 97180-97186
10. RSC Adv., 2015,5, 54439-54445.
11. Eur J Med Chem. 2014, 82, 225-32.

12. ChemBiol Drug Des. 2014,83(6), 682-87
13. ChemSci Trans., 2014, 3(1), 67-72.
14. Eur J Med Chem. 2013, 65, 12-20
15. Chem Biol Drug Des. 2013, 82(5), 630-34.
16. Chemical Biology & Drug Design.2013,82, 468–476.
17. Cancer BiotherRadiopharm. 2012, 27(7), 452-6.
18. Chem Biol Drug Des. 2012, 80(2),245-53.
19. Chemical Biology and Drug Design. 2012, 79(2), 223-34.
20. Mol Imaging. 2012, 11(4), 309-37.
21. Dalton Transactions. 2011, 40(13), 3346-51.
22. Bioconjug Chem.(ACS) 2011, 22(2), 244-55.
23. Therapeutic Delivery. 2011, 2(2), 205-12.
24. Cancer Biotherapy and Radiopharmaceuticals. 2010,25(6),645-55.
25. Ann NuclMed . 2010, 24(5), 345-55.
26. Chemical Biology and Drug Design. 2009, 74(2), 159-64.
27. Chemical Biology and Drug Design. 2011,77(1), 57-62.
28. Cancer Biotherapy and Radiopharmaceuticals. 2010, 25(5), 571-5.
29. Cancer Biotherapy and Radiopharmaceuticals. 2010, 25(5), 559-62.
30. Cancer Biotherapy and Radiopharmaceuticals. 2010, 25(2), 245-50.
31. Cancer Biotherapy and Radiopharmaceuticals. 2010, 25(1), 117-21.
32. Int J ChemKinet. 2009, 41(5), 349-56.
33. Cancer Biotherapy and Radiopharmaceuticals. 2009, 24(2), 209-14.
34. Chemical Biology and Drug Design. 2008, 72(6), 533-9.
35. Cancer Biotherapy and Radiopharmaceuticals. 2008, 23(5), 571-9.

Publication in 2019

1. Pooja Srivastava, Pravir Kumar, &**Anjani K Tiwari***(2019). Design, synthesis and in silico evaluation of methyl 2-(2-(5-bromo/chloro-2-oxobenzooxazol-3(2H)-yl)acetamido)-3-phenylpropanoate for TSPO targeting, Radiochemistry, Accepted in April 2019 (In press)
2. Pooja Srivastava, Pravir Kumar, &**Anjani K Tiwari***. Modified benzoxazolone (ABO-AA) based SPECT probes for 18 kDa TSPO, Drug Development Research , Accepted 11May 2019,DOI: 10.1002/ddr.21547.
3. Pooja Srivastava, Neelam Kumari, Dipti Kakkar, Pravir Kumar, &**Anjani K Tiwari***. Comparative evaluation of ^{99m}Tc -MBIP-X/ ^{11}C] MBMP for visualization of 18 kDa translocator protein, New Journal of Chemistry, 2019, Accepted June 2019 DOI: 10.1039/C9NJ00180H

Publication in 2018

1. Kanchan Chauhan, Anjani K Tiwari, Nidhi Chadha, AnkurKaul, Ajai Kumar Singh and AnupamaDatta. Chalcone Based Homodimeric PET Agent, ^{11}C -(Chal) $_2$ DEA-Me for Beta Amyloid Imaging: Synthesis and Bioevaluation. Mol. Pharmaceutics, Mol Pharm. 2018,15(4),1515-1525.

2. Shivani Singh, Sweta Singh, Anjani K Tiwari, R.K.Sharma, RashiMathur, AnkurKaul A Novel 18F Labelled Imidazo-oxazolopyridine Derivative as b-Amyloid Imaging Agent: Synthesis and Preliminary Evaluation. Asian J. Chem. 2018, 30(1), 183-190.

Publication in 2017

3. Kumari N, Chadha N, Srivastava P, Mishra L C, Bhagat S, Mishra A.K and Tiwari A.K*. Modified benzoxazolone derivative as 18 kDa TSPO Ligand. ChemBiol Drug Des. 2017,90(4),511-519.

4. Dumoga S, Rai Y, Bhatt AN, Tiwari AK, Singh S, Mishra AK, Kakkar D. Block Copolymer Based Nanoparticles for Theranostic Intervention of Cervical Cancer: Synthesis, Pharmacokinetics, and in Vitro/in Vivo Evaluation in HeLaXenograftModels. ACS Appl Mater Interfaces. 2017,9(27),22195-22211.

5. Adhikari A, Kumari N, Adhikari M, Kumar N, Tiwari AK, Shukla A, Mishra AK, Datta A. Zinc complex of tryptophan appended 1,4,7,10-tetraazacyclododecane as potential anticancer agent: Synthesis and evaluation. Bioorg Med Chem. 2017,25(13),3483-3490.

6. Mallika Pathak, HimanshuOjha, Anjani K. Tiwari, Deepti Sharma, Manisha Saini, and Rita Kakkar. Design, synthesis and biological evaluation of antimalarial activity of new derivatives of 2,4,6-s-triazine. Chem Cent J. 2017,11,132.

Publication in 2016

7. Srivastava P., Kaul A., Ojha H., Kumar P. and Tiwari A.K.* Design, synthesis and biological evaluation of methyl-2-(2-(5-bromo benzoxazolone)acetamido)-3-(1H-indol-3-yl)propanoate: TSPO ligand for SPECT. RSC Adv. 2016,6,114491-114499.

8. RaunakVarshney, Swarndeeep K. Sethi, SandhyaRangaswamy, Anjani K. Tiwari, Marilyn D. Milton, SenthilKumaran and Anil K. Mishra .Design, synthesis and relaxation studies of triazole linked gadolinium(III)-DO3A-BT-bistriazaspirodecanone as a potential MRI contrast agent. New J. Chem. 2016,40,5846-5854.

9. Singh S, Tiwari AK, Varshney R, Mathur R, Shukla G, Bag N, Singh B, Mishra AK. Comparative evaluation of Bis(thiosemicarbazone)- Biotin and Met-ac-TE3A for tumor imaging. *Spectrochim Acta A Mol Biomol Spectrosc.* 2016,153,566-71.

10. Samant M, Chadha N, Tiwari AK, Hasija Y. In Silico Designing and Analysis of Inhibitors against Target Protein Identified through Host-Pathogen Protein Interactions in Malaria. *Int J Med Chem.* 2016,2741038.

11. Sandhya Rangaswamy, Raunak Varshney, Anjani K. Tiwari, Swarndeeep K. Sethi, B. S. Hemanthkumar, Himanshu Ojha, Sandeep Kaur-Ghumaan, and Anil K. Mishra. Gd(III)-DO3A-SBMPP: An Effort to Develop the MRI Contrast Agent with Enhanced Relaxivity. *Chemistry Select.* 2016, 1, 6206 – 6211

Publication in 2015

12. Tiwari AK, Ji B, Yui J, Fujinaga M, Yamasaki T, Xie L, Luo R, Shimoda Y, Kumata K, Zhang Y, Hatori A, Maedal M, Higuchi M, Wang F and Zhang MR. [¹⁸F]FEBMP: Positron Emission Tomography Imaging of TSPO in a Model of Neuroinflammation in Rats, and in vitro Autoradiograms of the Human Brain. *Theranostics.* 2015,5(9), 961-969.

13. Tiwari AK, Yui J, Zhang Y, Fujinaga M, Yamasaki T, Xie L, Shimoda Y, Kumata K, Hatori A, and Zhang MR. [¹⁸F]FPBMP: – a potential new positron emission tomography radioligand for imaging of translocator protein (18 kDa) in peripheral organs of rats. *RSC Adv.* 2015, 5, 101447-101454.

14. Tiwari AK, Yui J, Pooja, Aggarwal S, Yamasaki T, Xie L, Chadha N, Zhang Y, Fujinaga M, Shimoda Y, Kumata K, Mishra AK, Ogawa M and Zhang MR. Design, synthesis and biological evaluation of small molecule-based PET radioligands for the 5-hydroxytryptamine 7 receptor. *RSC Adv.* 2015, 5, 19752-19759.

15. Saini N, Varshney R, Tiwari AK*, Ankur Kaul, M. P. S. Ishar and Anil K. Mishra. Design, synthesis and biological evaluation of coumarin coupled nitroimidazoles as potential imaging agents. *RSC Adv.* 2015, 5, 97102-97112.

16. Aggarwal S, Sinha D, Tiwari AK*, Pooja P, Kaul A, Singh G, Mishra AK. Studies for development of novel quinazolinones: new biomarker for EGFR. *SpectrochimActa A MolBiomolSpectrosc.* 2015, 143, 309-18.
17. Singh S, Tiwari AK*, Varshney R, Mathur R, Hazari PP, Singh B and Mishra AK. Evaluation of methionine and tryptophan derivatised vehicles: Met-ac-TE3A/Trp-ac-TE3A for tumor imaging. *RSC Adv.* 2015,5,41977-41984.
18. Pooja, Aggarwal S, Tiwari AK*, Kumar V, Pratap R, Singh G and Mishra AK. Novel pyridiniumoximes: synthesis, molecular docking and in vitro reactivation studies. *RSC Adv.* 2015,5, 23471-23480.
19. Chadha N, Tiwari AK*, Kumar V, Milton MD, Mishra AK. In silico thermodynamics stability change analysis involved in BH4 responsive mutations in phenylalanine hydroxylase: QM/MM and MD simulations analysis. *J BiomolStructDyn.* 2015, 33(3), 573-8317.
20. Ankur Kaul, Anjani K. Tiwari, Raunak Varshney and Anil K. Mishra. Synthesis, in silico screening and preclinical evaluation studies of a hexapeptide analogue for its antimicrobial efficacy. *RSC Adv.* 2015,5, 97180-97186.
21. Varshney R, Singh S, Tiwari AK, Mathur R, Singh S, Panwar P, Yadav N, Chutani K, Singh B and Mishra AK. Comparison of BTSE-RGD with DOTA-RGD as a potential imaging agent for tumors. *RSC Adv.*, 2015,5, 54439-54445.
22. Chadha N, Tiwari AK, Kumar V, Lal S, Milton MD, Mishra AK. Oxime-dipeptides as anticholinesterase, reactivator of phosphonylated-serine of AChE catalytic triad: probing the mechanistic insight by MM-GBSA, dynamics simulations and DFT analysis. *J BiomolStructDyn.* 2015, 33(5), 978-90.

Publication in 2014

23. Tiwari AK, Fujinaga M, Yui J, Yamasaki T, Xie L, Kumata K, Mishra AK, Shimoda Y, Hatori A, Ji B, Ogawa M, Kawamura K, Wang F and Zhang MR. Synthesis and evaluation of new ¹⁸F-labelled acetamidobenzoxazolone-based radioligands for imaging of the translocator protein (18 kDa, TSPO) in the brain. *Org. Biomol. Chem.*, 2014,12, 9621-9630.
24. Tiwari AK, Yui J, Fujinaga M, Kumata K, Shimoda Y, Yamasaki T, Xie L, Hatori A, Maeda J, Nengaki N, Zhang MR. Characterization of a novel acetamidobenzoxazolone-based PET ligand for translocator protein (18 kDa) imaging of neuroinflammation in the brain. *J Neurochem.* 2014, 129(4), 712-20.
25. Singh P, Aggarwal S, Tiwari AK*, Kumar V, Pratap R, Chuttani K, Mishra AK. Bis(Methylpyridine)-EDTA Derivative as a Potential Ligand for PET Imaging: Synthesis, Complexation, and Biological Evaluation. *ChemBiol Drug Des.* 2014, 84(6), 704-11.
26. Tanwar J, Datta A, Chauhan K, Kumaran SS, Tiwari AK, Kadiyala KG, Pal S, Thirumal M, Mishra AK Design and synthesis of calcium responsive magnetic resonance imaging agent: Its relaxation and luminescence studies. *Eur J Med Chem.* 2014, 82, 225-32.
27. Srivastava P, Tiwari AK, Kakkar D, Singh Rathore V, Mishra AK., Bis (histidine) with N2 Vehicle: An Important Skeleton for MR/Chelation Therapy. *ChemBiol Drug Des.* 2014, 83(6), 682-87.
28. Husain MM, Rajeev and Tiwari AK. Natural Bond Orbital (NBO) Analysis and Binding Affinity towards Protein Kinase 2: DFT and Docking Studies of Coumarin Derivatives. *ChemSci Trans.*, 2014, 3(1), 67-72.

Publication in 2013

29. Saini N, Varshney R, Tiwari AK*, Kaul A, Allard M, Ishar MP, Mishra AK. Synthesis, conjugation and relaxation studies of gadolinium(III)-4-benzothiazol-2-yl-phenylamine as a potential brain specific MR contrast agent. *Dalton Trans.* 2013, 42(14), 4994-5003.
30. Pooja Singh, Vikas Kumar, Swati Aggarwal, Tiwari AK*, Krishna Chuttani, RamendraPratap and Anil K. Mishra. Design, Synthesis, and Biological Evaluation of

Catecholamine Vehicle for Studying Dopaminergic System. *Chemical Biology & Drug Design*. 2013, 82, 226–232.

31. Chadha Nidhi , Tiwari A K.*, Kumar Vikas, Marilyn D. Milton and Mishra Anil K. , Perception into hypoxia selectivity and electronic features of symmetrically substituted bithiosemicarbazone ligands and their copper complexes: DFT and QM/MM docking , *Med. Chem. Commun.*, 2013,4, 542-548 .

32. Vikas Kumar, Nidhi Chadha, Anjani K. Tiwari*, Neeta Sehgal, Anil K. Mishra. Prospective atom-based 3D-QSAR model prediction, pharmacophore generation, and molecular docking study of carbamate derivatives as dual inhibitors of AChE and MAO-B for Alzheimer's disease, *Medicinal Chemistry Research*. 2013,23(3),1114-22.

33. Pooja Srivastava, Vikas Kumar, Anjani K. Tiwari*, Anil K. Mishra. Quantitative structure activity relationship of tetraazamacrocyclic vehicle DO3A with lanthanide relaxivity and hydrophobicity, *Medicinal Chemistry Research*. 2013,22(12),5861-67.

34. Aggrawal S, Tiwari AK*, Srivastava P, Chadha N, Kumar V, Singh G, Mishra AK. Investigation for the interaction of tyramine based anthraquinone analogue with Human Serum Albumin by optical spectroscopic technique. *ChemBiol Drug Des*. 2013, 81(3), 343-48.

35. Srivastava P, Tiwari AK, Chadha N, Chuttani K, Mishra AK., Synthesis and biological evaluation of newly designed phosphonate based bone-seeking agent. *Eur J Med Chem*. 2013, 65, 12-20.

36. Sangeeta Agrawal, R. R Bhatnagar, A Tiwari and Upasana Sharma, Synthesis, Analytical analysis and medicinal aspect of novel Benzimidazole and their metal complexes. *ChemBiol Drug Des*. 2013, 82(5), 630-34.

37. Nidhi Chadha, Deepa Sinha, Anjani K. Tiwari, Krishna Chuttani and Anil K. Mishra. Synthesis, Biological Evaluation and Molecular Docking Studies of High-Affinity Bone Targeting N,N'-Bis (alendronate) Diethylenetriamine-N,N'-Triacetic Acid: A Bifunctional Bone Scintigraphy Agent. *Chemical Biology & Drug Design*. 2013, 82, 468–476.

Publication in 2012

38. Sindhu R, Tiwari AK, Mishra LC, Husain MM Spectroscopic interaction of a coumarin derivative with bovine serum albumin. *CancerBiotherRadiopharm*. 2012, 27(7), 452-6.
39. Kakkar D, Tiwari AK, Chuttani K, Khanna A, Datta A, Singh H, Mishra AK. Design, synthesis, and antimycobacterial property of PEG-bis(INH) conjugates. *ChemBiol Drug Des*. 2012, 80(2), 245-53.
40. Hazari PP, Pandey AK, Chaturvedi S, Tiwari AK, Chandna S, Dwarakanath BS, Mishra AK. Synthesis of oxovanadium(IV) schiff base complexes derived from C-substituted diamines and pyridoxal-5-phosphate as antitumor agents. *Chemical Biology and Drug Design* . 2012, 79(2), 223-34.
41. Kakkar D, Tiwari AK, Singh H, Mishra AK. Past and present scenario of imaging infection and inflammation: a nuclear medicine perspective. *Mol Imaging*. 2012, (4), 309-37.
42. Tiwari AK, Singh Rathore V, Sinha D, Datta A, Sehgal N, Chuttani K, Mishra AK. Design and docking studies of [diethylenetriaminepentaacetic acid-(amino acid)₂] with acetylcholine receptor as a molecular imaging agent for single-photon emission computed tomographic application. *Mol Imaging*, 2012, (3), 240-50.

Publication in 2011

43. Tiwari AK, Sinha D, Datta A, Kakkar D, Mishra AK. Kinetics of formation for lanthanide (III) complexes of DTPA-(me-trp)₂ used as imaging agent. *Chemical Biology and Drug Design*. 2011, 77(5), 388-92.
44. Tiwari AK, Varshney R, Kaushik A, Datta A, Singh L, Mishra AK. Correlation of physical parameters during radiochemical synthesis of ¹⁸F positron emission tomography radiopharmaceuticals. *Cancer Biotherapy and Radiopharmaceuticals*. 2011, 26(3), 389-93.

45. Tanwar J, Datta A, Tiwari AK, Chaturvedi S, Ojha H, Allard M, Chaudary NK, Thirumal M, Mishra AK. Facile synthesis of non-ionic dimeric molecular resonance imaging contrast agent: Its relaxation and luminescence studies. Dalton Transactions. 2011, 40(13), 3346-51.
46. Tanwar J, Datta A, Tiwari AK, Thirumal M, Chuttani K, Mishra AK. Preclinical evaluation of DO3P-AME-DO3P: A polyazamacrocyclic methylene phosphonate for diagnosis and therapy of skeletal metastases. Bioconjug Chem. 2011, 22(2), 244-55.
47. Kakkar D, Tiwari AK, Chuttani K, Kumar R, Mishra K, Singh H, Mishra AK. Polyethylene-glycolylated isoniazid conjugate for reduced toxicity and sustained release. Therapeutic Delivery. 2011, 2(2), 205-12.
48. Ojha H, Gahlot P, Tiwari AK, Pathak M, Kakkar R. Quantitative structure activity relationship study of 2,4,6-trisubstituted-s-triazine derivatives as antimalarial inhibitors of plasmodium falciparum dihydrofolatereductase. Chemical Biology and Drug Design. 2011, 77(1), 57-62.

Publication in 2010

49. Kakkar D, Tiwari AK, Chuttani K, Kaul A, Singh H, Mishra AK. Comparative evaluation of glutamate-sensitive radiopharmaceuticals: Technetium-99m-glutamic acid and technetium-99m-diethylenetriaminepentaacetic acid-bis(glutamate) conjugate for tumor imaging. Cancer Biotherapy and Radiopharmaceuticals. 2010, 25(6), 645-55.
50. D'Souza MM, Marwaha RK, Sharma R, Jaimini A, Thomas S, Singh D, Jain M, Bhalla PJS, Tripathi M, Tiwari AK, Mishra A, Mondal A, Tripathi RP. Prospective evaluation of solitary thyroid nodule on 18F-FDG PET/CT and high-resolution ultrasonography. Ann NuclMed . 2010, 24(5), 345-55.
51. Kumar N, Tiwari AK, Kakkar D, Saini N, Chand M, Mishra AK. Design, synthesis, and fluorescence lifetime study of benzothiazole derivatives for imaging of amyloids. Cancer Biotherapy and Radiopharmaceuticals. 2010, 25(5), 571-5.
52. Srivastava V, Sinha D, Tiwari AK, Sharma H, Bala Sharma R, Singh VK, Mishra AK. Quantitative structure-activity relationship analysis of 4(3H)-quinazolone derivatives as

tyrosine kinase inhibitors by multiple linear regression. *Cancer Biotherapy and Radiopharmaceuticals*. 2010, 25(5), 559-62.

53. Singh S, Ojha H, Tiwari AK, Kumar N, Singh B, Mishra AK. Design, synthesis, and in vitro antiproliferative activity of benzimidazole analogues for radiopharmaceutical efficacy. *Cancer Biotherapy and Radiopharmaceuticals*. 2010, 25(2), 245-50.

54. Kaushik A, Tiwari AK, Varshney R, Singh L, Mishra AK. Monitoring of radiation levels in medical cyclotron facility measured by a comprehensive computerized monitoring system. *Indian J Pure ApplPhys* . 2010, 48(11), 790-3.

55. Singh S, Tiwari AK, Ojha H, Kumar N, Singh B, Mishra AK. SAR of Cu (II) thiosemicarbazone complexes as hypoxic imaging agents: MM3 analysis and prediction of biologic properties. *Cancer Biotherapy and Radiopharmaceuticals*. 2010, 25(1), 117-21.

Publication in 2009

56. Tiwari AK, Ojha H, Kaul A, Dutta A, Srivastava P, Shukla G, Srivastava R, Mishra AK. Quantitative structure-property relationship (correlation analysis) of phosphonic acid-based chelates in design of MRI contrast agent. *Chemical Biology and Drug Design*. 2009, 74(1), 87-91.

57. Tiwari A K, New anti tumor agents, *NATURE INDIA*, 283, 2009
doi:10.1038/nindia.2009.283

58. Sinha D, Shukla G, Tiwari AK, Chaturvedi S, Chuttani K, Chandra H, Mishra AK. ^{99m}Tc-DTPA-amino acids conjugate as specific spect pharmaceuticals for tumor imaging. *Chemical Biology and Drug Design*. 2009, 74(2), 159-64.

59. Srivastava V, Srivastava AM, Tiwari AK, Srivastava R, Sharma R, Sharma H, Singh VK. Disubstituted 4(3H) quinazolones: A novel class of antitumor agents. *Chemical Biology and Drug Design*. 2009, 74(3), 297-301.

60. Kakkar D, Tiwari AK, Verma J, Mishra AK. Kinetic and mechanistic significance of the chemical activation of ciprofloxacin for conjugation chemistry. *Int J ChemKinet*. 2009, 41(5), 349-56.

61. Shukla G, Tiwari AK, Sinha D, Srivastava R, Chandra H, Mishra AK. Synthesis and assessment of ^{99m}Tc chelate-conjugated alendronate for development of specific radiopharmaceuticals. *Cancer Biotherapy and Radiopharmaceuticals*. 2009, 24(2), 209-14.

Publication in 2008

62. Sinha D, Tiwari AK, Singh S, Shukla G, Mishra P, Chandra H, Mishra AK. Synthesis, characterization and biological activity of schiff base analogues of indole-3-carboxaldehyde. *Eur J Med Chem* . 2008, 43(1), 160-5.

63. Shukla G, Tiwari AK, Singh VK, Bajpai A, Chandra H, Mishra AK. Effect of a novel series of benzothiazolo-quinazolones on epidermal growth factor receptor (EGFR) and biological evaluations. *Chemical Biology and Drug Design*. 2008, 72(6), 533-9.

64. Shukla G, Tiwari AK, Kumar N, Sinha D, Mishra P, Chandra H, Mishra AK. Polyethylene glycol conjugates of methotrexate and melphalan: Synthesis, radiolabeling and biologic studies. *Cancer Biotherapy and Radiopharmaceuticals*. 2008,23(5),571-9.

Publication in 2007

65. Tiwari AK, Singh VK, Bajpai A, Shukla G, Singh S, Mishra AK. Synthesis and biological properties of 4-(3H)-quinazolone derivatives, *Eur J Med Chem*, 2007, 42(9),1234-8.

66. Tiwari AK, Mishra AK, Bajpai A, Mishra P, Singh S, Sinha D, Singh VK. Synthesis and evaluation of novel benzimidazole derivative [bz-im] and its radio/biological studies. *Bioorganic and Medicinal Chemistry Letters*.2007, 17(10),2749-55.

67. Naik RM, Srivastava A, Tiwari AK, Yadav SBS, Verma AK. Kinetic and mechanistic studies of oxidation of amine-N-polycarboxylates complexes of cobalt(II) by periodate ions in aqueous medium. *Journal of the Iranian Chemical Society*. 2007,4(1),63-71.

Publication in 2006

68. Tiwari AK, Mishra AK, Bajpai A, Mishra P, Sharma RK, Pandey VK, Singh VK. Synthesis and pharmacological study of novel pyrido-quinazolone analogues as anti-fungal,

antibacterial, and anticancer agents. Bioorganic and Medicinal Chemistry Letters. 2006, 16(17), 4581-5.

Publication in 2005

69. Naik RM, Tewari RK, Singh PK, Tewari AK, Prasad S. The mercury(II) catalyzed ligand exchange between hexacyanoferrate(II) and pyrazine in aqueous medium. Transition Metal Chemistry . 2005, 30(8), 968-77.

Publication in 2004

70. Naik RM, Chaturvedi DD, Srivastava N, Verma AK, Tewari AK, Agarwal A. Kinetics and mechanism of pentacyanohydroxoferrate(III) formation from the reaction of [FeL(OH)]²⁻ⁿ complexes with cyanide ions [L n=⁻trans-1,2-diaminocyclohexanetetraacetic acid (CYDTA) and nitrilotriacetic acid (NTA)]. Indian Journal of Chemistry - Section A Inorganic, Physical, Theoretical and Analytical Chemistry. 2004, 43(11), 2307-14.

Invitation/oral presentations in Conferences/seminars/meets/workshop/symposium in last five years

Title of Conferences/seminars/meets/workshop/symposium	International/national	Title of paper presented	Presented (place and date)	Role (coordinator/participant/faculty/presenter/author)
National Workshop entitled "Important Techniques for Characterization of Molecules"	National	Techniques for Characterization of New Molecules in PET radiopharmaceuticals"	Shri Ramswaroop Memorial University, March 25 th -29 th , 2019	Invited Speaker
58 th Annual Scientific Meeting of the Japanese Society of Nuclear	International	Modified acetamidobenz-oxazolonederivatized biomarkers for TSPO	15 to 17 th Nov 2018	Oral Presenter

Medicine		quantification		
National Conference on Recent Approaches and Innovations in Chemical Sciences [RAICS-2k18]	National	New generation tools in PET	Shri Ramswaroop Memorial University, 2-3 rd Nov 2018	Invited Speaker
NANOBIOTECK	National	Panelist/Observer/Invited Guest At NANOBIOTECK	All India Institute of Medical Sciences, New Delhi from 24 th - 27 th October 2018	Panelist/Invited Guest
National Seminar on "Recent trends in Biomedical Technology",	National	Recent trends in Biomedical Technology	Aryakul college of pharmaceutical college Lucknow, 25 th Aug 2018	Invited Speaker
49 th Annual Conference of the Association, SNMICON2017	International	Current paradigm of the 18-kDa translocator protein (TSPO) third generation ligands developed by acetamidobenzoxazone	15-17 th Nov, 2017 at New Delhi	Oral Presenter
Workshop on 'Non-Invasive Imaging of Small Animal: An insight to Minimal Use of Animals'	National	Autoradiography:- A tool to see tissue distribution / pharmacokinetics of new chemical entities"	5 th Sep 2017 at New Delhi	Invited Speaker
47 th Annual Conference of the Association, SNMICON2015	International	N ₄ vehicle based Acetamidobenzoxazone derivative for imaging of Translocator Protein (18 kDa) during inflammatory condition	27 th February, 2016 at JIPMER, Puducherry	Presenter
6 th International Symposium on Current Trends in Drug Discovery & Research (CTDDR-2016)	International	Design, synthesis and in vitro evaluation of benzoxzalone based agents for TSPO in brain	25 th to 28 th Feb 2016 at CDRI Lucknow	Presentor
Biomedical Imaging: Techniques and	National	Designing of imaging agent for biomedical	1 st Feb 2016 ShobhitUniver	Invited Speaker

Clinical Applications		application	sity, Meerut, UP	
National Seminar on Detection and Treatment of Cancer Using Nano and Conventional Technologies	National	Recent advances in biomedical imaging for cancer diagnosis and treatment	November 28-29, 2015 Department of Chemistry, GLA University, Mathura, UP	Invited Speaker
<u>Centre for Professional Development in Higher Education</u> (CPDHE) Refresher course, Faculty of Science, Delhi University	National	Research for imaging modalities in health sciences	29 th June, 2015 Department of Chemistry, University of Delhi	Invited Speaker
Emerging Issues in Health Sciences	National	Current aspect of biomedical imaging	18 th Apr 2015 DR. K. N. MODI Engineering College, Modinagar, Meerut	Invited Speaker
National Seminar on Confluence of Supramolecular Chemistry and Nanoscience, NSCSCN-2015	National	Role of supramolecular chemistry in biomedical imaging	March 27-28th 2015 Department of Chemistry, Gujarat University, Ahmadabad	Invited Speaker
IAEA Collaborating Centre Commemorative Symposium	International	NIRS-IAEA-CC meeting (as a selected representative from Asian zones)	20 th February, 2014 Akihabara, Tokyo	Invited Speaker
54 th Annual Meeting of Japan Society of Nuclear Medicine	International	Acetamidobenzoxazolon e-based ligands for imaging of translocator protein (18 kDa) during neuroinflammatory condition in the brain	Osaka, Japan (Session Title: Brain : Injury/Neuroinflammation), 6-8 th Nov 2014	Oral presentation
Advance Training Course on Radiochemistry for Neuro-application	International	PET Neuroimaging	Molecular Imaging Center, National Institute of	Training Course

			Radiological Sciences, Chiba Japan (1 st April 2013 to 30 th Sep 2013)	
IAEA-CC Molecular Imaging Training Course	International	PET Radiochemistry	National Institute of Radiological Sciences, ChibaJapan (17-26 April, Chiba, Japan)	Training Course
Refresher Course at PGI Chandigarh	National	Cyclotron produced isotopes and operational issues	15 th Sep 2012, Department of nuclear medicine, PGI, Chandigarh	Invited Lecture
2 nd World Congress on Ga-68 (Generators and Novel Radiopharmaceuticals), Molecular Imaging (PET/CT), Targeted Radionuclide Therapy & Dosimetry (SWC-2013)	International	Design of radiopharmaceuticals	28 th Feb-2 nd March, 2013 at INMAS	Faculty
1 st Indo-swiss Workshop on Novel Radioligands for Neuro/Neuro-Onco Imaging	International	Labelling strategies “Non-peptidic ligands for brain imaging”	6 th -7 th Dec 2013, Delhi	Oral Presentation