

REFERENCES

- Ayob, A. & Abdullah, A. Z. 2012 Characterisation of polymer-stabilized nano zero-valent iron particle by ultrasonic irradiation-assisted method. *Journal of Polymer Materials* 29, pp.167–179.
- Athuraliya, N.T., Abeysekera, T.D., Amerasinghe, P.H., Kumarasiri, R., Bandara, P., Karunaratne, U., Milton, A.H., and Jones, A.L., 2011. Uncertain etiologies of proteinuric-chronic kidney disease in rural Sri Lanka. *Kidney International*, 80(11), pp.1212-1221.
- Athuraliya, T.N.C., Abeysekera, D.T.D.J., Amerasinghe, P.H., Kumarasiri, P.V.R., and Dissanayake, V., 2009. Prevalence of chronic kidney disease in two tertiary care hospitals: high proportion of cases with uncertain etiology. *Ceylon Medical Journal*, 54(1).
- Auerbach, S.M., Carrado, K.A., and Dutta, P.K., 2003. *Handbook of zeolite science and technology*. CRC press.
- Bhatnagar, A., Kumar, E., and Sillanpää, M., 2011. Fluoride removal from water by adsorption—a review. *Chemical Engineering Journal*, 171(3), pp.811-840
- Barbier, O., Arreola-Mendoza, L. & Razo, D. L. M. 2010 Molecular mechanisms of fluoride toxicity. *Chemico-Biological Interaction* 188(2), pp.319–333.
- Bober, J., Kwiatkowska, E., Kedzierska, K., Olszewska, M., Stachowska, E., Ciechanowski, K. and Chlubek, D., 2006. Fluoride aggravation of oxidative stress in patients with chronic renal failure. *Fluoride*, 39(4), p.302.
- Borke, J.L., and Whitford, G.M., 1999. Chronic fluoride ingestion decreases 45Ca uptake by rat kidney membranes. *The Journal of nutrition*, 129(6), pp.1209-1213.

- Calafat, A.M., 2012. The US National Health and Nutrition Examination Survey and human exposure to environmental chemicals. International journal of hygiene and environmental health, 215(2), pp.99-101.
- Carlson, C.H., Armstrong, W.D., and Singer, L., 1960. Distribution and excretion of radiofluoride in the human. Proceedings of the Society for Experimental Biology and Medicine, 104(2), pp.235-239.
- Carton, R.J., 2006. Review of the 2006 United States National Research Council report: fluoride in drinking water. Fluoride, 39(3), pp.163-172.
- Chandrajith, R., Nanayakkara, S., Itai, K., Aturaliya, T.N.C., Dissanayake, C.B., Abeysekera, T., Harada, K., Watanabe, T., and Koizumi, A., 2011. Chronic kidney diseases of uncertain etiology (CKDu) in Sri Lanka: geographic distribution and environmental implications. Environmental geochemistry and health, 33(3), pp.267-278.
- Chandrajith, R., Padmasiri, J.P., Dissanayake, C.B. and Prematilaka, K.M., 2012. Spatial distribution of fluoride in groundwater of Sri Lanka. Journal of the National Science Foundation of Sri Lanka, 40(4).
- Chandrajith, R., Seneviratna, S., Wickramaarachchi, K., Attanayake, T., Aturaliya, T.N.C., and Dissanayake, C.B., 2010. Natural radionuclides and trace elements in rice field soils in relation to fertilizer application: study of a chronic kidney disease area in Sri Lanka. Environmental Earth Sciences, 60(1), pp.193-201.
- Chouhan, S. and Flora, S.J.S., 2008. Effects of fluoride on the tissue oxidative stress and apoptosis in rats: biochemical assays supported by IR spectroscopy data. Toxicology, 254(1-2), pp.61-67.
- Cittanova, M.L., Lelongt, B., Verpont, M.C., Geniteau-Legendre, M., Wahbe, F., Prie, D., Coriat, P. and Ronco, P.M., 1996. Fluoride ion toxicity in human kidney collecting duct cells. Anesthesiology: The Journal of the American Society of Anesthesiologists, 84(2), pp.428-435

Dharma-Wardana, M.W.C., 2018. Chronic kidney disease of unknown etiology and the effect of multiple-ion interactions. Environmental geochemistry and health, 40(2), pp.705-719.

Dharma-Wardana, M.W.C., Amarasiri, S.L., Dharmawardene, N. and Panabokke, C.R., 2015. Chronic kidney disease of unknown aetiology and groundwater ionicity: study based on Sri Lanka. Environmental geochemistry and health, 37(2), pp.221231.

Dissanayake, C.B. and Chandrajith, R., 2017. Groundwater fluoride as a geochemical marker in the etiology of chronic kidney disease of unknown origin in Sri Lanka. Ceylon Journal of Science, 46(2).

Freundlich, H.M.F., 1906. Over the adsorption in solution. J. Phys. Chem, 57(385471), pp.1100-1107.

Gifford, F.J., Gifford, R.M., Eddleston, M. and Dhaun, N., 2017. Endemic nephropathy around the world. Kidney international reports, 2(2), pp.282-292.

Ileperuma, O.A., Dharmagunawardhane, H.A. and Herath, K.P.R.P., 2009. Dissolution of aluminium from sub-standard utensils under high fluoride stress: a possible risk factor for chronic renal failure in the North-Central Province. Journal of the National Science Foundation of Sri Lanka, 37(3).

Ingallinella, A.M., Pacini, V.A., Fernández, R.G., Vidoni, R.M. and Sanguinetti, G., 2011. Simultaneous removal of arsenic and fluoride from groundwater by coagulation-adsorption with polyaluminum chloride. Journal of Environmental Science and Health, Part A, 46(11), pp.1288-1296.

Inkovaara, J., Heikinheimo, R., Jarvinen, K., Kasurinen, U., Hanhijarvi, H. and Iisalo, E., 1975. Prophylactic fluoride treatment and aged bones. Br Med J, 3(5975), pp.73-74.

Jayasekara, J.M., Dissanayake, D.M., Adhikari, S.B. and Bandara, P., 2013. Geographical distribution of chronic kidney disease of unknown origin in North Central Region of Sri Lanka. Ceylon Med J, 58(1), pp.6-10.

Jayasekara, K.B., Dissanayake, D.M., Sivakanesan, R., Ranasinghe, A., Karunaratna, R.H. and Kumara, G.W.G.P., 2015. Epidemiology of chronic kidney disease, with special emphasis on chronic kidney disease of uncertain etiology, in the north central region of Sri Lanka. *Journal of epidemiology*, 25(4), pp.275-280.

Jayasekara, K.B., Dissanayake, D.M., Sivakanesan, R., Ranasinghe, A., Karunaratna, R.H. and Kumara, G.W.G.P., 2015. Epidemiology of chronic kidney disease, with special emphasis on chronic kidney disease of uncertain etiology, in the north central region of Sri Lanka. *Journal of epidemiology*, 25(4), pp.275-280.

Jayasumana, C., Fonseka, S., Fernando, A., Jayalath, K., Amarasinghe, M., Siribaddana, S., Gunatilake, S. and Paranagama, P., 2015. Phosphate fertilizer is a main source of arsenic in areas affected with chronic kidney disease of unknown etiology in Sri Lanka. *SpringerPlus*, 4(1), p.90.

Jayasumana, C., Paranagama, P.A., Amarasinghe, M.D., Wijewardane, K.M.R.C., Dahanayake, K.S., Fonseka, S.I., Rajakaruna, K.D.L.M.P., Mahamithawa, A.M.P., Samarasinghe, U.D. and Senanayake, V.K., 2013. Possible link of chronic arsenic toxicity with chronic kidney disease of unknown etiology in Sri Lanka.

Jayatilake, N., Mendis, S., Maheepala, P. and Mehta, F.R., 2013. Chronic kidney disease of uncertain aetiology: prevalence and causative factors in a developing country. *BMC nephrology*, 14(1), p.180.

Jayawardana, D.T., Pitawala, H.M.T.G.A., and Ishiga, H., 2012. Geochemical assessment of soils in districts of fluoride-rich and fluoride-poor groundwater, northcentral Sri Lanka. *Journal of Geochemical Exploration*, 114, pp.118-125.

Jayawardana, D.T., Udagedara, D.T., Silva, A.A.M.P., Pitawala, H.M.T.G.A., Jayathilaka, W.K.P. and Adikaram, A.M.N.M., 2016. Mixing geochemistry of cold water around non-volcanic thermal springs in high-grade metamorphic terrain, Sri Lanka. *Chemie der Erde-Geochemistry*, 76(4), pp.555-565.

- Jha, V., Garcia-Garcia, G., Iseki, K., Li, Z., Naicker, S., Plattner, B., Saran, R., Wang, A.Y.M. and Yang, C.W., 2013. Chronic kidney disease: global dimension and perspectives. *The Lancet*, 382(9888), pp.260-272.
- Kakavandi, B., Jonidi, A., Rezaei, R., Nasseri, S., Ameri, A. and Esrafily, A., 2013. Synthesis and properties of Fe₃O₄-activated carbon magnetic nanoparticles for removal of aniline from aqueous solution: equilibrium, kinetic and thermodynamic studies. *Iranian journal of environmental health science & engineering*, 10(1), p.19.
- Karagas, M.R., Le, C.X., Morris, S.T.E.V.E.N., Blum, J.O.E.L., Lu, X.I.U.F.E.N., Spate, V.I.C.K.Y., Carey, M.A.R.K., Stannard, V.I.R.G.I.N.I.A., Klaue, B.J.O.E.R.N. and Tosteson, T.D., 2001. Markers of low-level arsenic exposure for evaluating human cancer risks in a US population. *International journal of occupational medicine and environmental health*, 14(2), pp.171-175.
- Knez, S., Strazisar, J., Golob, J. and Horvat, A., 2001. Agglomeration of zeolite in the fluidized bed. *Acta chimica slovenica*, 48(4), pp.487-504.
- Kosmulski, M., 2009. pH-dependent surface charging and points of zero charge. IV. Update and new approach. *Journal of Colloid and Interface Science*, 337(2), pp.439-448.
- Kovacheva, P., Arishtirova, K. and Vassilev, S., 2001. MgO/NaX zeolite as basic catalyst for oxidative methylation of toluene with methane. *Applied Catalysis A: General*, 210(1-2), pp.391-395.
- Ku, Y. and Chiou, H.M., 2002. The adsorption of fluoride ion from aqueous solution by activated alumina. *Water, air, and soil pollution*, 133(1-4), pp.349-361.
- Kumari, M.K.N., Pathmarajah, S., Dayawansa, N.D.K., and Nirmanee, K.G.S., 2016. Evaluation of groundwater quality for irrigation in Malwathu Oya cascade-I in the Anuradhapura District of Sri Lanka. *Tropical Agricultural Research*, 27(4), pp.310-324.
- Langmuir, I., 1938. Overturning and anchoring of monolayers. *Science*, 87(2266), pp.493-500.

Levine, K.E., Redmon, J.H., Elledge, M.F., Wanigasuriya, K.P., Smith, K., Munoz, B., Waduge, V.A., Periris-John, R.J., Sathiakumar, N., Harrington, J.M. and Womack, D.S., 2016. Quest to identify geochemical risk factors associated with chronic kidney disease of unknown etiology (CKDu) in an endemic region of Sri Lanka—a multimedia laboratory analysis of biological, food, and environmental samples. Environmental monitoring and assessment, 188(10), p.548.

Padilla, A. P., & Saitua, H. (2010). Performance of simultaneous arsenic, fluoride, and alkalinity (bicarbonate) rejection by pilot-scale nanofiltration. Desalination, 257(1-3), 16-21.

Paranagama, D., 2014. Chronic kidney disease of unknown origin in Sri Lanka and its relation to drinking water supplies: Doctoral dissertation

Petala, E., Dimos, K., Douvalis, A., Bakas, T., Tucek, J., Zboril, R. & Karakassides, M. A. 2013 Nanoscale zero-valent iron supported on mesoporous silica: characterization and reactivity for Cr(VI) removal from aqueous solution. Journal of Hazardous Materials 261, pp. 295–306.

Pinon-Miramontes, M., Bautista-Margulis, R.G., Perez-Hernandez, A., 2003. Removal of arsenic and fluoride from drinking water with cake alum and a polymeric anionic flocculent. Fluoride 36 (2), 122e128 (Research Report).

Ramesh, K. and Reddy, D.D., 2011. Zeolites and their potential uses in agriculture. In Advances in agronomy (Vol. 113, pp. 219-241). Academic Press.

Raul, P., Umlong, I. M. & Purkait, M. K. 2012 Removal of fluoride from water using iron oxide-hydroxide nanoparticles. Journal of Nanoscience and Nanotechnology 12 (5), pp.3922–3930.

Rubasinghe, R., Gunatilake, S.K. and Chandrajith, R., 2015. Geochemical characteristics of groundwater in different climatic zones of Sri Lanka. Environmental earth sciences, 74(4), pp.3067-3076

Sudasinghe, M. I, 2016. "Water quality data of CKDu prevalent areas", University of Moratuwa

Sudasinghe, M. et al., 2019. Defluoridation of calcium - rich groundwater using iron oxide nano particles. Water Practice and Technology, pp. 665-681.

Vithanage, M. and Bhattacharya, P., 2015. Fluoride in drinking water: health effects and remediation. In CO₂ Sequestration, Biofuels and Depollution (pp. 105-151). Springer, Cham.

WHO (World Health Organisation). 2017 Guidelines for Drinking Water Quality: 4th Edition Incorporating the 1st Addendum. Geneva, World Health Organization.

Zager, R. A. & Iwata, M. 1997 Inorganicfluoride divergent effects on human proximal tubular cell viability. American Journal of Pathology 150(2), 735–743.