

CURRICULUM VITAE



Abrahams P. Mwasha (MASCE, MAPETT)

(Ph.D., MSc. , BSc.)

Senior Lecturer (1st August, 2015 - Present)

Lecturer (4th May 2006 – 31st July 2015)

Department of Civil and environmental Engineering

Faculty of Engineering, the University of the West Indies, St. Augustine.

Residence: Trinidad and Tobago	Mobile Phone: 1-868-4689311
Home address: #22 Boys lane D'Abadie, Arima	

Qualifications & Training

University Degrees/Certificates

YEAR	UNIVERSITY DEGREE/CERTIFICATE -
2020	Certificate in Contract law: Harvard Law. School
2020	Certificate in Negotiation strategies The University of Michigan.
2020	Certificate in Energy Efficiency Building Code and ASHRAE 90.1 Essentials The CARICOM Regional Organization for Standards and Quality
2007	University Teaching. Institutional Development Unit. The University of the West Indies (UWI), St. Augustine Campus.
2005	Ph.D. Limited Life basal Reinforcement for Embankment Built on Soft Ground Wolverhampton University West Midland, England, UK.
1986	Kandydat nauk in Soil mechanics and foundation Kharkov State Academy of Municipal Management, Kharkov, Ukraine

1983	Bsc and Msc in Civil and industrial construction Kharkov State Academy of Municipal Management, Kharkov, Ukraine
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Work History (Academic, Administrative, Industry, Research)

Post	Where Held	Dates
Lecturer/ Snr. Lecturer	Department of Civil and environmental Engineering, UWI, St. Augustine.	May 2006– Present • Lecturer below bar 2006– 2015 • Senior Lecturer 2015 – Present Indefinite Tenured
Deputy Dean, Physical facilities and administrative staff	Faculty of Engineering, UWI, St. Augustine.	August 2016 – present
Chairman FoE OHSE committee	Faculty of Engineering UWI, St. Augustine.	August 2016 - present
Research Assistant	Wolverhampton University	September 2001- May 2006
Part-Time lecturer	Stourbridge Technical College England, UK West midlands	July 2002- May 2006
Director of Education	International Coordination Council of Educational Institutions Alumni	July 1995- September 2001
Project Structural Engineer	Ministry of Education and Vocational Training Tanzania/ DANIDA Project (PIS) Tanzania	January 1984-July 1990

Training – Academic Leadership

Dates	HR Training for new HODs and Deputy Deans, <i>Human Resources Division, UWI, St. Augustine</i>
August 5 th to October 7 th 2016	Principles of good leadership
	Managing employee performance
	Conflict resolution / Industrial Relations
	Strategic Management
	Banner & PeopleSoft
	University Policies & procedures (Managing Finance)
	Health & Safety

Teaching & Related Experience

Category	Course in Dept. of Civil and Environmental Engineering	Date
LECTURER & FIRST EXAMINER: M.Sc.	COEM 6014 Construction Materials 4 credits	2006-2009
	COEM 6004 Construction Equipment 4 credits	2007-2009
	COEM 6013 Material Technology 4 credits	2006-present
	COEM 6012 Environmental geotechnical, 3 credits	2018-present
	COEM 6015 Maintenance and facilities management 4 credits	2019-present
LECTURER & FIRST EXAMINER: B.Sc	CVNG 1008 Building Services 3 credits	*2006-present
	CVNG 1005 Science of materials 3 credits	*2006-present
	CVNG 1006 Healthy and Safety 0 credits	2007-2008
	CVNG 2006 Structural Design 1 4 credits	2006- present
RESEARCH PROJECT SUPERVISOR: B.Sc. M.Sc., M.Phil., Ph.D.	COEM 6018 Research Project 9 credits	2006-present
	COEM 6025 Practical Team Project 5 credits	2006 - present
	CVNG 3015 Student Investigative project 6 credits	2006-present
	CVNG 3014 Design project 6 credits	2006 - present

PhD Supervision

Candidate	Project title	Supervision	Year/status
DR. JOHN MONROSE	Provisional Title: Permeable Pavement Engineering for Water Movement in Road Structures and Drainage Effects applicable to Small Island Developing States across the Caribbean	Supervisor The University of the West Indies and University of the West of England, Bristol, England	Completed 2020

DR. DAVATEE MAHARAJ:	Application of electric arc furnace slag in shielding x-ray radiation	Main supervisor	Completed 2018
DR LEON LEE	The effect of aggregate shape characteristics on HMA mix design stiffness and permanent deformation (<i>advisory committee member</i>)	Supervisory team	Completed 2018
DR. JOSEPH IWARO	Development of an integrated performance model for the assessment and design of sustainable residential building envelope in Trinidad and Tobago	Main Supervisor	Completed 2016
MARC COOPER	An investigation into the use of relative permittivity for evaluation and monitoring of expansive clay subgrades	Main supervisor	Completed 2015 MPhil
LAWRENCE BRIDGEMOHAN	Analysis of shear damage in foamed bitumen stabilized material	Supervisory team	On going
RAKESH SOOKOO	Development of a workmanship management system for performance appraisal of construction projects in Trinidad and Tobago construction industry	Main supervisor	On going
LEAH WRIGHT	Mode choice modeling in Trinidad	Supervisory team	On going
AARON CHADEE	A New Theoretical Discourse in Managing Cost Overruns in Social Housing Programmes	Co- supervisor	On going

Publications

Google Scholar (July 2020): h-index = 12, Citations = 723

Book (sole author)

Mwasha, A (2011) Practical Guide to Green Technology for Ground Engineering Publisher: Smithers Rapra Technology United Kingdom. (September 30, 2011) 208 pages. **ISBN-10:** 1847355307 **ISBN-13:** 978-1847355300

(a) Book Chapters

YEAR	Title
2019	1. Mwasha A and Ramnuth R. (2019) Recycled aggregates for green concrete The Trinidad and Tobago construction industry: Multifaceted Disposition. The Multimedia Production Centre, The University of the West Indies ISBN 978-8260-76-5
2019	2. Guerra, R.; Mwasha, A and Outridge, D. (2019) The importance of preservation of historic building The case of Port of Spain in Trinidad and Tobago. The Trinidad and Tobago construction industry: Multifaceted Disposition PP 58 -79 Multimedia production center West Indies ISBN 978-8260-76-5
2017	3. Monroe, J., Tota-Maharaj, K., Cheddie, D., Mwasha, A. (2017) A permeable pavement system utilising recycled concrete aggregate in the sub-base - Preliminary laboratory performance assessments Water, Wastewater, and Stormwater; Urban Watershed Management; and Municipal Water Infrastructure pgs 146-155. Eds: Christopher N. Dunn and Brian Van Weele, Curran Associates, Inc. 57 Morehouse Lane Book set: World Environmental and Water Resources Congress 2017 ISBN (PDF): 9780784480632 (ASCE) (Selected Papers from the World Environmental and Water Resources Congress World Environmental and Water)
2013	4. JOSEPH IWARO and A. Mwasha (2013), Development of an integrated approach for the assessment and sustainable design of residential building envelope New Developments in Structural Engineering and Construc Yazdani, S. and Singh, A. (Eds.) ISEC-7, Honolulu, June 18 –23, 2013 Publisher: Research Publishing Services (June 18, 2013) ISBN-10: 9810753543. ISBN-13: 978-981075354 pp 1806
2010	5. Mwasha, A. , R. Ramnarine and R. Atkinson. (2010) “Modelling the Behaviour of Reinforced Embankments on the Peat Caroni Swamp”, 7th International Conference on Physical Modelling in Geotechnics, ICPMG 2010 Edited by Linda Seward, CRC Press, 2010. pgs i-xxv, June 28-July 1, 2010, Zurich, Switzerland. ISBN 978-1-4665-5742-0
2000	6. Mwasha. Abraham , V. G. Nanikashwili, H. E. Brown, N. V. Brown (2000) The use of incinerator ash for making lightweight bricks Sustainable Construction: Use of Incinerator Ash. Edited by Thomas

	D. Dyer, Ravindra K. Dhir, Kevin A. Paine. ICE Publishing 8 Storey's Gate London SW1P 3AT, UK info@icepublishing.com accessed June 2020
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(b) Peer-Reviewed Journals Publications

YEAR	Title	
2020	1. Amrita Milling Abrahams Mwasha Hector Martin (2020) Exploring the full replacement of cement with expanded polystyrene (EPS) waste in mortars used for masonry construction. <i>Construction and Building Materials</i> <u>Volume 253</u> , Impact Factor: 4.046 Citation NA	T1
2019	2. Joseph Iwaro and Abrahams Mwasha.(2019) Effects of Using Coconut Fiber–Insulated Masonry Walls to Achieve Energy Efficiency and Thermal Comfort in Residential Dwellings (ASCE) <i>Journal of Architectural Engineering</i> <i>Volume 25 Issue 1</i> https://ascelibrary.org/doi/full/10.1061/%28ASCE%29AE.1943-5568.0000341 Impact Factor: NA Citation 5	T1
2019	3. Monroe, J. Maharaj, K. and Mwasha. A. (2019) Effect of carbon-negative aggregates on the strength properties of concrete for permeable pavements <i>International Journal of Pavement Engineering (GPAV)</i> , DOI: 10.1080/10298436.2019.1567924 Impact factor 2.298 Citation 1 E-JOURNAL	T1
	4. John Monroe, K. Tota-Maharaj & A. Mwasha. Assessment of the physical characteristics and storm water effluent quality of permeable pavement systems containing recycled materials, <i>Road Materials and Pavement Design</i> , DOI: 10.1080/14680629.2019.1643397 Impact Factor: 1.980 citation 1	
2019	5. Mwasha A. and Iwaro, J. (2019) “Assessing Residential Building Energy Efficiency in the Caribbean Environment: A Case Study of Trinidad and Tobago. <i>West Indies Journal of Engineering (WIJE)</i> , Vol.41, No.2 Impact Factor NA citation NA	T2
2019	6. Abrahams Mwasha, Dillon Ramdhanie (2019) Manufacturing Wall Panels Using Waste Sawmill Dust Bonded By Polystyrene Waste (<i>ICE</i>) <i>Proceedings of the Institution of Civil Engineers - Waste and Resource</i> ; 2019; Pages 1-7 https://doi.org/10.1680/jwarm.18.00011 Impact Factor NA citation NA	T2

2018	7 A. Mwashwa and Rakesh Ramnath (2018) Manufacturing Concrete with High Compressive Strength Using Recycled Aggregates <i>Journal of Materials in Civil Engineering, 30(8) (ASCE)</i> Impact Factor: NA citation 2	T1
2017	8 .Iwaro, J. Mwashwa, A. ,Narinesingh, P (2017). Validation of integrated performance model for sustainable envelope performance assessment and design <i>International Journal of Low-Carbon Technologies</i> 12 (2), 189-207 Impact Factor 1.622 citation 2	T1
2016	9. D Maharaj, A Mwashwa (2016) Comparative analysis of the transmission factors of lead and concrete manufactured with electric arc furnace slag aggregates <i>Construction and building Materials Volume 112</i> , 1 Pages 1141-1146 Impact Factor: 4.046 Citation 2	T1
2014	10. Joseph Iwaro, A. Mwashwa , Rupert G. Williams, Ricardo Zico (2014). An Integrated Criteria Weighting Framework for the sustainable performance assessment and design of building envelope <i>Renewable and Sustainable Energy Reviews Volume 29 Pages 417-434</i> Impact Factor: 10.556 Citation 51	T 1
2014	11. Iwaro, J., Mwashwa, A. , Williams, R. G., & Wilson, W. (2014). An integrated approach for sustainable design and assessment of residential building envelope: part I. <i>International Journal of Low-Carbon Technologies</i> , 1 vol. 10, issue 3, 268-274 Impact Factor 1.622 Citation 7	T1
2014	12 Lalla, J.R.F. and Mwashwa,A. (2014). "Investigating the Compressive Strengths of Guanapo Recycled Aggregate Concrete as Compared with that of its Waste Material", <i>West Indian Journal of Engineering</i> , Vol.36, No.2, January, pp.12-19 Impact Factor NA citation 10	T2
2014	13 Iwaro, J., Mwashwa, A. , Williams, R. G., & Wilson, W. (2014). An integrated approach for sustainable design and assessment of residential building envelope: part II. <i>International Journal of Low-Carbon Technologies</i> , 1(1) 89-108 ctu002. I UKctu002. Impact Factor1.622 citation 6	T1
2014	14 Mwashwa, A. and Jason. (2014) "Analyzing the Strength Parameters of Concrete Manufactured using Natural and Recycled", <i>West Indian Journal of Engineering</i> , Vol. 34, Nos. 1, 2, January, pp. 44-51. Impact Factor NA citation 6	T2
2013	15. Joseph Iwaro , and Abrahams Mwashwa (2013)The impact of sustainable building envelope design on building sustainability using Integrated Performance Model <i>International Journal of Sustainable Built Environment</i> . Volume 2, Issue 2, December 2013, Pages 153–171 https://www.journals.elsevier.com/international-journal-of-sustainable-built-environment/most-downloaded-articles-cited-2018 Impact Factor 3.48 citation 57	T1

2012	16. Mwasha, A. and J. Iwaro. (2012) "The Effects of ISO Certification on Organization Workmanship Performance", <i>Quality and Management Journal</i> ,Vol. 19, No. 1, pp. 53-67. (Taylor and Francis) Impact Factor NA citation 40	T3
2012	17. Iwaro, J., A. Mwasha and R. Williams. (2012) "Sustainable Performance Modelling Approach for Residential Building Envelope", <i>International Journal of Multi-Criteria Decision Making (UMCDM)</i> , Vol. 2, No. 1, pp. 47-73. Citation Inderscience Publisher. Impact Factor NA citation 3	T3
2011	18. Mwasha, A. , J. Iwaro and R. Williams. (2011) "Modelling the Performance of Residential Building Envelope: The Role of Sustainable Energy Performance Indicators", <i>Energy and Buildings</i> , Volume 43, Issue 9,pp. 2108-2117 Impact Factor 4.823 NA citation 126	T1
2010	19. Mwasha, A. and Petersen, A. (2010) "Thinking Outside the Box: The Time Dependent Behavior of a Reinforced Embankment on Soft Soil", <i>Materials and Design</i> , Vol. 31, Issue 5, pgs. 2360-2367Elsevier. Impact Factor 4.36 citation 8	T1
2010	20. Iwaro, J. and Mwasha, A. (2010) "A Review of Building Energy Regulation and Policy for Energy Conservation in Developing Countries". <i>Energy Policy</i> , Vol. 38, Issue 12, pgs. 7744-7755, Elsevier. Impact Factor4.14 citation 228	T1
2009	21. Mwasha, A. (2009) "Using Environmentally Friendly Geotextiles for Soil Reinforcement: A Parametric Study", <i>Materials and Design</i> , Vol. 30, Issue 5, pgs. 1798-1803, Elsevier. Impact Factor 4.136 citation 23	T1
2009	22. Mwasha, A. (2009) "Designing Bio-Based Geotextiles for Reinforcing an Embankment Erected on Soft Soil", <i>Materials and Design</i> , Vol. 30, Issue 7, pgs. 2657-2664, IF 4.36 Citation 18	T1
2009	23. Mwasha, A. (2009) "Modelling Limited Life Geotextiles for Reinforcing an Embankment on Soft Soil", <i>West Indian Journal of Engineering</i> , Vol. 31, Issue July 2008/January 2009, pp. 1-9 Impact Factor NA citation 2	T2

(a) Actually Published in other Journals

YEAR	Title
2017	<p>1. Maharaj, D., Parris, J., Mwashu, A. (2017) Physical and mechanical properties of concrete manufactured using electric arc furnace slag as coarse aggregates <i>International Journal of Environment and Waste Management</i> 20 (1), 21-34 Impact Factor: NA citation NA</p> <p style="text-align: right;">T3</p>
2016	<p>1. Davatee Maharaj and A Mwashu (2016) "Radiation Shielding Properties of Concrete Containing Electric Arc Furnace Steel Slag Aggregate" <i>The APETT Journal, Vol.44, No.1, pp 10-15</i> Impact Factor NA citation</p> <p style="text-align: right;">T3</p>
2013	<p>2. Mwashu, A ; Iwaro, J. & Williams, R. G. (2013) Significance of sub-criteria in measuring sustainable performance of building envelope development. <i>International Journal of Sustainable Development and Planning</i>. Volume 8 Issue 4 Pages 464-484 Impact Factor NA citation 1</p> <p style="text-align: right;">T3</p>
2013	<p>9. Mwashu, A., Armstrong-Richardson, A. and Wilson, W. (2013), "Management of Polystyrene Wastes Using a Supercritical Solvent - Propanone", <i>Journal of The Association of Professional Engineers of Trinidad and Tobago</i> Vol.41, No.1 April/May, pp.23-28 Impact Factor NA citation 12</p> <p style="text-align: right;">T3</p>
2012	<p>10. Mwashu Abrahams and Davatee Maharaj An analysis of the effect of temperature on the pattern of wind energy distribution in the Caribbean region. <i>Journal of Environmental Science and Water Resources</i> Vol. 1(7), pp. 178 - 182, August 2012 Impact Factor NA citation</p> <p style="text-align: right;">T3</p>
2012	<p>11. Mwashu, A. and Marlon, C. (2012) "The Behaviour of Folded Plate Foundation Models for Monopole Structures Erected on Expansive Clay Soils". <i>The Journal of the Association of Professional Engineers of Trinidad and Tobago</i>, Vol. 40, No. 2, pp. 4-10.</p>

	Impact Factor NA citation	T3
2010	12. Iwaro, J. and Mwasha, A. (2010) "Implications of Building Energy Standard for Sustainable Energy Efficient Design in Buildings", <i>The International Journal of Energy and Environment (IJEE 1(5) pp745-756</i> Impact Factor NA citation 23	T3
2009	13 Mwasha, A. (2009) "Coir Fibre: A Sustainable Engineering Material I for the Caribbean Environment", <i>The College of the Bahamas Research Journal</i> , Volume 15, No 6 pp. 36-44. Impact Factor NA citation 23	T3

(a) Peer-Reviewed Conference proceedings

YEAR	Title
2019	11. Samantha Jagmohan, Abrahams Mwasha and Winston Mellowes (2019) POTENTIAL USE OF tropical landfill leachate in manufacturing Portland cement concrete. LACCEI (Latin American and Caribbean Consortium of Engineering Institutions) International Multi-Conference of Engineering, Education and Technology, Montego Bay, Jamaica on July 24-26, 2019
2019	12. John Monroe, Kiran Tota-Maharaj, Abrahams Mwasha , Colin Hills (2018) Utilization of Utilization of artificial carbon-negative aggregates in blocks APETT technical conference Trinidad and Tobago West Indies
2018	13. Monroe, J, Tota maharaj k and Mwasha A , (2018) Pollutant removal efficacies of permeable pavements comprising recycled concrete aggregates SUDSnet international Conference, 30-31 August 2018 Coventry University UK
2018	14. Samantha Jagmohan , Abrahams Mwasha and Winston Mellowes n (2018) Potential Use of Tropical Landfill Leachate in Manufacturing Portland Cement Concrete The Caribbean Academy of Sciences - 21st General Meeting and Conference (CAS-2018), 27th – 30th November 2018 The theme of the conference: "Science, Technology and Innovation – Vehicles for a Knowledge Based Economy"; p.68-74
2018	15. A. Mwasha and Dillon, R. (2018) Innovative Technologies of Waste Recycling With Production of High Performance Panels First African International Conference on Industrial Engineering and Operations Management. IEOM Pretoria/Johannesburg, South Africa Saint George Hotel– Pretoria

2018	16. Iwaro, Joseph, Abrahams Mwash . (2018) Building Envelope as an Effective Strategy for Achieving Sustainable Building Energy Efficiency. 4th Residential Building Design & Construction Conference - February 28 - March 1, 2018, Penn State, University Park PHRC.psu.edu. https://www.phrc.psu.edu/assets/docs/Publications/2018RBDCCPapers/2018-RBDCC-Conference-Program.pdf
2017	17. Abrahams Mwash and Rakesh Ramnath (2017) Recycled Aggregates for Green Concrete. Proceedings of the International Conference on Industrial Engineering and Operations Management International Congress on Industrial Engineering and Operations Management University de Rosario – Bogota/ Marriott Bogota Hotel Bogota, Colombia, October 25-26, 2017 pp 64-78
2016	18. Mwash A. (2016) Development of a Device (D-LLGs) for Monitoring Tim dependent Behaviour of an Embankment on Soft ground Reinforced with Limited Life geotextiles, GeoAmericas 2016 Proceedings: Vol 1 www.GeoAmericas2016.org 10 – 13 April 2016 pp 807-117 Loews Miami Beach USA International Geosynthetics Society (www.geosyntheticssociety.org)
2016	19. J. Iwaro and Mwash, A (2016) Validation and Verification of an Integrated Performance Model for Sustainable Envelope Performance Assessment and Design (IPM-SEPAD). Proceedings of the 3rd Residential Building Design & Construction Conference March 2-3, 2016 Penn Stater Conference Center Hotel, State College, PA USA Edited by Dr. Ali M. Memari Sarah Klinetob Lowe pp 41-63
2015	20. D Maharaj and A Mwash (2015) Assessment of the use of Arcelor Mittal electric arc furnace slag as coarse aggregates in concrete production Concrete Repair, Rehabilitation and Retrofitting IV: pp 389-399
2015	21. D Maharaj, A Mwash (2015) A comparative analysis of compressive and tensile strengths of concrete made with natural aggregates and electric arc furnace steel slag produced in Trinidad Materials Characterisation VII 90, pp 159-170
2011	22. Iwaro, J. and A. Mwash. (2011) “Modelling the Sustainable Performance of Building Envelope for Sustainable Energy Efficiency Design. Proceedings of the International Structural Engineering and Construction Conference. ISEC, June 22-25, Zurich, Switzerland, pgs. 1099-1104.
2011	23. Lalla, J. and Mwash, A. (2011) “An Experimental Investigation on the Strength Parameters of Concrete Manufactured Using Natural and Recycled Guanapo Quartzite Aggregate”. Ninth LACCEI, Latin American and Caribbean Conference (LACCEI 2011), Engineering for a Smart Planet, Innovation, Information Technology and Computational Tools for Sustainable Development. WE1-10, August 3-5, 2011, Medellin, Colombia. pp 1 -10

2010	24. Iwaro, J. and Mwashu, A.(2010) "Implications of Building Energy Standard for Energy Conservation in Developing Countries", Eighth LACCEI Latin American and Caribbean Conference for Engineering and Technology (LACCEI 2010), Innovation and Development for the Americas, June 1-4, Arequipa, Peru. 1-10 pages http://cybertesis.urp.edu.pe/ponencias/LACCEI_2010/Papers/Papers_pdf/TT009_Iwaro.pdf cited 2018
2010	25. Mwashu, A. and Ekwue, E. (2010) "The Effect of Crust Strength and Thickness on the Stability of Reinforced Embankment Constructed on Soft Soil", The First African Regional Conference Geosynthetics, 2-5 September, Cape Town, South Africa.
2010	26. Mwashu, A. and Festus, I.A. .(2010) "Derivation of Continuous Functional for the Behaviour of Limited Life Geotextile Materials for Reinforcing on Embankment on the Soft Ground", ICCE-17 Hawaii-Honolulu, Hilton Waikiki Prince Kuhio. 2500 Kuhio Avenue, Waikiki Beach, Honolulu, HI 96815.
2008	27. Mwashu, A. (2008)"Potential for the Use of Environmentally Friendly Geotextiles for Ground Strengthening", Sixth LACCEI International Latin American and Caribbean Conference for Engineering and Technology (LACCEI 2008), Partnering to Success: Engineering Education Research Development. Tegucigalpa, Honduras.10 pages http://www.laccei.org/LACCEI2008-Honduras/Papers/Env119_%20Mwashu.pdf accessed 2018
2008	28. Mwashu, A. (2008)"Rodriguez and Goodman, L. and Paul, C. "Potential for the Use of Locally Available Biodegradable Materials for Reinforcing an Embankment Erected on Soft Ground: A Trinidad and Tobago Experience". Quelle: Construction in Developing Economies: New Issues and Challenges. Port-of-Spain, Trinidad and Tobago.
2007	29. Mwashu, A. and Aqui, D. (2007) "Potential for the Use of Coir Fibres in Trinidad and Tobago for Ground Engineering Works". Fifth LACCEI International Latin American and Caribbean Conference for Engineering and Technology (LACCEI 2007). Developing Entrepreneurial Engineers for the Sustainable Growth of Latin America and the Caribbean: Education, Innovation, Technology and Practice, May 29-June 1, 2007, Tampico, Mexico. 12 pages http://www.laccei.org/LACCEI2007-Mexico/Papers%20PDF/ESE038_Mwashu.pdf accessed
2006	30 Sarsby, R.W., Mwashu, A. and Kari, S.K. (2006) "Sisal Fibre Geotextiles". ICG 8th International Conference in Geosynthetics, Yokohama, Japan. pp 989-992 https://www.tib.eu/en/search/id/tema%3ATEMA20070808049/Sisal-fibre-geotextiles-for-soil-strengthening/ accessed 2018
2003	31 Mwashu, A. and Sarsby, R.W. (2003) "Road Improvement in Tanzania Using Sisal Fibre Geotextiles". Conference of the Tanzanian Development Forum, Dar es Salaam, Paper 2.5, Tanzanian Economic and Social Research Foundation.
2003	32 Mwashu, A. (2003) "Proposed Shallow Footing in Expansive Soils". 3rd International Postgraduate Research Conference in Built Environment, ESAI, Lisbon.

1998	33 Mwash, A. and Kramarenko, O.A. (1998)“Deploying Earth Impulse of Electromagnetic Impulse for the Assessment of Engineering Geological Hazards”. Environmental Management Engineering the Water Environment and the Geo-Environment, Vols. 2. Eds. Siva Sivakumar and Robin Chowdhury. Proceedings of the Second International Conference on Environmental Management (ICEM2), Amsterdam, The Netherlands, Elsevier. https://trove.nla.gov.au/work/24226602?selectedversion=NBD9974106 cited 2018
1998	34 Mwash, A. and Kramarenko, W. (1998) “The Purification of Wastewater Contaminated with Oil Using Ultra-Membrane”. Environmental Management: Engineering the Water Environment and the Geo-Environment, Vols. 1. Eds. Siva Sivakumar and Robin Chowdhury. Proceedings of the Second International Conference on Environmental Management (ICEM2),pages 828 Amsterdam, The Netherlands, Elsevier. https://trove.nla.gov.au/work/24226602?selectedversion=NBD9974106 cited 2018
1998	35 Mwash, A. (1998) “Using Information System to Solve Construction Problems”. Udoskonalehyya Organizazii diplomnogo proekuvaniya Pidvisheniya Yakosti Diplomnikh Proektiv I Robot, Kharko, pp. 151-154.
1998	36 Lapshin, A.S., Mwash, A. and Ekoue, P. (1998)“The Influence of Grain Size Distribution on Physical and Mechanical Properties of the Electro-Conducting Concrete”. Fifth International Conference on Composite Engineering ICCE/5, Las Vegas, Caesars Palace Hotel, USA. July 5-11.

(b) Manuscripts under preparation

YEAR	Title
2020	<ol style="list-style-type: none"> 1. Mwash, A. Assessing the potential for the use of non-hydraulic plastic cement for the manufacturing of mortar (859) <i>Journal of the South African Institution of Civil Engineering.</i> 2. Davatee maharaj Mwash , A. and Zyuzikov, N. Development of attenuated energy spectrums at X-ray energies of 60 keV and 150 keV 3. Samantha Jagmohan, Abrahams Mwash, and Winston Mellowes3 Replacement of the Potable Water with Tropical Landfill Leachate in Manufacturing Portland Cement Concrete

Theses

1. Ph.D. Thesis: **MWASHA, A.** 2005. Limited Life Basal Reinforcement for an Embankment built on saturated soft soil. The University of Wolverhampton , West Midland England, Supervisor: Prof. R . W . S a s b y . 332 pages.
2. Kandydat Nauk: **MWASHA, A.**
Kharkov State Academy of municipam management, Kharkov Ukraine of m

PhD Examination

	Candidate/theme	Year/award
Chairman PhD Examination Committee	Dr Jason Dwaine Tambie Geospatial Analysis of Atlantic Ocean Eddies and their Implications on the Islands of the Eastern Caribbean. Department of	2018 High Commendations
	Dr Tamitha Ramcharan Petroleum Engineering	2019
Examiner	Dr Robert Birch Trinidad soils	2019 High commendation

MSc Supervision and Examination

<u>completed</u>			
Candidate name	Topic	Year completed	Remarks
SAMUEL KARL	The use of Local Clay Block Waste as a Cement Replacement	2020	Distiction
SAMANTHA JAGMOHAN	Potential use of tropical landfill leachate in manufacturing Portland cement concrete Trinidad	2018	Good
GAITRI RAMLAL	Thermal comfort, heating load and indoor air quality in the tropics	2017	Good
ANEELA RAMHIT	The Application of Waste Clay Blocks as Aggregates in Recycled Portland cement Concrete	2017	Distiction
SOKOO RAKESH	Investigation into the impact of total quality management (TQM) on the workmanship in Trinidad and Tobago construction industry	2016	Distiction
RAKESH S. RAMNATH	An investigation into the design of high compressive strength recycled	2016	Distiction

	aggregate concrete, by applying particle packing optimization		
SHOBA NANCOO	Reducing Solid Waste Disposal Volumes through Biodegradable Plastic Packaging to prolong the lifespan on Landfills in Trinidad Submitted	2015	
GANGIA DURGA	Factors that prevent the conversion of existing government owned and occupies office buildings within Port of Spain to greener environment Submitted	2014	Good
MANDY NATASHA ST ROSE	The effect of inclusion of polyethelene Terephthalate waste in Portland cement concrete as additive	2014	Distiction
TETTEH JOJOH SALANDY	Investigating the use of coconut fiber in masonry walls	2014	Distiction
AARON MITCHEL	Solar Insulation of the historical building using sustainable materials	2014	Good
MELISSA LEE CHONG	An investigation into the public awareness of green building in Trinidad and Tobago	2012	Good
FRANKA CASTELOE	Project management of LIFETIME Roofing show room renovation	2012	Distiction
MARK TANG YEW	The state of sustainability design in Trinidad and Tobago construction industry	2012	Distiction
ZICO DE CLOU	An investigation into the energy saving for single family units in Trinidad and Tobago	2012	Distiction
CUTHBERT DAVID	An investigation into concrete strength properties influenced by mixing procedures between hand mix and machine mix	2012	Distiction
VANCE THOMSON	Analytical and Empirical Investigations into the Application of Limited-Life Geotextile Materials as Temporary Ground Reinforcement for an	2011	Distiction

	Embankment Built on a Compressible Layer of Soft Homogenous Soil”		
HAMAN RAJEEV JAROO	An opinion survey of construction managers and supervisors regarding the human factor	2011	Good
NYRON GRANT	The use of PAC and ALUM as primary coagulant	2011	Good
RAMPASAD BHOLA	Performance of strengthened pavement in Trinidad	2011	Good
RAMDAL PATRICK	Relationship between motivation and performance of CM in T&T	2011	Good
HAMAN RAJEEV JAROO	An opinion survey of construction managers and supervisors regarding the human factor	2011	Good
WILLIAM ARVID	The shortage of aggregates in Trinidad and Tobago	2009	Good
GREGORY ERSKINE	An investigation in to the causes of delays and construction projects in Guyana’s construction industry	2009	Good
FULLERTON WILFRED	Procurement processes and policies constrains and strategie	2009	Good
BENGOCHEA CANDICE	Support for the implementation of construction and demolition recycling in Trinidad and Tobago	2009	Good
DAVINDRA BISSOON	An investigation into the sustainability of construction materials used for housing in Guyana	2009	Good
GILLIAN BUKETT	Maintaining low income housing units in Trinidad	2009	-
JASON BAKSH	Detailing the use of value engineering on a construction project in Trinidad and Tobago	2008	Good
Gerard DEVON THOMPSON	An investigation into the accuracy of cost estimates in construction sector of Trinidad and Tobago	2007	Good
BALROOP, DATA	Quality of Block Manufacturing in Trinidad and Tobago	2007	Good

Contribution to Department

Category	Course	Date
ADMINISTRATIVE:	- Construction Management Programme Coordinator – In charge of COEM Postgraduate courses - Acting Head of Department	Aug 2011- August 2012
DEPARTMENTAL COMMITTEES:	Chairman override committee	2014-present
	Level two coordinator	2006-2009
	Member, Accreditation Committee (sustainability JBM)	2012-present
LABORATORY MANAGEMENT:	Concrete lab coordinator	June 2006-- Present

Contribution to Faculty

Category	contribution	Date
ADMINISTRATIVE:	Deputy Dean facilities and Administrative and technical staff	Aug 2016-present
	Acting Dean faculty of Engineering	July 2019
	Chairman Faculty procurement and Contracts committee	2019-today
FACULTY COMMITTEES:	Chairman Faculty of Engineering Health and Safety	2016-present
	Faculty of Engineering Assessment and Promotions	2016-present
	Faculty Academic Management Committee	2016-present
	Faculty Accreditation Committee	2016-present
	Faculty Board	2006-present
MANAGEMENT:	Faculty of Engineering Facilities	June 2006-- Present

Contribution to University

Category	Contribution	Date
CAMPUS COMMITTEE	Member Campus Health and safety Committee	2016-present
	Member Campus Environmental and Sustainability Committee	2008-2009
	Member, procurement and contracts Committee	2019-present

Professional Activity & Experience

Role	Organization	Date
Member	American Society of Civil Engineers	2015 - present
Member	Association of professional Engineers Trinidad and Tobago	2010 - present
Member	Member (GEER) Geotechnical Extreme Events Reconnaissance	2007- present
Past Member	Institute of Civil Engineers	1991 - 2006
Past Member	Member Chartered Institute of Building (MCIQB) and ICE since February 1991	1991 - 2006

Awards and Significant Achievement

Awarding Body	award	Year
Trinidad and Tobago Research and Development Impact (RDI).	\$TT 350,000.00 Research on multifaced blocks	2020
National Standard Committee <u>Trinidad & Tobago Bureau of Standards - TTBS</u>	SPECIAL SERVICE AWARD in recognition of special contribution on Development of CARICOM standards on residential energy	2019
National Standard Committee <u>Trinidad & Tobago Bureau of Standards - TTBS</u>	SPECIAL SERVICE AWARD in recognition of special contribution and service as CHAIRPERSON of	2014

The University of the West Indies St Augustine Campus Research and Publication Fund.	\$TT 300,000 For various research	2010 - 2015
Trinidad and Tobago Government Research Grant \$ 200,000.00 (2007)	Research on the use of Vegetable Fibre Geotextiles	2007
First Prize Winner of the Competitive BIZCOM social Enterprise Award category.	1000.00 Pound Sterling Novel and Sustainable Technology. Mercia Institute of Enterprise, England, UK (2006	2006

Community services

		Services	Duration
1		Chief Examiner – Caribbean Examination Council Green Engineering 2016-today	2016-present
2		Member (GEER) Geotechnical Extreme Events Reconnaissance Association	2007- present
3		Assistant Chief Examiner Caribbean Examination Council woodwork 2012-2016	2012-2016
4		Member – TTBS Residential Energy Efficiency established as the National Technical Working Group (TWG), to assist in formulating the national position on the draft requirements of the Code.	2018-present
5		Member TTBS Engineering drawings 2009	2009

6		Co- founder Tanzania Edinburgh Community Association - TzECA 2001/2	2001-2002
7		Member TTBS Cell towers 2012	2012

Magazines and Periodicals publications

- (1) **Mwasha, A. (2011)** "A Polystyrene Waste Disposal and the UWI Initiative". UWI Today, St. Augustine Campus. http://sta.uwi.edu/uwitoday/archive/november_2011/article4.asp.
- (2) **Mwasha, A. (2010)** "Positive and Negative Impacts on Recycling of Iron and Steel Products. *Health, Safety Environment HSE Quarterly Issue*, pp. 53-56.
- (3) **Mwasha, A. and Mwasha, C. (2010)** "For An Adequate Home: What You Must Know". *Health, Safety Environment HSE Quarterly Issue*, pp. 20-22.
- (4) **Mwasha, A. and Mwasha, C. (2009)** "Impact of Excessive Lighting within the Built Environment". *Health, Safety Environment HSE Quarterly Issue* pp, 19-24.
- (5) **Mwasha, A. and Mwasha, C. (2008)** "Excessive Noise as an Environmental Stress". *Health, Safety Environment HSE Quarterly Issue*, pp. 20-23.
- (6) **Mwasha, A. and Mwasha, C. (2008)** "Renewable Aggregates for Ready-Mix Concrete" *Health, Safety Environment HSE Quarterly Issue*, pp. 14-16.
- (7) **Mwasha, A. and Petersen, A. (2008)** "Sick Building Syndrome – What Trinidad and Tobago Must Know". *Health Safety Environment HSE Quarterly Issue 2*, pp. 33-34, <http://www.newsday.co.tt/features/print.0.102482.html>
- (8) **Mwasha, A. and Mwasha, C. (2008)** "For an Adequate Home: What you must Know". *Health, Safety Environment HSE Quarterly*.

Editorial and Review Duties

Journal reviewed <https://publons.com/researcher/731218/abrahams-mwasha/peer-review/> accessed July 2020

	Name of the journal	WqS	Manuscript reviewed
1	Materials & Design	yes	40
2	Buildings	yes	4
3	Journal of Cleaner Production	yes	3
4	International Journal of Environmental Research and Public Health	yes	2
5	Journal of Building Engineering	yes	2

6	Journal of Material Cycles and Waste Management	yes	2
7	Sustainability	yes	2
8	Sustainable Energy Technologies and Assessments	yes	2
9	(Waste Management & Research	yes	2
1	Construction and Building Materials	yes	1
1	Critical Reviews in Environmental Science and	yes	1
1	International Journal of Fatigue	yes	1
1	West Indian Journal of Engineering	no	9
1	others	no	6
Total			77

Handling Editor/Guest Editor

Duties	Name of the Journal	Duration
Guest Editor The Uncertainties in Climate Change and Its Consequences in Sustainable Development	Sustainability	2020 - Today
Handling Editor	International Journal of Environment and Waste Management http://www.inderscience.com/ijewm	2015- 2019
	International Journal of Environmental Engineering (IJEE) http://www.inderscience.com/ijee	2015-2019

Duration	Funding Body	Subject/Area of research/Sponsorship	Amount of award (\$TT)	Output
July 2020- On going	RDI Fund Innovation Proof of Concept Grant- 5th	Manufacturing, Patenting and commercialization of Multifaced blocks	350,000. 00	On going
2014- 2015	ABEL Building Solutions. Building #2 Maingot Street. Mt. Hope. Trinidad , W.I. (Endorsed by the Engineering Institute)	Investigating the Properties of the following: (1) The water absorption of clay and concrete blocks (2) Complete analyses of Clay and concrete blocks (3) Thermal insulation properties of Clay and concrete blocks (4) Effects of different insulators on performance of these products (5) Acoustic properties (6) Thermal endurance for both clay and concrete blocks	100.000. 00	The properties of Trinidad Tobago bricks Publication of 5 papers Teaching manual
2014- 2016	The University of the West Indies	The Application of plastic wastes binding material	75,000.0 0	Teaching methodolog y New binding material On the process of commerciali zation and applied for patent
2014- 2016	The University of the West Indies	The Application of plastic wastes binding material	75,000.0 0 T	Teaching methodolog y New binding material On the process of commerciali zation and applied for patent

2011-2012	The University of the West Indies	Publication of the Practical Guide to Green Technology for the Ground Engineering	20,000.00	Book published
2010-2011	The University of the West Indies Campus research award	Recycling and the applications of the plastics as construction material	30,000.00	Building a model house Applied for the patent since 2012
2007-2013	Government of Trinidad and Tobago	Investigation on the use of biodegradable Geotextiles for ground engineering. -Construction of the Full size embankment on the soft soil	200,000.00	FOUR (4) New Sisal Geotextiles tested 4 Journal papers published Developed New Teaching equipment Book published
Total Funds			850,000.00	

RESEARCH GRANT – PRINCIPAL APPLICANT (2007-2020):

Technical Report

	Report	pages
1	The CARICOM Energy Efficiency Building standards (2019)	50
2	Green Engineering Syllabus for CAPE (2015)	60
3	ABEL BUILDING SOLUTION Physical properties (concrete blocks) (i) ASTM C140 – 11A Dimension tolerance and weight (dry, immersed, saturated and oven dry) Density (kg/m ³) Water absorption (kg/m ³ and %) and	25

	<p>Statistical analyses Trinidad and Tobago 5 pages</p> <p>(ii) Physical properties of clay tiles ASTM C 20</p> <p>(iii) Dimension tolerance and weight (dry, immersed, saturated and oven dry) Density (kg/m³)</p> <p>(v) Water absorption after boiling treatment</p> <p>(vi) (kg/m³ and %) and Statistical analyses Trinidad and Tobago 8 pages</p> <p>(vii) Thermal properties of clay tiles (IEEE 442 and ASTM 5334) Thermal conductivity “k” (W/mK) and</p> <p>(viii) Thermal resistivity “R” (m²K/W/) and Statistical analyses Trinidad and Tobago 6 pages</p> <p>(ix) Thermal properties of concrete blocks (IEEE 442 and ASTM 5334) Thermal conductivity “k” (W/mK) and Thermal resistivity “R” (m²K/W/) and Statistical analyses Trinidad and Tobago 8 pages 2015</p>	
4	<p>Technical report Validation of sodium silicate as a concrete hardener / sealant Sterling Products Limited Providence East Bank Demerara, Guyana, South America. 24th September 2012</p>	17
5	<p>Technical report PERA INNOVATION, UK. Designing the innovative concept of a layer along the brick by optimizing the sustainable insulation and absorption materials. 05/09/2005</p>	26

International/local languages proficiency

	Languages	Reading	Writing	talking
1	English	Yes	Yes	Yes
2	Russian	Yes	Yes	Yes
3	Swahili	Yes	Yes	Yes
4	Chagga	yes	yes	yes