

Lihil Uthpala Subasinghe

Lecturer, Department of Mechanical Engineering, University of Moratuwa, Sri Lanka

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Google Scholar : <https://scholar.google.com/citations?user=r5RUaGkAAAAJ&hl=en>

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EDUCATION

Degree	Institution	Dates	Subject Area
Doctor of Philosophy ¹	National University of Singapore	01/2016 – 05/2020	Li-ion/Na-ion Battery Technology
Bachelor of the Science of Engineering (Hons) ²	University of Moratuwa, Sri Lanka	07/2009 – 03/2014	Mechanical Engineering

¹ Thesis title : A Study of Heat Generation and Cycling Performance of Sodium-ion Cells

Download link : <https://scholarbank.nus.edu.sg/handle/10635/167126>

Supervisor : Associate Professor Palani Balaya, Department of Mechanical Engineering, National University of Singapore, SG 117575

² Academic standing: First Class (Overall GPA: 3.71/4.20)

a) Special Professional Qualifications

1. ISO 9712 qualified and certified personnel for Radiographic Testing - Level 1 (2012)
2. ISO 9712 qualified and certified personnel for Eddy Current Testing – Level 1 (2013)
3. ISO 9712 qualified and certified personnel for Dye Penetrant Testing – Level 1 (2013)

b) Memberships in professional bodies

1. Associate member - Institution of Mechanical Engineers (IMechE): Membership Number: 80537489
2. Associate member - The Institution of Engineers, Sri Lanka (IESL): Membership Number: AM-17183

c) Continuing Education / Training

1. Workshop Safety for Engineers (Live CPD), conducted by the Institution of Engineers Sri Lanka (July – September 2021)
2. Certificate Course in Teaching in Higher Education (CTHE), conducted by the Staff Development Centre of the University of Sri Jayewardenepura, Sri Lanka (Mar 2021)
3. Workshop on Scanning Electron Microscopy, jointly organized by Hitachi and National University of Singapore (Feb 2019)
4. E-training on “NUS Data Protection Policy and Personal Data Protection Act (PDPA) Guidelines”, conducted by the Office of Privacy and Compliance of National University of Singapore (Nov 2017)
5. Electrical Safety training, conducted by the Faculty of Engineering, National University of Singapore (Apr 2016)
6. Laboratory “Risk Assessment Application Training” conducted by the Faculty of Engineering, National University of Singapore (Mar 2016)

7. Chemical Safety training, conducted by the Office of Safety, Health, and Environment of National University of Singapore (Mar 2016)
8. Faculty Safety Induction Programme Training, conducted by the Faculty of Engineering of National University of Singapore (Feb 2016)

EMPLOYMENT

Position	Organisation	Dates
Senior Lecturer (Grade II)	University of Moratuwa, Department of Mechanical Engineering	12/2020 – Present
Lecturer (Visiting)	Sri Lanka Institute of Information Technology, Department of Mechanical Engineering	02/2022 – Present
Teaching Assistant	National University of Singapore, Department of Mechanical Engineering	01/2016 – 05/2017
Lecturer (Probationary)	University of Moratuwa, Department of Mechanical Engineering	12/2015 – 12/2020
Lecturer (Temporary)	University of Moratuwa, Department of Mechanical Engineering	08/2014 – 12/2015
Lecturer (Visiting)	General Sir John Kotelawala Defence University, Department of Mechanical Engineering	08/2014 – 12/2015
Instructor (Visiting)	University of Moratuwa Department of Mechanical Engineering	04/2014 – 08/2014
Mechanical Engineer (Trainee)	Colombo Dockyard PLC	05/2012 – 10/2012

TEACHING EXPERIENCE

a) Undergraduate courses taught and assisted in the University of Moratuwa

Year	Module	Intake/Field/Semester	Role	Class size
2023	ME1033 – Mechanics	2022/ENG,ER,TT/S1	Examiner & Practical Coordinator	993
2023	ME4632 – Automotive Engineering	2018/ME/S8	Module Coordinator, Lecturer, & Practical Coordinator	24
2023	ME2171 – Manufacturing Engineering	2020/ME/S4	Lecturer	111
2023	ME1803 – Introduction to Manufacturing Processes	2021/ENG,ER,TT /S2	Module Coordinator & Lecturer	149
2023	ME1071 – Manufacturing Technology	2021/ME/S2	Module Coordinator & Lecturer	102
2022	ME2161 – Fundamentals of Automotive Engineering	2020/ME/S3	Module Coordinator & Lecturer	110
2022	ME2024 – Manufacturing Processes	2020/ME/S3	Lecturer	120
2022	ME1803 – Introduction to Manufacturing Processes	2020/ENG,ER,TT/S2	Module Coordinator & Lecturer	114
2022	ME1071 – Manufacturing Technology	2020/ME/S2	Module Coordinator & Lecturer	128
2022	ME3200 – Machine Design Project	2019/ME/S5	Module Coordinator & Lecturer	109
2022	ME1033 – Mechanics	2021/ENG,ER,TT/S1	Examiner & Practical Coordinator	1000
2022	ME4632 – Automotive Engineering	2017/ME/S8	Module Coordinator & Lecturer	28
2022	ME2160 – Introduction to Automotive Engineering	2019/ME/S4	Module Coordinator & Lecturer	113
2022	ME2170 – Manufacturing Engineering II	2019/ME/S4	Lecturer	121

2021	ME3200 – Machine Design Project	2018/ME/S5	Module Coordinator & Lecturer	109
2021	ME2023 – Manufacturing Engineering I	2019/ME/S3	Lecturer	121
2021	ME4332 – Computer Aided Design and Manufacture	2017/ME/S7	Module Coordinator	55
2021	ME1033 – Mechanics	2020/ENG,ER,TT/S1	Lecturer	932
2020	ME4632 – Automotive Engineering	2016/ME/S8	Lecturer & Practical Coordinator	28
2020	ME2160 – Introduction to Automotive Engineering	2018/ME/S4	Module Coordinator & Lecturer	110
2020	ME2023 – Manufacturing Engineering I	2018/ME/S3	Lecturer	120
2020	ME1070 – Manufacturing Technology	2019/ME/S2	Module Coordinator & Lecturer	121
2020	ME1032 – Mechanics	2019/ENG,ER,TT/S1	Lecturer	850
2015	ME4710 – Aircraft Technology	2011/ME/S7	Lecturer	73
2015	ME4632 – Automotive Engineering	2010/ME/S8	Lecturer	53
2015	ME2170 – Manufacturing Engineering II	2013/ME/S4	Lecturer	98
2015	ME2092 – Mechanics of Machines	2013/ME/S3	Practical Coordinator	99
2015	ME1802 - Introduction to Manufacturing Engineering	2013/CS/S4	Lecturer & Practical Coordinator	125
2015	ME1822 – Introduction to Engineering Thermodynamics	2013/BM,CS,EN,MT,TT/S3	Lecturer	242
2015	ME1812 – Basic Thermal Sciences	2014/CE,ER/S2	Lecturer	176
2015	ME1802 - Introduction to Manufacturing Engineering	2014/CS,EE,TT/S2	Lecturer & Practical Coordinator	277
2015	ME1100 – Mechanics of Materials	2014/ME,EE,MT/S2	Practical Coordinator	253
2014	ME4710 – Aircraft Technology	2010/ME/S7	Lecturer	51
2014	ME1812 – Basic Thermal Sciences	2013/CE,ER/S2	Lecturer	171
2014	ME1802 – Introduction to Manufacturing Engineering	2012/CS/S4	Module Coordinator, Lecturer, & Practical Coordinator	125
2014	ME1802 – Introduction to Manufacturing Engineering	2013/EE,TT/S2	Practical Coordinator	154
2015	ME3052 – Machine Design and Projects	2012/ME/S5	Lecturer	109
2015	ME3812 – Machine Design	2012/MT/S5	Lecturer	52
2014	ME2602 – Motor Vehicle Technology	2012/ME/S3	Instructor	109
2014	ME2112 – Fluid Dynamics	2012/ME/S3	Instructor	109
2014	ME2092 – Mechanics of Machines	2012/ME/S3	Instructor	109
2014	ME1032 – Mechanics	2013/ENG,ER,TT/S1	Instructor	800

ENG: Engineering General Intake

ME: Mechanical Engineering

MT: Materials Science and Engineering

ER: Earth Resources Engineering

TT: Textile and Apparel Engineering

EE: Electrical Engineering

CS: Computer Science and Engineering

CE: Civil Engineering

BM: Biomedical Engineering

EN: Electronic and Telecommunication Engineering

b) Postgraduate courses taught and assisted in the University of Moratuwa

Year	Module (Course)	Intake/Term	Role	Class size
2023	ME5141 – Special Studies (MEng/PGDip in Manufacturing Systems Engineering)	2022/3	Module Coordinator & Lecturer	21
2022	ME5028 – Energy Storage Systems (MEng/PGDip in Energy Technology)	2021/2	Module Coordinator & Lecturer	34

2022	ME5141 – Special Studies (MEng/PGDip in Manufacturing Systems Engineering)	2020/3	Module Coordinator & Lecturer	53
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c) Courses taught and assisted in other institutions

Year	Module (Institution)	Intake/Field/ Year & Semester	Role	Class size
2023	ME3100 – Manufacturing Processes II (DOME-SLIIT)	2021/ME,MT/Y3S1	Module Coordinator & Lecturer	50
2022	FST391 – Mechanical Aspects of Food Technology (DFST-USJP)	2019/FST/Y3S2	Module Coordinator & Lecturer	55
2022	ME2100 – Manufacturing Processes I (DOME-SLIIT)	2021/ME,MT/Y2S2	Module Coordinator & Lecturer	70
2022	ME3100 – Manufacturing Processes II (DOME-SLIIT)	2020/ME,MT/Y3S1	Module Coordinator & Lecturer	50
2021	FST391 – Mechanical Aspects of Food Technology (DFST-USJP)	2018/FST/Y3S2	Module Coordinator & Lecturer	53
2017	EG1112 – Engineering Principles and Practices II (DOME-NUS)	2016-17/ME,EE/Y1S2	Teaching Assistant	80
2017	ME2121– Engineering Thermodynamics and Heat Transfer (DOME-NUS)	2015-16/ME/Y2S2	Teaching Assistant*	466
2015	MC4022 – Introduction to Transportation Technology (MC-KDU)	31/MC/Y2S4	Module Coordinator & Lecturer	20
2014	MC4022 – Introduction to Transportation Technology (MC-KDU)	30/MC/Y2S4	Module Coordinator & Lecturer	25

DOME-SLIIT: Department of Mechanical Engineering – Sri Lanka Institute of Information Technology

DFST-USJP: Department of Food Science and Technology – University of Sri Jayawardenepura

DOME-NUS: Department of Mechanical Engineering National University of Singapore

MC-KDU: General Sir John Kotelawala Defence University

ME: Mechanical Engineering

MT: Materials Science and Engineering

EE: Electrical Engineering

MC: Mechatronics Engineering

*Laboratory Teaching Assistant: Facilitating practical experiment sessions; preparation of marking rubrics and evaluating exams under the supervision of the course coordinator

d) CPD courses/training programmes taught and assisted in the University of Moratuwa

Year	CPD course/Training programme	Duration	Role	Class size
2022	Session on Hydraulics and Pneumatics for Dime Trainees	6 sessions (54 hours)	Programme Coordinator & Lecturer	20
2022	Design for Operation and Maintenance of Textile and Apparel Manufacturing Industry	6 sessions (48 hours)	Programme Coordinator & Lecturer	20

STUDENT SUPERVISION

a) Graduate student supervision (University of Moratuwa)

Research topic	Student Name	Programme	Main supervisor	Co-supervisors	Duration
Development of a commercial type lithium ion battery using Sri Lankan graphite	Haggallage SDH	M.Phil.	Witharana S	Subasinghe LU Wijayasinghe HWMAC Amaraweera THNG	12/2021 - Present

b) Postgraduate programme special study/research project supervision (University of Moratuwa)

Project Title	Student Name	Programme	Main supervisor	Co-supervisors	Duration
Feasibility study and analysis of suitable energy storage system for grid connected Solar PV in Sri Lanka	Kumudu SANE	M.Eng. in Energy Technology	Subasinghe LU	-	07/2021 - Present
Fire Containment of Commercially Used Lithium-ion Battery Cell Fires Onboard Aircrafts	Fonseka GHVPDJ	M.Eng. in Manufacturing systems Engineering	Subasinghe LU	-	01/2021 – 12/2022

c) Undergraduate final year projects (University of Moratuwa)

Project Title	Student Names	Main supervisor	Co-supervisors	Duration
Development of an Energy Recovering and Harvesting System for an Electric Bicycle (Intake 18)	Shayan G Niyaz MSM Partheepan T	Subasinghe LU	-	08/2022 – Present
Real-Time Emissions Monitoring System for An Automobile Engine (Intake 18)	Chamara SKAS Chamika NNHAW Dissanayake PG	Subasinghe LU	Jayathilaka WADM Gunarathne RMDS	08/2022 – Present
Design and Development of a Flywheel-Based Waste Energy Storage System for a Passenger Bus (Intake 18)	Dhananjaya MLT Weerakoon DAS Dharmadasa ESWSRM	Subasinghe LU	-	08/2022 – Present
Investigating Vehicle Yaw Stability with Torque Vectoring and Active Steering (Intake 18)	Herath RP Rajasuriya DMHHS Fonseka HSY	Gamage JR	Subasinghe LU	08/2022 – Present
Intelligent Disc Plough for Improving Productivity of Tilling Operations and Durability of Tilling Equipment (Intake 17)	Elangasinghe AI Fernando MPB Colomboge JS	Subasinghe LU	Perera ULS	05/2021 – 08/2022
An Improved Electromagnetic Suspension Strut for Modern Automobiles (Intake 17)	Napawala AM Arafath MAMJ Kabilan N	Subasinghe LU	Miyanawala TP	05/2021 – 08/2022
Design and Development of a Machine for Bulk Processing of Cinnamon (Intake 17)	Devinda GKS Induwara SVG Kumara UKS	Gamage JR	Subasinghe LU	05/2021 – 08/2022
Design and Development of an Areca Nut Harvesting Machine Suitable for Sri Lanka (Intake 17)	Dayarathna MDC Jananayake JAPM Nishshanka NAANN	Gamage JR	Subasinghe LU	05/2021 – 08/2022
Design and Development of an Energy Harvesting Back Cover for a Smartphone (Intake 17)	Dewapura PP Jayaweera TKDP Perera KASD	Miyanawala TP	Subasinghe LU	05/2021 – 08/2022
Design and Development of a Demonstrational Setup for a Hybrid Renewable Energy System (Intake 17)	Randika BL Jeevapriyanthan V Kalairaj T	Manthilake MMID	Subasinghe LU	05/2021 – 08/2022

SCHOLARLY AND PROFESSIONAL ACTIVITIES

a) Research and consultancy work

Research/Project Title	Nature of work	Organisation	Duration
Pilot Project for Converting 300 Conventional Tuk-Tuks to E-Tuk Tuks in Sri Lanka	Technical Consultant – Recommendation and evaluation of technical specifications for e-tuk tuks	United Nations Development Programme (UNDP) / Department of Motor Traffic (DMT) Sri Lanka	10/2022 – Present
Science and Technology Human Resource Development Project (STHRDP)	Technical Consultant – Recommendation of laboratory equipment for Automobile Laboratory and Mechanical Workshop of the Department of Engineering Technology, Sabaragamuwa University of Sri Lanka	Asian Development Bank (ADB) / Ministry of Education Sri Lanka	04/2022 – Present
Experimental and Theoretical Studies of Trisodium-1,3,5-Benzene Tricarboxylate as a Low-Voltage Anode Material for Sodium-Ion Batteries (Research Paper) DOI: https://doi.org/10.1002/ente.201801030	Support first author; <u>Tripathi A</u> by providing expertise on electrochemical impedance analysis	National University of Singapore	04/2018 – 04/2019
Developing High Power Li-ion and Na-ion Batteries: Synthesis and Electrochemical Characterization of Anode Materials (PhD Thesis) Link: https://scholarbank.nus.edu.sg/handle/10635/187320	Support the author; <u>Wang C</u> by providing expertise on calorimetry and electrochemical impedance analysis	National University of Singapore	06/2016 – 07-2020

b) Keynote speeches

1. **Subasinghe LU**, *Battery Safety*, Annual General Meeting of the IMechE Student Chapter of University of Moratuwa, 19 Aug 2021, University of Moratuwa, Sri Lanka.

c) Invited speeches

1. **Subasinghe LU**, *University; my second family*, Engineering Student Familiarisation Programme (2022 Intake), 01 Mar 2023, University of Moratuwa, Sri Lanka.
2. **Subasinghe LU**, *University; my second family*, Engineering Student Familiarisation Programme (2021 Intake), 09 Jun 2022, University of Moratuwa, Sri Lanka.
3. **Subasinghe LU**, *Life as an Engineering Student*, Engineering Student Familiarisation Programme (2020 Intake), 22 Jun 2021, University of Moratuwa, Sri Lanka.
4. **Subasinghe LU**, *Life as an Engineering Technology Student*, Engineering Technology Student Motivational Programme (2020 Intake), 09 Jul 2021, University of Jaffna, Sri Lanka.

d) Invited presentations

1. **Subasinghe LU**, *Lithium-ion Battery Safety*, DOME-UOM Research Seminars, 24 Sep 2020, University of Moratuwa, Sri Lanka.

2. **Subasinghe LU**, Wang C, and Balaya P, *Improving thermal safety of LTO anode-based high power lithium ion batteries using high conductivity electrolyte*, 2nd International Forum on the Safety of Lithium Ion Batteries, 8-10 Jun 2018, Beijing, China.
3. **Subasinghe LU**, Law M, Gajjala SR, Wang C, Du K, and Balaya P, *Development of thermally safe Na-ion batteries for Stationary Energy Storage Applications*, International Symposium on Lithium Ion Battery Safety (East China), 16-17 Jul 2019, Zhangjiagang, China.

e) Research or equivalent grants

Granting Agency	Subject	Grant value	Year	Principal Applicant	Co-applicant(s)
Senate Research Committee (SRC), University of Moratuwa	Capital Intensive (CAP) Grant - Development of a commercial type lithium ion battery using Sri Lankan graphite	5,000,000 LKR	2021	Witharana S	Subasinghe LU Wijayasinghe HWMAC Amaraweera THNG

f) Conference and event participation

Conference or Event	Organiser(s)	Role(s)	Location	Dates(s)
Paving Paths 2023	IESL Student Chapter, University of Moratuwa	Member of the panel discussion	Civil Auditorium, University of Moratuwa	03 rd Apr 2023
9 th Biennial Conference on Science and Technology (BICOST IX)	National Science and Technology Commission (NASTEC)	Technical Committee Member	Waters Edge, Battarabulla, Sri Lanka	23 rd and 24 th Mar 2023
Undergraduate Inventor of the Year (UIY) 2022	Institution of Engineers Sri Lanka (IESL)	Member of the honorary judge panel	IESL HQ, Colombo 07	04 th Dec 2022
Junior Inventor of the Year (JIY) 2021	Institution of Engineers Sri Lanka (IESL)	Member of the honorary judge panel	IESL HQ, Colombo 07	15 th Jan 2022
8 th International Conference of Sabaragamuwa University of Sri Lanka (ICSUSL)	Center for Research and Knowledge Dissemination, Sabaragamuwa University of Sri Lanka.	Panel Member	Sabaragamuwa University of Sri Lanka, Sri Lanka	02 nd Dec 2021
7 th Moratuwa Engineering Research Conference (MERCon)	Engineering Research Unit, University of Moratuwa.	Technical Co-chair	University of Moratuwa, Sri Lanka	27 th and 28 th Jul 2021
NUS Engineering Industry Day	Faculty of Engineering, National University of Singapore	Demonstrator	NUS Engineering, Singapore	21 st and 24 th Nov 2018
12 th International Conference on Ceramic Materials and Components for Energy and Environmental Applications (CMCEE)	The American Ceramic Society	Symposium Assistant	Suntec City, Singapore	22 – 27 Jul 2018
19 th International Meeting on Lithium Batteries (IMLB)	IMLB, LLC	Participant	Kyoto, Japan	17 – 22 Jun 2018
9 th International Conference on Materials for Advanced Technologies (ICMAT)	The Materials Research Society of Singapore (MRS-S)	Participant	Suntec City, Singapore	18 – 23 Jun 2017

Joint Workshop on Translational Research in Redox Flow and Lithium-ion Batteries	National University of Singapore - Centre for Energy Research and Technology (NUS-CERT)	Participant	University Hall, NUS, Singapore	08 Jun 2017
Travelling University ¹	The Institute of Applied Materials Flow Management (IfaS), Germany	Member	Kuliapitiya, Maradankadawala, Trincomalee and Jaffna, Sri Lanka	09 – 17 Oct 2014
Wayamba International Conference (WinC) 2014	Wayamba University of Sri Lanka	Participant	Kuliapitiya, Sri Lanka	29 – 30 Aug 2014

¹ Travelling University (TU) is an academic management seminar concept developed by The Institute of Applied Materials Flow Management (IfaS), Germany to develop practical solutions for Small and Medium Enterprises (SME) and regional authorities by using student creativity.

g) Reviewer duties (for Journals and Conferences)

Journal	Role	Dates
Journal of Mechatronics and Robotics	Reviewer – 1 paper	10/2018
American Journal of Engineering and Applied Sciences	Reviewer – 2 papers	07/2018

Conference	Role	Dates
University of Moratuwa Engineering Research Unit (ERU) Symposium 2021	Reviewer – 3 papers	07/2021
14 th Kotelawala Defence University International Research Conference (KDUIRC)	Reviewer – 2 papers	07/2021
7 th Moratuwa Engineering Research Conference (MERCon)	Reviewer – 1 paper	06/2021

h) Services and administrative duties

National Contributions

Organisational unit	Title / Nature of Duties	Dates
Ministry of Industries	Consultative Committee Member – Developing a National Policy for Automobile Assembling Industry	03/2023 – Present
Sri Lanka Standards Institution (SLSI)	Working Group Committee Member – Formulating National Standards for EV Charging Stations & Electric Vehicles	03/2023 - Present
National Science and Technology Commission (NASTEC)	Technical Committee Member – Preparing “Renewable Energy, Energy Storage and Green Hydrogen” report for 9 th Biennial Conference on Science and Technology (BICOST IX)	02/2023 – 03/2023
Department of Motor Traffic (DMT)	Technical Evaluation Committee Member - Recommending Specifications for registering electric motorcycles in the DMT	02/2023 – 03/2023
Industry Development Board (IDB)	Committee Member – Developing Standard Rules and Regulations for Design and Fabrication of Electric Vehicles	10/2022 - Present
Department of Motor Traffic (DMT)	Technical Evaluation Committee Chair – Recommending technical specifications for registering electric three wheelers in the DMT	08/2022 – 09/2022
Ministry of Industries	Consultative Committee Member - Reviewing the Procedures of Local Automobile Assembling	08/2022 - Present
Ministry of Industries	Cabinet Appointed Committee (CAC) Member – Assessing Locally Assembled Motor Vehicles	07/2022 – Present
Sri Lanka Standards Institution (SLSI)	Working Group Committee Member - Revising SLS 1212:2001- Sri Lanka Standard Specification for Passenger Car Tyres	03/2022 - Present

University of Moratuwa

Organisational unit	Title / Nature of Duties	Dates
DOME	Lecturer-in-charge – Automobile Laboratory	05/2023 – Present
DOME	President – Welfare Society	03/2023 - Present
DOME	Examiner – Trade tests for promotion of workshop-related employees of the University of Moratuwa	08/2022 – Present
DOME	Lecturer-in-charge – Mechanical Engineering Departmental Workshops	09/2021 – Present
IMechE ³	Chapter Counsellor – IMechE Student Chapter of the University of Moratuwa	08/2021 – Present
DOME	Member - Facilities Management Committee	03/2021 – 05/2023
DOME	Coordinator – Department News for University Newsletter	02/2021 – 05/2023
DOME	Committee member - Curriculum revision exercise for M.Eng./PG Diploma in Energy Technology	12/2020 – 06/2022
EAP Division ²	Member – University main website renovation team	07/2020 – 12/2020
DOME	C2 sub-committee member - IESL Washington Accord Accreditation exercise 2019	06/2020 – 07/2022
DOME	Committee member - Undergraduate curriculum revision exercise 2020/21	06/2020 - Present
DOME	Organising committee member - Department Industry Consultative Board (DICB) meeting 2015	04/2015 – 07/2015
DOME ¹	Administrative member – Department website development team	09/2012 - Present

¹Department of Mechanical Engineering

²External Affairs, Publicity and International Student Promotion Division

³Institution of Mechanical Engineers, United Kingdom

Other institutions

Organisational unit	Title / Nature of Duties	Dates
IMechE Sri Lanka Group	Committee Member	05/2023 - Present
DOET – SUSL	Final examination paper moderation and second marking of ET22023 - Computer Aided Design (Intake 2018)	10/2022 – 05/2023
DOET – SUSL	Final examination paper moderation and second marking of ET 31033 – Automobile Electronics (Intake 2017)	07/2022 – 05/2023
DOET – SUSL	Final examination paper moderation of ET 22033 - Manufacturing Processes II (Intake 2018)	11/2022
DOET – SUSL	Final examination paper moderation and second marking of ET 11023 - Workshop Technology & Practice (Intake 2019)	07/2022 – 10/2022
DOBST – SUSL ⁴	Final examination paper moderation and second marking of BST21092 – Computer Aided Designs for Technology (Intake 2018)	02/2022 – 06/2022
DOET – SUSL	Final examination paper moderation and second marking of ET 11023 – Manufacturing Processes I (Intake 2018)	02/2022 – 06/2022
DOET – SUSL	Final examination paper moderation and second marking of ET 21023 – Design of Machine Elements (Intake 2018)	02/2022 – 06/2022
DOET – SUSL	Final examination paper moderation and second marking of ET 22033 - Manufacturing Processes II (Intake 2017)	07/2021 – 10/2021
DOET – SUSL	Final examination paper moderation and second marking of ET22023 - Computer Aided Design (Intake 2017)	07/2021 – 10/2021
DOET – SUSL ³	Final examination paper moderation and second marking of ET 11023 - Workshop Technology & Practice (Intake 2018)	06/2021 – 09/2021

DOET – UOJ	Final evaluation of Final Year Project Presentations and Reports of Automobile Technology Specialisation students (Academic Year 2015-16)	10 & 12 Mar 2021
DOET – UOJ ²	Evaluation of Proposal Presentations for the Final Year Projects of Automobile Technology Specialisation students (Academic Year 2015-16)	14 & 15 Oct 2020
DOME – NUS ¹	Consolidating data for DOME – NUS Research Benchmarking	05/2017 – 06/2017

¹ Department of Mechanical Engineering, National University of Singapore

² Department of Engineering Technology, University of Jaffna

³ Department of Engineering Technology, Sabaragamuwa University of Sri Lanka

⁴ Department of Biosystems Technology, Sabaragamuwa University of Sri Lanka

ACADEMIC AWARDS AND HONOURS

Award	Institution	Year
NUS Research Scholarship	Ministry of Education in Singapore and National University of Singapore	2016
Special Recognition Award for receiving CATIA Award for Excellence	University of Moratuwa, Sri Lanka	2014
CATIA Award for Excellence (as One of the Five Winning Teams) at the EV Super Micro Mobility Design Contest -	Association for the Promotion of Electric Vehicles (APEV), Japan	2013
Mahapola Merit Scholarship Award	University Grant Commission, Sri Lanka	2009

PUBLICATIONS

a) Journal articles:

1. **L.U. Subasinghe**, S.R. Gajjela, C. Wang, M. Law, P. Balaya, A study on the capacity degradation in $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ cathode and hard carbon anode based sodium-ion cells, *Journal of The Electrochemical Society*. 169, 080507 (2022). <https://doi.org/10.1149/1945-7111/ac7e6f>
2. **L.U. Subasinghe**, C. Wang, S.R. Gajjela, M. Law, B. Manikandan, P. Balaya, A study on heat generation characteristics of $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ cathode and hard carbon anode-based sodium-ion cells, *Journal of Thermal Analysis and Calorimetry*. 147, 8631–8649 (2022). <https://doi.org/10.1007/s10973-021-11151-0>.
3. **L.U. Subasinghe**, S.R. Gajjela, A. Rudola, P. Balaya, analysis of heat generation and impedance characteristics of prussian blue analogue cathode-based 18650-type sodium-ion cells, *Journal of The Electrochemical Society*. 167, 110504 (2020). <https://doi.org/10.1149/1945-7111/ab9ee9>.
4. K. Du, C. Wang, **L.U. Subasinghe**, S.R. Gajjela, M. Law, A. Rudola, P. Balaya, A comprehensive study on the electrolyte, anode and cathode for developing commercial type non-flammable sodium-ion battery, *Energy Storage Materials*. 29, 287–299 (2020). <https://doi.org/10.1016/j.ensm.2020.04.021>.
5. Pihillegedara T, Udayanga N, Sampath R, Jayaweera ND, **Subasinghe LU**. Re-Configurable Supporting Structures for Aircraft Industry. *Institute for Construction Training and Development Journal* 2014;12:87–98.

b) Conference articles:

1. A. Elangasinghe, P. Fernando, J. Colombage, S. Perera, and **L.U. Subasinghe**, "A Theoretical Model to Analyze the Draft Force and Power Requirement of a Tillage Implement Consisting of Both a Disc Plough and a Subsoiler," *2022 Moratuwa Engineering Research Conference (MERCon)*, Moratuwa, Sri Lanka, 2022, pp. 1-6. <https://doi.org/10.1109/MERCon55799.2022.9906158>

2. D. Hewawasam, **L. Subasinghe**, H. Karunathilake, and S. Witharana, "Bottom-up cost modeling of lithium-ion battery cells for electric vehicle applications," *2022 Moratuwa Engineering Research Conference (MERCon)*, Moratuwa, Sri Lanka, 2022, pp. 1-6. <https://doi.org/10.1109/MERCon55799.2022.9906183>

3. **Subasinghe LU**, Mendis KDT, Chandima PKT, Jayaweera ND, De Silva CMSP. Fault Detection and diagnosis of an Automobile Engine using Instantaneous Angular Speed fluctuation. *Wayamba International Conference*, Kuliyaipitiya: 2014, p. 47.

c) Technical reports:

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e) Newspaper articles

1. D. Hewawasam, **L. Subasinghe**, and S. Witharana, "Sri Lankan graphite: To store energy and fix economy," *The Sunday Times*, Nov. 20, 2022. <https://www.sundaytimes.lk/221120/business-times/sri-lankan-graphite-to-store-energy-and-fix-economy-502005.html>

OTHER WORKS

a) University of Moratuwa

1. Facilitation and coordination of the Field Familiarisation Programme of Intake 2022
2. Facilitation and coordination of the Field Familiarisation Programme of Intake 2021
3. Facilitation and coordination of the Field Familiarisation Programme of Intake 2020

b) Media

1. Providing technical expertise for the conversion of conventional tuk tuks to electric tuk tuks in Sri Lanka
 - This interview was aired by DW News-Business on 19th May 2023

<https://www.dw.com/en/dw-business/video-65681301?fbclid=IwAR11irMyFugx238tGtb93sFSWUJQBeEjceUmjzO3LZVUvo40FX9mPcHVGU8>

2. Facilitation and preparation of the experimental setup for Li-ion battery abusive testing
 - This experiment was aired by Channel News Asia in Feb 2018
<https://www.youtube.com/watch?v=CkEkFjoFPIA>