Mr.R.C.W. ARACHCHIGE

Research Technologist

Materials Technology Section

Qualifications	**BSc** - Physics, Chemistry, Botany (Open University of Sri Lanka) **MPhil** - Reading (University of Peradeniya) **Diploma -** Advanced Ceramic Technology conducted by Centre for Technical Excellence in Ceramic (CENTEC)
Contacts	**Tel: 94 011 2379849 Email: rcwick@iti.lk**
Research Experience	8 years research experience in mineral base research and water purification since 2009.
Interest Areas	Mineral, Ceramic and water purification
Abstract:	• Reduction of Chromium Levels in Waste Water and Industrial Sludge usingCost Stabilization Technology **Arachchi, R.C.W**. & Fernando, G.W.A.R., 2nd Sri Lankan roundtable on sustainable consumption and production, The Open University of Sri Lanka, (2012) • Suppression of water hardness using Red Clay Jayaratna. I.P.L, **Arachchige. R.C.W**, Munaweera. R.R.K.W, Hetiarachchi. H. A.M. I.T, Bandara. A and Kottagoda I.R.M., Biennial Research symposium, Industrial Technology Institute, (2017)
Patents	1. Red-clay water filter body composition for removal of arsenic, cadmium and fluoride from water. I.R.M. Kottegoda, I.P.L. Jayarathna, J.T.S.T. Jayawardane, **R.C.W. Arachchi**, H.A.M.I.T. Hettiarachchi. The Registry of Patents and Trade Marks, Sri Lanka, Patent No. 19158 (2017). 2. Fabrication of red-clay blocks for removal of fluoride, arsenic and cadmium contamination from water. I.R.M. Kottegoda, I.P.L. Jayarathna, J.T.S.T. Jayawardane, **R.C.W. Arachchi**, H.A.M.I.T. Hettiarachchi, H.C.D.P. Colombage. *The Registry of Patents and Trade Marks, Sri Lanka, Applied Patent No. LK/P/1/18250 (2015).* 3. Regeneration method of red-clay filter for removal of fluoride from water. *I.P.L. Jayarathna, J.T.S.T. Jayawardane, **R.C.W. Arachchi**, H.A.M.I.T. Hettiarachchi, I.R.M. Kottegoda,. The Registry of Patents and Trade Marks, Sri Lanka, Applied Patent No. LK/P/1/18302 (2015).* 4. Development of red-clay based water filter for removal of heavy metal contamination from water. I.R.M. Kottegoda, I.P.L. Jayarathna, J.T.S.T. Jayawardane, **R.C.W. Arachchi**, H.A.M.I.T. Hettiarachchi. (2014). *The Registry of Patents and Trade Marks, Sri Lanka, Applied Patent No. LK/P/1/17884.* 5. Cost effective Eco-friendly novel rain guard sealant based on cashew nut shell liquid, for application rubber trees**.**, S. Weerartne, D.S. Samarawickrama, **R.C.W.**

	Arachchi. *Patent No. 16943, The Registry of Patents and Trade Marks, Sri Lanka, (2012).* 6. Development of clay filter body with high fluoride binding ability for the remediation of fluoride contaminated water*., I*.R.M. Kottegoda, W.H.A.G. Pramathilake, G.P.C.A. Dharmasiri, B.U. Hettiarachchi, ***R.C.W. Arachchi****.(2012) Patent No. LK/P/1/16753, The Registry of Patents and Trade Marks, Sri Lanka, (2012).*
Awards	• Presidential Awards 2018 for invention of clay filter composition for removal of fluoride ion from water (Sri Lanka Inventors Commission) • Awards for invention of Clay Water filter for removal of heavy metal and fluoride at 3rd Biennial Research Symposium, ITI in 2017 • Finalist for WAITRO (World Association of Industrial and Technological Original Research Organization) innovation award for "Clay filter for removal of fluoride, arsenic and cadmium from water" in 2016
Major Projects Undertaken	• Low Cost Eco friendly domestic system to compost bio - degradable food waste (TG/18/144 -2018) • Development of Red-clay based water filter/ apparatus for the removal of hardness of drinking water.(TG/16/125 - 2016) • Filter supplying and monitoring-North western province (CP-101120, CP-1011222015 -2018) • Development of Red-clay based water filter for the remediation of Fluoride and other contamination in water (TG 14/90 - 2014/2015) • Development of Red Clay Based Superior Quality Cookware (TG /DF/13-00-01, 2013) • Development of Novel Sealant for Rain Guards used in Rubber Cultivation (2011)