

1. Name: Dr. Kamalika Sen
2. Designation: Assistant Professor
3. Date of Birth: 01.05.1977
4. Department: Chemistry
5. Date of Joining: 04.01.2010
6. Email: kamalchem.roy@gmail.com
7. Highest qualification: M.Sc., Ph.D.
8. Specialization/Major thrust area: Analytical Chemistry
9. Honor/Awards/Recognitions



1. **Invited Talk** on “Analytical Methods in Chemistry DSE A-4” Four-Day National Webinar on Discipline Specific Elective (DSE) Topics of UG Chemistry (Hons.), CBCS Syllabus, University of Calcutta (4-7th August 2020). Maulana Azad College and Ashutosh College, Kolkata, India.
2. **Invited Talk** on “Prospective Applications of Potential Porous Materials” One-day National Webinar on “Aspects of Material Chemistry in Modern Times”, 21st July, 2020. Presidency University, Kolkata, India.
3. **Invited Talk** on “Green Chemistry for Everyday” Two-day National Conference on Science and Technology: Rural development, 20th and 21st January, 2020. Surendranath College, Kolkata, India.
4. **Invited Talk** on “Molybdenum Chemistry: A versatile Prodigy” School on Know Your Elements (KYE-2019), Chemical Sciences Division, Saha Institute of Nuclear Physics, Kolkata, 4th -10th Aug 2019.
5. **Invited Talk** on “Elements and their Speciation” CHEMoNaTiON-3, One day Seminar on Current Progress in Chemistry, Department of Chemistry, Surendranath College, Kolkata, 27th Feb 2019.
6. **Invited Talk** on “Elemental Speciation using Sustainable Alternatives” International Seminar on Recent Trends in Chemistry at Prasannadeb Women’s college, Jalpaiguri on 3rd Jan 2019.
7. **Invited Talk** on “Chemical Characterization of the Superheavy Elements: Extreme Chemistry” in Refresher Course in Chemistry at the Dept of Chemistry, University of Calcutta, from November 30-December 20, 2018.
8. **Invited Talk** on “Aqueous Biphasic Systems for Extractions, Separations and Identification of Molecular Interactions” 2nd Caparica Christmas Conference on Sample Treatment, 5th, 6th, 7th of December, 2016, Caparica, Portugal.
9. **Invited Talk** on “Sustainable Alternatives in Developing Elemental Speciation” Recent Developments in Chemistry, 4-6 October, 2016, Department of Chemistry, National Institute of Technology, Durgapur.

10. **Invited Talk** on “Sustainable Alternatives in Developing Elemental Speciation” 26th August 2016. One day seminar organized by Department of Chemistry, City College, Kolkata.
11. **Invited Talk** on “Role of Polymers in Generating Aqueous Biphasic Systems: A Tool to Recognize Interacting Molecular Species” International Conference on Frontiers in Materials Science and Technology, 10-12 December, 2015, National Institute of Science and Technology, Berhampur, Odisha.
12. **Invited Talk** on “Speciation, Separation and Sensing of Different Analytes using Polymeric and Bio-Nanocomposite Materials” Fourth International Conference on Natural Polymers and Biomaterials, 10-12 April, 2015, Mahatma Gandhi University, Kottayam, India
13. **Chaired a session** in Fourth International Conference on Natural Polymers and Biomaterials, 10-12 April, 2015, Mahatma Gandhi University, Kottayam, India.
14. **Invited Talk** on “A prologue to elementary particles” in Refresher Course in Chemistry at the Dept of Chemistry, University of Calcutta, from August – September, 2012.
15. **Invited talk** on Radioactivity and Radioisotopes: Effect on Fungal Biodiversity, UGC Sponsored National Seminar on Biodiversity: Crisis, Conservation and Management, East Calcutta Girls’ College, Laketown, Kolkata, December, 8-9, 2011.
16. **Invited talk** on Radiation, Radioactivity and Radiotracers, “Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry Today (2011) and Celebration of the International Year of Chemistry” organized by the Indian Chemical Society, Rashbehari Siksha Prangan, University of Calcutta, August 02-03, 2011.
17. **Invited Talk** on Radiation, Radioactivity and Radiotracers-Part I in Refresher Course in Chemistry at the Dept of Chemistry, University of Calcutta, from July 04 – 23, 2011.
18. **Invited Talk** on Radiation, Radioactivity and Radiotracers-Part II in Refresher Course in Chemistry at the Dept of Chemistry, University of Calcutta, from July 04 – 23, 2011.
19. **Invited talk** on Speciation Analysis: A Directive to the Chemical Behavior of Elements, UGC sponsored Seminar on Recent Trends in Chemistry, BC College Asansol, 25-26 February, 2010.

Completed Projects

Funded by	Title of the project	Tenure	Sanction No.	Money sanctioned (Rs.)
UGC Major Research	Speciation Analysis in Trace Scale using Aqueous Biphasic	July 2012-July 2015	UGC/1228C/Major Research (SC) 2012	12,78,300/-

Project	Extraction System: A Green Chemistry Approach			
DST fast track	Designing New Aqueous Biphasic Extraction Systems as Cleaner Alternatives in Separation Technology	June 2012- June 2015	SR/FT/CS-105/2011	26,83,000/-
UGC-DAE-CSR	Radiation Mediated Sustainable Synthesis of Magnetic Nanoparticles	December 2013- December 2016	CSR/PROJECT /ACCT/2014/0057/0085	7,61,400/-
UGC-DAE-CSR	Radiation induced synthesis and modification of metal nanoparticles for optical sensing of biomarkers	May 2019- April-2022	UGC-DAE-CSR-KC/CRS/19/RC07/0982/1017	7,50,000/-

Number of Ph.D students supervised: 8

Number of students pursuing Ph.D: 4

Number of post doctoral fellows: 2

ANNEXURE II

List of Publications in International Journals

1. Subhasis Ghosh, Rituparna Patra, Dipanjali Majumdar, Kamalika Sen, Developing Scenario of Titania Based Building Materials for Environmental Remediation. Int. J. Env. Sci. Tech. (in press).
2. Debashree Das, Souvik Sen, **Kamalika Sen**, Disparity of selenourea and selenocystine on methemoglobinemia in nondiabetics and diabetics. Journal of Biochemistry. (in press).

3. Dhiman Santra and **Kamalika Sen**, Ionic Liquid Modified Cellulosic Hydrogels for Loading and Sustained Release of Selenourea: An Ensuing Inhibition of Tyrosinase Activity. *Materials Today* (in press).
4. Rajib Karmakar, Pritam Singh and **Kamalika Sen**, Selectivity of Th(IV) Adsorption as Compared to U(VI), La(III), Ce(III), Sm(III) and Gd(III) using Mesoporous Al₂O₃. *Sep. Sci. Tech.* (in press).
5. Debashree Das, **Kamalika Sen**, Effect of Organo-Selenium Anticancer Drugs on Nitrite Induced Methemoglobinemia: A Spectroscopic study, *Spectrochim Acta A*, (in press)
6. Pritam Singh, Zarina Ansari, Santanu Ray, Bilwadal Bandyopadhyay, and **Kamalika Sen**, Effect of γ -Irradiation on Ruthenium-Morin Nanocomposite for Trace Detection of Ce(IV), Ce(III) and Dy(III). *Mat. Chem. Phys.* 248 (2020) 122949.
7. Zarina Ansari, Pritam Singh and **Kamalika Sen**, Facile Synthesis of Polyphenol Mediated Metal Nanocomposites for Selective Sensing of Methylmercury, *J. Env. Chem. Eng.* 8 (2020) 103838.
8. Debashree Das, Souvik Sen, **Kamalika Sen**, Caffeine and Catechin towards Prevention of Drug Induced Oxidation of Hemoglobin: A spectroscopic study, *Spectrochim Acta A*, 232 (2020) 118167.
9. Souvik Sen, **Kamalika Sen**, Debashree Das, Differential effect of catechin hydrate and caffeine and it's metabolite on prevention of methemoglobinemia caused by nitrate and nitrite containing drugs used for the treatment of coronary heart disease. *The Journal of the Association of Physicians of India* (2020) 68(1), 105.
10. Pritam Singh, P. K. Maiti and **Kamalika Sen**, Pristine and Modified Mesoporous Alumina: Molecular Assistance Based Drug Loading and Sustained Release Activity, *Bull. Mater. Sci.* (2020) 43:56.
11. Pritam Singh, Mita Halder, Santanu Ray, Bilwadal Bandyopadhyay, **Kamalika Sen**, Biomolecule Mediated Generation of Ru Nanocatalyst for Sustainable Reduction of Nitrobenzene, *ACS Omega* 4 (2019) 21267–21278.
12. Partha Pratim Chakrabarty, Pritam Singh, **Kamalika Sen**, Sandip Saha, Dieter Schollmeyer, An Azido Adduct of Schiff Base Manganese (III) Phenoxo-Bridged

- Dimer in Dual Action: Sensing of Benzene and Phenoxazinone Synthase Activity, *J. Indian Chem. Soc.*, 96(10) (2019) 1317-1331.
13. Pritam Singh, Sanchaita Mondal, Moumita Saha, Krishna Das Saha, P. K. Maiti and **Kamalika Sen**, Toxicity of pristine and β -cyclodextrin modified mesoporous alumina towards normal and cancer cell lines, *J. Indian Chem. Soc.*, 96(8) (2019) 1109-1116.
 14. Rajib Karmakar and **Kamalika Sen**, Role of Biomolecules in Selective Extraction of U(VI) using an Aqueous Biphasic System, *J. Radioanal. Nucl. Chem.* 322(1) (2019) 57-66.
 15. Zarina Ansari, Tara Shankar Bhattacharya, Abhijit Saha, **Kamalika Sen**, γ -Irradiated Ni-Hesperidin Nanocomposite for Selective Trace Level Sensing of Sulfide Ions, *J. Radioanal. Nucl. Chem.* 322(1) (2019) 79-88.
 16. Laboni Das, Sankar Prasad Paik, **Kamalika Sen**, Thermoseparative Regeneration of Triblock Copolymer after Aqueous Biphasic Extraction of Molybdate Species. *J. Chem. Eng. Data* 64(1) (2019) 51-59.
 17. Sankar Prasad Paik, **Kamalika Sen**, Micelle mediated extraction of calcium species in aqueous biphasic systems: A mechanism steered by aggregation number. *J. Mol. Liq.* 276 (2019) 861–866. <https://doi.org/10.1016/j.molliq.2018.12.065>.
 18. Dhiman Santra and **Kamalika Sen**, Generating cellulose-agar composite hydrogels for uptake-release kinetic studies of selenate and selenomethionine. *Int. J. Biol. Macromol.*, 122 (2019) 395–404.
 19. Adity Bose, Priti Sengupta, Uttam Pal, Sanjib Senapati, Mohd. Ahsan, Santanu Roy, Upasana Das, **Kamalika Sen**, Encapsulation of Thymol in cyclodextrin nanocavities: A multi spectroscopic and theoretical study. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 208 (2019) 339-348.
 20. Rajib Karmakar and **Kamalika Sen**, Aqueous Biphasic Extraction of Metal Ions: An Alternative Technology for Metal Regeneration, *J. Mol. Liq.*, 273 (2019) 231–247.
 21. Susanta Lahiri, Dibyasree Choudhury, **Kamalika Sen**, Radio-green chemistry and nature resourced radiochemistry. *J. Radioanal. Nucl. Chem.* 318 (2018) 1543–1558. <https://doi.org/10.1007/s10967-018-6240-3>

22. Pritam Singh and **Kamalika Sen**, Drug Delivery of Sulphanilamide using Modified Porous Calcium Carbonate. *Colloid. Polym. Sci.*, 296 (2018) 1711–1718. DOI 10.1007/s00396-018-4392-x
23. Zarina Ansari, Abhijit Saha, Shib Shankar Singha, **Kamalika Sen**, Phytomediated generation of Ag, CuO and Ag-Cu nanoparticles for dimethoate sensing. *J. Photochem. Photobiol., A* 367 (2018) 200–211.
24. Shib Shankar Singha, Suchanda Mondal, Tara Shankar Bhattacharya, Laboni Das, **Kamalika Sen**, Biswarup Satpati, Kaustuv Das, Achintya Singha, Au nanoparticles functionalized 3D-MoS₂ nanoflower: An efficient SERS matrix for biomolecule sensing. *Biosensors and Bioelectronics* 119 (2018) 10–17. <https://doi.org/10.1016/j.bios.2018.07.061>.
25. Mita Halder, Md. Mominul Islam, Pritam Singh, Anupam Singha Roy, Sk. Manirul Islam, and **Kamalika Sen**, Sustainable Generation of Ni(OH)₂ Nanoparticles for the Green Synthesis of 5-Substituted 1H-Tetrazoles: A Competent Turn on Fluorescence Sensing of H₂O₂. *ACS Omega* 2018, 3, 8169–8180. DOI: 10.1021/acsomega.8b01081.
26. Pritam Singh and **Kamalika Sen**, Contemporary mesoporous materials for drug delivery applications: a review, *J Porous Mater* (2018) 25:965–987. DOI 10.1007/s10934-017-0508-9.
27. Zarina Ansari, Tara Shankar Bhattacharya, Abhijit Saha, **Kamalika Sen**, Block copolymer mediated generation of bimetallic Ni-Pd nanoparticles: Raman sensors of ethyl paraben and ciprofloxacin, *React. Funct. Polym.* 124 (2018) 1–11.
28. Kangkana Sarkar, **Kamalika Sen**, Polyvinyl alcohol based hydrogels for urea release and Fe(III) uptake from soil medium, *J. Env. Chem. Eng.* 6 (2018) 736–744.
29. Sankar Prasad Paik and **Kamalika Sen**, Extraction of Bi(III) subsalicylate in micellar aggregation and its sustained release using an aqueous biphasic system, *J. Mol. Liq.*, 249 (2018) 188-192.
30. Kangkana Sarkar, **Kamalika Sen**, Susanta Lahiri, Separation of no-carrier-added ⁹⁷Ru from ¹¹B-induced Y target by encapsulation of ⁹⁷Ru into calcium alginate hydrogel beads, *J. Radioanal. Nucl. Chem.* 314 (2017) 969–973.

31. **Kamalika Sen**, Kangkana Sarkar, Susanta Lahiri, Production, Separation and Embedment of NCA ^{93m}Mo in Iron-Doped Calcium Alginate Beads From ^7Li Irradiated Yttrium Target, *J. Radioanal. Nucl. Chem.* 314 (2017) 451–456.
32. Sumanta Kumar Ghatak, Dipanwita Majumdar, Achintya Singha, **Kamalika Sen**, Peanut proteins in selective sensing of Bi(III) at trace concentrations. *J. Ind. Chem. Soc.* 94 (2017) 773-780.
33. Arabinda Chakraborty and **Kamalika Sen**, Ammonium and manganese salts vs. Brij 35 in forming new aqueous biphasic systems: Application in validation of drug-drug interaction. *J. Mol. Liq.* 241 (2017) 182–187.
34. Zarina Ansari, Abhijit Saha and **Kamalika Sen**, On the Kinetics of Block Copolymer Mediated Palladium Quantum Dot Synthesis: Application in Reduction of Cr(VI) to Cr(III), *React. Funct. Polym.* 114 (2017) 23–30.
35. Kangkana Sarkar, **Kamalika Sen**, Susanta Lahiri, Radiometric analysis of isotherms and thermodynamic parameters for cadmium(II) adsorption from aqueous medium by calcium alginate beads. *J. Radioanal. Nucl. Chem.* 312 (2017) 343–354.
36. Kangkana Sarkar, **Kamalika Sen**, Susanta Lahiri, Separation of long-lived ^{152}Eu Radioisotopes from a binary mixture of ^{152}Eu and ^{134}Cs by Calcium Alginate: A green technique. *J. Radioanal. Nucl. Chem.* 311 (2017) 2001–2006.
37. Mita Halder, Md. Mominul Islam, Zarina Ansari, Sabir Ahammed, **Kamalika Sen** and Sk. Manirul Islam, Biogenic Nano-CuO Catalyzed Facile C-N Cross-Coupling Reactions: Scope and Mechanism, *ACS Sustainable Chem. Eng.*, 5 (2017) 648–657.
38. Zarina Ansari, Shib Shankar Singha, Abhijit Saha, **Kamalika Sen**, Hassle free Synthesis of Nanodimensional Ni, Cu and Zn Sulfides for Spectral Sensing of Hg, Cd and Pb: A Comparative Study, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 176 (2017) 67–78.
39. Arabinda Chakraborty and **Kamalika Sen**, Ionic Liquid vs. Tri-block Copolymer in a New Aqueous Biphasic System for Extraction of Zn-Cholesterol Complex. *J. Mol. Liq.* 229 (2017) 278-284.
40. Kangkana Sarkar, Susanta Lahiri, **Kamalika Sen**, Incorporation of no-carrier added $^{200,203}\text{Pb}$ and $^{200,201,202}\text{Tl}$ in calcium alginate and hesperidin incorporated calcium alginate beads. *Appl. Radiat. Isot.* 121 (2017) 16-21.

41. Arabinda Chakraborty and **Kamalika Sen**, Comparison of Salt Cations in the Design of Nonionic Surfactant Based Aqueous Biphasic Systems: Application in Polyphenol Separations, *J. Chem. Eng. Data* 61 (2016), 3710-3717.
42. Kangkana Sarkar, Susanta Lahiri, **Kamalika Sen**, Separation of no-carrier-added ^{203}Pb , a surrogate radioisotope, from proton irradiated $^{\text{nat}}\text{Tl}_2\text{CO}_3$ target using calcium alginate hydrogel beads. *Radio Chim. Acta* 104 (2016) 891-896.
43. Sankar Prasad Paik, **Kamalika Sen**, Species Dependent Iodine Extractions in Polymer Based Aqueous Biphasic Systems: Emerging Relations with Aggregation Number of Polymeric Micelles, *J. Mol. Liq.* 223 (2016) 1062–1066.
44. Partha Pratim Chakrabarty, Sanjib Giri, **Kamalika Sen**, Sandip Saha, Atish Dipankar Jana, Santiago García-Granda, Shobhraj Haldar, Manindranath Bera, A Phenoxo-Azido Assorted Schiff Base Copper(II) Bridged Dimer in Trace Level Fluorescence Sensing of a Pesticide: A DFT Supported Phenomenon, *J. Coord. Chem.* 69, (2016), 2881-2894.
45. Arabinda Chakraborty, Chhanda Mukhopadhyay and **Kamalika Sen**, Block copolymer and organic salts in forming aqueous biphasic systems: a platform to identify molecular interactions in aqueous medium. *RSC Adv.*, 6, (2016) 77673-77681. DOI: 10.1039/c6ra16957k.
46. Kangkana Sarkar, Zarina Ansari and **Kamalika Sen**, Detoxification of Hg(II) from Aqueous and Enzyme Media: Pristine vs. Tailored Calcium Alginate Hydrogels, *Int. J. Biol. Macromol.*, 91 (2016) 165-173. <http://dx.doi.org/10.1016/j.ijbiomac.2016.05.049>.
47. Zarina Ansari, Kangkana Sarkar, Abhijit Saha, Achintya Singha and **Kamalika Sen**, Enhanced Anion Sensing by γ -Irradiated Polyphenol Capped Iron oxide Nanoparticles. *J. Radioanal. Nucl. Chem.* 308 (2016) 517–525. DOI: 10.1007/s10967-015-4473-y.
48. Pallabi Samaddar, **Kamalika Sen**, Discrimination of Inorganic and Organic Mercury Species by Cloud Point Extraction of Polyethylene Glycol, *J. Env. Chem. Eng.* 4 (2016) 1862–1868. <http://dx.doi.org/10.1016/j.jece.2016.03.010>
49. **Kamalika Sen** and Arabinda Chakraborty, A Glycine Based Aqueous Biphasic System: Application in Sequential Separation of Ni, Cu and Zn, *J. Mol. Liq.*

- 218, (2016) 106-111.
50. Arabinda Chakraborty and **Kamalika Sen**, Impact of pH and Temperature on Phase Diagrams of Different Aqueous Biphasic Systems, *J. Chromatogr. A.* 1433 (2016) 41–55.
51. Sumanta Kumar Ghatak, Souvik Sen, Dipanwita Majumdar, Achintya Singha, **Kamalika Sen**, Peanut Proteins in Periodate Specific Anion Sensing: An Ensuing Reduction in Allergic Response. *Food Chem.* 197 (2016) 1286–1291.
52. Zarina Ansari, Susmita Dhara, Bilwadal Bandyopadhyay, Abhijit Saha and **Kamalika Sen**, Spectral Anion Sensing and γ -Radiation Induced Magnetic Modifications of Polyphenol Generated Ag-Nanoparticles, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 156 (2016) 98–104.
53. Souvik Sen, Sumanta Kumar Ghatak, Dipanjali Majumdar, **Kamalika Sen** and Basudev Bhattacharya, Free Iron Status and Insulin Resistance in Type 2 Diabetes: Analyzing the Probable Role of a Peanut Protein, *Indian J. Med. Res.* 142 (2015) 606-609. DOI:10.4103/0971-5916.171291.
54. **Kamalika Sen**, A Journey from the Crossroads of Green Chemistry and Radiochemistry, *Science and Culture*, 81 (2015) 243-247.
55. Kangkana Sarkar and **Kamalika Sen**, On the Design of Ag-Morin Nanocomposite to Modify Calcium Alginate Gel: Framing Out a Novel Sodium Ion Trap, *RSC Advances*, 5 (2015) 57223 – 57230. DOI: 10.1039/C5RA10938H.
56. Pallabi Samaddar, Arabinda Chakraborty and **Kamalika Sen**, Block Copolymer as A Novel Functional Phase in An Aqueous Biphasic System for Species Selective Iodine Extraction. *RSC Adv.*, 5 (2015) 44204–44210.
57. Pallabi Samaddar, **Kamalika Sen**, Anion Induced Gelation in Polyvinyl Alcohol: A Probe for Metal Ion Speciation Studies, *Journal of Sol-Gel Science and Technology*, 73 (2015) 389–395.
58. Sumanta Kumar Ghatak, Dipanwita Majumdar, Achintya Singha, Souvik Sen, Debashree Das, Abhijit Chakrabarti, Chaitali, Mukhopadhyay, **Kamalika Sen**, Peanut Protein Sensitivity towards Trace Iron: A Novel Mode to Ebb Allergic Response, *Food Chem.*, 176 (2015) 308–313.

59. Pallabi Samaddar, **Kamalika Sen**, Species Dependent Sustainable preconcentration of Zinc: Possible Aspects of ABS and CPE J. Ind. Engg. Chem. 21 (2015) 835-841 doi:10.1016/j.jiec.2014.04.020.
60. Kangkana Sarkar and **Kamalika Sen**, Some Drugs in Action: Metal Ions do Influence the Activity! Int. J. Pharm. Sci. Res, 6 (2015) 6(1) 1000-13 DOI: 10.13040/IJPSR.0975-8232.
61. **Kamalika Sen**, Pallabi Samaddar, Organized Polyvinyl Alcohol Assemblies: Eligible Luminescent Centers for Species Dependent Metal Sensing, J. Mol. Liq. 200 (2014) 369–373. DOI: 10.1016/j.molliq.2014.11.004.
62. Sumanta Kumar Ghatak and **Kamalika Sen**, Prospective Chromium, Iron and Copper Sensitivity towards Aromatic Amino Acids. J. Ind. Chem. Soc. 2014, 91, 2041-2046.
63. Arabinda Chakraborty, **Kamalika Sen**, Phase Separation in Aqueous Systems for Realizing Virtually Significant Extractions, RSC Adv. 2014, 4 (109), 64328 – 64335. DOI: 10.1039/c4ra06798c.
64. Sankar Prasad Paik, Pallabi Samaddar, Souvik Sen and **Kamalika Sen**, Self Assembled Polymer Vesicles in Deciding Action of Zn-Sulphanilamide Allergenicity, Drug Deliv. and Transl. Res. (2014) 4: 409–415 (DOI 10.1007/s13346-014-0203-1).
65. Partha Pratim Chakrabarty, Sandip Saha, **Kamalika Sen**, Atish Dipankar Jana, Debarati Dey, Dieter Schollmeyer, Santiago Garcia Granda, Unexplored analytics of some novel 3d–4f heterometallic Schiff base complexes, RSC Adv., 4, (2014) 40794-40802 DOI: 10.1039/C4RA04531A.
66. Arabinda Chakraborty, **Kamalika Sen**, L-Proline Based Aqueous Biphasic System: Design and Application to Isolate the Alkaline Earths, J. Chem. Engg. Data. 59 (2014) 1288-1294.
67. Pallabi Samaddar, **Kamalika Sen**, Cloud point extraction: A sustainable method of elemental preconcentration and speciation J. Ind. Engg. Chem. 20 (2014) 1209-1219.
68. Pallabi Samaddar, **Kamalika Sen**, Competent Arsenicals: Aqueous Biphasic Extractions and Their Application in Nitrate/Nitrite Speciation, RSC Advances 3 (2013) 20750 – 20757.
69. Sumanta Kumar Ghatak, Debarati Dey, Souvik Sen, **Kamalika Sen**, Aromatic amino acids in high selectivity bismuth(III) recognition, Analyst, 2013, 138, 2308.

70. Sumanta Kumar Ghatak and **Kamalika Sen**, Peanut Proteins: Applications, Ailments and Possible Remediation. *J. Ind. Engg. Chem.* 19 (2013) 369-374
<http://dx.doi.org/10.1016/j.jiec.2012.09.009>.
71. Sankar Prasad Paik, Sumanta Kumar Ghatak, Debarati Dey and **Kamalika Sen**, Polyethylene Glycol Vesicles: Self Assembled Site for Luminescence Generation, *Anal. Chem.* 84 (2012) 7555–7561. **DOI:** 10.1021/ac301731x.
72. Sankar Prasad Paik, Sumanta Kumar Ghatak and **Kamalika Sen**, A Complete Aqueous Method for Trace Level Extraction and Spectrophotometric Estimation of Bi(III/V) Salts. *J. Ind. Chem. Soc.* 89 (2012) 1465-1470.
73. **Kamalika Sen**, Eduardo Mendes and H. Th. Wolterbeek, Combined Effort of Fe-Dextran and an RTIL towards Formation of Ionogel, *J. Sol-Gel Sci. Tech.* 63 (2012) 135-139 (**DOI 10.1007/s10971-012-2775-x**).
74. **Kamalika Sen**, Wouter A. P. Breeman and H. Th. Wolterbeek, Speciation of No-Carrier-Added ^{68}Ga Prior to its Labeling for PET Imaging, *J. Radioanal. Nucl. Chem.*, 292 (2012) 683-687. (**DOI: 10.1007/s10967-011-1482-3**).
75. **Kamalika Sen** and H. Th. Wolterbeek, Role of an Ionic Liquid, 1-Butyl-3-methylimidazolium 2-(2-methoxyethoxy) ethyl sulfate in Extraction Studies of Gadolinium Oxide, *Radiochim. Acta*, 100 (2012) 263-266. (**doi: 10.1524/ract.2012.1914**).
76. Debashree Das and **Kamalika Sen**, Species Dependent Aqueous Biphasic Extraction of some Heavy Metals, *J. Ind. Engg. Chem.* 18 (2012) 855–859. (**doi:10.1016/j.jiec.2011.11.142**).
77. **Kamalika Sen**, Wouter A. P. Breeman and H.Th. Wolterbeek, Choice of Inorganic Materials as $^{68}\text{Ge}/^{68}\text{Ga}$ Generator: An Intercomparison, *Ion Exch. Lett.*, 4 (2011) 32-43.
78. **Kamalika Sen**, Krishna Kowligi, Ger Koper and H. Th. Wolterbeek, Light Induced Green Synthesis of Gold Nanoparticles, *Int. J. Nanotechnol. Appl.* 5 (2011) 173-180.
79. **Kamalika Sen**, P. Sinha and Susanta Lahiri, Time Dependent Formation of Gold Nanoparticles in Yeast Cells: A Comparative Study, *Biochem. Eng. J.* 55 (2011) 1-6.

80. Moumita Maiti, **Kamalika Sen**, Souvik Sen, Susanta Lahiri, Studies on stabilities of some human chorionic gonadotropin complexes with β -emitting radionuclides. *Appl. Radiat. Isot.* 69 (2011) 316-319.
81. Erik de Blois, Ho Sze Chan, **Kamalika Roy**, Eric P. Krenning, Wouter A. P. Breeman, Reduction of ^{68}Ge activity containing liquid waste from ^{68}Ga PET chemistry in nuclear medicine and radiopharmacy by solidification. *J. Radioanal. Nucl. Chem.*, 288 (2011) 303-306.
82. **Kamalika Roy**, Rakhi Paul, Baisakhi Banerjee, Susanta Lahiri, Extraction of Long-Lived Radionuclides $^{152,154}\text{Eu}$ and ^{134}Cs Using Environmentally Benign Aqueous Biphasic System, *Radiochim. Acta*, 97 (2009) 637-642.
83. Susanta Lahiri and **Kamalika Roy**, A Green Approach for Sequential Extraction of Heavy Metals from Li Irradiated Au Target, *J. Radioanal. Nucl. Chem.*, 281 (2009) 531-534.
84. **Kamalika Roy** and Susanta Lahiri, Extraction of Hg(I), Hg(II) and Methylmercury Using Polyethylene Glycol Based Aqueous Biphasic System. *Appl. Radiat. Isot.* 67 (2009) 1781–1784.
85. **Kamalika Roy**, Kalpita Ghosh, Anupam Banerjee, Debashis Mukhopadhyay and Susanta Lahiri, 2009, Biomolecule–metal interactions: Applications in extraction and separation techniques, *Biochem. Eng. J.* 45(21) (2009) 82-85.
86. Susanta Lahiri, **Kamalika Roy** and Souvik Sen, 2008, Complexation Study on No-Carrier-Added Astatine with Insulin: A Candidate Radiopharmaceutical, *Appl. Radiat. Isot.*, 66 (2008) 1901-1904.
87. **Kamalika Roy** and Susanta Lahiri, *In situ* γ -radiation: One step environmentally benign method to produce gold-palladium bimetallic nanoparticles, *Anal. Chem.*, 80 (2008) 7504-7507.
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89. **Kamalika Roy**, P. Sinha and Susanta Lahiri, 2008, Immobilization of long-lived radionuclides, $^{152,154}\text{Eu}$ by selective bioaccumulation in *Saccharomyces cerevisiae* from a synthetic mixture of $^{152,154}\text{Eu}$, ^{137}Cs and ^{60}Co . *Biochem. Eng. J.* 40(2) (2008) 363-367.

90. **Kamalika Roy** and Susanta Lahiri, 2008, Production and Separation of Astatine Radionuclides: Some New Addition to Astatine Chemistry, *Appl. Radiat. Isot.*, 66 (2008) 571-576.
91. **Kamalika Roy** and Susanta Lahiri, 2008, Species dependent radiotracer study of Cr(VI) and Cr(III) using an aqueous biphasic system. *Radiochim Acta.*, 96, 49-54.
92. **Kamalika Roy and Susanta Lahiri.** 2006 A green method for synthesis of radioactive gold nanoparticles. *Green Chem.* 8, 1063-1066.
93. Susanta Lahiri, **Kamalika Roy**, Soumya Bhattacharya, Samir Maji and S. Basu, 2005. Separation of ^{134}Cs and ^{152}Eu using Inorganic Ion Exchangers, Zirconium Vanadate and Ceric Vanadate, *Appl. Radiat. Isot.*, 63, 293-297.
94. **Kamalika Roy** and S. Basu, 2005. Separation of Gold and Silver Using A Chelating Resin – Thiosemicarbazide Incorporated Amberlite IRC-50. *Indian Journal of Chemistry.* 44A, 9-12.
95. **Kamalika Roy**, S. Basu, Dalia Nayak and Susanta Lahiri, 2004. Studies on the Multielemental Uptake by Thiosemicarbazide Incorporated Amberlite IRC-50, Using Tracer Packet Technique. *Indian Journal of Chemistry.* 43A, 1152-1155.
96. **Kamalika Roy**, S. Basu, A. Ramaswami, Dalia Nayak, and Susanta Lahiri, 2004: Incorporation of thiosemicarbazide in Amberlite IRC-50 for separation of astatine from α -irradiated bismuth oxide. *Appl. Radiat. Isot.* 60, 793-799.
97. **Kamalika Roy**, P. K. Mohapatra, N. Rawat, D. K. Pal, S. Basu and V. K. Manchanda, 2004: Separation of ^{90}Y from ^{90}Sr using Zirconium Vanadate as the Ion Exchanger. *Appl. Radiat. Isot.* 60, 621-624.
98. **Kamalika Roy**, S. Basu, A. Ramaswami, and Susanta Lahiri, 2003: Application of Tracer Packet Technique for Multielemental Uptake Studies on the Inorganic Ion Exchanger, Zirconium Vanadate. *Appl. Radiat. Isot.* 59, 105-108.
99. Dalia Nayak, Susanta Lahiri, **Kamalika Roy**, S. Basu, and A. Ramaswami, 2003: Radiochemical separation of Carrier-Free $^{204,206}\text{Bi}$ from α -irradiated thallium oxide target. *Appl. Radiat. Isot.* 58, 447-450.
100. **Kamalika Roy**, S. Basu, D. K. Pal, Susanta Lahiri and A. Ramaswami, 2003: Separation of carrier-free ^{95}Tc from α -irradiated natural niobium. *J. Radioanal. Nucl. Chem.* 256, 311-313.

101. **Kamalika Roy**, D. K. Pal, S. Basu, D. Nayak, and Susanta Lahiri, 2002: Synthesis of a new ion exchanger, zirconium vanadate, and its application to the separation of barium and cesium radionuclides at tracer levels. *Appl. Radiat. Isot.* 57, 471-474.

ANNEXURE III

Publications as chapter of books

1. Susanta Lahiri and **Kamalika Roy**, Study of Radiotracer Application in Bio-Nano-Geo Sciences at Saha Institute of Nuclear Physics, in *Bio-Nano-Geo Sciences: The Future Challenge*, A. Srivatava, I Roy (eds), pp 101-108, Ane Books Pvt. Ltd., New Delhi 2009.
2. Dalia Nayak and **Kamalika Roy**, Trace Element Speciation using Greener Techniques, In: *Advanced Trace Analysis*, Ed. S. Lahiri, Narosa Publishing House, New Delhi, 2009, ISBN 978-81-8487-029-9.
3. **Kamalika Roy**, D. K. Pal, S. Basu, Dalia Nayak, A. De and Susanta Lahiri, "Synthesis of a Novel Ion Exchanger, Zirconium Vanadate, for Immobilising $^{134,137}\text{Cs}$ Radionuclides", In: *Environmental Radiochemical Analysis II*, Ed. P. Warwick, Royal Society of Chemistry, UK, 2003, pp. 17-20.

ANNEXURE IV

Publications in Conferences

A. International Conferences:

1. Shamali Basu, Debashree Das and **Kamalika Sen**, Surface Enhanced Raman Spectroscopy using Selenium Nanoparticles for Sensing of Cancer Biomarker. International Seminar (ICBS-2020) on Innovation, Expansion, Impacts and Challenges in Chemical and Biological Sciences, 8th and 9th January, 2020, Sruendranath College, Kolkata, India.
2. Bhavya Srivastava, Souvik Sen and **Kamalika Sen**, Spectroscopic Studies on Sorbitol-Caffeine Interactions: A Suggestive Approach for Plausible Remediation of Diabetic Neuropathy. International Seminar (ICBS-2020) on Innovation, Expansion, Impacts and Challenges in Chemical and Biological Sciences, 8th and 9th January, 2020, Sruendranath College, Kolkata, India.
3. Debashree Das, **Kamalika Sen**, Role of some organo-selenium drugs on oxidative damage of hemoglobin. International Seminar (ICBS-2020) on Innovation, Expansion, Impacts and Challenges in Chemical and Biological Sciences, 8th and 9th January, 2020, Sruendranath College, Kolkata, India.
4. Laboni Das, Sankar Prasad Paik and **Kamalika Sen**, Interaction of Synthetic and Natural Pesticides with Metal Ions in PEG Media: Extraction Patterns in Aqueous Biphasic Systems. International Seminar (ICBS-2020) on Innovation, Expansion, Impacts and Challenges in Chemical and Biological Sciences, 8th and 9th January, 2020, Sruendranath College, Kolkata, India.
5. Sankar Prasad Paik, Laboni Das and **Kamalika Sen**, Thermoseparative regeneration of triblock copolymer after aqueous two phase extraction of molybdate species. International Seminar (ICBS-2020) on Innovation, Expansion, Impacts and Challenges in Chemical and Biological Sciences, 8th and 9th January, 2020, Sruendranath College, Kolkata, India.

6. Laboni Das, Santanu Ray, Sreyan Raha, Debarati Dey and **Kamalika Sen**, Biomolecule assisted acid free generation of molybdenum blue: Application in analytical and bioanalytical system. International Symposium on Recent Advances in Chemistry and Material Sciences (2019) and the Celebration of the International Year of the Periodic Table, August 2 and 3, 2019, Saha Institute of Nuclear Physics, Kolkata.
7. Pritam Singh, Mita Halder, Santanu Ray, Bilwadal Bandyopadhyay and **Kamalika Sen**, Generation of biomolecules based Ru nanocatalysts for sustainable reduction of benzene. International Symposium on Recent Advances in Chemistry and Material Sciences (2019) and the Celebration of the International Year of the Periodic Table, August 2 and 3, 2019, Saha Institute of Nuclear Physics, Kolkata.
8. Rajib Karmakar and **Kamalika Sen**, Selective adsorption and separation of Th(IV) from U(VI) and Ce(III) using TiO₂ and mesoporous Al₂O₃. International Symposium on Recent Advances in Chemistry and Material Sciences (2019) and the Celebration of the International Year of the Periodic Table, August 2 and 3, 2019, Saha Institute of Nuclear Physics, Kolkata.
9. Debashree Das, Souvik Sen and **Kamalika Sen**, Differential effect of caffeine and Catechin on prevention of drug induced methemoglobinemia in coronary heart disease. International Symposium on Recent Advances in Chemistry and Material Sciences (2019) and the Celebration of the International Year of the Periodic Table, August 2 and 3, 2019, Saha Institute of Nuclear Physics, Kolkata.
10. Rajib Karmakar and **Kamalika Sen**, Role of Biomolecules in Extraction of U(VI) using an Aqueous Biphasic System, The fourth International Conference on Application of RadiotraCers and Energetic Beams in Sciences, ARCEBS-2018 (November 11-17, 2018), Ffort Raichak.
11. Pritam Singh and **Kamalika Sen**, Effect of γ -Irradiation on Ruthenium-Morin Nanocomposite for Trace Detection of Ce(IV), Ce(III) and Dy(III), The fourth International Conference on Application of RadiotraCers and Energetic Beams in Sciences, ARCEBS-2018 (November 11-17, 2018), Ffort Raichak.
12. Zarina Ansari, **Kamalika Sen**, γ -Irradiated Ni-Hesperidin Nanocomposite for Selective Trace Level Sensing of Sulfide Ions, The fourth International Conference

on Application of Radioisotopes and Energetic Beams in Sciences, ARCEBS-2018 (November 11-17, 2018), Ffort Raichak.

13. **Kamalika Sen**, Aqueous Biphasic Systems for Extractions, Separations and Identification of Molecular Interactions. 2nd Caparica Christmas Conference on Sample Treatment, 5th, 6th, 7th of December, 2016, Caparica, Portugal. (**Invited Talk**)
14. Kangkana Sarakar, Susanta Lahiri, **Kamalika Sen**, Adsorption of cadmium by microporous calcium alginate beads. 52nd Annual Convention of Chemists 2015 and International Conference on Recent Advances in Chemical Sciences, 28-30 December, 2015, JECRC University, Jaipur, Rajasthan, India.
15. **Kamalika Sen**, Role of Polymers in Generating Aqueous Biphasic Systems: A Tool to Recognize Interacting Molecular Species” International Conference on Frontiers in Materials Science and Technology, 10-12 December, 2015, National Institute of Science and Technology, Berhampur, Odisha, India (**Invited Talk**).
16. Zarina Ansari and **Kamalika Sen**, Agro Waste Derived Polyphenols in Generation of Metal Nanoparticles: Application in Organophosphorus Sensing, 14th Annual Meeting of the Society for Free radical Research-India (SFRR-India), 7-9 January 2016, department of Biochemistry, College of Medicine and JNM Hospital, WBUHS, Kalyani, India.
17. Zarina Ansari and **Kamalika Sen**, Generation of NiS, ZnS and CuS Nanoparticles for Sensing Heavy Metal Ions, International Conference on Frontiers in Materials Science and Technology, 10-12 December, 2015, National Institute of Science and Technology, Berhampur, Odisha.
18. Kangkana Sarkar and **Kamalika Sen**, Hg(II) Detoxification from Aqueous Enzyme Media using Modified Calcium Alginate Gels, International Conference on Frontiers in Materials Science and Technology, 10-12 December, 2015, National Institute of Science and Technology, Berhampur, Odisha.
19. **Kamalika Sen**, Speciation, Separation and Sensing of Different Analytes using Polymeric and Bio-Nanocomposite Materials, Fourth International Conference on Natural Polymers and Biomaterials, 10-12 April, 2015, Mahatma Gandhi University, Kottayam, India (**Invited talk**).

20. Pallabi Samaddar and **Kamalika Sen**, Anion Induced Gelation in Polyvinyl Alcohol: A Probe for Metal Ion Speciation Studies, MACRO 2015, International Symposium on Polymer Science and Technology, January 23-26, 2015.
21. Arabinda Chakraborty and **Kamalika Sen**, Implementation of a Tri-block Copolymer towards Designing an Aqueous Two –phase system, MACRO 2015, International Symposium on Polymer Science and Technology, January 23-26, 2015.
22. Zarina Ansari and **Kamalika Sen**, Silver-Polyphenol Nanocomposites from Peanut Skin Extract in Anion Sensing Studies. 5th Interdisciplinary Symposium on Materials Chemistry, December 9-13, 2014, Bhabha Atomic Research Centre, Mumbai, India.
23. Arabinda Chakraborty and **Kamalika Sen**, L-Proline Based Aqueous Biphasic System: Role of Sodium Alginate to Isolate the Alkaline Earths. 20th ISCB International Conference on “Chemistry and Medicinal Plants in Translational Medicine for Healthcare” Department of Chemistry, University of Delhi, 1st to 4th March, 2014.
24. Sankar Prasad Paik, Pallabi Samaddar, Souvik Sen, **Kamalika Sen**, Matrix Dependent Allergenicity of a Zn-Bound Sulpha Drug, 20th ISCB International Conference on “Chemistry and Medicinal Plants in Translational Medicine for Healthcare” Department of Chemistry, University of Delhi, 1st to 4th March, 2014.
25. Kangkana Sarkar and **Kamalika Sen**, Silver-Morin Nanocomposites in their Antimicrobial Action. 20th ISCB International Conference on “Chemistry and Medicinal Plants in Translational Medicine for Healthcare” Department of Chemistry, University of Delhi, 1st to 4th March, 2014.
26. Pallabi Samaddar and **Kamalika Sen**, Polyvinyl Alcohol Solutions as Fluorescent Probes. 20th ISCB International Conference on “Chemistry and Medicinal Plants in Translational Medicine for Healthcare” Department of Chemistry, University of Delhi, 1st to 4th March, 2014.
27. Sumanta Kumar Ghatak and **Kamalika Sen**, Iron Configuration in the Type 2 Diabetes Profile using Ion Chromatograph: Probable Role of a Peanut Protein. 20th ISCB International Conference on “Chemistry and Medicinal Plants in Translational

Medicine for Healthcare” Department of Chemistry, University of Delhi, 1st to 4th March, 2014.

28. Pallabi Samaddar and Kamalika Sen, Speciation of Nitrate and Nitrite Ions: A Novel Application of PVA, 5th Asian Conference on Colloid and Interface Science, November 20-23, 2013.
29. Arabinda Chakraborty, Kangkana Sarkar and **Kamalika Sen**, Designing Amino Acid Based New Aqueous Biphasic System for Extraction of Ag-Morin Complex, International symposium on Molecular Organization and complexity: A Chemical Perspective, Feb 6-8, 2013, Kolkata, India.
30. Pallabi Samaddar and **Kamalika Sen**, Speciation Study of Zn and its Complexes Based on Aqueous Biphasic System. International symposium on Molecular Organization and complexity: A Chemical Perspective, Feb 6-8, 2013, Kolkata, India.
31. Partha Pratim Chakrabarty, Sandip Saha and **Kamalika Sen**, Effect of Salt-Anion in the formation of Zn(II)-Schiff Base complexes. International symposium on Molecular Organization and complexity: A Chemical Perspective, Feb 6-8, 2013, Kolkata, India.
32. Sumanta Kumar Ghatak and **Kamalika Sen**, Peanut Globulin Conarachin: Sensitivity towards Trace Level Cr(VI), Fe(III) and Cu(II) Salts. International symposium on Molecular Organization and complexity: A Chemical Perspective, Feb 6-8, 2013, Kolkata, India.
33. Sumanta Kumar Ghatak, Sankar Prasad Paik and **Kamalika Sen**, Polyethylene Glycol Solutions as Fluorescent Probes, International Symposium on Chemistry and Complexity December 6-8, 2011. Indian Association for the Cultivation of Science, Kolkata, India.
34. Debashree Das and **Kamalika Sen**, Spectroscopic Studies in Extraction of Some Heavy Metals using a Surfactant based Aqueous Biphasic System. International Symposium on Facets of Weak Interactions in Chemistry. January 13-15, 2011, Saha Institute of Nuclear Physics, Kolkata, India.

35. **Kamalika Roy**, Wouter A. P. Breeman and H.Th. Wolterbeek, Speciation of No-Carrier-Added ^{68}Ga Prior to its Labelling for PET Imaging, ARCEBS 2010, 7-13 November, 2010, Saha Institute of Nuclear Physics, Kolkata.
36. **Kamalika Roy** and H.Th. Wolterbeek, Role of an Ionic Liquid in Dissolution and Extraction Studies of $^{159}\text{Gd}_2\text{O}_3$, ARCEBS 2010, 7-13 November, 2010, Saha Institute of Nuclear Physics, Kolkata.
37. **Kamalika Roy** and H. Th. Wolterbeek, A Green Synthesis of Ionogel from Fe-Dextran and a Room Temperature Ionic Liquid, 8th Green Chemistry Conference, September 9-11, 2009, Zaragoza, Spain.
38. Susanta Lahiri, **Kamalika Roy** and Souvik Sen, *In Vitro* Kinetic Studies on Direct Complexation of Insulin with Astatine Radionuclides, 9th International Conference on Nuclear Analytical Methods in the Life Sciences, *NAMLS-9*, 7-12 September, 2008, Lisbon, Portugal.
39. **Kamalika Roy** and Susanta Lahiri Aqueous Biphasic Extraction: A Tool to Generate Radiogenic Gold-Palladium Nanoparticles, Seventh International Conference on Nuclear and Radiochemistry, 24-29 August, 2008, Eötvös Loránd University, Budapest, Hungary.
40. **Kamalika Roy**, Souvik Sen and Susanta Lahiri, 2008, Studies on ^{198}Au -insulin complex: A proposed radiopharmaceutical for targeted therapy. 10th International Symposium on Metal ions in Biology and Medicine. May 19-22, 2008, Corsica, France.
41. **Kamalika Roy** and Susanta Lahiri (2006): Polyethylene glycol based aqueous biphasic system: A potential extractant of Gold (III). ARCEBS 06, Saha Institute of Nuclear Physics, Kolkata, 23-27 Jan, 2006.
42. **Kamalika Roy**, P. Sinha and Susanta Lahiri (2006): Accumulation Studies of Gold Using Baker's Yeast, *Saccharomyces cerevisiae*. ARCEBS 06, Saha Institute of Nuclear Physics, Kolkata, 23-27 Jan, 2006.
43. **Kamalika Roy**, S. Basu, Dalia Nayak and Susanta Lahiri, 'Application of Tracer Packet Technique in Multielemental Uptake Studies by Thiosemicarbazide Incorporated Amberlite IRC-50', International Conference on Modern Trends in

Activation Analysis (MTAA), June 20-25, 2004 University of Surrey, Guildford, UK.

44. **Kamalika Roy**, (2003): Tracer Packet: A New Concept and its Application in Bioaccumulation Studies, 5th Chittagong Conference on Biophysics, Biomathematics and Biostatistics, 20-21 September 2003, Bangladesh.

B. National Conferences:

1. Pritam Singh and **Kamalika Sen**, Activity of Different Porous CaCO₃ Materials as Carrier of an Antibiotic Drug. National Symposium on Recent Advances in Chemistry and Industry, August 2 and 3, 2017, Department of Chemistry, IEST, Shibpur, Howrah.
2. Dhiman Santra and Kamalika Sen, Behavior of Se(VI) adsorption in cellulose-agar composite material: A kinetic study, National Symposium on Recent Advances in Chemistry and Industry, August 2 and 3, 2017, Department of Chemistry, IEST, Shibpur, Howrah.
3. Zarina Ansari and Kamalika Sen, Palladium Quantum Dots: Generation and γ Irradiation Mediated Regeneration for Catalyzing Reduction of Cr(VI) to Cr(III), 13th DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), 6th -10th February, 2017, KIIT University, Odisha, India
4. Zarina Ansari and **Kamalika Sen**, Facile synthesis of palladium quantum dots: Application in reduction of Cr(VI) to Cr(III). Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2016, University of Calcutta.
5. Kangkana Sarkar and **Kamalika Sen**, Polyvinyl alcohol based hydrogel scaffolds for time dependent urea uptake and release. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2016, University of Calcutta.

6. Kangkana Sarkar, Susanta Lahiri, **Kamalika Sen**, Separation of No-Carrier-Added ^{203}Pb , A Surrogate Radioisotope, from Proton Irradiated $^{\text{nat}}\text{Tl}_2\text{CO}_3$ Target using Calcium Alginate Hydrogel Beads, 7th DAE-BRNS Biennial Symposium on Emerging Trends in Separation Science and Technology - SESTEC 17-20 May 2016, Indian Institute Of Technology, Guwahati.
7. Mita Halder, Md. Mominul Islam, Sabir Ahammed, **Kamalika Sen** and Sk. Manirul Islam, Unprecedented Catalytic Activity of Biogenic Cu-Nanoparticles in N-Arylation of Amides. Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry, Indian Chemical Society, 31st July-1st August, 2015, University of Calcutta, Kolkata, India.
8. Kangkana Sarkar, Susanta Lahiri and **Kamalika Sen**, Calcium alginate and its modification with hesperidine: A separation matrix of no-carrier-added lead and thallium. Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry, Indian Chemical Society, 31st July-1st August, 2015, University of Calcutta, Kolkata, India.
9. Arabinda Chakraborty and **Kamalika Sen**, Effect of caffeine on the extraction of selected vitamins in block copolymer based aqueous two phase systems. Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry, Indian Chemical Society, 31st July-1st August, 2015, University of Calcutta, Kolkata, India.
10. Zarina Ansari and **Kamalika Sen**, Polyphenol Generated Metal Nanoparticles: Application in Organophosphorus Sensing, Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry, Indian Chemical Society, 31st July-1st August, 2015, University of Calcutta, Kolkata, India.
11. Kangkana Sarkar, **Kamalika Sen** and Susanta Lahiri, PVA based hydrogels for uranium (VI) preconcentration: An attempt to separate ^{226}Ra from bulk uranium. National level seminar on advanced spectroscopy, theoretical chemistry, synthesis, reactivity and structural evaluation, 19th-21st February, 2015.
12. Zarina Ansari, Susmita Dhara, Bilwadal Bandyopadhyay and **Kamalika Sen**, γ -Radiation Induced Physico-Chemical Transformations in Ag-Polyphenol

Nanocomposites, 12th National Symposium on Nuclear and Radiochemistry, (NUCAR 2015), February 9-13, 2015, Bhabha Atomic Research Centre, Mumbai.

13. Kangkana Sarkar, Zarina Ansari and **Kamalika Sen**, Calcium alginate biopolymer and its modification for mercury (II) detoxification study. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 1 and 2, 2014, University of Calcutta.
14. Zarina Ansari, Kangkana Sarkar and **Kamalika Sen**. Effect of gamma irradiation in the formation of Fe-polyphenol nanocomposites and peanut skin extract. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 1 and 2, 2014, University of Calcutta.
15. Arabinda Chakraborty and **Kamalika Sen**, Designing some new aqueous biphasic systems for realizing virtually significant extractions, Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 1 and 2, 2014, University of Calcutta.
16. Partha Pratim Chakrabarty, Sandip Saha and **Kamalika Sen**, Application of a Hetero-Metallic Schiff Base Complex in Speciation Analysis, Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2013, University of Calcutta.
17. Kangkana Sarkar and **Kamalika Sen**, Spectral Evidences of Ag⁺ ion Complexation with 2',4',3,5,7-pentahydroxyflavone. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2013, University of Calcutta.
18. Arabinda Chakraborty and **Kamalika Sen**, Sequential Separation of Ni, Cu and Zn using a New Glycine based Aqueous Biphasic System. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2013, University of Calcutta.
19. Pallabi Samaddar and **Kamalika Sen**, Speciation of Inorganic Arsenicals (As⁵⁺/As³⁺) using a PEG-salt ATPS. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2013, University of Calcutta.

20. Sumanta Kumar Ghatak and **Kamalika Sen**, Analysis of Biomolecular Fractions in Peanut for Identification of Iron and Zinc Storage Sites. Proceedings of the National Symposium on Recent Advances in Chemistry & Industry, August 2 and 3, 2013, University of Calcutta.
21. Sumanta Kumar Ghatak and **Kamalika Sen**, Aromatic Amino Acids in High Selectivity Bismuth(III) Recognition. Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry. 2nd and 3rd August, 2012, Indian Chemical Society, University of Calcutta.
22. Pallabi Samaddar and **Kamalika Sen**, Cloud Point Extraction Studies of Some Trivalent Metals. Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry. 2nd and 3rd August, 2012, Indian Chemical Society, University of Calcutta.
23. Sumanta Kumar Ghatak and **Kamalika Sen**, Heavy Metal Complexation of Tyrosine and Tryptophan: A Comparative Study, National Seminar on Inorganic Chemistry-2011 and the celebration of 150th Birth Anniversary of Acharya P. C. Ray, July 8-9, 2011, Department of Chemistry, Jadavpur University.
24. Shankar Prasad Paik and **Kamalika Sen**, Aqueous Biphasic Extraction of Bi and Tl Salts using Spectrophotometric Methods, National Seminar on Inorganic Chemistry-2011 and the celebration of 150th Birth Anniversary of Acharya P. C. Ray, July 8-9, 2011, Department of Chemistry, Jadavpur University.
25. **Kamalika Sen**, (2011) Aqueous Two Phase Extraction Behavior of Ga, Sn and Bi salts, National Seminar on International Year of Chemistry: Chemistry in our Lives, Department of chemistry, The University of Burdwan during 15th-17th March 2011.
26. **Kamalika Sen**, Krishna Kowgi, Ger Koper and H.Th. Wolterbeek (2010): Light Induced Green Synthesis of Gold Nanoparticles, National Symposium on Recent Trends in "Chemistry Today", Department of Chemistry, The University of Burdwan during 18th-20th March 2010.
27. Binita Dutta, **Kamalika Roy**, Joyeeta Mukherjee, Susanta Lahiri, Conarachin II: A possible Biosensor for Heavy Metals, National Symposium on Recent Trends in "Chemistry Today", Department of Chemistry, The University of Burdwan during 18th-20th March 2010.

28. **Kamalika Roy**, Lipsa Das and Susanta Lahiri (2009): Studies on Mercury Binding Affinity of Conarachin Extracted from Groundnut (*Arachis hypogaea*), Nuclear and Radiochemistry Symposium, NUCAR 2009, Mithibai College, Mumbai, India, 7-10 January, 2009.
29. **Kamalika Roy**, Rakhi Paul, Baisakhi Banerjee, Susanta Lahiri (2009): Extraction of Long-Lived Radionuclides $^{152,154}\text{Eu}$ and ^{134}Cs Using Environmentally Benign Aqueous Biphasic System, Nuclear and Radiochemistry Symposium, NUCAR 2009, Mithibai College, Mumbai, India, 7-10 January, 2009.
30. Susanta Lahiri and **Kamalika Roy**, A Green Approach for Sequential Extraction of Heavy Metals from Li Irradiated Au Target, Nuclear and Radiochemistry Symposium, NUCAR 2009, Mithibai College, Mumbai, India, 7-10 January, 2009.
31. Moumita Maiti, **Kamalika Roy**, Souvik Sen and Susanta Lahiri, 2008, Studies on possible complexation of ^{99}Mo with hCG hormone for treatment of hyperthyroidism. UGC-Sponsored National Seminar on Advanced Spectroscopy, Theoretical Chemistry, Synthesis, Reactivity and Structure Evaluation, 25-27th April, 2008, Department of Chemistry, The University of Burdwan, Burdwan, 713 104, India.
32. **Kamalika Roy** and Susanta Lahiri, 2008, Synthesis of palladium-gold nanoparticles using in situ γ -radiation from ^{198}Au . National Seminar on Current Trends in Chemistry-1, January 8, 2008, University of Kalyani, Kalyani, West Bengal, India.
33. **Kamalika Roy** and Susanta Lahiri, 2007, An alternative production and separation method of ultratrace astatine radionuclides from lead target. School on Trace Analysis, TRACE-07, Saha Institute of Nuclear Physics, Kolkata, India, 3-13 October 2007.
34. Kalpita Ghosh, **Kamalika Roy**, Debashis Mukhopadhyay and Susanta Lahiri, 2007, Separation of trace amount of mercury by arachin derived from *Arachis hypogaea*. School on Trace Analysis, TRACE-07, Saha Institute of Nuclear Physics, Kolkata, India, 3-13 October 2007.
35. Susanta Lahiri and **Kamalika Roy**, Speciation Dependent Study of Cr(VI) and Cr(III) using an Aqueous Biphasic System. NUCAR 2007, The Maharaja Sayajirao University of Baroda, Vadodara, 14-17 February, 2007.

36. **Kamalika Roy** and Susanta Lahiri, Investigation of Cr(III/VI) Uptake Kinetics in Baker's Yeast using Cell Products. NUCAR 2007, The Maharaja Sayajirao University of Baroda, Vadodara, 14-17 February, 2007.
37. **Kamalika Roy** and Susanta Lahiri, "Aqueous Biphasic Extraction of As(III) and As(V)" National Symposium on Current Trends in Chemistry, January 30-31, 2007, University of Kalyani, Kalyani, West Bengal.
38. **Kamalika Roy**, Anupam Banerjee, Kalpita Ghosh, Dalia Nayak, Susanta Lahiri, "Radiochemistry Research at SINP using Neutron Activation" Proceedings of DAE-BRNS Discussion Meet on "Current Trends and Future Perspectives of Neutron Activation Analysis", November 16-17, 2006, Bhabha Atomic Research Centre, Mumbai.
39. Susanta Lahiri and **Kamalika Roy**, "Application of radiotracers in bio-nano-geo-sciences: Trends in SINP, Kolkata" Humboldt Kolleg on "Bio-, nano-, Geo-Sciences: Addressing issues of concern to Mankind", March 24-26, 2006, Institute of Himalayan Bioresource Technology, Palampur, India.
40. **Kamalika Roy**, P. Sinha and Susanta Lahiri (2005): Selective Bioaccumulation of ^{152}Eu by the Yeast, *Saccharomyces cerevisiae*. NUCAR 2005, Guru Nanak Dev University, Amritsar, 15-18 March, 2005.
41. Susanta Lahiri, Samir Maji, **Kamalika Roy**, Soumya Bhattacharya and S. Basu (2005): Separation of ^{134}Cs and ^{152}Eu using Inorganic Ion Exchangers, Zirconium Vanadate and Ceric Vanadate. NUCAR 2005, Guru Nanak Dev University, Amritsar, 15-18 March, 2005.
42. **Kamalika Roy**, S. Basu, A. Ramaswami, Dalia Nayak and Susanta Lahiri (2004): Application of Tracer Packet Technique in Multielemental Uptake Studies by Thiosemicarbazide Incorporated Amberlite IRC-50. Discussion meeting on Application of Radiotracers in Chemical, Environmental and Biological Sciences, Saha Institute of Nuclear Physics, Kolkata, April 15-16, 30.
43. **Kamalika Roy** and S. Basu (2004): Separation of Gold and Silver Using a Chelating Resin-Thiosemicarbazide Incorporated Amberlite IRC-50. Discussion meeting on Application of Radiotracers in Chemical, Environmental and Biological Sciences, Saha Institute of Nuclear Physics, Kolkata, April 15-16, 31.

44. Dalia Nayak, Susanta Lahiri, **Kamalika Roy**, S. Basu, A. and Ramaswami (2003): Radiochemical Separation of Carrier-free $^{204,206}\text{Bi}$ from α -Irradiated Thallium Oxide Target, Nuclear and Radiochemistry Symposium, NUCAR 2003, Bhabha Atomic Research Centre, Mumbai, 10-13 February, 2003.
45. **Kamalika Roy**, S. Basu, Dalia Nayak and Susanta Lahiri (2003): Incorporation of thiosemicarbazide in Amberlite IRC-50 for separation of $^{210,211}\text{At}$ from bismuth oxide target. Nuclear and Radiochemistry Symposium, NUCAR 2003, Bhabha Atomic Research Centre, Mumbai, 10-13 February, 2003.