

## Ph.D , M.Phil and M.Sc DEGREES AWARDED & TITLES OF THESES

Ph.D. and M.Phil. DEGREES AWARDED in 2018

### *Degree Awardees*

### *Titles of Theses*

#### **Ph.D. – Biochemistry and Molecular Biology**

01. H P Gunawardena Cardio-metabolic risk factors and antioxidant status of risk populations and effect of Ceylon cinnamon on prehypertensives  
Supervisors: Dr. K D R R Silva and Prof. R Sivakanesan

#### **Ph.D. – Chemical Sciences**

01. T M M Marso Utilization of environmental pollutants and biomass for the production of biofuels and industrial chemicals using heterogeneous catalysts  
Supervisors: Prof. M Y U Ganehenage and Dr. C S Kalpage
02. I H V Nicholas Naturally occurring therapeutic agents as potential nutraceuticals  
Supervisors: Prof. N L V Karunaratne , Prof. D N Karunaratne and Prof. Gehan Amaratunga
03. R S Hewawasam Bioethanol and wine from fruits of *musa* spp. By microbial fermentation  
Supervisors: Prof. S Sotheeswaran , Dr. U S K Weliwegamage and Prof. R G C S Rajapakse
04. U G R L Wanniarachchi Development of solid state thermochromism & photochromism in spirobenzopyrans upon encapsulation into metal organic frameworks  
Supervisors: Dr. C V Hettiarachchi and Prof. A Wickramasinghe

#### **Ph.D. – Earth Sciences**

01. E M S G Edirisooriya Jurassic plant fossils from the Tabbowa Basin, Sri Lanka: their evolutionary significance in Gondwana  
Supervisors: Prof. H A Dharmagunawardhane and Prof. Patricia Vickers Rich
02. A M N M Adikaram Geochemical and sedimentological characterization of sediments from eastern coast, Sri Lanka: implications for paleo environments and coastal evolution  
Supervisors: Prof. H Ishiga Shimane, Dr. D T Jayawardana and Prof. H M T G A Pitawala

#### **Ph.D. – Environmental Science**

01. P A A Gamaethige Assessment of environmental impacts of the Mahaweli diversion scheme downstream of Polgolla  
Supervisors: Prof. H M T G A Pitawala, Prof. H M D Namal Priyantha and Prof. S K Yatigammana
02. N V Edirisinghe Characterization of inland water resources in selected zones in Sri Lanka: An isotopic and geochemical approach  
Supervisors: Prof. H M T G A Pitawala, Prof. H A Dharmagunawardhane and Dr. R

L Wijayawardane

**Ph.D. – Physics**

01. W G C Kumarage Studies on modified chemical bath deposited Cds thin films as a solar cell window material  
Supervisors: Dr. B S Dassanayake, Dr. J A C P Jayalath and Prof. L B D R P Wijesundara
02. C A Thotawatthage Nanostructural modifications to photoanodes and electrolytes to improve the performance of dye sensitized solar cells  
Supervisors: Prof. M A K L Dissanayake and Dr. G K R Senadhera

**Ph.D. – Plant Sciences**

01. S L Rajakaruna Impacts of river regulation on riverine vegetation and fish populations in downstream of Mahaweli diversion scheme from Minipe to Manampitiya Sri Lanka  
Supervisors: Prof. K B Ranawana, Prof. H M S P Madawala and Dr. A M T A Gunarathne
02. W A M P Ariyaratne Chromosome evolution of the endemic species of Sri Lanka with emphasis on families anacardiaceae and orchidaceae based on DNA sequences  
Supervisors: Prof. Deepthi Yakandawala, Dr. S A Wijesundara and Prof. M R A Samuel
03. N C S Ruklani Taxonomy, biogeography and evolutionary relationships of thalloid liverworts and hornworts of Sri Lanka  
Supervisors: Dr. S C K Rubasinghe, Dr. D G Long and Dr. L L Forrest

**Ph.D. – Zoological Science**

01. T C Weeraratne DNA barcoding, genetic diversity, genetic structure and age structure of selected mosquito species of Sri Lanka  
Supervisors: Prof. H S P P Karunarathne and Prof. S N Surendran

**M.Phil. – Biochemistry and Molecular Biology**

01. U M U W Jayasekara Prevalence of Breast Cancer and risk factors of Breast Cancer among women in Yatinuwara secretariat division in Kandy district  
Supervisors: P B Hewavitharana, Dr. M L Jayathilake and Dr. S Kulathunga

**M.Phil. – Chemical Sciences**

01. D N P R Jayakantha Designing and construction of a low cost instrument to measure the surface area of powdered samples.  
Supervisors: Prof. H M N Bandara and Prof. R M G Rajapakse
02. K U B Gunatilake Fabrication of underwater superoleophobic and superhydrophilic membranes to purify oil contaminated wastewater  
Supervisors: Prof. J M S Bandara and Prof. R Weerasooriya
03. R M N M Rathnayaka Synthesis of expanded graphite from Sri Lankan vein graphite for novel technological applications  
Supervisors: Dr. H W M A C Wijayasihghe and Prof. H M T G A Pitawala
04. A Kuganesan Bioactivity of pulp, peel and seed kernel of selected Mango varieties from Sri Lanka  
Supervisors: Dr. G Thiripuranathar, Prof. P A Paranagama and Prof. A N Navarathna
05. D M R T D K Divisekara Adsorption of Cd (ii) and Pb (ii) on Bathalagoda paddy soil treated with glyphosate

- Supervisors: Prof. A N Navarathna and Ms. A S K Abeyssekara
06. D S N K Liyanagamage In vitro antioxidant, in vivo antihyperglycaemic and antihyperlipidaemic activities of combined plant extract used in traditional medicine  
Supervisors: Prof. V Karunarathna , Dr. S Jayasinghe and Prof. A P Attanayake

### ***M.Phil. – Earth Sciences***

01. H P T S Hewathilake Development of Sri Lankan graphite as an anode material for rechargeable li-iron batteries  
Supervisors: Dr. N W B Balasooriya, Dr. H W M A C Wijayasinghe and Prof. H M T G A Pitawala
02. W A P Weerakoon Palynological investigations on Gondwana flora from Sri Lanka: palaeoenvironmental and palaeogeographical implications  
Supervisors: Prof. H A H Jayasena, Prof D Yakandawala and Prof. R L R Chandrajith
03. L H M T M B Reconstructing the quaternary sea level changes around Palk Bay of the Central Indian ocean and evolution of Palk Bay Islands of Sri Lanka  
Supervisors: Dr. P N Ranasinghe, Dr. C H E R Siriwardana and Dr. Bernard Preme
04. P A S R D Perera Calcareous nannofossil biostratigraphy of late cretaceous to early paleogene succession at Mannar basin, Sri Lanka  
Supervisors: Dr. P N Ranasinghe, Dr. C H E R Siriwardana and Dr. Bernard Preme

### ***M.Phil. – Environmental Science***

01. M B U Perera Distribution and environmental preference of phytoplankton and zooplankton of selected reservoirs in Sri Lanka  
Supervisor: Dr. S K Yatigammana, Prof. S A Kulasoorya and Prof. C B Dissanayake
02. P Jeganathan Knowledge, practices and attitudes of fruits and vegetable farmers on pesticide usage and effect of three commonly used pesticides on common hourglass tree frog, *Polypedates cruciger* in Sri Lanka  
Supervisor: Prof. R S Rajakaruna
03. R P S K Rajapaksha Assessment and mapping of soil carbon stocks in knuckles forest region of Sri Lanka  
Supervisor: Dr. R R Ratnayake, Prof. H M S P Madawala and Prof. S K Gunathilake
04. W M L S Weerasundara Chemical characterization of atmospheric deposition in Kandy, Sri Lanka  
Supervisor: Dr. M Vithanage, Dr. A M M Ziyath, Prof. A Goonetillake and Dr. D G G P Karunaratna

### ***M.Phil. – Physics***

01. A M J S Weerasinghe Development of novel polymer free and polymer incorporated quasi solid (gel) electrolytes for dye sensitized solar cells  
Supervisors: Prof. M A K L Dissanayake and Dr. V A Seneviratne

### ***M.Phil. – Statistics and Computer Science***

01. C M M Mansoor Automatic Hdl generator for application specific instruction - set processor (asip)  
Supervisor: Dr. R G Ragel and Dr. S Radhakrishnan

- |     |                     |  |
|-----|---------------------|--|
| 02. | A Galapaththi       | Social network analysis approach for criminal network analysis<br>Supervisors: Prof. S R Kodituwakku, Dr. Y P R D Yapa, Dr. A A J K Gunathilake and Dr. R D Nawarathne |
| 03. | K R Wijeweera       | Analysis and enhancement of algorithms in computational geometry<br>Supervisors: Prof. S R Kodituwakku   |
| 04. | K A N K Karunaratna | Poisson mixed models for count data from dependent clusters and thier applications<br>Supervisor: Prof. P Wijekoon   |

***M.Phil. – Zoological Sciences***

- |     |                 |  |
|-----|-----------------|--|
| 01. | N U K Pathirana | Trematode infections in common hourglass tree frog (polypedates ruciger): multiple parasitism and age dependent resistance and tolerance<br>Supervisors: Prof. R S Rajakaruna and Dr. M Meegahakumbura |
|-----|-----------------|--|

**M.Sc. DEGREES AWARDED in 2018**

*Awardees*

*Titles of Research Project Reports*

***M.Sc. – Analytical Chemistry***

- |     |                          |   |
|-----|--------------------------|---|
| 1.  | B A P V S Cooray         | Isolation of the seed germination inhibitory principles presents in fruit pericarp of caryota urens l.  |
| 2.  | K K A S Sanjeewa         | Transport pathways and transfer coefficients of heavy metals generated by waste co-incineration in the Sri Lankan cement manufacturing process  |
| 3.  | S A N A Sirisinghe       | Removal of textile dye by using carbon obtained from sawdust burned in industrial furnace   |
| 4.  | U G W L Jayaweera        | Serum zinc levels in diabetic patients with and without dyslipidemia and cardiovascular diseases  |
| 5.  | R M L T Rajapaksha       | Assessment and improvement of quality of treated wastewater from Hantana sewage treatment plant using biochar   |
| 6.  | V S Withanage            | Determination of lead, cadmium, chromium and copper in edible parts of cabbage (brassica oleracea) and removal of selected heavy metals by washing with distilled water and common house-hold solutions |
| 7.  | T M P G C R Senevirathne | Analysis of antimony, barium and lead in gunshot residues by inductively coupled plasma mass spectroscopy (icp-ms) for the estimation of shooting distance  |
| 8.  | K G D L Kirinda          | Evaluation of antioxidant properties, total phenolic content and preparation of a cream from artocarpus heterophyllus extract   |
| 9.  | H Dananjaya              | Removal of arsenic (arsenate) from water by iron impregnated coconut shell based activated carbon   |
| 10. | P G R S Hemapala         | Effect of chitosan clay composite coatings on quality traits of Chiken eggs stored at room temperature  |
| 11. | P W C M Purijjala        | Molecular dynamics simulation study of c6 cell penetrating peptides   |

12. D M D A Bandara Investigation of volatile compounds and physico chemical properties of cocount toody and sprit
13. G H S D Pathmasiri Defluoridedation using coconut coir based activated carbon - alginate beads
14. R G G Pradeep Montmorillonite composites of murraya paniculata: intercalation, releasing, antibacterial and cytotoxicity studies
15. L R C Premalal Decolourisation of crystal violet and congo red dyes from aqueous solutions by using salvinia molesta
16. M M S Sanjeedha Methyl ammonium lead idodide sensitized nano crystalline tio2-based solar cell with graphene as the hole transport material
17. I A L Ipalawaththa Inhibitive action of graphene oxide/natural rubber and graphene oxide/carboxymethyl cellulose coatings on the corrosion of mild steel
18. M M Liyanage Bioremoval of pb(ii) using the green alga chlorococcum aquaticum
19. I W D N Wickramarachchi In-vitro investigation of antidiabetic properties of some selected medicinal plants and their chemical profiling

#### ***M.Sc. – Applied Epidemiology***

1. M D N Jayaweera Prevalence of antimicrobial resistance in bovine clinical mastitis cases reported tocentarl veterinary investigation centre of Veterinary Research Institute, Gannoruwa from 2011-2015
2. S D M Maheer Dengue incidence and risk factors in the Kattankudy medical officer of health (MOH) division in Batticaloa during the 2009/2010 outbreak
3. T P Wijayathilaka Evaluation of awareness on rabies control among the middle level staff of the Department of Animal Production and health with a view to strengthen rabies control
4. B M C Rathnayake A survey on general symptoms and potential risk factors for transmission of infections in a selected sample of students in University of Peradeniya
5. H P S D Palliyage Assessment of current knowledge, attitude and practices regarding pulmonary tuberculosis and perception of their social relationships by patients attending District Chest Clinic, Kilinochchi

#### ***M.Sc. – Applied Statistics***

1. H M S M Herath Copula based analysis of groundwater quality in Sri Lanka
2. D A R K Dasanayaka Reference values for spiromenry for healthy Sri Lankan adults: age between 20 to 65 years

#### ***M.Sc. – Clinical Biochemistry***

01. B M S Amarajeewa Nutritional and health status of rural attending the Ayurveda mobile health clinic at Hanguranketha and Madadumbara
02. S S K Marasinghe 192 R/Q polymorphism of human serum pon 1 in a cohort of healthy Sri Lankan individuals
03. M M M Shafras Comparison of glycemic control and anthropometric parameters before and after Ramadan fasting in a selected cohort of patient with type 02 diabetes mellitus in Sri Lanka

**M.Sc. – Computer Science**

01.	K Kanisto	Voting system for visually impaired voters
02.	W H M R Y Wijekoon	Design and development of an application to increase the efficiency of supply of new electricity connections
03.	W S J M M U P Senevirathne	Brain tumour detection in MRI images based on image segmentation
04.	W A Malkanthi	Automated classification of plants based on shapes of the leaves
05.	V Mathyananthan	An approach to weed detection in paddy fields using digital images
06.	K Aniththithan	Coursework M.Sc. degree
07.	A T Bandaranayake	Coursework M.Sc. degree
08.	A D M Gunaralnam	Coursework M.Sc. degree
09.	S Hisoban	Vehicle diagnostic information monitoring system
10.	U A V Punyajeeva	Coursework M.Sc. degree
11.	S Sivasothilingam	Coursework M.Sc. degree
12.	V Thryagarajah	Coursework M.Sc. degree
13.	T Jathubalatharan	Coursework M.Sc. degree
14.	A P K N D Karunanayake	Coursework M.Sc. degree
15.	A D Hemachandra	Coursework M.Sc. degree
16.	L S K Lokuliyana	Coursework M.Sc. degree
17.	S A C Prasanna	Coursework M.Sc. degree
18.	G Romiyal	Coursework M.Sc. degree
19.	M S Shafana	Effective feature extraction methods for improving the performance of printed Tamil character recognition
20.	S S Sugirtharaju	Coursework M.Sc. degree
21.	T Logendraraj	Coursework M.Sc. degree
22.	D Pavalakumar	Coursework M.Sc. degree
23.	N Kajaluxshy	Coursework M.Sc. degree
24.	T Kopinath	Coursework M.Sc. degree
25.	M S S Masharrath	Coursework M.Sc. degree
26.	A K M Nasleen	Coursework M.Sc. degree
27.	P Niruththika	Coursework M.Sc. degree
28.	N C Pinnaduwege	Coursework M.Sc. degree
29.	W M P Rathnayake	Coursework M.Sc. degree
30.	T Sugirthan	Coursework M.Sc. degree
31.	M N Suraweera	Coursework M.Sc. degree
32.	W Archana	Coursework M.Sc. degree
33.	H Ashokan	Coursework M.Sc. degree
34.	N A C Cooray	Coursework M.Sc. degree

- |     |                     |                         |
|-----|---------------------|-------------------------|
| 35. | N C N Cooray        | Coursework M.Sc. degree |
| 36. | K Tharsan           | Coursework M.Sc. degree |
| 37. | R W H R Amarasinghe | Coursework M.Sc. degree |
| 38. | D F Dehipe          | Coursework M.Sc. degree |
| 39. | V Sathananthy       | Coursework M.Sc. degree |
| 40. | M G V Sadaruwan     | Coursework M.Sc. degree |

**M.Sc. – Biodiversity, Ecotourism and Environment Management**

- |     |           |  |
|-----|-----------|--|
| 01. | Z Hassan  | Development of environmental management models for marine ecotourism in the Maldives: a case study of Hulhumale and Ukulhas Islands          |
| 02. | K Arjunan | Spatial distribution of parthenium hysterophorus and association of native flora in parthenium sp. Dominated habitats in Vavuniya, Sri Lanka |

**M.Sc. – Disaster Management**

- |     |                    |  |
|-----|--------------------|--|
| 01. | H M C Ekanayake    | Assessment of the occurrence of dental fluorosis in relation with groundwater fluoride in the galewela area  |
| 02. | N Thananjeyan      | Droughts and its socio-economic impacts: a case study in the northern province of sri lanka  |
| 03. | V Muarlitharan     | Risk mapping of denfue and determination of knowladge, attitudes and practicles and association of sociodemographic factors in high risk areas of trincomalee moh division |
| 04. | D S Vithanage      | Analysis of the meteorological drought in sri lanka using the standardized precipitation index   |
| 05. | M G H U Gunarathna | Industrial hazard management system planning in manufacturing industries of export prrocessing zone, katunayake- sri lanka: from the perspectives of four case studies     |
| 06. | KSivendram         | The study of grounwater quality crises and best management practices in Jaffna Peninsula - Sri Lanka   |
| 07. | N D K BNiyangoda   | Gaps and shortcomings of the emergency response in sri lanka (with special reference to floods and landslides)   |
| 08. | T M R KThennakoon  | Valnerability analysis of the daduru oya floods in the ganewatta divisional secretary division   |
| 09. | S Kokularajah      | Development of a community partipatory and cost effective hazard risk sensitive spatial database to multiwaikkal west gn division  |
| 10. | S Suthakaran       | Flood risk assessment through gis technology: a case study in manmunai north divisionalsecretariat of Batticaloa, Si Lanka   |
| 11. | S Shanmugarajah    | Investigation of factors affecting on dengue outbreaks: a case study in Vavuniya District, Sri Lanka   |

**M.Sc. – Engineering Geology & Hydrogeology**

- |     |                     |   |
|-----|---------------------|---|
| 01. | K D A Samaraweera   | Assessment of groundwater chemistry in eastern part of Ampara District, Sri Lanka   |
| 02. | J P D R K Jayalath  | Rectification of road cut failures occurred between culvert 5/11 and 5/13-a case study from Dehiovita-Daraniyagala-Nooriya road in Kegalle District |
| 03. | M P K G Jayathilaka | Relationship of rock mass rating and tunneling quality index for metamorphic rocks in North Central and Central Provinces, Sri Lanka                |
| 04. | M D S LKarunadasa   | Investigation, instumentation and monitoring for mitigation of landslides: an application in Kahagalla landslides, Sri Lanka                        |

- |     |                      |   |
|-----|----------------------|---|
| 05. | C N Subasinghe       | Assessment of landslide analysis at second mile post-Badulla, Sri Lanka   |
| 06. | A M N P B Abeysinghe | Assesment of hydrogeological conditions using resistivity data: a case study in Moragahakanda area, Sri Lanka   |
| 07. | M M T N B Munasinghe | Reassessment of subsurface tunneling conditions of upper elehera canal with an integration of geophysical data with geological and geotechnical information |
| 08. | E M N H Ekanayake    | Analysis of road cut failures and designing of countermeasures - a case study Bulathsinhala-Horana road, Kalutara District Sri Lanka                        |
| 09. | A G R P Weerasinghe  | Application of tank model and quantitative assessment to predict rainfall induced displacement on landslide case study on Nawalapitiya landslide Sri Lanka  |
| 10. | D M D I K Ariyaratna | Road cut stability assessment; Kegalle-Bulathkohupitiya road, Sri Lanka   |

### **M.Sc. – Environmental Science**

- |     |                          |   |
|-----|--------------------------|---|
| 01. | T L Samaraweera          | Legislative disputes with respect to import/export of animal commodities from the perspective of enforcement officers (customs officers)                  |
| 02. | N M P J G C P Nawarathna | Avifaunal diversity in natural and human-modified habitats in Kithulgala, Sri Lanka   |
| 03. | J A M D Jayakody         | Estimation of water footprint for University of Peradeniya, Sri Lanka   |
| 04. | A W L C Sugathapala      | Determination of soil respiration in up-country tea growing regions of Sri Lanka  |
| 05. | K Kanchana               | Economic valuation of mangrove ecosystem in Jaffna peninsula  |
| 06. | K M D P Kodithuwakku     | Performance of Garnet filter media for filtration of algae and reduce turbidity   |
| 07. | J A I Senadhera          | Reclamation of acid saline soil by organic amendments   |
| 08. | N A K L Seneviratne      | Characterization of fibres used as friction materials of brake pads in Sri Lanka  |
| 09. | G A M S Gunarathna       | Screening of cytogenotoxic potentials of weedol and polycrone profenofos applied in sri lankan agricultural fields using plant based bioassays.           |
| 10. | H P Amaratunga           | Hydrogeochemical characteristics of groundwater in wilgamuwa region: an area with high incidence of chronic kidney disease with uncertain etiology (ckdu) |
| 11. | P L M M Perera           | A Conservation plan for the critically endangered mangrove Lumnitzeria littorea   |
| 12. | M P N M Dias             | Formulation of low cost nutrient medium for cultivation of microalgae spirulina platensis   |

### **M.Sc. – Experimental Biotechnology**

- |     |                     |   |
|-----|---------------------|---|
| 01. | K M S C Bandara     | Analysis of heavy metal concentrations of alternanthera sessilis (mukunuwenna) plants from selected sites in sri lanka  |
| 02. | G Abhiram           | The antioxidant activity of gymnema sylvestre leaf extract  |
| 03. | P Wijesiriwardhana  | Assessment of mn, cu and pb contamination in ipomoea aquatica (kankong) collected from selected sites in sri lanka  |
| 04. | Y A P K Dayasena    | Assessment of marker based genotypes diversity of saltol qtl in relation to seedling stage salinity tolerance in selected rice genotypes                        |
| 05. | B D S Muthusinghe   | Identification of pathogenic leptospira species among swine in sri lanka: use of fiab gene based pcr and 16s rrna gene based lamp method                        |
| 06. | D Paramalingam      | PCR based identification of Meloidogyne species infecting chili, tomato and okra in selected locations of Sri Lanka.  |
| 07. | S Premina           | Quantification and identification of airborne bacterial and fungal communities in selected areas of teaching hospital, kandy, sri lanka                         |
| 08. | V R R U Udapamunuwa | Physiological characterization and genetic diversity analysis of the rhizobial populations inhabiting gliricidia sepium from selected locations of anuradhapura |

- district, sri lanka
09. V Thiruchenthooran Partial purification and characterization of extracellular lipase form cladosporium cladosporiodes
10. U H K Dissanayake Morphological and molecular characterisation and consumer oreference analysis of cassava (manihot esculenta crantz) cultivars grown in sri lanka

### **M.Sc. – GIS & Remote Sensing**

1. S N Edirisinghe Gis based analysis of vesting land for university of peradeniya
2. O N S M Fonseka Identification of traffic accident monitoring points for katunayake police division
3. T M Wijeratne Analysis of the spatial and temporal distribution of dengue patients in sri lanka and colombo district
4. W K N C Withanage Gis based locational suitability analysis for residential development in kandy municipal council area
5. W V T D Amarasinghe Defection of change of total vegetation cover using multi-temporal landsat imagery in northern and eastern provinces of sri lanka
6. H M D M Dissanayake Rehabilitation and management of irrigation tank cascade system using gis and gps case study meegaha amuna watershed, sri lanka
7. S K Epasinghe Flood risk analysis using geographic information systems case study-lower kelani river basin
8. J A B N Jayawardana Gis based analysis on human-elephant conflict (hec) in polonnaruwa region
9. Shakthivel Kishoran Gis based road traffic accident analysis in batticaloa district, sri lanka
10. D A J S Kumara Application of webgis in infrastructure development projects: a case study in sabaragamuwa province
11. H M K Kumarasinghe Gis approaches for estimation of soil erosion in uma oya upper catchment area
12. K P A M K Luxmini Forest cover change detection using gis and remote sensing in mannar district
13. G L Pathirage Locational suitability for residential development in kandy district: gis based multi-criteria evaluation
14. S S K Sujanthy Investigation of factors responsible for land subsidence in matale area, sri lanka: a gis based approach
15. L R T C Weeraratne Application of gis in demarcation of land valuation zones (case study in gangawata korale dsd)
16. A M R N K Alahakoon Effects of land use in landslides: a case study in the haliela divisional secretariat division of the badulla district, sri lanka
17. K D N P Ranaweera Gis based analysis of utilization of clustered hospitals in jaffna district
18. J W M M P K Jayasinghe Landslide hazard zoning using open spatial data ; a case study in udadumbara & medadumbara divisional secratariats in sri lanka

### **M.Sc. – Information Technology**

01. E M T B Ekanayake Coursework M.Sc. degree
02. A C T Fernando Coursework M.Sc. degree
03. M T G G Jayathilaka Coursework M.Sc. degree
04. L P C D Karunananda Coursework M.Sc. degree
05. G V A C L Nanayakkara Coursework M.Sc. degree
06. R M S C Ranaweera Coursework M.Sc. degree

- |     |                    |                         |
|-----|--------------------|-------------------------|
| 07. | V Tharsinath       | Coursework M.Sc. degree |
| 08. | N Wickramasinghe   | Coursework M.Sc. degree |
| 09. | H G T S Dharmasena | Coursework M.Sc. degree |
| 10. | P S U De Silva     | Coursework M.Sc. degree |

***M.Sc. – Industrial Chemistry***

- |     |                      |  |
|-----|----------------------|--|
| 01. | L A A H Gunathilaka  | Antimicrobial and antioxidant activity of essential oil from allspice ( <i>Pimenta dioica</i> L. Merr)                         |
| 02. | S Sithamparapillai   | Use of <i>Phyllanthus emblica</i> plant materials to treat well water in Jaffna municipal council area                         |
| 03. | A M R Ruwan          | Comparison study of activated carbon, activated rice husk ash and activated sweet corn cob for wastewater treatment            |
| 04. | U B D Perera         | Determination of tetramethylthiourea disulphide (TMTD) content in natural rubber latex   |
| 05. | K S Weerathunga      | Effects of selected stabilizers and different storage temperatures on the physical & sensory properties of canned coconut milk |
| 06. | A N R Wickramasinghe | Utilizing rejected fly ash as an additive for cement blocks production   |

***M.Sc. – Industrial Mathematics***

- |    |                        |   |
|----|------------------------|---|
| 1. | E M E K Ekanayake      | The impact of the upwind angle for a wind driven iron smelting furnace in Sri Lanka         |
| 2. | R L Lokuhetti          | Synchronization in the multi-manufacturer multi-buyer integrated inventory                  |
| 3. | H M D P Bandarathilake | A stochastic differential equation approach to model wind speed forecasting                 |
| 4. | T Varathalingarajah    | A theoretical and analytical study of abruptly stopped axial Couette flow in annular region |

***M.Sc. – Medical Physics***

- |     |                      |   |
|-----|----------------------|---|
| 01. | M S P Marasinghe     | Quantitative evaluation of T1 using dual-flip-angle to distinguish lesions and non-lesions in human brain using magnetic resonance imaging  |
| 02. | S Colombage          | Survey of patient dose and safe use of radiation in computed tomography   |
| 03. | R L R A S Rajapaksha | A Survey Of Radiation Doses To Paediatric Patients Undergoing Common Fluoroscopic Examinations On A Conventional Fluoroscopy System In A Dedicated Paediatric Hospital In Sri Lanka |
| 04. | J Mahadevan          | The structural connectomic blueprint of Alzheimer's disease   |
| 05. | D K A Vithanage      | Computerized mass detection system for early detection of breast cancer   |

***M.Sc. – Medical Microbiology***

- |     |                  |  |
|-----|------------------|--|
| 01. | G G K Vidyaratne | Determination of the prevalence of <i>Campylobacter</i> species and their antibiotic sensitivity pattern among patients with diarrhea in a paediatric tertiary care Hospital |
| 02. | Y A Raddella     | A cross-sectional study on soil transmitted helminth infection in children in  |

- selected divisions of Hanthana tea estate, Kandy, Sri Lanka
03. T Thakshagini Antibiotic sensitivity patterns of extended spectrum beta cactomase producing coliforms isolated from patients with urinary tract infections presenting to an out patients department at a private hospital
04. M S Shihana Molecular mechanisms of carbapenem resistance among enterobacteriaceae isolated at teaching Hospital, Batticaloa

### **M.Sc. – Nanoscience & Nanotechnology**

01. R A Amarasinghe Calcium carbonate nanoparticles as cheap adsorbent of methylene blue
02. V C M Somarathna Pure chemical method to synthesize precipitated calcium carbonate nanoparticles from naturally occurring dolomite
03. M I Haseemdeen Design of a novel protein to protect telomere againststterf2: an approach towards cancer therapy
04. K Sivanathan Synthesis of nano-silica from two popular varieties of rice husk in batticaloa district in sri lanka
05. S Ehanathan Greenly synthesised iron nano particle (inp) and their application for degradation of volatile organic compounds (voc)
06. N M Gunawardana High yield and low cost synthesis of expanded graphite, graphene oxide and graphene from vein graphite
7. H L S K Hiniduma Synthesis of shape memory polyurethane polymers using commercially available oils and their incorporation into cotton fabric
8. D M M H Dahanayake Development of a biosensor using antigen-coated silver nanoparticles for the detection of leptospirosis
9. A W M V Ekanayake Enhancement of the efficiency of a dye-sensitized solid-state solar cell by eliminating the excess iodine in the cui hole conductor material
10. H B Ihalagedara In situ one step synthesis of phase selective super-hydrophobic calcium carbonate nanoparticles from sri lankan dolomite
11. G G T A Ranathunge Utilization of economical materials to synthesize magnesium oxide nanoparticles and graphene oxide based nanocomposite as an anti-cancer drug carrier
12. W R A P Ratnayake A model system to investigate drug loading and releasing using bacterial nanocellulose and bovine serum albumin

### **M.Sc. – Pharmaceutical Botany**

01. K K Y Dilhani Coursework M.Sc. degree
02. A R Godakanda Coursework M.Sc. degree
03. A P R Bandara Coursework M.Sc. degree
04. K G S R Rajapaksa Coursework M.Sc. degree
05. S M D S Samarakoon Coursework M.Sc. degree
06. M G T M Wijesinghe Coursework M.Sc. degree

### **M.Sc. – Physics of Materials**

01. R J G L R Kumara Development of multilayer graphene-based counter electrodes for dye-sensitized solar cells
02. H K D W M K U K Hapuhinna Characterization of natural pyrite (FeS<sub>2</sub>) for thermoelectric applications

03. A A B Madushani Fabrication and characterization of floated Graphite/Graphene based composite counter electrodes for dye – sensitized solar cells

### **M.Sc. – Science Education**

01. M J I K Wijesinghe Identification of some learning difficulties of physics concepts in mechanics among g c e a/l students and potential remedial measures
02. H S Peramunage Perspective of science teachers on in-service teacher training in Colombo District
03. M A D N Kumara Achievement level of Mathematics of junior secondary level students across gender and age level in Kegalle educational zone in Kegalle, Sri Lanka
04. A S Ajmeer Investigation of the student's achievement and motivation on the unit 'molecular shapes' at g c e (a/l) chemistry: a case study in Mawanella Educational Zone, Sri Lanka
05. L Vijayagowry A study on the conventional teaching and assessment versus skill oriented instruction and assessment to enhance generic skills through learning Biology in junior secondary school
06. A A U N Samarakoon Investigation of student's perception on selecting ICT as a basket subject for G C E (O/L) in Mawanella Education Zone
07. N W L Narangoda The impact of scientific literacy and motivation of grade 11 students on their performance in Science
08. D M P S Dissanayake Effectiveness of using activity based learning method to teach plant diversity for Seventh graders
09. W N Rukmalee Key factors affecting performance and enrolment in Science in Dimbulagala Education Zone
10. W M N D Wijenayeka Factors affecting the students' achievement in G C E (A/L) Biological Science Stream

### **M.Sc. – Water Resources management**

01. V Thadsayini Effects of rainfall variation on paddy cultivation in dry seasons in Trincomalee: case study on Thambalagamuwa village
02. P A S S Nawarathne Groundwater quality assessment in a hard rock terrain a case study in Kirindi Oya basin, Sri Lanka
03. D V S Samarasingha Evaluation of treatment efficiency of the serum from skim latex coagulation with different coagulants by aerobic microbes
04. K S G S Priyadarshanee Groundwater recharge mechanism of artesian wells and geothermal springs of Sri Lanka: a combined environmental isotope and hydrochemical study