



Review on Water Quality Status

Dibyajyoti Saha *, Md. Jahangir Kabir, Swati Paul

Department of Pharmacy, BGC Trust University Bangladesh Chittagong.

Corresponding Author: E-mail:saha.dibyajyoti@gmail.com

ABSTRACT: The literature survey reveals that water is getting polluted everyday much purposeful use in day-to-day life. The water quality parameters best on the physical characteristics, colour, taste, odour, turbidity, temperature, conductivity, BOD, COD, hardness, p^H , alkalinity, acidity, dissolved oxygen, total suspended solid etc. So, the analysis of some selected parameters, physico-chemical properties of water has been taken for an investigation to explore.

Keywords: Water, Quality, Parameters, Physico-chemical.

INTRODUCTION

About 70% of the surface of the globe is covered with liquid water of which 97% earth water supply is in the ocean, which is unfit for human consumption and other uses because of its high salt content, of the remaining 2% polar ice caps and only 1% is available as fresh water in rivers, lake, streams, reservoirs and ground water which is suitable for human consumption. Water is distributed in nature in different forms as rain water, ground water, river water, lake water, spring water, etc. Potential drinking water sources are classified either as ground water or surface water.

BRIEF REVIEW OF PAST WORK

The literature survey clearly reveals that a lot of earlier workers have been done the monitoring of water quality status in different water bodies like ground water, surface water etc. Past works already done in the field are as follows –

- **Das S. M (1957)¹** has studied the ecological parameters of fresh water lakes of India and established physical, chemical and biological interrelationship.
- **Bhuyan B.R (1970)²** has investigated physico-chemical qualities of the water of some ancient tanks in Sibsagar (Assam).
- **Cabtree K. T (1972)³** studied the variation of nitrate and nitrite in ground water of Wisconsin.
- **Khalif A. K and McDonald L (1975)⁴** have investigated physicochemical conditions in temporary ponds in new forest.
- **Handa et al (1981)⁵** has investigated the presence of trace elements of surface water in U.P.

- **Mitra A. K (1982)⁶** has studied the chemical characteristics of surface water.
- **Bishnoi et al (1984)⁷** have studied the underwater quality of Dhuri Block, sangrur (Punjab).
- **Singh D. K and Sing C. P (1990)⁸** studied the water quality of Suvernakheka River around industrial belt of Ranchi.
- **Malviya, S (1990)⁹** have investigated the Ecological impact of sewage and effluent disposal in river Narmada at Hoshangabad.
- **Pandey B. N et al (1991)¹⁰** has reported variations in the physicochemical parameters of pond in the city of Purnea.
- **Sudarshan V et al (1991)¹¹** have studied the pollution of fluorides in ground water and its impact on environment and socio-economic status of people.
- **Joshi H. C and Sukumaran P. K (1991)¹²** have investigated the pollution present in Tungabhadra River (Karnataka).
- **Khoco C. D et al (1991)¹³** have studied water quality of Narmada River.
- **Suryanarayan Raju (1992)¹⁴** reported ground water quality of Machlipatnam and total dissolved solid prediction through conductivity measurement.
- **Mohammad Abdulla and Mohammad Akhtar (1993)¹⁵** have investigated some trace and toxic elements in Nutrition and Health.
- **Jakher et al (1993)¹⁶** have studied the patterns of Zn, Cu, Pb and Cd accumulation in different tropic levels of tropical ponds of Padmasagar, Jodhpur.
- **Pandey et al (1993)¹⁷** have studied the physical and chemical quality of Nakuchiyatal lake water.



- **Pati and sahu (1993)¹⁸** have carried out Bio-monitoring of water pollution in Rengali reservoir Orissa.
- **Kulsheshth et al (1993)¹⁹** have investigated various chemical and biological parameters of water pollution of Bhopal Lake.
- **Chatterjee A. D et al (1993)²⁰** have reported contamination of Arsenic in the ground water of the residential area of Behela, Calcutta.
- **Ramesh N. B et al (1993)²¹** have studied the chemical properties of effluent discharge from Korba industrial area.
- **Krishnamurthy and Bharati (1993)²²** have studied the metal pollution of river Kali, around Dandali, Karnataka.
- **De. A. K (1995)²³** studied the water pollution in Damodor River.
- **Jain C. K. et al (1996)²⁴** studied water quality in Western Uttar Pradesh.
- **Chaudhari A. A et al (1998)²⁵** studied the effect of seasonal variations on physical and chemical characteristics of Indus River water.
- **Khatvkar S. D and Trivedi R. K (1998)²⁶** have studied the water quality Parameters of river PanchGanga Maharashtra.
- **Mahammud, ali et al (2000)²⁷** have studied the effect of seasonal variation of physical and chemical characteristics of mixed water from rivers Ravi and Chenab at Union State in Pakistan.
- **Singh P (2001)²⁸** investigated the Physico-Chemical Characteristics of a tributary of Mahanadi River near Orient Paper site w.r.t Water Pollution.
- **Julshrestha S (2002)²⁹** studied the Physico-Chemical Characteristics of under ground and effluent water, in Sansagar Town in Jaipur City.
- **Upaddhaya M (2002)³⁰** has reported Physico-Chemical studies of the effluents from Korba industrial area
- **Chaturvedi Samiksha et al (2003)³¹** have studied the Physico-Chemical Characteristics of flowing water of Ganga River at Haridwar.
- **Bindiya Langer (2003)³²** studied the chemical composition of water of some streams in Jammu province-I.
- **Reddy Vikram and Vijay Kumar A (2003)³³** studied the disappearance of some toxic elements in the surface water of Hussainsagar Lake following Ganesh Idol Immersion.
- **Saha T et al (2003)³⁴** studied the waste water quality status of Tally Nulla in Calcutta.
- **Mishra P. C et al (2003)³⁵** have explored the quality of water for drinking and agriculture in an around a mines in Keonjhar district, orissa.
- **Patel K. S and Shrivastava K (2004)³⁶** have investigated some toxic elements in water.
- **Sahu R. K (2004)³⁷** has investigated some toxic elements in coal, coal ash, water and plants of Dipka coal mines area, Korba district Chattishgarh.
- **Sivasankaran M. A et al (2004)³⁸** studied the nutrient concentration in ground water of Pondicherry region.
- **Sharma O. P and Banger K. S (2004)³⁹** studied the assessment of the quality of sewage effluents around Indore and Ujjain districts of Madhya Pradesh, India.
- **Deshpande Leena (2005)⁴⁰** studied the water quality status of Murda village in Ramtek Tehsil.
- **Mishra P. C and Behera P. C (2005)⁴¹** studied the contamination of water due to major industries and open refuse dumping in the steel city Orissa.
- **Narasima Prasad N. B and Mansoor O. A (2005)⁴²** studied the assessment of ground water quality status in Amini Island of Lakshadweep.
- **Ku. Yadav Anita (2005)⁴³** explored the Physico-Chemical studies of Hasdeo River water concerning effect of industrial effluents.
- **Singh, Omkar et al (2005)⁴⁴** explored the water quality aspects of some wells, springs and rivers in part of Udhampur District (J&K).
- **Sinha Deepak and Khan S. A (2005)⁴⁵** have studied the analysis of chemicals present in soil, water, plant and aquatic animals with special reference to Industrial effluents and pollutional effect in Bilaspur District.
- **Nayar R (2005)⁴⁶** explored the physico-chemical study of underground drinking water of Korba and its surrounds.
- **Tiwari M. K (2005)⁴⁷** has studied the physico-chemical investigation of drinking water quality of Bilaspur and its surrounding rural areas with special reference to Nitrate and Fluoride toxicity.
- **Nouri J and Malmasi S (2005)⁴⁸** have explored the role of ground water vulnerability in urban development planning.
- **Naddeo V. et al (2005)⁴⁹** have studied the European Procedures to River water quality assessment.



- **Voudouris K. S. et al (2005)**⁵⁰ have studied the water resources and ground water quality in North Peloponnesus (Greece).
- **Vishnav M. M and Sahu Anita (2006)**⁵¹ have studied the fluoride content in ground water around the Balko, Korba area (C' garh).
- **Vaishnav M. M and Sahu Dhaneswari (2006)**⁵² have studied some physico-chemical parameter of Hasdeo River at Korba.
- **Dutta S et al (2006)**⁵³ studied the hydrochemical characteristic of ground water at Makrana, Nagaur, Rajasthan (India).
- **Sharma M. K and Jain C. K (2006)**⁵⁴ have studied the multivariate analysis of ground water quality data of Jodhpur dist. (Rajasthan, India).
- **Begum Nafeesa and Purushothama R (2006)**⁵⁵ explored the water quality studies of TV Station reservoir at Davangere city, Karnataka (India).
- **Singh Vijendra (2006)**⁵⁶ studied the assessment of quality of drinking water in outer rural Delhi.
- **Sinha D. K. and Saxena Ritesh (2006)**⁵⁷ carried out the statistical assessment of underground drinking water contamination and effect of monsoon at Hasanpur, J.P Nagar (Uttar Pradesh, India).
- **Warhate S. R et al (2006)**⁵⁸ studied the impact of mining activities on water and soil in Wardha River Valley at Wani (Dist. Yavatmal of Maharashtra).
- **Tiwari R. K and Chandel C. P (2007)**⁵⁹ have studied hydro-chemical investigation and correlation analysis of ground water quality of Jaipur city, Rajasthan (India).
- **Bhathysa M. I (2007)**⁶⁰ assessed the surface water quality in eight major ponds of Coimbatore city and potential risk of ground water quality.
- **Batheja K et al (2007)**⁶¹ have studied the Physico-Chemical characteristic of ground water at Chulu Tehsil, Rajasthan, India.
- **Shastri G. N Singh N. K and Das C (2008)**⁶² have explored the assessment of physico-chemical analysis of pond water in Newra village.
- **Shravastav S. K et al (2008)**⁶³ have studied the physico-chemical quality of pond water in Bilaspur (C. G.).
- **Singh Naveen Kumar et al (2008)**⁶⁴ have assessed the physicochemical parameters of drinking water of Bhitwar town, Gwalior, M.P. India.
- **Bikkand B. S et al (2008)**⁶⁵ have evaluated the bore well water of various place located in and around industrial areas of Aurangabad district of Maharashtra.
- **Banger K. S et al (2008)**⁶⁶ have investigated the quality of ground water used for irrigation in Ujjain District, M.P, India.
- **Yadav S. C et al (2008)**⁶⁷ have explored the analysis of waste water from different waste water system.
- **Sharma A et al (2008)**⁶⁸ have investigated the monitoring of ground water quality in Mandideep, Industrial area Bhopal (India).
- **Sundar M. Lenin and Seseetharan, M. K (2008)**⁶⁹ have studied the ground water quality in Coimbatore, Tamil Nadu along Noyyal River.
- **C. Galbrand et al (2008)**⁷⁰ have studied the water quality assessment of a constructed wetland treating landfill leachate and industrial Park runoff in Canada.
- **Sia Su Glenn L. (2008)**⁷¹ has assessed the Effect of a dumpsite to Groundwater quality in Payatas, Philippines.
- **Dhakad N K et al (2009)**⁷² have explored hydrobiological study of Banihard dam of Khargone (M.P.).
- **Kočí Vladimír (2009)**⁷³ has studied the background level of pops in Ground water assessed on chemical and toxicity analysis of exposed semipermeable membrane devices.
- **Pandeya S. N, Rana A. K and Bhoi D. K (2010)**⁷⁴ have studied the physico-chemical analysis of borewells drinking water of Kapadwanj territory.
- **Sahni Anirudh et al (2010)**⁷⁵ have assessed the drinking water quality of Jaipur main and its suburb railway stations with special mention to fluoride.
-
- **Reza Rizwan and Singh Gurdeep (2010)**⁷⁶ have studied the application of water quality index for assessment of pond water quality status in Orissa, India.
- **Kataria H.C. et al (2010)**⁷⁷ have investigated the study of physicochemical parameters of drinking water of Bhopal city with reference to health impacts.



- **Sonel Manish et al (2010)**⁷⁸ have explored the physico-chemical and bacteriological studies of ground water layers in Bhanpur Bhopal (M.P.)", Current World Environment, Vol 5 (2), pp 379-382 (2010).
- **E.O. Orebiyi et al (2010)**⁷⁹ have assessed the Pollution Hazards of Shallow Well Water in Abeokuta and Environs, Southwest, Nigeria.
- **Ramirez Elizabeth et al (2010)**⁸⁰ have studied the microbiological and physicochemical quality of well water used as a source of public supply.
- **Yadav S. S and Kumar Rajesh (2010)**⁸¹ have assessed the ground water pollution due to fluoride content and water quality in and around Tanda Taluka of Rampur district, Uttar Pradesh, India.

NOTEWORTHY CONTRIBUTION IN THE FIELD OF PROPOSED WORK

- **Mahilange Yashwant Raj** has studied the effect of industrial effluents on surface and underground water in Gaturi Villeg of Bilaspur districts.
- **Awasthi Vijita** has explored the physico-chemical analysis of underground water in Industrial area of Bilaspur.
- **Gupta Vijaylakshami** has reported the analytical study of selected analytical characters of surface and underground water bodies in Ameri and its surrounding areas.
- **Barman Varsha** has studied removal of fluoride from ground water.
- **Rathore Vandana** has reported the analytical study of surface has studied the hydrochemical evaluation of water quality contaminated with industrial discharge in Amartara villeg of Akaltara Tehasil.
- **Singh Sima** has reported the physico-chemical analysis of water location of Arpa River in Bilaspur city.
- **Yadav Shilpa** has reported the studied of physico-chemical properties of ground water sources in rural areas in Bilaspur city.
- **Shriwas Sanjay ku.** investigated the studied of water quality parameters Borewells of rural areas of Bilaspur city.
- **Kaushik Shailendra Ku.** has studied the physico-chemical of ground
- **Tiwari Richa** has explored the complete chemical analysis of heavy metals with special emphasis on Cd toxicity and biomedical importance of toxic metal in industrial areas around Bilaspur.
- **Dubey Poonam** has explored the studies on water quality parameters of Borewells of Bilaspur region.
- **Yadav Babita** has investigated the study of nitrate in Different water sources in Takhatpur and its effects in surround areas.
- **Mishra Neeta** has investigated the physico-chemical studies of water of Bilaspur city and its suburbs.
- **Sahu Haraprasad** has reported the comparative studies on some physico-chemical characteristics of surface and underground water in Badra Thakur Villeg of Bilaspur District.
- **Mishra Gyaneswari** has explored the assessment of well water quality of Bilaspur, Chattishgarh.
- **Tiwari Archana** has studied the ecological investigation of surface and underground water around rice and Dal Mill of Deorikhurd of Bilaspur.
- **Tiwari Anju** reported the complete studies on some physicochemical parameters analysed for underground water of Malhar Villeg Masturi block of Bilaspur District.
- **Patel Rajni** has analyzed the studies on the ground water quality in industrial areas of Sirgitti in Bilaspur.
- **Gupta Shuchi** has explored the study of fluoride in different water resources in Bilaspur and their effect in surround areas

CONCLUSION

The water quality characteristic of aquatic environments arises from multitude physical, chemical and biological interactions. The water bodies are continuously subjected to a dynamic state of change with respect to their geological age and geochemical characteristics. This is demonstrated by continuous circulation, transformation and



accumulation of energy and matter through the medium of living things and their activities. This dynamic balance in aquatic ecosystem upset by human activities, resulting in pollution.

REFERENCES

1. Das, S.M; *Proceedings*, National Academy of Science India, vol.27, pp150-161 (1957).
2. Bhuyan, B. R; "Study of some physico-chemical quality of water in ancient tank in sibsagar, Assam". *Env. Health*, Vol. 12 (2), pp 129-134 (1970).
3. Cabtree, K.T; *Nat. Res. Tech. Bul.*, vol.58 (1972).
4. Khalif, A. K & Mcdonald, L. J; *Hydrobiology*, vol.47, pp 301-308 (1975).
5. Handa, K ; *JIWPC Technology Annual*, vol.8, pp.11-17 (1981).
6. Mitra A. K; *Ind. J. Env. Heal*, vol.24 (2), pp.169-179 (1982).
7. Bishnoi, S.R et al; *Ind. J. Eco.* , vol.11 (2), pp.220-228 (1984).
8. Singh, D.K and Singh C.P; "water quality of Suvernrekha river water around coal mine belt of Ranchi", *Ind. J. Env. Heal.*, vol.1 (32), pp 26-33(1990).
9. Malviya, S; "Ecological impact of sewage and effluent disposal in river Narmada at Hoshangabad". Ph.D. Thesis, Dr. H.S. Gour University,Sagar (1990).
10. Pandey, B.N et al ; *Poll. Res.*, vol.10 (3), pp189-190 (1991).
11. Sudarshan, V et al ; *Ind. J. Env.Prot.*, vol.11(3),pp185-192 (1991).
12. Joshi, H. C and Sukumaran, P.K; *Ind. J. Ani. Sci.*, vol 61 (2), pp230-234(1991).
13. Khocho, C.D and Narain, R; *J. Ind. Wat. Res. Socie.*, vol 11 (2) pp49-52 (1991).
14. Suryanarayan Raju, M.V; *Poll. Res.*, vol.11 (4), pp203-208 (1992).
15. Mohammad, Abdulla and Mohammad, Akhtar; "Trace and Toxic elements in Nutrition and Health", Proceeding of 4th international conference on health and disease, Willy Eastern Ltd, New Delhi, (1993).
16. Jakahar,G.r et al; *J. Nat. Conser.*, vol 5 (2), pp 47-50 (1993).
17. Pandey,D.K et al ; *Ind. J. Prot.*, vol.13 (10), pp 726-728 (1993).
18. Pati, S and sahu, B.K; *Env. Eco.*, vol.11 (4), pp 982-984 (1993).
19. Kulshresth, S.K et al; "Past, Present and Future of Bhopal Lake",Proceeding National Symposium, pp 253-257 (1993).
20. Chatterjee, a.D et al; *Env. Pol.*, pp 57-65 (1993).
21. Ramesh, N.B et al ; *Pol. Res.*, vol.II (4), pp209-212 (1993).
22. Krishnamurthy, S.R and Bharati; *Poll. Res.*, vol.13 (3), pp 49-252(1993).
23. De, A. K ; "The Saga of Damodar river", *J. Ind. Chem. Soc.*, vol.6, pp 1038 (1995).
24. Jain C.K et al; *Ind. J. Env. Heal.*, vol 38 (2), pp105-112 (1996).
25. Chaudhari, A. A et al; "studies on the effect of seasonal variations on physical and chemical characteristic of Indus river water", *J. Pure. App. Sci.*, vol 17, pp26-33 (1998).
26. Khatvkar, S.D and Trivedi R. K; "Water quality Parameters of river PanchGanga Maharashtra", *J. Eco. Toxic. Monitor.*, vol.2 (113), (1998).
27. Mahammud, ali et al, "Study of the effect of seasonal variation of physical and chemical characteristics of mixed water from rivers Ravi and Chenab at Union State in Pakistan", *J. Res. Sci.*, vol.11 (2000).
28. Singh, P; "Physico-chemical Characteristics of a tributary of Mahanadiriver near Orient Paper site w.r.t Water Pollution", *J. Env. Poll.*, vol.8 (3), pp 237 (2001).
29. Julshrestha, S; "Physico-Chemical Characteristics of under ground and effluent water, in Sansagar Town in Jaipur City during pre monsoon season", *Nat. Env .Poll. Tech.*, vol.1, pp 493 (2002).
30. Upaddhaya, M; "Physico-Chemical studies of the effluents from Korba industrial area", Ph.D , Thesis, GGDU Bilaspur, C.G., (2002).
31. Chaturvedi Samiksha, Kumar Dinesh and Singh, R.V; "Study of some Physico-Chemical Characteristics of flowing water of Ganga river at Haridwar", *R. J. Che. Env.*, Vol 7 (3), pp 79-89 (2003).



32. Bindiya, Langer; *R.J.Che.Env.*, vol 45 (2), pp 54-58 (2003).
33. Reddy, Vikram and Vijay Kumar; *Ind J. Env. Hel.*, vol 45 (2), pp161-162 (2003).
34. Saha, T and Ghose, P; *Ind.J. Env.Hel.*, vol. 45(3), pp221-226 (2003).
35. Mishra, P.C et al; *Ind. J. Env. Hel.* , vol.45 (3), pp213-220(2003).
36. Patel K. S and Shrivastava, K; "On site determination of arsenic contaminated water", *Analytical Letter*, vol.37 (2), pp 333-334 (2004).
37. Sahu, R. K; "Study of some toxic elements in coal, coal ash, water and plants of Dipka coal area, Korba", Ph.D. Thesis, GGDU, Bilaspur,(2004).
38. Sivasankaran, M. A; *J. Env. Sci. Engg.* Vol. 46 (3), pp210-216 (2004).
39. Sharma, O. P and Banger, K. S ; *Res. J. Chem. Env.*, vol 8 (2), pp 62-64 (2004).
40. Deshpande, Leena; *J.Env.Sci. Engg.*, vol.47 (2) ,pp 161-163 (2005).
41. Mishra, P.C. and Behera, P.C. ; *J. Env. Sci. Engg.*, vol. 47(2), pp141-154(2005).
42. Narasima Prasad N.B and Mansoor O. A ; *J. Env. Sci. Engg.*, vol.47(2005).
43. Ku. Yadav, Anita; "Physico-Chemical studies of Hasdeo River water concerning effect of industrial effluents", Ph.D. Thesis, GGDU,Bilaspur, C.G (2005).
44. Singh, Omkar et al ; *J. Env. Sci. Engg.*, vol 47 (1) , pp25-32 (2005).
45. Sinha, Deepak and Khan, S. A; "Analysis of Chemicals present in soil,water, plant and aquatic animals with special reference to Industrial effluents and pollutional effect in Bilaspur District", Ph.D. thesis,GGDU, Bilaspur, C.G. (2005).
46. Nayar, R; "Physico-chemical study of underground drinking water of korba and its surrounds", Ph.D Thesis, GGDU,Bilaspur, C.G.(2005).
47. Tiwari, M.K; "Physico-Chemical investigation of drinking water quality of Bilaspur and its surroundings rural areas with special reference to Nitrate and Fluoride toxicity", Ph.D Thesis, GGDU, Bilaspur, C.G.(2005).
48. Nouri, J and Malmasi, S ; " The role of ground water vulnerability in urban development planning", *American J. Env. Sci.*, 1 (1): 16-21(2005).
49. Naddeo V. et al ; "European Procedures to river water quality assessment", *Global NEST Journal*, vol 7 (3), pp 306-312 (2005).
50. Voudouris K. S. et al; "Water resources and ground water quality in North Peloponnesus (Greece)", *Global NEST Journal*, vol 7(3), pp 340-353 (2005).
51. Vishnav, M. M and Sahu, Anita; "Study of fluoride in ground water around the Balko, Korba area (C' garh)", *J. Env. Sci.Engg.* , Vol. 48(1), pp 65-68 (2006).
52. Vaishnav, M. M and Sahu, Dhaneswari; *J. Env. Res. Dev.* , vol. 1(2) , pp140-142 (2006).
53. Dutta, S and Pandey, A. K; *J. Env. Sci. Engg.*, vol48 (4), pp 241-246 (2006).
54. Sharma, M. K and Jain , C. K ; *J. Env. Sci. Engg.* Vol. 48 (4), pp 271-280 (2006).
55. Begum, Nafeesa and Purushothama, R ; *J. Env. Sci. Engg.*, vol. 48(4),(2006).
56. Singh, Vijendra. R ; *J. Che. Env. Vol.* 10 (3), pp 62-66 (2006).
57. Sinha, D. K. and Saxena, Ritesh ; *J. Env. Sci. Engg.*, vol. 48 (3), pp 157- 164 (2006).
58. Warhate, S. R et al ; *J. Env. Sci. & Engg.* , vol. 48 (2), 81-90 (2006).
59. Tiwari, R. K and Chandel C. P ; "Hydrochemical investigation and correlation analysis of ground water quality of Jaipur city, Rajasthan (India)", *J. Env. Sci. Engg.* , 49(3), 229-234 (2007).
60. Bhatnaya M. I ; "Assessment of surface water quality in eight major ponds of Coimbatore city and potential risk of ground water quality", *J. Env. Sci. Engg.*, 49 (2), pp 297-308 (2007).
61. Batheja K et al; "Physico-Chemical characteristic of ground water at Chulu Tehsil , Rajasthan, India", *J. Env. Sci. Engg.*, 49 (3) , pp 203-206 (2007).
62. Shastri, G. N, Singh N. K and Das C, "Assessment of physico-Chemical analysis of pond water in Newra village", *Current World Environment* vol 3(1), pp 211-212 (2008).
63. Shrivastava, S. K et al ; "A study of physico-chemical quality of pond water in Bilaspur (C. G.)", *Current world Environment*, 3(1), 97-107 (2008).
64. Singh Naveen Kumar et al; "Assessment of physico-chemical parameters of drinking water of Bhitwar town, Gwalior, M.P. India",



- Current world Environment*, 3(1), 153-156 (2008).
- 65.
66. Bikkand, B. S et al; "Evaluation of bore well water of various place located in and around industrial areas of Aurangabad district of Maharashtra", *Current world Environment*, 3(1); 115-118 (2008).
67. Banger K. S et al ; "Quality of Ground Water Used for Irrigation in Ujjain District, M.P, India", *J. Env. Sci. Ens* , 50(3) , 179-186 (2008).
68. Yadav, S. C et al ; "Analysis of waste water from different waste water system", *Current World Environment*, 3(1), 203-206 (2008).
69. Sharma A et al ; "Monitoring of ground water quality in mandideep,Industrial area Bhopal (India)", *Current world Environment*, 3(1), 115-118 (2008).
70. Sundar M. Lenin and Seseetharan, M. K; "Ground water quality in Coimbatore, Tamil Nadu along Noyyal River", *J. Env Sci.* ; 50(3) , 187- 190 (2008).
71. Galbrand C. et al ; "water quality assessment of a constructed wetland treating landfill leachate and industrial Park runoff", *American Journal of Environmental Sciences.*, 4 (2): 111-120 (2008).
72. Sia Su Glenn L. ; Assessing the Effect of a Dumpsite to Groundwater Quality in Payatas, Philippines, *American Journal of Environmental Sciences*, 4 (4): 276-280, 2008.
73. Dhakad N K et al ; "Hydrobiological study of Banihard dam of Khargone (M.P.)", *Ind Res. Commun.* , 3(1), 39-40(2009).
74. Kočí Vladimír ; "Background Level of Pops in Ground Water Assessed on Chemical and Toxicity Analysis of Exposed Semipermeable Membrane Devices", *Air, Soil and Water Research* ,vol 2 , pp1-14(2009).
75. Pandeya, S.N, Rana A. K and Bhoi D. K ; "Physico-Chemical analysis of borewells drinking water of Kapadwanj territory", *Current World Environment*, vol 5(2) , pp 253-257 (2010).
76. Sahni Anirudh, Sahni Kavita and Gautam Abhisekh ; "Assessment of drinking water quality of Jaipur main and its suburb railway stations with special mention to fluoride", *Current World Environment* , vol 5 (2) , pp 293-298 (2010).
77. Reza Rizwan and Singh Gurdeep ; "An application of water quality index for assessment of pond water quality status in Orissa, India", *Current World Environment*, Vol 5 (2), pp 305-310 (2010).
78. Kataria H.C. et al ; "Study of physico-chemical parameters of drinking water of Bhopal city with reference to health impacts", *Current World Environment*, vol 5(2), pp 355-359 (2010).
79. Sonel Manish et al ; " Physico-chemical and bacteriological studies of ground water layers in Bhanpur Bhopal (M.P.)", *Current World Environment*, vol 5 (2), pp 379-382 (2010).
80. E.O. Orebiyi et al; "Assessment of Pollution Hazards of Shallow Well Water in Abeokuta and Environs, Southwest, Nigeria", *American Journal of Environmental Sciences*, 6 (1): 50-56, 2010.
81. Ramirez Elizabeth et al; "Microbiological and Physicochemical Quality of Well Water Used as a Source of Public Supply", *Air, Soil and Water Research*:3 105-112 (2010).
82. Yadav S.S and Kumar Rajesh; "Assessment of ground water pollution due to fluoride content and water quality in and around Tanda Taluka of Rampur district, Uttar Pradesh, India", *J. Chem. Pharm. Res.*, 2(4):564-568 (2010).