

# Dr Naba Kumar Mondal 

Professor \& Head<br>Department of Environmental Scienc<br>The University of Burdwan<br>Golapbag, Burdwan-713104<br>Mob: 9434545694, 8918013887<br>E-mail: nkmenvbu@gmail.com

Academic qualifications M. Sc, M. Ed, Ph. D

Date of Birth
Teaching Experience 24 years

Research Experience 20 years

## Ph.D. awarded 2008 from University of Burdwan

Ph. D. Topic "Development of agrotechnology in old alluvial soil zone of Burdwan District, West Bengal for sustainable soil health and crop yield of Mungbean (Vigna radiate (L) Wilczek)"
Research area Water pollution and remediation Nano synthesis and application Indoor air pollution

## List of Journals where acts as reviewer

1. Chemosphere (Elsevier)
2. African journal of biotechnology
3. African Journal of Agricultural Research
4. Chemical Engineering Journal (Elsevier)
5. Research journal of chemistry and Environment
6. International Journal of Agricultural Sciences
7. Journal of Agricultural and Biological Science
8. Journal of hazardous materials (Elsevier)
9. Science of the Total Environment (Elsevier)
10. Ecological Indicators (Elsevier)
11. Journal of Applied water Science (Springer)
12. Journal of Water Process Engineering (Elsevier)
13. Journal of Environmental Monitoring and Assessment (Springer)
14. Journal of Rice Science (Elsevier)
15. Environmental Earth Science (Springer)

## Present research scholars

\author{

1. Amita Hajra <br> M.Sc, Zoology (The university of Burdwan) <br> Ph.D student (Science 2013) <br> Research area: Nanotechnology <br> E-mail: amitahajrasinha@gmail.com <br> Mob: 7605847650
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## 3. Arghadip Mondal

M.Sc, Zoology (Sidho Kanho Birsha University) Ph.D student (Science 2017)
Research area: Nanotechnology \& Vector control
E-mail: arghadeepmonda1511@gmail.com
Mob: 9679910906/7908283127

## 5. Debojyoti Mishra

M.Sc, Environmental Science (The University of

Burdwan)
DAE-BRNS Project fellow
Area of Project: Uranium analysis from water
sample
E-mail: deb.chhattu@gmail.com
Mob: 8001801081

## 2. Kamalesh Sen

M.Sc, Environmental Science (The University of Burdwan)

Ph.D student (Science 2015)
Research area: Adsorption Chemistry
E-mail: ksen.envs @ gmail.com
Mob: 8250640118/9932154311

## 4. Priyanka Debnath

M.Sc, Environmental Science (The University of Burdwan)

Ph.D student (science 2017)
Research area: Nanotechnology
E-mail: priyanka.debnath00000@gmail.com
Mob: 9674927872

## Research projects

| Title | Agency (Funding, <br> Commissioning <br> and/or <br> Collaborating) | Period | Grant(s)/ <br> Amount <br> mobilized (so <br> far) in Rs. <br> (Lakhs) | Whether <br> Principal <br> Investigator/ Co- <br> investigator or <br> Consultant/Qualit <br> y evaluator |
| :--- | :--- | :--- | :--- | :--- |
| Interference of vehicle noise in <br> teaching-learning process and <br> development of strategies for <br> abatement of classroom noise | Indian Council of <br> Social Science <br> Research (ICSSR) | $2019-2021$ | $9,00,000$ | Principal <br> Investigator |
| Spatial distribution of uranium <br> in the ground water of four <br> districts of West Bengal | Board of Research in <br> Nuclear Sciences <br> (BRNS) | $2017-2019$ | $27,51,800$ | Principal <br> Investigator |
| Green synthesis of heavy metal <br> nanoparticles and its effective <br> utilization <br> towards eradication of mosquito | Department of <br> Science and <br> Technology, West <br> Bengal | $2017-2020$ | $12,20,200 /-$ | Principal <br> Investigator |
| Indoor air pollution and <br> associated disease from <br> unprocessed biofuels and <br> possible remedial measures in <br> rural villages of West Bengal, <br> India | University Grant <br> Commission | $2013-2016$ | $11,90,800 /-$ | Principal <br> Investigator |
| Development of a model for <br> effective integration of <br> environmental education in <br> technical and general education | ICSSR | $2006-2008$ | $85,000 /-$ | Principal <br> Investigator |
| Isolation, Identification and <br> characterization of arsenic <br> resistant bacteria and their <br> vertical distribution in soil: <br> Possible role in bioremediation | DST-Inspire project | $2012-2017$ | 12 Lakhs | Principal <br> Investigator |
| Municipal waste management <br> through vermicomposting and its <br> impact on growth, physiology, <br> yield, soil health, soil <br> biodiversity and carbon <br> conservation under paddy and <br> mustard cultivation in old <br> alluvial soil zone of Burdwan <br> district, West Bengal. | University Grant <br> Commission | $2011-2014$ | 9 Lakhs | Co-Investigator |
| Evaluation of fluoride toxicity in <br> agro ecosystem of Birbhum <br> district, West Bengal | DST-Inspire project | $2011-2017$ | 12 Lakhs | Co-Investigator <br> Development and application of <br> innovative Technology towards <br> environmental education for <br> backward students (Rural and <br> Urban) in upper primary classes <br> of West Bengal. <br> Development of agrotechnology <br> in old alluvial soil zone of <br> Burdwan, West Bengal <br> University Grant <br> Commission <br> University Grant <br> Commission |
| Principal |  |  |  |  |
| Investigator |  |  |  |  |

## Ph.D awarded (up to 2018):

| $\begin{aligned} & \text { Sl. } \\ & \text { No. } \end{aligned}$ | Name of the research scholar | Title of the thesis | Awarded/Submitt ed/Registered/On going |
| :---: | :---: | :---: | :---: |
| 1. | Dr Moumita Sinha | "Impact of effluents of Durgapur thermal power station Burdwan on adjacent Agroecosystem" | $\begin{gathered} \text { Awarded } \\ 2013 \end{gathered}$ |
| 2. | Dr Ria Bhaumik | "Development of low cost technology for the removal of fluoride from drinking water" | Awarded 2014 |
| 3. | Dr Biswajit Das | "comparative studies on removal efficiency of heavy metal (chromium, lead and copper) from aqueous solution through naturally available adsorbents" | $\begin{gathered} \hline \text { Awarded } \\ 2014 \end{gathered}$ |
| 4. | Dr Kartick Chandra Pal | "Fluoride contamination in soil and vegetation in Birbhum district, West Bengal, India" | $\begin{gathered} \hline \text { Awarded } \\ 2014 \end{gathered}$ |
| 5. | Dr Palas Roy | "Removal of arsenic (III) and arsenic (V) on chemically modified low-cost adsorbent: batch and column operations" | $\begin{gathered} \hline \text { Awarded } \\ 2015 \end{gathered}$ |
| 6. | Dr Anindita Maitra | "Assesment of fluoride toxicity through field and laboratory studies vis- a -vis its impact on growth, metabolism and yield on two different crop species (Brassica sp.; Oryza sativa MTU)" | $\begin{gathered} \hline \text { Awarded } \\ 2015 \end{gathered}$ |
| 7. | Dr Anjan Dutta | "Sustainable potato cultivation by utilizing rice mill by products" | Awarded |
| 8. | Dr Soumya Chattoraj | "In sight in to adsorption equilibrium, kinetics and thermodynamics of carbaryl insecticide from aqueous solution by naturally available adsorbetns" | $\begin{gathered} \hline \text { Awarded } \\ 2016 \end{gathered}$ |
| 9. | Dr Bikash Sadhukhan | "Biosorptive removal of methylene blue from aqueous solution using naturally available low cost adsorbent by using suitable models" | $\begin{gathered} \hline \text { Awarded } \\ 2017 \end{gathered}$ |
| 10. | Dr Uttiya Dey | "An innovative approach towards bioremediation with isolation and molecular characterization of arsenic resistant bacteria from arsenic contaminated areas of Purbasthali, Burdwan, West Bengal" | Awarded 2017 |
| 11. | Dr Chittaranjan Das | "Nutrient dynamics study of few selected tree species of Ramna Forest Burdwan West Bengal" | $\begin{gathered} \text { Awarded } \\ 2018 \end{gathered}$ |
| 12. | Dr Tapas Kumar Roy | "Decolourisation of congored dye by low cost adsorbents" | $\begin{gathered} \hline \text { Awarded } \\ 2018 \end{gathered}$ |
| 13. | Dr Deep Chakraborty | "Indoor air pollution and associated health effects from unprocessed biomass fuels used in rural West Bengal" | $\begin{gathered} \hline \text { Awarded } \\ 2018 \end{gathered}$ |

Supervised thirty (35) M. Sc. dissertation up to 2019

| 1. | Sanhita Ghosh | 2010-12 | Study of soil enzyme during pre- monsoon and postmonsoon period in arsenic affected areas of Burdwan district, West Bengal |
| :---: | :---: | :---: | :---: |
| 2. | Aniruddha Banerjee | 2011-13 | Heavy metals (arsenic, cadmium and lead) phytoremediation by aquatic floating macrophytes: growth physiology, biochemistry, kinetics and isotherm study |
| 3. | Rupa Paul | 2011-13 | Assessment of poultry litter and its contamination pattern in chicken, field soil and plants |
| 4. | Sanjukta Ghosh | 2011-13 | Modeling of photo-fenton degradation of methylene blue and congo red by response surface methodolgy |
| 5. | Sapinaj Khatun | 2011-13 | Fluoride phytoremediation by floating macrophytes: growth, biochemical, kinetics and isotherm study |
| 6. | Snehali Dutta | 2011-13 | Noble and simple approach for synthesis of heavy metal nano particle and their application in different fields |
| 7. | Soumi Roy | 2011-13 | Potentiality of gastropod shell dust for removal of phenol |
| 8. | Sumona Kar | 2011-13 | Removal of Congo red dye by easily available low cost adsorbents: equilibrium, kinetic and thermodynamic studies |
| 9. | Jinat Aktar | 2012-14 | Synthesis of nano zero valent iron (nZVI) from potatobased starch and borohydrate and its application in different field |
| 10. | Wasim Akram Shaikh | 2012-14 | Experimental and Kinetic modeling of As (III) and As (V) adsorption on treated pond sediment using synthetic water |
| 11. | Soumya Bikas Ghosh | 2012-14 | Effect of Arsenic and Manganese Exposure on Intellectual Function of Children in Arsenic Stress Area of Purbasthali, Burdwan, West Bengal |
| 12. | Piya Nayek | 2012-14 | Chromium Bioaccumulation: Comparison of the capacity of two floating aquatic macrophytes |
| 13. | Deblina <br> Chakraborty | 2013-15 | Contamination of arsenic in vegetables and its influence on soil enzyme in arsenic affected area, Purbasthali, Burdwan, West bengal |
| 14. | Moumita Bairagi | 2013-15 | Compartmentalization pattern of arsenic in rice plant and its influence on soil enzyme in arsenic affected area, Purbasthali, burdwan, West Bengal |
| 15. | Priyanka Debnath | 2014-16 | Biogenic approach for the synthesis and characterization of zinc oxide nanoparticles and its effective utilization towards removal of dyes from aqueous solution |
| 16. | Samarpita Chakraborty | 2014-16 | Synthesis and characterization of grapheme oxide nano-sheets and its application for the removal of |


|  |  |  | $\mathrm{Cr}(\mathrm{VI})$ from aqueous solution and compare the adsorption capacity with egg shell and fish scale dust |
| :---: | :---: | :---: | :---: |
| 17. | Jesmin sultana | 2014-16 | Biosorptions of anionic dye (methyl orange) from aqueous solution using three different form of rice husk |
| 18. | Suparna De | 2014-16 | Green synthesis of cadmium and copper nanoparticles and their role towards antimicrobial enhancers |
| 19. | Debojyoti Misra | 2015-17 | Effect of wireless network radiation on environment with special emphasis on human plants and birds health in few selected areas of Burdwan and Hooghly districts |
| 20. | Ranu Barik | 2015-17 | Flower mediated zinc oxide nanoparticle synthesis and its efficacy towards degradation of insecticide (carbaryl) |
| 21. | Manjira Pal | 2015-17 | Optimization of hexavalent chromium phytoremediation by the three aquatic macrophytes; a modelling approach |
| 22. | Soumita Parikhal | 2015-17 | Effect of nanosilver on seed germination, seedling growth and biochemical attributes of wildly cultivated crops (Brassica sp. and Vigna mungo) and vegetables (Pissumsativam and Abelmoschuseseulentus) |
| 23. | Kumari Guddi | 2015-17 | Phytotoxicity of silver nanoparticles to the three aquatic floating macrophyte (Lemna minor, Eichhornia sp. and Pistia sp.) |
| 24. | Puja Sain | 2015-17 | Phytotoxicity of gold nanoparticle on rice (Oryza sativa L) seedling with special emphasis on morphological and biochemical analysis |
| 25. | Richa Das | 2015-17 | Biosynthesis of silver nanoparticles by fungi isolated from soil and its antifungal activityagainst some selected plants fungi |
| 26. | Pratiti Roy | 2016-18 | Efficacy of egg shell(poultry, domestic hen and duck) and sea shell dust towards removal of fluoride from both synthetic and field sample |
| 27. | Subhadeep Mitra | 2016-18 | Synthesis and characterization of silica nanoparticles from rice husk ash and its application towards germination, morphophysiological, biochemical and anatomical studies of rice (Oryza sativa 1.) and ladies finger (abelmoschusesculentus)" |
| 28. | Animesh Mondal | 2016-18 | Indoor air pollution generated from unprocessed solid biomass fuel and health status among the rural women of few selected villages of Hooghly and PaschimMedinipur districts of West Bengal |
| 29. | Bilkish Sultana | 2016-18 | Influence of synthetic dye at albino rat and their subsequent removal by specific adsorbent from aqueous solution |


| 30. | Soma Chowdhury | $2016-18$ | Single pot synthesis of Silver and Gold nanoparticles <br> using different parts (Leaf, Flower and Bark) of <br> Moringaoleifera <br> and their efficacy as anti-fungal effect against <br> Aspergillus sp. |
| :--- | :--- | :--- | :--- |
| 31. | Priyasmita <br> Bhattacharjee | 2017-19 | Efficacy of homeopathic medicine (argentum <br> metallicum), silver salt and silver nonaoparticles on <br> seed germination, growth attributes, biochemical <br> analysis and anatomical studies of rice (Oryza satival.), <br> mungbean (Vigna mungo 1.) and cowpea (Vigna <br> unguiculata l.). |
| 32. | Sudipta Palui | $2017-19$ | Potentiality of keratinous substances (animal hair) and <br> synthetic wool towards removal of hexavalent <br> chromium from aqueous solution. |
| 33. | Supriya Paul | $2017-19$ | Synthesis of graphene oxide from graphite, waste dry <br> cell and composite of graphene oxide with silver <br> nanoparticles and their effective utilization towards <br> removal of phenol from aqueous solution. |
| 34. | Nilufar karim | $2017-19$ | Synthesis of copper nanoparticles from waste electric <br> wire and check the toxicity of copper nanoparticles <br> with two varieties of rice (Oryza sativa L.) with <br> reference to growth physiology, biochemicals and <br> anatomical attributes in laboratory condition |
| 35. | Saptarshi Ghosh | $2017-19$ | Efficacy of silver nanoparticles, nano-titanium oxide <br> and their composite under UV-B exposure towards <br> removal of azo and non-azo dye from aqueous solution <br> and to evaluate the suitability of spent dye solution with <br> respect to growth and development of peas (Pisum <br> sativum L.) |

Publications: (185) [All publications are available at Google scholar]

## Selected publications:

1. SB Ghosh, NK Mondal (2019) Application of Taguchi method for optimizing the process parameters for the removal of fluoride by Al-impregnated Eucalyptus bark ash; Environmental Nanotechnology, Monitoring \& Management 11, 100206
2. NK Mondal, S Basu, B Das (2019) Decontamination and optimization study of hexavalent chromium on modified chicken feather using response surface methodology; Applied Water Science; 9 (3), 50
3. NK Mondal, S Basu (2019) Potentiality of waste human hair towards removal of chromium (VI) from solution: kinetic and equilibrium studies; Applied Water Science; 9 (3), 49
4. NK Mondal, P Ghosh, K Sen, A Mondal, P Debnath (2019) Efficacy of onion peel towards removal of nitrate from aqueous solution and field samples. Environmental Nanotechnology, Monitoring \& Management, 100222
5. P Debnath, A Mondal, A Hajra, C Das, NK Mondal (2018) Cytogenetic effects of silver and gold nanoparticles on Allium cepa roots, Journal of Genetic Engineering and Biotechnology 16 (2), 519-526
6. D Chakraborty, NK Mondal (2018) Hypertensive and toxicological health risk among women exposed to biomass smoke: A rural Indian scenario; Ecotoxicology and Environmental Safety;161, 706-714
7. NK Mondal, S Kar (2018) Potentiality of banana peel for removal of Congo red dye from aqueous solution: isotherm, kinetics and thermodynamics studies, Applied Water Science, 8 (6), 157
8. S Chattoraj, NK Mondal, K Sen (2018) Removal of carbaryl insecticide from aqueous solution using eggshell powder: a modeling study; Applied Water Science, 8 (6), 163
9. NK Mondal, A Samanta, S Chakraborty, WA Shaikh (2018) Enhanced chromium (VI) removal using banana peel dust: isotherms, kinetics and thermodynamics study; Sustainable Water Resources Management, 4 (3), 489-497
10. NK Mondal, A Roy(2018) Potentiality of a fruit peel (banana peel) toward abatement of fluoride from synthetic and underground water samples collected from fluoride affected villages of Birbhum district; Applied Water Science, 8 (3), 90
11. D Chakraborty, NK Mondal (2018) Assessment of health risk of children from traditional biomass burning in rural households; Exposure and Health, 10 (1), 15-26
12. NK Mondal (2017) Effect of fluoride on photosynthesis, growth and accumulation of four widely cultivated rice (Oryza sativa L.) varieties in India; Ecotoxicology and environmental safety; 144, 36-44
13. S Medda, NK Mondal (2017) Chromium toxicity and ultrastructural deformation of Cicer arietinum with special reference of root elongation and coleoptile growth; Annals of Agrarian Science; 15 (3), 396-401
14. R Bhaumik, NK Mondal, S Chattoraj. (2017). An optimization study for defluoridation from synthetic fluoride solution using scale of Indian major carp Catla (Catlacatla): An Unconventional Biosorbent; Journal of Fluorine Chemistry;195, 57-69
15. D Chakraborty, NK Mondal (2017). Assessment of Health Risk of Children from Traditional Biomass Burning in Rural Households; Exposure and Health; 1-12
16. K Sen, NK Mondal, S Chattoraj, JK Datta. (2017). Statistical optimization study of adsorption parameters for the removal of glyphosate on forest soil using the response surface methodology; Environmental Earth Sciences; 76 (1), 22
17. NK Mondal. (2017). Effect of fluoride on photosynthesis, growth and accumulation of four widely cultivated rice (Oryza sativa L.) varieties in India. Ecotoxicology and environmental safety, 144, 36-44.
18. Shreya Medda, NK Mondal. (2017). Chromium toxicity and ultrastructural deformation of Cicerarietinum with special reference of root elongation and coleoptile growth. Annals of Agrarian Science, 15 (3), 396-401
19. A Hajra, NK Mondal. (2017). Effects of ZnO and TiO 2 nanoparticles on germination, biochemical and morphoanatomical attributes of Cicer arietinum L. Energy, Ecology and Environment. 2(4), 277-288
20. TK Roy, NK Mondal. (2017). Biosorption of Congo Red from aqueous solution onto burned root of Eichhornia crassipes biomass. Applied Water Science. 7(4),1841-1854
21. NK Mondal, A Samanta, S Dutta, S Chattoraj (2017). Optimization of Cr (VI) biosorption onto Aspergillusniger using 3-level Box-Behnken design: Equilibrium, kinetic, thermodynamic and regeneration studies. Journal of Genetic Engineering and Biotechnology. 15(1),151-160
22. P Roy, U Dey, S Chattoraj, D Mukhopadhyay, NK Mondal. (2017). Modeling of the adsorptive removal of arsenic (III) using plant biomass: a bioremedial approach. Applied Water Science. 7(3),1307-1321
23. T Mondal, JK Datta, NK Mondal. (2017). Chemical fertilizer in conjunction with biofertilizer and vermicompost induced changes in morpho-physiological and bio-chemical traits of mustard crop, Journal of the Saudi Society of Agricultural Sciences. 16(2),135-144
24. U Dey, S Chatterjee, NK Mondal. (2017) Investigation of Bioremediation of Arsenic by Bacteria Isolated from an Arsenic Contaminated Area. Environmental Processes, .4(1),183199
25. NK Mondal. (2017). Natural Banana (Musa acuminate) Peel: an Unconventional Adsorbent for Removal of Fluoride from Aqueous Solution through Batch Study. Water Conservation Science and Engineering. 1(4), 223-232
26. K Das, U Dey, NK Monda (2016). Deleneation of groundwater quality in the presence of fluoride in selected villages of Simlapal block, Bankura district, West Bengal, India. 2016. Sustainable Water Resources Management, 2 (4), 439-451
27. C Das, NK Mondal. Litterfall, (2016) Decomposition and nutrient release of Shorea robusta and Tectona grandis in a sub-tropical forest of West Bengal, Eastern India. Journal of Forestry Research, 27(5), (1055-1065).
28. B Sadhukhan, NK Mondal, S Chattoraj. (2016). Optimisation using central composite design (CCD) and the desirability function for sorption of methylene blue from aqueous solution onto Lemna major. Karbala International Journal of Modern Science, 2 (3), 145155
29. S Chattoraj, NK Mondal, B Sadhukhan, P Roy, TK Roy. (2016). Optimization of adsorption parameters for removal of carbaryl insecticide using neem bark dust by response surface methodology. Water Conservation Science and Engineering, 1 (2), 127-141
30. R Bhaumik, NK Mondal (2016). Optimizing adsorption of fluoride from water by modified banana peel dust using response surface modelling approach. Applied Water Science, 6 (2), 115-135
31. K Das, NK Mondal. (2016). Dental fluorosis and urinary fluoride concentration as a reflection of fluoride exposure and its impact on IQ level and BMI of children of Laxmisagar, Simlapal Block of Bankura District, WB, India. Environmental Monitoring and Assessment. 188(4): 1-14
32. SB Ghosh, D Chakraborty, NK Mondal. (2016). Effect of Arsenic and Manganese Exposure on Intellectual Function of Children in Arsenic Stress Area of Purbasthali, Burdwan, West Bengal. Exposure and Health, (9-1), 1-11.
33. NK Mondal, R Bhaumik, JK Datta. (2016). Fluoride Adsorption by Calcium Carbonate, Activated Alumina and Activated Sugarcane Ash. Environmental Processes, 3(1): 195-216
34.K Das, NK Mondal, U Dey, P Roy, KC Pal. (2016). Statistical appraisal of fluoride enrichment in areas of Malda AND South Dinajpur District, West Bengal, India; Journal of Urban and Environmental Engineering. 9(2): 119-126
34. NK Mondal, M Kundu (2016) Biosorption of Fluoride from Aqueous Solution Using Lichen and Its Ca-Pretreated Biomass. Water Conservation Science and Engineering. 1(3), 143-160
35. A Hajra, NK Mondal (2016). Phyto fabrication of silver nanoparticles using Elephantopuss caber and Azadirachtaindica leaf extract and its effect on larval and pupal mortality of Culexquinquefasciatus. Asian Pacific Journal of Tropical Disease. 6(12). 979-986
36. U Dey, NK Mondal (2016) Ultrastructural deformation of plant cell under heavy metal stress in Gram seedlings, 2(1) Cogent Environmental Science
37. A Hajra, S Dutta and NK Mondal (2016). Mosquito larvicidal activity of cadmium nanoparticles synthesized from petal extracts of marigold (Tagetes sp.) and rose (Rosa sp.) flower. Journal of Parasitic Diseases. 40(4). 1519-1527
38. C Das, NK Mondal (2016). Litterfall, decomposition and nutrient release of Shorea robusta and Tectona grandis in a sub-tropical forest of West Bengal, Eastern India. Journal of Forestry research. 27(5), (1055-1065)
39. K Das, U Dey, NK Mondal (2016). Deleneation of groundwater quality in the presence of fluoride in selected villages of Simlapal block, Bankura district, West Bengal, India. Sustainable Water Resources Management. 2(4), 439-451
40. NK Mondal, Soumi Roy. (2016) Optimization study of adsorption parameters for removal of phenol on gastropod shell dust using response surface methodology. Clean Technologies and Environmental Policy. 18 (2), 429-447
41. NK Mondal (2016) Effect of sodium fluoride and sodium nitroprouside on Cicerarietinum and Pisumsativum. Communications in Plant Sciences. 6(1-6)
42. NK Mondal; K Sen; A Banerjee; JK Datta (2016) Toxicity of $\operatorname{As(III)~and~} \operatorname{As}(\mathrm{V})$ on morphological traits and pigments of Gram Seed (Cicerarietinum) during germination and early seedling growth. Communications in Plant Sciences. 6(1-2), 1-6(6)
43. AmitaHajra, Naba Kumar Mondal (2016) Synthesis of copper nanoparticles (CuNPs) from petal extracts of marigold (Tagetessp.) and sunflower (Helianthus sp.) and their effective use as a control tool against mosquito vectors. Journal of Mosquito Research 6(19)
44. Uttiya Dey, Soumendranath Chatterjee, NK Mondal. (2016). Isolation and characterization of arsenic-resistant bacteria and possible application in bioremediation. Biotechnology Reports. 10:1-7
45. S Bhattacharyya, NK Mondal, R Bhaumik, B Das, P Roy, JK Datta (2015)Neural network model and isotherm study for removal of phenol from aqueous solution by orange peel ash, Applied Water Science 5 (3), 271-282
46. JK Datta, NK Mondal, CR Das, U Dey, D Chakraborty (2015) Fluoride toxicity effects in potato plant (solanum tuberosum 1.) grown in contaminated soils, Octa Journal of Environmental Research 3 (2), 136-143
47. NK Mondal, C Das, JK Datta (2017) Effect of mercury on seedling growth, nodulation and ultrastructural deformation of Vigna radiata (L) Wilczek, Environmental monitoring and assessment 187 (5), 241
48. NK Mondal, U Dey, S Ghosh, JK Datta (2014) Soil enzyme activity under arsenic-stressed area of Purbasthali, West Bengal, India, Archives of Agronomy and Soil Science 61 (1), 7387
49. T Mondal, JK Datta, NK Mondal (2014) An alternative eco-friendly approach for sustainable crop production with the use of indigenous inputs under old alluvial soil zone of Burdwan, West Bengal, India, Archives of Agronomy and Soil Science 61 (1), 55-72
50. NK Mondal, S Roy(2014) Optimization study of adsorption parameters for removal of phenol on gastropod shell dust using response surface methodology; Clean Techn Environ Policy, DOI 10.1007/s10098-015-1026-6
51. NK Mondal, A Roy (2014) Novel use of riche husk Carbon (A Natural Silica-Carbon Matrix) For Fluoride Removal From Aqueous Solution, Moroccan Journal of Chemistry 3 (1), 3-1 (2015) 8-18
52. C Das, P Aditya, JK Datta, NK Mondal (2014) Soil enzyme activities in dependence on tree litter and season of a social forest, Burdwan, India, Archives of Agronomy and Soil Science 60 (3), 405-422
53. P Roy, NK Mondal, K Das (2014) Modeling of the adsorptive removal of arsenic: a statistical approach; Journal of Environmental Chemical Engineering 2 (1), 585-597
54. KC Pal, NK Mondal, S Chatterjee, TS Ghosh, JK Datta (2014) Characterization of fluoride-tolerant halophilic Bacillus flexus NM25 (HQ875778) isolated from fluoride-affected soil in Birbhum District, West Bengal, India, Environmental monitoring and assessment 186 (2), 699-709
55. TK Garai, JK Datta, NK Mondal (2014) Evaluation of integrated nutrient management on boro rice in alluvial soil and its impacts upon growth, yield attributes, yield and soil nutrient status, Archives of Agronomy and Soil Science 60 (1), 1-14
56. NK Mondal Siddhartha Bhattacharyyaa ,Siddhartha Bhattacharjee (2015) A quantum backpropagation multilayer perceptron (QBMLP) for predicting iron adsorption capacity of calcareous soil from aqueous solution;, Applied Soft Computing 27, 299-312
57. Shreya Medda, Amita Hajra, Uttiya Dey, Paulomi Bose, Naba Kumar Mondal(2015) Biosynthesis of silver nanoparticles from Aloe vera leaf extract and antifungal activity against Rhizopus sp. and Aspergillus sp. Applied Nano Science, 5(7) , pp 875-880
58. JK Datta NK Mondal, D Chakraborty, P Roy, TK Roy (2015) Correlation between arsenic intoxication and cognitive ability of primary school children of West Bengal, Asian Pacific Journal of Tropical Disease 4 (Suppl 2), S850
59. S. Chattoraj, B Sadhukhan, N.K. Mondal, B. Das, P. Roy (2014) Carbaryl removal from aqueous solution by Lemna major biomass using response surface methodology and artificial neural network, Journal of Environmental Chemical Engineering 2, 1920-1928
60. CR Das, N. K. Mondal, U. Dey, S. Khatun, K. Das (2014) Toxic Effect of Cigarette Origin Tobacco Leaf (Nicotiana tabaccum L.) and Cigarette Smoke Extract on Germination and BioChemical Changes of Bengal Gram (Cicer arietinum L.), Journal of Stress Physiology \& Biochemistry 10 (1), 135-144
61. NK Mondal, R Bhaumik, CR Das, P Aditya, JK Datta, A Banerjee, K Das; Assessment of indoor pollutants generated from bio and synthetic fuels in selected villages of Burdwan, West Bengal ,Journal of Environmental Biology 34 (5), 963
62. P Roy, NK Mondal, S Bhattacharya, B Das, K Das(2015) Removal of arsenic (III) and arsenic (V) on chemically modified low-cost adsorbent: batch and column operations, Applied Water Science 3 (1), 293-309
63. NK Mondal, K Das, U Dey, P Roy, KC Pal (2015) Dental fluorosis among children in laxmisagar village, bankura district, west bengal, india, Fluoride 46 (4), 230-233
64. JK Datta, NK Mondal, KC Pal, S Ghosh, C Das, M Dey (2015) Seasonal variation of soil enzymes in areas of fluoride stress in Birbhum District, West Bengal, India; Taibah University

## Book Chapter:

1. Siddhartha Bhattacharjee, Siddhartha Bhattacharjee, Naba Kumar Mondal. Quantum Backpropagation Neural Network Approach for Modeling of phenol adsorption from aqueous solution by Orange peel Ash. Chapter 25.
2. Soumendra nath Chatterjee and Naba Kumar Mondal Uttiya Dey. Effective Microbial Detoxification of Arsenic: Green Bioremediation. Nova Science Publishers, Inc. 400 Oser Avenue, Suite 1600, Hauppauge, NY 11788 USA. Nova Science Publishers, ISBN:978-1-53614-528-1 .

