

CURRICULUM VITAE

Gayani Chathurika Pathiraja

Department of Engineering Technology, Faculty of Technology,
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ACADEMIC QUALIFICATIONS

- Master of Philosophy (M.Phil.) (Effective date-21.01.2015)
Postgraduate Institute of Science, University of Peradeniya, Sri Lanka.
Title of thesis- Development and optimization of an anode material for oxidation of chlorpyrifos
- Special Degree of Bachelor of Technology in Science and Technology (B.Tech)
Second class upper honors (Overall GPA – 3.6, Effective date- 01.10.2011)
Uva Wellassa University, Sri Lanka.
Specialization area- Materials Science and Technology
- Diploma in Information Technology (External) at University of Colombo School Computing (UCSC), Colombo, Sri Lanka.

AWARDS

- PhD/M.Phil Research Fellowship for a M.Phil degree with effective from 24th October 2011 to work on NRC grant No 11-054, titled ‘Development of electrochemical technologies to remove organic and heavy metal pollutants present in pesticides’: awarded by the PhD/M.Phil Training programme of the National Research Council, Sri Lanka.

WORKING EXPERIENCE

- Lecturer (probationary) at Department of Engineering Technology, Faculty of Technology, University of Ruhuna, Sri Lanka from 1st of June 2016 to present.
- Scientific Officer at National Science Foundation, Sri Lanka from 29th June 2015 to 24th May 2016.
- Research Assistant of Dr. Nanayakkara’s Environmental Engineering Research group at Department of Civil Engineering, University of Peradeniya, Sri Lanka from May, 2014 to June 2015.
- Research Assistant (National Research Council funded) of Electrochemistry/ Environmental Engineering group at Institute of Fundamental Studies, Kandy, Sri Lanka from October, 2011 to April, 2014.

- Trainee at LALAN Rubbers (Pvt) Ltd, Biyagama, Sri Lanka from June to October 2011.

PUBLICATIONS

REFEREED JOURNAL ARTICLES

- (1) **Gayani Chathurika Pathiraja**, Athula Wijayasinghe, Nadeeshani Nanayakkara (2016). Oxygen evolution reaction of Ti/IrO₂-SnO₂ electrode: A study by cyclic voltammetry, Tafel lines, EIS and SEM, Bulletin of Materials Science, 39(3), 803-809.
- (2) Chandima Weerakkody, **Gayani Chathurika Pathiraja**, Parakrama Karunarathne, Nadeeshani Nanayakkara (2015). Development of corrosion resistant composite coating with copper and zirconium, Ceylon Journal of Science- Physical Sciences, 19, 17-21.
- (3) **Gayani Chathurika Pathiraja**, Pavithra Bhakthi Jayathilaka, Chandima Weerakkody, Parakrama Karunarathne, Nadeeshani Nanayakkara (2014). Comparison study of dimensionally stable anodes for degradation of chlorpyrifos in water, Current science, 107(2), 219-226.
- (4) Jayathilaka, P.B., **Pathiraja, G.C.**, Bandara, A., Subasinghe, N.D., Nanayakkara, N. (2014). An electrochemical mechanisms study: On Steel/IrO₂-Sb₂O₃ electrodes for oxidation of phenol in water, Canadian Journal of Chemistry, 93(5), 536-541.
- (5) Pavithra Bhakthi Jayathilaka, **Gayani Chathurika Pathiraja**, Athula Bandara, Nalaka Deepal Subasinghe, Nadeeshani Nanayakkara (2014) Theoretical study of phenol and hydroxyl radical reaction mechanism in aqueous medium by DFT/ B3LYP/ 6-31+G (d,p)/ CPCM model, Canadian Journal of Chemistry, 92(9), 809-813.
- (6) **Gayani Chathurika Pathiraja**, Dilini Kumari De Silva, Lasangi Dhanapala, Nadeeshani Nanayakkara (2014). Investigating the surface characteristics of chemically modified and unmodified rice husk ash; bottom-up approach for adsorptive removal of water contaminants, Desalination and Water Treatment, 54(2), 547-556.

CONFERENCE PROCEEDINGS AND ABSTRACTS

- (1) P.B. Jayathilaka, **G.C. Pathiraja**, N.D. Subasinghe, A. Bandara, Nadeeshani Nanayakkara, Optimization of Ti/IrO₂-Sb₂O₃ anode material content by using Response Surface Method, 3rd Water Research Conference 2015, China, 11-14 January 2015.
- (2) **Gayani Chathurika Pathiraja**, Dilini Kumari De Silva, Nadeeshani Nanayakkara, (2014) Surface modification of rice husk ash for enhancing copper adsorption, 5th International Conference on Sustainable Built Environment, Earl's Regency Hotel, Kandy, Sri Lanka, 10th and 11th December 2014.

- (3) P.B. Jayathilaka, **G.C. Pathiraja**, N.D. Subasinghe, A. Bandara, Nadeeshani Nanayakkara (2014) Novel anode with low energy consumption for polluted water treatment, Driving Research Towards Economy “Opportunities and Challenges”, 2nd International conference, 13th -14th November 2014
- (4) **G.C. Pathiraja**, P.B. Jayathilaka, A. Wijayasinghe, P. Karunarathne, N. Nanayakkara (2014). Optimization of anode materials for electrochemical degradation of chlorpyrifos in water, PGIS Research Congress-2014 Postgraduate Institute of Science, University of Peradeniya, Sri Lanka, 10th – 11th October 2014.
- (5) P.B. Jayathilaka, **G.C. Pathiraja**, N.D. Subasinghe, A. Bandara, Nadeeshani Nanayakkara (2014). Steel/IrO₂ novel anode material for the treatment of phenol contaminated water, PGIS Research Congress-2014 Postgraduate Institute of Science, University of Peradeniya, Sri Lanka, 10th – 11th October 2014.
- (6) **Gayani Chathurika Pathiraja**, Pavithra Bhakthi Jayathilaka, Kumudu Karunarathna, Nadeeshani Nanayakkara (2014). Electrochemical properties and degradation of chlorpyrifos on different DSA electrodes, Third International Symposium on Water quality and human health: challenges ahead, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka, 27th –28th June 2014.
- (7) P.B. Jayathilaka, **G.C. Pathiraja**, N.D. Subasinghe, A. Bandara, Nadeeshani Nanayakkara (2014). Oxidation methods of water management and treatment, Third International Symposium on Water quality and human health: challenges ahead, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka, 27th – 28th June 2014.
- (8) Pavithra Bhakthi Jayathilaka, **Gayani Chathurika Pathiraja**, Nadeeshani Nanayakkara (2013). Electrochemical oxidation of phenol in wastewater, 69th Annual Session of the Sri Lanka Association of the Advancement of Science, Sri Lanka
- (9) **Gayani Chathurika Pathiraja**, Pavithra Bhakthi Jayathilaka, Nadeeshani Nanayakkara (2013). Preparation and characterization of dimensionally stable anode for degradation of chlorpyrifos in water, Sustainable Development Conference 2013, Thailand, ISBN 978-86-87043-17-6, 21st – 23rd June 2013.
- (10) P.B. Jayathilaka, **G.C. Pathiraja**, D. Subasingha, A. Bandara, N. Nanayakkara (2013). Electrochemical oxidation techniques for urban water management, 4th International Conference on Structural Engineering and Construction Management Urban Water Environment: Monitoring and Management, Earl’s Regency Hotel, Kandy, Sri Lanka, 15th of December 2013.
- (11) Nanayakkara, N., Jayathilake, H.A.P.P.B., **Pathiraja, G.C.** (2012). Importance of electrode material in electrochemical technologies for wastewater treatment and its sustainability, International conference on sustainable built environment, Earl’s Regency Hotel, Kandy, Sri Lanka, 14-16 December 2012.
- (12) Jayathilaka, P.B., **Pathiraja, G.C.**, Nanayakkara, N. (2012). Electrochemical treatment for phenol/ phenolic hazardous chemicals in water, Symposium on “The Potential Health and

Environmental impacts of exposure to hazardous natural and man-made chemicals and their proper management”, ISBN 978-955-0498-02-4, 22nd-23rd of November 2012, Sri Lanka.

(13) **G.C. Pathiraja**, K.G.N. Nanayakkara (2011). Surface modification of activated carbon to treat polluted water streams, “Towards a knowledge economy”, Proceedings of the research symposium of Uva Wellassa University, Badulla, 15-16 December 2011.

RESEARCH EXPERIENCE

June. 2011- To date	(1)Development and optimization of anode material for oxidation of organic components in pesticides (2)Investigating the surface characteristics of chemically modified and unmodified rice husk ash; for adsorptive removal of water contaminants (3)Surface modification of activated carbon to treat polluted water streams
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PARTICIPATION IN WORKSHOPS, SYMPOSIUMS AND CONFERENCES

- Participated for International conference of Solar Energy Materials, Solar Cells and Solar Energy Applications at Institute of Fundamental Studies (IFS), Kandy.
- Participated for workshop on Electrochemistry at Postgraduate Institute of Science, University of Peradeniya.
- Participated for International symposium on Water quality and human health: challenges ahead at Postgraduate Institute of Science, University of Peradeniya.
- Participated for workshop on Current status and future trends in Thin Film Solar PV Technology at Institute of Fundamental Studies (IFS), Kandy.
- Participated for workshop on scientific writing at Postgraduate Institute of Science, University of Peradeniya.
- Member of the Sri Lanka Association of the Advancement of Science (SLAAS)
- Member of the Alumni Association of University of Peradeniya (AAUP)

PERSONAL PARTICULARS

Full Name - Gayani Chathurika Pathiraja
Date of Birth - 25.06.1985
Gender - Female
Nationality: - Sri Lankan

Marital status: - Married
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REFEREES

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I declare that the above information is true, accurate and to the best of my knowledge.

Gayani Chathurika Pathiraja

14/12/2016