# 1.1. Ph.D., M.Phil. and M.Sc. Degrees Awarded

### Ph.D. DEGREES AWARDED

	Degree Awardee	Title of Thesis	Supervisor(s)
Bioc	hemistry and Molecul	ar Biology	
1.	W T R Perera	Investigation of the effect of fluoride, water hardness, glyphosate, dehydration, manganese and mercury for chronic kidney disease of unknown etiology (CKDu) on animal models	Prof. J G S Ranasinghe Prof. N Alles Prof. R Waduge
Eartl	h Sciences		
2.	W M C M Wijesinghe	Clinico-epidemiological and spatio-temporal characteristics of dengue in a high-risk area: a case study in Mawanella, Sri Lanka	Dr. A A J K Gunathilaka Dr. P H D Kusumawathi Prof. F Noordeen
Phys	rics		
3.	T Jaseetharan	Synthesis and characterization of cadmium sulphide and lead sulphide semiconductor quantum dots and their applications in solar cells and infrared detectors	Prof. M A K L Dissanayake Prof. G K R Senadeera
4.	N U Senarath Yapa	Investigation of spin reorientation of ferromagnetic thin films using modified third order perturbed Heisenberg-Hamiltonian	Dr. P Samarasekara
Plan	t Sciences		
5.	M M A W P Mudannayake	Morphological and genetic diversity of Sri Lankan cycads (cycadaceae) and nutritional properties of their seeds	Dr. G A D Perera Prof. S D S S Sooriyapathirana Prof. P Samaraweera
6.	M P T Wijewickrama	Investigation on ecological and socio-economic impacts of <i>Bambusa bambos</i> (L.) Voss: a case study from intermediate zone forests at Moragahakanda area, Sri Lanka	Dr. H M S P Madawala Dr. D S A Wijesundara Dr. W A I P Karunaratne
		MPhil DEGREES AWARDED	

Supervisor(s)

**Biochemistry and Molecular Biology** 

Title of Thesis

Degree Awardee

1.	BSATH Sudasinghe	Systematics and phylogenetic relationships of the family cyprinidae: danioninae in Sri Lanka	Prof. M Meegaskumbura Prof. S Rajapaksha Mr. R Petiyagoda
Chen	nical Sciences		
2.	W A K M Gunasekara	Isolation and potential applications of cellulose from sugarcane bagasse discarded as a waste biomass	Dr. M Y U Ganehenage
Plant	t Sciences		
3.	A A C B Alahakoon	Development of a seed vigor testing protocol for popular rice varieties of Sri Lanka and maintenance of high seed vigor during storage	Dr. N S Gamaarachchige Dr. D S D Z Abeysiriwardena Dr. J W Damunupola
4.	W A D D Wasalamuni	Soil carbon sequestration potential of home gardens in Sri Lanka: as a way to mitigate global warming	Dr. A M T A Gunaratne Dr. R Rathnayake
5.	N G D N Nikagolla	Efficacy of soluble silicon in extending the keeping quality and enhancing fruit resistance to anthracnose and crown rot of banana	Dr. W A M Daundasekara Prof. M Y U Ganehenege
6.	S K Jayasekara	Microbial cellulases: the potential application in biofuel production, textile industry and agriculture	Dr. R R Rathnayake Dr. C L Abayasekara
Statis	stics &Computer Scie	nce	
7.	B V Lakshman	Agent compatible item response theory model and a clustering mechanism for e learning	Dr. J Wijekulasooriya Dr. M Sandirigama
Zool	ogical Sciences		
8.	D P Bopearachchi	Molecular phylogeny and systematics of three jumping spider tribes (araneae : salticidae ) of Sri Lanka	Prof. S P Benjamin Prof. I Karunaratne
9.	W M G A S T B Wijetunga	Impact of tropical forest fragmentation on figs and wasp pollinator interactions	Dr. W A I P Karunaratne Dr. A M T A Gunaratne
10.	C S Munasinghe	Association between coral bleaching and diversity of reef fish communities in the bar reef marine sanctuary, Kalpitiya, Sri Lanka	Dr. S K Yatigammana Mr. W M C S Wijesundara

# MSc DEGREES AWARDED (SLQF Level 10)

Degree Awardee Title of Thesis Supervisor(s)

### **Computer Science**

		Gatum: A Java based RESTful API for	
1.	M D Weerasinghe	calculating average collision cross sections of	Dr. L C Menikarachchi
		molecules	

#### **Environmental Science**

2.	M S Jayathilaka	Impact of laws and regulation on industries for water quality variation in Maha Oya	Prof. G B B Herath Dr. T W A W Wijayasinghe
3.	K N M H H Kosgahakumbura	Impacts of associated anions on lead uptake by Pistia stratiotes and Salvinia molesta: a new perspective for phytoremediation	Prof. C V Hettiarachchi Prof. S Madawala
4.	T A K L Thalangama	Investigation of the effect of plant growth on heavy metal removal in floating macrophyte systems	Prof. M I M Mowjood Dr. P B Weerakoon
5.	R M V N Gunarathne	Hydrometallurgical extraction of hazardous heavy metals from industrial sludge	Dr. M Vithanage Dr. A U Rajapaksha
6.	A A A Rahiman	Engineered clay-biochar composite for trapping antibiotic ciprofloxacin from aqueous media	Dr. M Vithanage

# **MSc DEGREES AWARDED (Old Syllabus)**

	Degree Awardee	Title of Project Report	Supervisor(s)
Anal	lytical Chemistry		
7.	Y K L N K Yatiwella	Evaluation of the performances of conventional water treatment process & selecting the best coagulant for Mahaweli river water	Ms. D Illangangedara Prof. A N Navaratne
8.	S S Achinthya	Removal of Cd (II) ions from aqueous solutions by barnacle exoskeleton material as an adsorbent	Prof. H M D N Priyantha
9.	N P N R Kumarachchi	Trends in encapsulation capacity of dentrimers with varying core-functionality and generation	Dr. R J K U Ranathunga
App	lied Epidemiology		
10.	N D W Karunarathna	Survey on probable arsenicosis in Mannar: a pilot study	Dr. S Fonseka Prof. R Chandrajith
11.	K P L Gunaratne	Short-term neonatal outcome in late preterm	Prof. S Dharmarathne

		deliveries in Teaching Hospital Peradeniya	Dr. S Bandara
12.	J Thanushanthan	An assessment on clinical trials registered with the Sri Lanka Clinical Trials Registry (SLCTR) analysis of ten years data (2007-2016)	Dr. K Pethiyagoda
13.	W M A U K Wijesinghe	Assessment of sexual and reproductive knowledge and attitude among advanced level state school students in Kurunegala Municipal Council area	Dr. S Tennakoon
App	lied Statistics		
14.	D M R W Divisekara	Forecasting the global market prices of major financial instruments using Arima and Garch models	Dr. L S Nawarathne
Biod	liversity, Ecotourism ar	nd Environmental Management	
15.	B D Jayathilaka	Ecotourism potentials of Munnakkare Conservation Reserve, Negombo, Sri Lanka	Mr. C Wijesundara
16.	D P T R Wijewardana	The study of ecotourism potential of the Madunagala area in Hambanthota district to develop as an ecotourism destination	Dr. A Gunawardane Prof. S K Yatigammana
17.	K V M Ariyasena	Ecotourism promotion plan to enhance the sustainable livelihood of rural communities living around Minneriya National Park, Sri Lanka	Dr. A M T A Gunaratne
18.	K Y Gunasinghe	Study on the current tourism trend and potential of introducing ecotourism to the Ella Divisional Secretariat in Badulla District	Prof. S K Yatigammana Dr. A Gunawardena
Clini	ical Biochemistry		
19.	M K A DE Zoysa	Plasma parathyroid hormone (pth) reference intervals in an apparently healthy employed Sri Lankans in Western Province	Prof. R Sivakanesan Dr. G Katulanda
20.	J M S Jayaweera	The effect of excessive concentration of dipotassium ethylene diamine tetraacetic acid anticoagulant on complete blood count	Dr. G U S Wijesekara Prof. R Sivakanesan
21.	M B M R D T Marapana	The correlation between salivary and serum creatinine levels among chronic kidney disease patients of unknown etiology (CKDu) in Anuradhapura District, Sri Lanka	Prof. R Sivakanesan Dr. J M K B Jayasekara

## **Disaster Management**

22.	H A S Jisantha	Knowledge and attitude of stakeholders for dengue mitigation and association of socio economic factors	Dr. A A J K Gunathilake Dr. K Perera
23.	K K R Thanushan	Study on surface and groundwater contamination at Kodikamam North of Jaffna	Dr. A A J K Gunathilake Dr. A Wijenayake
24.	N Pirasanth	Knowledge and practices on disaster preparedness among allied health professionals at Teaching Hospital, Jaffna	Dr. S T Sarma Dr. P A D Coonghe
Engi	neering Geology and H	ydrogeology	
25.	E I Jayasekara	A study on triggering mechanism of shallow landslides: a case study from Bulathsinhala, Sri Lanka	Dr. A A J K Gunathilake Dr. H A G Jayathissa
26.	D M L P Dassanayake	Incorporation of engineering geological measures into an engineering design - a case study of Kokmaduwa landslide mitigation, Sri Lanka	Mr. K N Bandara Dr. A A J K Gunathilake
27.	J M Hettiarachchi	Evaluation of mitigation measures of landslide using monitoring instrument data; a case study on Udamadura landslide	Mr. K N Bandara Dr. A A J K Gunathilake
28.	K G N Saroja	Contribution of geology and soil properties for the mechanism of landslides: a case study from Morawakkanda landslide in Sri Lanka	Dr. A A J K Gunathilake Mr. C S Menikpura
29.	P D M Arachchi	Sand potentials in the ancient Walawe river course in Ambalantota area, Sri Lanka	Dr. A A J K Gunathilake Mr. U De Silva
Envi	ronmental Science		
30.	W A M N S Dhanapala	Conservation importance of flora in tropical lowland wet evergreen forest fragment at Halgolla, Sri Lanka	Dr. A M T A Gunaratne
31.	S Umasuthan	Relationship of water quality to avifaunal diversity in selected freshwater bodies in the Kilinochchi District, Sri Lanka	Mr. C Wijesundara
32.	A Sivasingham	Comparison of insect diversity on selected invasive and native plant species in the Jaffna Peninsula, Sri Lanka	Mr. C Wijesundara
33.	A B N Withanage	Monitoring of water quality and bacteriological parameters in the Rahas-Ella catchment before and after water treatment	Prof. R Weerasooriya Dr. P W H K P Daulagala
34.	D S M Weththasingha	Developing a coastal sediment dynamic model for Sri Lanka	Prof. N Ratnayake Dr. A S Ratnayake
35.	A M T I Amandakoon	Comparative study on determination of water quality using physicochemical parameters and benthic macroinvertebrates of Sarasavi Oya, University of Peradeniya, Sri Lanka	Dr. A C A Jayasundara

36.	H K I C Hapuarachchi	Urban lake water quality: a case study in Kurunegala lake	Dr. K B S N Jinadasa Prof. M I M Mowjood
37.	R M K Ratnayake	Estimating the carbon footprint of the University of Peradeniya for year 2014	Dr. D G G P Karunarathne
38.	M S Weerasooriyagedara	Adsorptive removal of antibiotic oxytetracycline hydrochloride using biochar montmorillonite clay composite	Dr. M Vithanage
Expe	rimental Biotechnolog	y	
39.	H Varnakulasingham	Evaluation of mice incisional wound healing with probiotic therapy and contraction of muscle panniculus carnosus	Dr. M G Thammitiyagode
40.	C A Dilo	Differentiation of the sibling species belong to <i>Phlebotomus argentipes</i> complex by targeting the mitochondrial cytochrome c oxidase subunit I gene	Dr. K Gajapathy
41.	P A N D Sumathipala	Patterns of genotypic resistance to rifampicin and isoniazid and susceptibility to selected second line drugs among rifampicin resistant mycobacterium tuberculosis strains in Sri Lanka	Dr. D Vidanagama Dr. C D Gamage
42.	R S R Rajakulasooriya	A PCR based assay for the identification of Acinetobacter baumannii and Acinetobacter nosocomialis from clinical isolates	Dr. T D C P Gunasekara
Fish	and Wildlife Managem	ent	
43.	K R Dalpathadu	Study on some biological and fisheries aspects of selected edible reef fishes in the east coast and west coast of Sri Lanka	Dr. S S K Haputhanthri Dr. W M C S Wijesundara
44.	P K P M P Kumara	Diversity of butterflies in Samanala Nature Reserve and Horton Plains National Park, Sri Lanka, a comparative study	Dr. C S Wijesundara
45.	M D S De Silva	Investigating human influence towards stress and agonistic behavior of orphaned Sri Lankan elephant calves at elephant transit home, Udawalawe	Dr. E Rajapakshe Dr. V Perera
46.	J S Madushanka	Study on early successional changes in plant species diversity and composition after clear cutting a <i>Pinus caribaea</i> plantation, Sri Lanka	Prof. A Perera Prof. S Ediriweera
Gem	mology and Industrial	Management	
47.	N I Balage	A mineralogical and geological study of occurrence, origin and evolution of gem deposits in Kaluganga - Elahera gem area of Sri Lanka	Dr. U B Amarasinghe Mr. R L D S Ranasingha
GIS a	nd Remote Sensing		
48.	M M N C K	Understanding the formation of cavities in	Dr. A A J K Gunathilake

	Marasinghe	marble, highland areas of Sri Lanka and their importance: GIS based study	
49.	K M M Kulathunga	Spatial analysis of field properties affecting the paddy field; case study from Sabaragamuwa and Central Provinces	Dr. A A J K Gunathilake
50.	R L A Wijenayake	A GIS based application for divisional administration; case study in a Grama Niladhari Division of Kotmale area	Dr. A A J K Gunathilake Mr. M Gunawardhane
51.	K G A P Karunasinghe	Real-time radiation monitoring, mapping and intelligent alerting system: a case study at University of Peradeniya	Mr. P M P C Gunathilake
52.	E A S N Wimalawardhana	GPR application for interpretation of slip surface of slow moving landslides in Sri Lanka	Dr. P Jayasinghe Dr. A A J K Gunathilake
Med	ical Microbiology		
53.	P G I D Amarasiri	A pilot study to determine the sensitivity and specificity of microscopic examination and polymerase chain reaction for early detection of canine eahrlichiosis reported to the Government Veterinary Hospital, Gatembe	Prof. W D S J Wickramasinghe Dr. S S Iddamaldeniya
54.	W G K C KapukotuWA	Urinary catheter colonization of candida in an intensive care unit	Dr. N Dissanayake Dr. A U B Pethiyagoda
55.	W M T D Bandara Warankulasooriya	Bacterial contamination of mobile phones among a group of young adults in Kandy, Sri Lanka	Dr. A L Tennegedara Dr. V Liyanapathirana
56.	M G S D Bandara	Identification of potentially pathogenic free- living amoebae in water sources in Homagama and Colombo Divisional Secretariat Divisions in Colombo District, Sri Lanka	Prof. D Iddawela
Med	ical Physics		
57.	K K D L Ruvinda	Verification of applicability of enhanced dynamic wedge	Dr. N Jeyakumaran
58.	A L Pallewela	Designing a noise reduction system in incubators used in level III neonatal intensive care unit in Sri Lanka	Dr. V Sivakumar
59.	D M J Nuwan	Effectiveness of computed tomography scans for management of patients with chronic headache	Dr. J C marasinghe Dr. J J K H Udupihilla
60.	A N P Weerasinghe	Calibration and determination of the transit dose of HDR brachytherapy source	Dr. M A Y Ariyarathne
61.	A J S P Nileema	Automated detection of pulmonary tuberculosis in digital chest radiographs	Dr. S Kulathunga
62.	K B U Piyadeva	Artificial intelligence to detect and classify	Dr. C P Jayalath

		brain tumors using-magnetic resonance imaging	Dr. W K I L Wanniarchchi
63.	R T N Rajapakshe	The effect of patient positioning error in three dimensional conformal radiotherapy for carcinoma in thorax region	Dr. K L Kandegedara Dr. C P Jayalath
64.	J H J K De Silva	Comparison of radiographic film with ionization chamber system for dose profile measurements of the Co-60 external beam radiotherapy	Dr. M Chenthuran Dr. C P Jayalath
Nan	oscience and Nanotech	nology	
65.	A S S Athukorala	Hydroxyapatite incorporated bacterial cellulose hydrogels as a cost-effective 3D cell culture platform	Dr. A C A Jayasundara Mr. J Liyanage
66.	D M N S Dissanayake	Polyaniline aluminium hydroxide nanocomposites: investigation of its anticorrosive and flame retardant properties	Dr. K G C Senaratne Prof. R M G Rajapakse
Phys	sics of Materials		
67.	W M G B R B Wijekkon	Synthesis of graphene oxide and graphene by Sri Lankan natural vein graphite and its application as an anode material for lithium ion batteries	Dr. N Gunawardhana
68.	H P Weeramuni	Characterizations of zinc doped cupric oxide thin films prepared by spin coating technique	Prof. P Samarasekara
69.	S M Aazir	Synthesis, XRD analysis and resistance measurements of <i>Bi-Pb-Sr-Ca-Cu-O</i> superconductors	Prof. F C Ragel Dr. V A Senevirathne
Scie	nce Education		
70.	M R T D Mallawa	Investigation of the strengths and weaknesses of newly introduced Grade 10 science syllabus	Dr. A R G A M Abeykoon Manike
71.	S R Dinali	Issues in implementing the curriculum of technology subject stream in school	Dr. S Yatigammana Ekanayake
72.	A C Volantine	Investigation of the factors affecting mathematics performance of Grade 11 students in Thunukkai Education Zone	Dr. T Kalamany
73.	E M T Bandaranayake	Effectiveness of applying self-determination theory in teaching mathematics in Hatton Education Zone	Dr. W D Chandrasena Dr. A K Amarasinghe
74.	W W M R G K S B Wijethunga	Investigation of the effectiveness of activity based instruction on learning mathematics of Grade 6 students in Galewela Education Zone	Dr. W D Chandrasena Dr. A K Amarasinghe
75.	D N K Herath	Factors affecting student's performance and motivation lesson units "vectors and systems of coplanar forces" in combined mathematics	Dr. W D Chandrasena Dr. A K Amarasinghe

		at GCE (A/L) in Kandy Education Zone	
76.	A M S P Angammana	Effectiveness of multi-approach method in teaching mathematics: a case study in Puttalam Education Zone	Dr. W D Chandrasena Dr. A Amarasinghe
77.	K M M N Medagoda	An investigation of the relationship between Grade 5 scholarship results and GCE Ordinary /evel performance	Dr. A Abeykoon Menike
78.	J M C N Jayasundara	A study to evaluate implementation of teaching/learning process in GCE (A/L) biosystems technology in Kandy District	Dr. P R K A Vitharana
79.	E G T P Premarathne	Identifying factors affecting the development of science stream in thousand secondary schools	Prof. I Karunarathne
80.	H M J S K Herath	Factors affecting teaching science for technology for GCE (A/L) students: a case study in Kurunegala District	Prof. L R A K Bandara
81.	N D S Wimalasena	Application of the constructivism for teaching and learning in Grade 10 science	Dr. W D Chandrasena

#### **Water Resources Management**

		Recent changes of agro well based water use	
82.	I U Gamage	pattern: a case study of Mawathawewa, Anuradhapura	Dr. M M P Perera