

CURRICULUM VITAE

PERSONAL

Name : Dr. Balasuriya Mudiyansele Windya Padma
Kumari Amarasinghe (nee Balasuriya)

Official Address : Department of Chemical and Process Engineering,
University of Moratuwa, Moratuwa, Sri Lanka.
Telephone: 94-11-2640474
E mail : padma@cheng.mrt.ac.lk

Present Position : Professor, Department of
Chemical and Process Engineering

Specialties and interests:

- Particle Technology and applications in environmental pollution control.
- Equilibrium and kinetic characterization of adsorbents and process development.
- Rice bran stabilization, optimization of oil extraction and process equipment design.
- Fluidized bed and spouted bed technology for drying
- Undergraduate course quality enhancement

Date of Birth : 14th June 1961 Sex : Female

Nationality : Sri Lankan Civil Status : Married

ACADEMIC AND PROFESSIONAL QUALIFICATIONS :

1. Ph.D. – University of Manchester Institute of Science and Technology, England, 1990.
2. M. Sc. - University of Manchester Institute of Science and Technology, England, 1987.
3. B.Sc. (Eng) First Class(Hons)-University of Moratuwa, Sri Lanka, 1983.
4. Certificate on Petroleum processing, Canadian Institute for Petroleum Industry Development, Edmonton and Calgary, Alberta, Canada. 1993.
5. Certificate on Solar Energy, Indian Institute of Technology, Bombay, India, 2003.
6. Life Member, Sri Lanka Association for the Advancement of Science, 1999.
7. Member, Institution of Engineers, Sri Lanka, 2011.
8. Associate Member, Institution of Chemical Engineers, UK, 2007.

AWARDS

1. Presidential awards for scientific publications in the year 2007. Awarded in 2013.
2. Outstanding Research Award, University of Moratuwa -2009, 2013, 2015, 2016.
3. Listed among the most cited scientists by ISI's Essential Science Indicators (Sep 2012). during the last 10 years based on citations received for indexed journal papers.
4. E O E Pereira Award for the Best Paper presented at the Annual Sessions 2007 of the Institution of Engineers, Sri Lanka.
5. Research fellowship from National Science Foundation, Sri Lanka, 2007.

6. Fulbright Fellowship from US- Sri Lanka Fulbright Commission under advanced research and university lecturing awards, University of Missouri-Rolla, USA, 2006.
7. Commonwealth Fellowship from UK's association of commonwealth universities to pursue post doctoral research work at the University of Leeds, UK. 2005.
8. Overseas Research Students Fellowship and Mohn Research Fellowship to pursue postgraduate studies at the University of Manchester Institute of Science and Technology, 1986-1991.
9. Union carbide award for the Best Chemical Engineering student in Final part III Examination, 1983.
10. Uni Levers Prize for the Best final year Design Project in Chemical Engineering, 1983.
11. Ceylon Tobacco Company award for the Best Performance in Final part II Examination, 1982.
12. University of Moratuwa scholarship for the Best performance in First Year Examination Engineering II Group, 1980.

ACADEMIC AND PROFESSIONAL EXPERIENCE :

Oct 2009 to date – Professor in Chemical and Process Engineering, University of Moratuwa.

(8th January 2011 – 23rd January 2011 – Acting Head of the Department, Department of Chemical and Process Engineering, University of Moratuwa.

November 2007 to Oct. 2009 - Senior Lecturer in Chemical and Process Engineering, University of Moratuwa.

(April 2001 to April 2004 – Head of the Department, Department of Chemical and Process Engineering, University of Moratuwa.

Teaching, laboratory work and projects for following undergraduate subject modulus.

1. Unit Operations I
2. Unit Operations II
3. Particle Technology
4. Comprehensive Design Project
5. Research Project

Post graduate supervision and teaching in taught PG courses.

Teaching postgraduate courses at the University of Sri Jayawardenapura as a visiting lecturer i) M.Sc in Polymer Science (iii) M.Sc in Industrial Utilization of medicinal and aromatic plants.

Chairperson of the department accreditation committee – played a leading role in applying for accreditation of the B.Sc. Eng. degree program.

October 2005 – November 2007 – On sabbatical leave

Commonwealth Fellowship from UK's association of commonwealth universities to pursue post doctoral research work at the University of Leeds, UK. Oct. 2005 to March 2006.

Fulbright Fellowship from US- Sri Lanka Fulbright Commission under advanced research and university lecturing awards, University of Missouri-Rolla, USA, May 2006 –August 2006.

Research fellowship from National Science Foundation, Sri Lanka, 2007.

Research on '*Use of low cost adsorbents from waste biomass for heavy metals and dye removal from wastewater*'.

April 1991 to October 2005 – Senior Lecturer in Chemical and Process Engineering, University of Moratuwa.

- Teaching undergraduate courses (i) Mass Transfer Operations I and II (former Unit Operations) (ii) Particulate systems (former Particulate systems and Fluid Mechanics) Principle, theory, equipment selection and design applications of the unit processes listed under Mass transfer operations and particulate systems were taught for groups consisting 20 to 50 students each year at the undergraduate and post graduate level over the last 14 years. Tutorials, mini projects, laboratory classes and student presentations were coordinated with the assistance of the temporary instructors.

Mass Transfer Operations - Binary and Multi component Distillation, Extraction, Adsorption, Drying, Absorption and Stripping, Humidification, Mixing, Evaporation, Refrigeration.

Particulate Systems - Motion of particles in a fluid, Flow through packed beds, Filtration, Centrifugation, Dust and Mist Separation from gases, Fluidization.

- Teaching postgraduate courses for the M.Eng. in Chemical and Process Technology, (i) Separation Processes (ii) Particle Technology (iii) Transport phenomena (iii) Process Equipment Design.
- Teaching postgraduate courses for the M.Sc. in Polymer Technology
- Teaching postgraduate courses for the M.Sc./M.Eng in Environmental Engineering at the Civil Engineering Department
- Teaching undergraduate course in Town and Country Planning
- Supervising postgraduate and final year undergraduate projects.
- Member of the several Panels of examiners for the evaluation of postgraduate research thesis.
- Member of the Quality Assurance team for undergraduate programs up to 2005 –played a leading role in commencement of the quality assurance activities in the department and submission of subject review report under the quality assurance of degree programs.
- Research on (i) Rice Bran oil Extraction (ii) Use of waste bio mass for Adsorption (iii) Cyclones for industries (iii) Membrane Separation.
- Teaching undergraduate and postgraduate courses at the University of Sri Jayawardenapura as a visiting lecturer (i) B.Sc. Chemistry special course (ii) M.Sc in Polymer Science (iii) M.Sc. in Food Science.

September 1987 to April 1990

Research titled *The effect of size and charge polydispersity on sedimentation behaviour of concentrated suspensions*, was completed for the PhD degree at the University of Manchester Institute of Science and Technology, Manchester, England, while on study leave.

September 1986 to September 1987

Research titled *Hindered Sedimentation Behaviour of Polydisperse suspension* was completed for the M.Sc degree at the University of Manchester Institute of Science and Technology, Manchester, England, while on study leave.

December 1983 to September 1986

Assistant Lecturer in Chemical and Process Engineering, University of Moratuwa.

- Teaching undergraduate courses (i) Unit Operations (ii) Particulate systems.

October 1982 to December 1983

- Undergraduate trainee at the Ceylon Petroleum Corporation Sri Lanka.

TRAINING PROGRAMS/ STAFF DEVELOPMENT PROGRAMS ATTENDED

1. Seminar on MCQ tests, University of Moratuwa, April 2001.
2. Seminar on Time Management by Global Conventions (Pvt) Ltd, Hilton Jaic, October 2002.
3. Workshop on 'Super Change', University of Moratuwa, December 2003.
4. Seminar on the Japanese 5S method, April 2003.
5. Work shop on Conflict Negotiations, University of Moratuwa, 2003
6. Seminar on project management, ADB.
7. Training on teaching and assessment of Separations processes course module, National University of Singapore, 24th Aug – 6th September 2008.
8. Training on process Modelling and Simulation, Telemark University, Norway, 21st Nov-4th Dec 2011.
2. Workshop on Competency building and capacity enhancement of the emerging off-shore gas and oil industry in Sri Lanka, at jetwing blue, Negombo, 7-8th January 2013.
3. Workshop on Preventing ragging sexual and gender based violence in the Universities and higher educational Institutions in Sri Lanka, 25th to 27th April 2016, Blue Waters, Wadduwa..
4. Workshop on ensuring consistency between Accreditation panels, IESL, 2nd May 2016.
5. Workshop on Research Management, organized by National Science Foundation, Sri Lanka and Global Research Council, Hotel galdari, Colombo, 28th November 2017.

OTHER ACTIVITIES

Within the University of Moratuwa

- Member - Committee on Preventing ragging sexual and gender based violence in the University of Moratuwa
- Faculty representative- Higher Degrees committee, Faculty of Engineering
- Warden- Female hostels –University of Moratuwa July 2008 to Dec 2014
- Chair person, Senate Medical Committee, since 2013 to Dec 2014.
- Semester 8 coordinator –Department of Chemical and Process Engineering, since 2009 Dec 2014.
- Member of the Consultative committee of social harmony, 2013
- Member of the Committee on Usage of accommodation within the UOM, 2013
- Member of the Security review committee, 2013
- SRC research proposal reviewer –University of Moratuwa

- Served as the Domain Expert- Intellectual Property Assessment committee - University of Moratuwa
- Member of the Higher Degrees committee of the Faculty of Engineering, University of Moratuwa from 2000 to 2005.
- Member of the committee for selection of postgraduate students under the Asian Development Bank funded project.
- Research coordinator of the department of Chemical and process Engineering 2000 to 2005.
- Member of the staff-student liaison committee 2001-2005.
- Member canteen committee from 2008.
- Member of the board of residence and discipline from 2008.
- Member Hostel coordinating committee from 2008.
- Member of the Time Table committee from 2008.
- Member Crisis Management committee.
- Member gender equity committee.
- Member examination by law committee.
- Member of the Quality Assurance team for undergraduate programs up to 2005 –played a leading role in commencement of the quality assurance activities in the department and submission of subject review report under the quality assurance of degree programs.
- Member of the Board of Management University Industry Interaction Cell, University of Moratuwa. Up to 2005.
- Developed curriculum and syllabi for the new masters program in Chemical and Process Engineering, University of Moratuwa.
- Assisted Developing curriculum and syllabi for the B.Sc. Eng. Under graduate program in 1992, 2000 and 2004, 2009.
- Vice President of the Chemical Engineering Society, Sri Lanka in 1993.
- Member Industrial Relations Committee in the Chemical Engineering Society for the year 1994.
- President of the Chemical Engineering Society of Sri Lanka for the year 1996.
- Resource person for
 - Short course on Air Pollution and Control from stationary and mobile sources, Dept. of Chemical and Process Engineering, University of Moratuwa, 3rd – 5th December 2002.
 - Seminar on 'Making the Future Happen', University of Moratuwa, Sri Lanka, December, 1993.
- Member Calendar committee, University of Moratuwa, 1998
- Member of the Engineering Research Unit, 1998.
- Acting warden – Female hostels University of Moratuwa in 2000.
- Panel member –Recruitment of academic staff for ITUM.
- Member of the several examination offence committees.
- Member of the committee for the inquiry on printing the Pali book, 1992.
- Member of several Technical evaluation committees.
- Member of the committee to prepare the Silver jubilee Hand book, 1996.

Outside the University of Moratuwa

- External Examiner, IChem, Sri Lanka
- Review of Research Proposals under OUSL Competitive Research Grant Scheme 2017
- Chair person of the IESL Accreditation review team for B.Sc. Chemical and Process Eng. undergraduate program at the University of Peradeniya Sri Lanka, June 2016.

- Evaluator, Chemical accident prevention and preparedness program for Sri Lanka, SAICM, Quick Start Program Trust Fund, 2013
- Member of the National Industry training Advisory committee for validation of the curriculum of 'Chemical and Process Technology course., 2013
- Consultancy work on the Distillation column design for the Bio super adsorbent polymer plant ,Chemcel (Pvt) Ltd and Archer daniels Midland of USA.
- Member of the Technical committee on enhancing the quality of fossil fuels for managing air quality in Sri Lanka, Ministry of environment, 2012/13.
- Member of the Quality Assurance review team for B.Sc. Chemical and Process Eng. undergraduate program at the University of Peradeniya Sri Lanka, April 2011.
- Member – Performance evaluation team SWITCH-Asia program on sustainable consumption and production to Food and Beverage Industry Sri Lanka, 2011.
- Member of the Working committee on Engineering, Architecture and ICT, National Science Foundation, since 2011
- Reviewer research projects –University of Peradeniya
- Member of the Interview Panel for the Undergraduate scholarships, Cuban, Russian, Indian, Chinese, Pakistan – Ministry of Higher education since 2009.
- External examiner for following Institutions – KDU, University of Kelaniya, OUSL.
- Reviewer for the research publications – University of Peradeniya
- Chairing the session on setting research priorities conducted by National Science Foundation
- Secretary of the Environmental committee, Sri Lanka Association for the Advancement of Sciences , 2008
- Member of the Sectional committee - Section C, Sri Lanka Association for the Advancement of Sciences, 2008,2009
- Member Environmental committee, Sri Lanka Association for the Advancement of Sciences 2009
- Member - Consultative Committee on Equipment requirement for SLINTEC and the convener of the sub committee on activated carbon for the same consultative committee (Coordinated by NSF)
- Referee for the following International journals
 - Chemical Engineering Journal
 - Journal of Food and Bio products processing
 - Biochemical Engineering journal
 - Journal of Hazardous Materials
 - Journal of Environment Management
 - Journal of Chemical Products and Process Modeling
 - Arabian Journal of Science and Engineering
 - Adsorption Science and Technology

- Member of the Quality Assurance review team for B.Sc. Civil Eng. undergraduate program at the Open University of Sri Lanka.
- Committee member Institution of Engineers Sri Lanka –Women Engineers' Forum. – 2005.
- Resource person for following seminars at the Institution Engineers Sri Lanka.
 - Seminar on Air Quality Management in Chemical Plants, Institution of Engineers, Sri Lanka. July 1993.
 - Seminar on Theory and Practice on Distillation, Institution of Engineers Sri Lanka, March 1999.
- Member of the team for waste minimization in industries under the pollution reduction program jointly with Central Environmental Authority and UNDP.
- Lecturer in Engineering Council Examination Chemical Engineering students in Sri Lanka.

- Prepared the question paper for the recruitment of Chemical Engineers to the Sevanagala Sugar Factory.

CURRENT RESEARCH PROJECTS

1. Heat and mass transfer analysis in a spouted bed dryer for pepper drying.
2. Fluidized bed dryer for grain drying.
3. Multi-component adsorption of heavy metals onto coir pith
4. Adsorption Desorption study of heavy metals onto coconut shell char.
5. Drying characteristics of parboiled paddy in packed bed

RESEARCH PROJECTS

- Extraction of Rice Bran oil - Rice bran oil extraction from Sri Lankan rice bran types were investigated. Factors affecting extraction and the optimal operating conditions were studied. Equilibrium data for process equipment design were obtained. Extraction using organic solvents was compared with aqueous extraction – on going.
- Production of adsorbents from waste bio mass - Production of adsorbents from coir pith, saw dust, paddy husk, sugar cane baggase and tea waste was studied. Kinetics, equilibrium data and fixed bed adsorber tests were performed. Adsorbents were tested for adsorption of heavy metals, organics and textile dye from effluents- on going.
- Reverse flow cyclone for separation of tea dust - Collection of tea dust from the fluidized bed dryers using reverse flow cyclones designed using customized design was studied.
- Application of membrane separation processes for the Sri Lankan Industry. -Comprehensive survey was conducted to investigate the separation processes used in Sri Lankan industries with the objective of applying membrane separation processes for waste minimization and recovery of valuable materials from waste streams.
- Low cost packing materials for gas scrubbers - Use of locally available low cost packing materials for gas scrubbers was studied. Mass transfer coefficients necessary for packed column design were obtained.
- Production of Phosphoric acid from rock phosphate – undergraduate students project
- Production of Fuel from vegetable oils – undergraduate students project
- Hindered Sedimentation behavior of Polydisperse suspension - *Research project leading to PhD.*

Hindered Sedimentation behavior of Polydisperse suspension containing high solid volume fraction in the size range 1-100 μm was studied with the objective of providing a method enable prediction of solid flux for solid-liquid separation equipment design. Suspension settling rate, solid flux, segregation, wall effect and stability of the suspensions were observed as a function of solid volume fraction, suspension particle size and size distribution, surface charge (which leads to coagulation or repulsion) in a specially constructed sedimentation rig

using glass ballotini particles. An empirical equation was developed to predict solid flux as a function of particle size distribution, zeta potential and solid volume fraction.

A comprehensive computer simulation program was developed to estimate the solid flux, concentration and size profiles and the structure of the sediment bed itself during batch processes and validated against experimental measurements.

REFEREED JOURNAL PAPERS AND CONFERENCE PAPERS (FULL PAPER PUBLISHED)

- R.A. Williams and W.P.K. Amarasinghe, *Measurement and Simulation behaviour of concentrated Polydisperse suspensions*, Trans. Of the Institution of Mining and Metallurgy sec C, vol. 98 C 68, 1989.
- R.A. Williams, C.G. Xie, R. Bragge and W.P.K. Amarasinghe, *Experimental Techniques for monitoring sedimentation in optically opaque suspensions*, Colloids and surfaces, 43, 1990 (1-32).
- R.A. Williams and W.P.K. Amarasinghe et al., *The effect of size and charge polydispersity on sedimentation behaviour of concentrated suspensions*, Proceedings of 5th World Filtration Congress, 1990.
- R.A. Williams and W.P.K. Amarasinghe et al., *Sedimentation Behaviour of complex polydisperse suspensions*, Powder Tech., 65, 1991, 411-432.
- B.M.W.P.K. Amarasinghe and I.M.B.M. De Silva, *Application of Membrane Separation Processes to the Sri Lankan Industry*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, Dec. 2000.
- N.C. Gangodavilage and B.M.W.P.K. Amarasinghe, *Optimal Operating Conditions and equilibrium characteristics for rice bran oil extraction*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, Nov 2001.
- B.M.W.P.K. Amarasinghe and N.C. Gangodavilage, *Effect of Operation Conditions on Rice Bran Oil Extraction and Equilibrium Data for Design Calculations*, 2nd world Engineering Congress, Kuching, Malaysia, July 2002.
- B.M.W.P.K. Amarasinghe, N.C. Gangodavilage, *Rice bran oil extraction in Sri Lanka: Data for process equipment design*, Trans IChem, Part C, Food and Bio products processing, 82(C1), March 2004.
- B.M.W.P.K. Amarasinghe and Gangodavilage NC, *Adsorbents from waste bio mass production and application*. 7th World Congress of Chemical Engineering, Glasgow, Scotland, 10-14 July 2005.
- B.M.W.P.K. Amarasinghe, R.A. Williams, *Tea waste as a low cost adsorbent for Cu and Pb removal from waste water*, Chem. Eng. Journal, 132 (2007) 299-309.
- B.M.W.P.K. Amarasinghe, P.A. Jayasinghe and M.Y. Gunesekara, *Adsorption of Cibacron blue dye from aqueous solutions onto HCL treated waste*, Engineer, Journal of the Institution of Engineers Sri Lanka, XXXX (3) July 2007.
- B.M.W.P.K. Amarasinghe, *Comparison of adsorption characteristics of waste biomass materials for the removal of Pb ions from industrial effluents*, Engineer, Journal of the Institution of Engineers Sri Lanka, XXXX (4) October 2007.
- B.M.W.P.K. Amarasinghe, M.P.M. Kumarasiri, N.C. Gangodavilage, *Effect of Method of Stabilization on Aqueous Extraction of Rice Bran Oil*, J. Food and Bio products processing, 87 (2) 2009.
- B.M.W.P.K. Amarasinghe and G.K. Jayathunga, *Effect of Method of Treatment of Rice Husk on Adsorption of Textile Dyes from Aqueous Solutions*, The proceedings of the 3rd International conference on Chemical and Bioprocess Engineering, 12th-14th August 2009, University Mayasia Sabah, Kota Kinabalu, Sabah, Malaysia.

- G.K. Jayathunga and B.M.W.P.K. Amarasinghe, *Rice husk based adsorbents for textile effluent treatment*, Engineer, Journal of the Institution of Engineers Sri Lanka, XXXX II(4) October 2009.
- W. A. J. Anurangi, B. M. W. P. K. Amarasinghe, A. A. P. de Alwis, *Adsorption of Residual Oil from Oily Wastewater using Natural Adsorbents*, Transactions of the Institution of Engineers Sri Lanka, October 2010.
- B. M. W. P. K. Amarasinghe, *Removal of lead and cadmium from wastewater by adsorption onto coir pith*, Journal of Tropical Forestry and Environment, Vol 1, No 1 (2011), 36-47.
- H.D.S.S. Karunarathne, B.M.W.P.K. Amarasinghe, *Sugar cane Bagasse based activated carbon as an adsorbent*, Third international conference in Chemical Engineering, Dhaka, Bangladesh, 29-30 December 2011.
- H.D.S.S. Karunarathne, B.M.W.P.K. Amarasinghe, *Fixed bed Adsorption Column Studies for the Removal of Aqueous Phenol from Activated Carbon Prepared from Sugarcane Bagasse*, 10th Eco-Energy and Materials Science and Engineering Symposium, Ubon ratchathani, Thailand, December 5-8. 2012 and Energy Procedia 34 (2013) 83 – 90.
- M A M Jinasena, A D U S Amarasinghe, B M W P K Amarasinghe, M A B Prashantha and D M M B Dissanayake, *Study on Extraction of Chlorophyll from Alternanthera Sessilis (Linn.): Operating Conditions and Mass Transfer*, Transactions of the Institution of Engineers Sri Lanka, October 2013.
- M A M Jinasena, B M W P K Amarasinghe, A D U S Amarasinghe and M. A B Prashantha, *Study on Pre Processing and Storage Conditions for Extraction of Chlorophyll From Alternanthera sessilis (L.) and Kinetics of Degradation of Chlorophyll*, Transactions of the Institution of Engineers Sri Lanka, October 2013.
- G.K. Jayatunga and B.M.W. P.K. Amarasinghe, *Drying Kinetics of Black Pepper Dried in A Spouted Bed Dryer with or without Draft Tubes*, Proc. of the Intl. Conf. on Advances in Civil, Structural and Mechanical Engineering-- ACSME 2014, Jan 4-5, Bangkok Thailand and International Journal of Manufacturing and Industrial Engineering (IJMIE), Vol. 1: Issue 2, June 2014, 6-10.
- G.K. Jayatunga and B.M.W. P.K. Amarasinghe, *Effect of Configuration of Non-porous Draft Tubes on Drying Kinetics of Black Pepper Dried in A Spouted Bed Dryer*, Transactions of the Institution of Engineers Sri Lanka, October 2014.
- B.M.W.P.K. Amarasinghe and D.S. Kodithuwakku, *Rice bran oil extraction: a study on leaching kinetics and cross flow extraction*, Proceedings of the 2nd International Conference on “Trends in Multidisciplinary Business and Economic Research” (TMBER). Bangkok Silom, Thailand. Vol. 2, 107-117, March 25-26, 2015.
- G.K. Jayatunga and B.M.W.P.K. Amarasinghe, *Mathematical modeling of drying kinetics of black pepper in a spouted bed dryer with and without non porous draft tubes*, Proceedings of the 2nd International Conference on “Trends in Multidisciplinary Business and Economic Research” (TMBER). Bangkok Silom, Thailand. Vol. 2, 118-134, March 25-26, 2015.
- M.A.M. Jinasena, A.D.U.S. Amarasinghe, B.M.W.P.K. Amarasinghe, M.A.B. Prashantha, *Extraction and degradation of chlorophyll a and b from Alternanthera sessilis*, J. of National Science Foundation, Sri Lanka, 44 (1), 11-21, 2016.

- G.K. Jayatunga, 'S.M.N.D Martino and B.M.W.P.K. Amarasinghe Thin Layer Drying Models for Drying of Black Pepper in Spouted Bed Dryer with Internal Devices, Annual Sessions, Institution of Engineers Sri Lanka, October 2016.
- B.M.W.P.K. Amarasinghe, A.J.M.L.M. Aberathna, K.K.P.P. Aberathna, Kinetics and Mathematical Modeling of Microwave Drying of Sri Lankan Black Pepper (*Piper nigrum*) International Journal of Environmental & Agriculture Research (IJOEAR) , Vol-4, Issue-2, February- 2018, 6-13.

REFEREED CONFERENCE PAPERS (ABSTRACT PUBLISHED)

- B.M.W.P.K. Amarasinghe, *Membrane Separation Techniques for Cleaner Technology and Waste Minimisation*, Seminar proceedings of the Engineering Jubilee congress, 'Engineering Beyond 2000', University of Peradeniya, June, 2000.
- B.M.W.P.K. Amarasinghe and N.C. Gangodavilage, *Effect of solvents on Rice bran oil extraction*, Annual sessions of the Sri Lanka Association for the Advancement of Sciences, University of Moratuwa, December 2001.
- B.M.W.P.K. Amarasinghe and I.M.B.M. De Silva, *Use of waste biomass for colour removal from textile effluent*, Annual sessions of the Sri Lanka Association for the Advancement of Sciences, University of Moratuwa, December 2001.
- B.M.W.P.K. Amarasinghe and De Silva IBM, *Customized Design of Reverse Flow Cyclones*, Annual sessions of the Sri Lanka Association for the Advancement of Sciences, University of Colombo, 2002.
- B.M.W.P.K. Amarasinghe and R.A. Williams, *Factors affecting the adsorption of Pb and Cu ions onto granular activated carbon*, Sri Lanka Association for the Advancement of Sciences, Annual sessions, OUSL, December, 2007.
- D.M.M.B. Dissanayake, A.D.U.S. Amarasinghe and B.M.W.P.K. Amarasinghe, *Extraction of Chlorophyll from 'Mukunuwenna's*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, October 2007.
- G.K. Jayatunga and B.M.W.P.K. Amarasinghe, *Rice husk as a low cost adsorbent for removal of Malachite Green & Nylosan blue from aqueous solutions*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, Oct 2007.
- B.M.W.P.K. Amarasinghe, G.K. Jayathunga and D. W. Dhanusekara., *Removal of Dyes from wastewater by chemically treated rice husk*, Proceedings of the 12th International Forestry and Environment symposium, 'Green Solutions', Kalutara, Sri Lanka, Nov 2007.
- B.M.W.P.K. Amarasinghe, *Removal of Reactive dye from wastewater using Coir Pith based adsorbent*, Annual sessions of the Sri Lanka Association for the Advancement of Sciences, University of Colombo, December 2008.
- G.K. Jayathunga and B.M.W.P.K. Amarasinghe, *Removal of Dyes from wastewater by thermally treated rice husk*, Proceedings of the 13th International Forestry and Environment Symposium 2008, Hotel Tangerine Kalutara, Sri Lanka, 27-28 December.
- W.A.J. Anurangi, B.M.W.P.K. Amarasinghe and A.A.P.De Alwis, *Natural and waste materials as adsorbents in oil pollution management*, Proceedings of the 13th International Forestry and Environment symposium 2008, Hotel Tangerine Kalutara, Sri Lanka, 27-28 December.
- K.W. Nuditha Dilnayana and B.M.W.P.K. Amarasinghe, *Comparison of Adsorption Characteristics of Activated Carbons from Waste Biomass for Dye Removal from Aqueous Solutions*, Proceedings of the 13th International Forestry and Environment symposium 2008, Hotel Tangerine Kalutara, Sri Lanka, 27-28 December.

- B.M.W.P.K. Amarasinghe, *Removal of Lead and Cadmium Ions from Aqueous Solutions Using Waste Coir Pith in Fixed Bed Adsorption Columns*, Proceedings of the 13th International Forestry and Environment symposium 2008, Hotel Tangerine Kalutara, Sri Lanka, 27-28 December.
- D.W. Dhanusekara and B.M.W.P.K. Amarasinghe, *Coir Pith Activated Carbon for The Removal Of Dyes From Aqueous Solutions*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, Oct 2008.
- K.K.C.W. Kandanapitiya and B.M.W.P.K. Amarasinghe,, *Removal of phenol from wastewater using rice husk based adsorbent*, Annual sessions of the Sri Lanka Association for the Advancement of Sciences, University of Kelaniya, December 2009.
- W. A. J. Anurangi, B. M. W. P. K. Amarasinghe, A. A. P. de Alwis, *Investigation of effectiveness of carbonized rice husk in oily water treatment*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, November 2009.
- K.M.C.U Senarathna and B.M.W.P.K. Amarasinghe,*Sugarcane bagasse pith as a low cost adsorbent for the removal of Methylene Blue from wastewater*, Proceedings of Engineering Research Unit Symposium, University of Moratuwa, Dec 2011.
- D.S Kodithuwakku and B M W P K Amarasinghe, *Rice Bran Oil Extraction and Suitability study for Food and Pharmaceutical Industries*, 1st International Conference on Unani, Ayurveda, Siddha and Traditional Medicine 2013, Institute of Indigenous Medicine, University of Colombo, Sri Lanka, 19th-21st December 2013.
- G.K. Jayatunga and B.M.W. P.K. Amarasinghe, *Drying Kinetics of Black Pepper Dried in A Spouted Bed Dryer*, National Development through Research and Innovation, HETC symposium, 7th-8th July 2014.
- W.B.S. Siriweera, S.A.S.D. Jayathilake, K.D.P.L. Jayawardena, B.M.W.P.K. Amarasinghe, *Mathematical modeling of adsorption of heavy metals and dyes onto waste biomass using fixed bed adsorption*, Proceedings of the National Undergraduate Research Symposium, 4th Aug. 2017, National Science and Technology commission.
- N.Z. Mohamed, A.S.N. Baanu, B. Keerthana, B.M.W.P.K. Amarasinghe, *Rice Husk Char-Clay Composite for the Adsorption of Methylene Blue Dye*, , 22nd International Forestry and Environment Symposium, 10th&11thNovember 2017 at Tangerine Beach Hotel, Waskaduwa, Sri Lanka.
- K. Vaishalan, J. Varnakulasingham, B.M.W.P.K. Amarasinghe, *Extraction of Silver from Printed Circuit Boards of Mobile Phones Using Sodium Thiosulfate Solutions*, 22nd International Forestry and Environment Symposium, 10th&11thNovember 2017 at Tangerine Beach Hotel, Waskaduwa, Sri Lanka.

NON- REFEREED RESEARCH PUBLICATIONS, PRESENTATIONS AND PUBLIC LECTURES:

- B.M.W.P.K. Amarasinghe, *'Surface and Colloidals - Application in Chemical Engineering'* in December 1993 in Seminar 'Making the Future Happen', University of Moratuwa, Sri Lanka.
- B.M.W.P.K. Amarasinghe, *Design Aspects of a Gas Handling Unit' in July 1993, Seminar on Air Quality Management in Chemical Plants*, Inst. of Engineers, Sri Lanka.
- B.M.W.P.K. Amarasinghe and P.N.P. Fonseka, *'Waste Minimization in a Distillery 'Project report under Industrial Pollution Reduction Program*, 1996.
- B.M.W.P.K. Amarasinghe *'Scrubber Design-use of local packing materials'*, Project report, 1996.

- B.M.W.P.K. Amarasinghe, '*Novel Separation Techniques for the Chemical and Process Industries*', 'Chemunique', 1999.
- B.M.W.P.K. Amarasinghe, '*Fundamentals of Distillation*', Seminar on Theory and Practice on Distillation, IESL, March 1999.
- B.M.W.P.K. Amarasinghe and I.M.B.M. De Silva, '*Application of Membrane Separation Processes to the Sri Lankan Industry*', Project Report, Nov. 2000.
- B.M.W.P.K. Amarasinghe, and R.A.Williams, '*Trapping heavy metals*', Filtration and Separation 2, The Chemical Engineer, April, 2006.
- B.M.W.P.K. Amarasinghe, '*Waste Biomass: Potential adsorbents for industrial Wastewater Treatment*', Public Lecture, IESL, 28th June 2011.
- B.M.W.P.K. Amarasinghe, '*Techniques for Eliminating Environmental Pollution and Health Hazard in Dye Based Process Industries*', Workshop on environmental impact and international requirements in using dyes in industrial products, EDB Auditorium, 3rd floor, NDB/ EDB Tower, 23rd August 2012.
- B.M.W.P.K. Amarasinghe, '*Key note speech titled 'Role of multidisciplinary research for the betterment of the society; Chemical Engineer's perspective*', 2nd International Conference on "Trends in Multidisciplinary Business and Economic Research" (TMBER). Bangkok Silom, Thailand. Vol. 2, 118-134, March 25-26, 2015.
- B.M.W.P.K. Amarasinghe, '*Waste Biomass as an adsorbent for Wastewater Treatment*', presentation at the Department of Chemical Engineering, Arizona State University, USA, 14th October 2015.