# **Curriculum Vitae of Pararajasingham Peratheepan**

# **Professor in Physics**

Department of Physics, Faculty of Science, Eastern University, Vantharumoolai 30350, Sri Lanka

Email: peratheepanp@esn.ac.lk

Office: (+94) 652240754; Mobile: (+94) 778603504

### **Biographical Data**

Date of Birth : 12<sup>th</sup> October, 1974

N.I.C Number : 742860400V

Sex : Male

Nationality : Sri Lankan Tamil

Civil Status : Married

### **Educational Background**

## Ph.D. in Experimental Condensed Matter Physics, August 2013

University of Johannesburg, South Africa

Thesis: Thermal, electronic, and magnetic properties of the cage-structured rare-earth system  $RT_2Al_{10}$  (R = rare-earth and T = d-electron element);

https://ujdigispace.uj.ac.za/handle/10210/8858

Supervisor: Prof. A.M. Strydom, Department of Physics, University of Johannesburg

# M.Sc. in Physics of Materials, January 2007

Postgraduate Institute of Science, University of Peradeniya, Sri Lanka

Thesis: Study on physical and mechanical properties of *Bambusa vulgaris* and *Dendrocalamus* gigantius for possible value addition in industrial flooring

Supervisor: Prof. J.C.N. Rajendra, Department of Natural Sciences, Open University, Sri Lanka Co-supervisor: Prof. B.S.B. Karunaratne, Department of Physics, University of Peradeniya

# B.Sc. (Hons.) (Special Degree) in Physics, Second Class (Upper Division), February 2002

Eastern University, Sri Lanka

Dissertation: Construction of Hartshorn bridge and AC susceptibility measurements on para and diamagnetic materials

Supervisor: Dr. N. Pathmanathan, Department of Physics, Eastern University, Sri Lanka

# **Employment History at the Department of Physics, EUSL**

- Professor in Physics, from 12.10.2018 to date
- Senior Lecturer (Grade I) in Physics, from 27.03.2017 to 11.10.2018
- Senior Lecturer (Grade II) in Physics, from 08.10.2013 to 26.03.2017
- Lecturer (Probationary) in Physics, from 27.03.2006 to 07.10.2013
- Temporary Assistant Lecturer in Physics, from 01.08.2002 to 26.03.2006
- **Temporary Demonstrator** in Physics, from 01.03.2002 to 31.07.2002

# Administrative Positions held at the Department of Physics, EUSL

- Dean/ Faculty of Science, Eastern University, Sri Lanka
   From 25.02.2019 to 24.02.2022
- Head/Department of Physics, Eastern University, Sri Lanka
   From 01.12.2013 to 30.11.2016 (first term)
   From 01.12.2016 to 24.02.2019 (second term)
- Acting Head/Department of Physics, Eastern University, Sri Lanka
   From 01.11.2013 to 30.11.2013
- Coordinator/Department of Physics, Eastern University, Sri Lanka
   From 01.12.2006 to 21.10.2007

# Administrative Experience at the Faculty of Science and EUSL

- University Grants Commission (UGC) appointed me as Acting Vice-Chancellor twice (two weeks from 02.05.2019, and then from 11.10.2021 to 22.10.2021) when the Vice Chancellor was on overseas/medical leave. During this period I had to chair two crucial Special Council meetings: one is to recommend three names of Vice Chancellor candidates to UGC in September 2021; and another for resolving UGC intervened examination matter in October 2021. In addition, I looked after duties of the Office of Vice Chancellor many times when the Vice Chancellor was on duty/official leave.
- Currently serving as Chairman of the Curriculum Development Committee, Faculty of Science, EUSL from xxxx.
- Served as Chairman of the Research and Publication Committee, EUSL from Aug 2020 to Nov 2021.

- Chaired Faculty Board Meetings, Head's Meeting, Faculty Higher Degree Committee
   (FHDC) Meetings, Faculty Quality Assurance Cell (FQAC) Meetings, Gender Equity and
   Equality (GEE) Meetings, Progress Review Meetings of the ELTA-ELSE Project and
   Programme Review, and Faculty Student's Union Meetings during my Deanship.
- Shared and deliberated views and opinions in the Standing Committee on Sciences
  and in the Statutory Meetings (Council, Senate, Leave and Awards Committee,
  Probationary Study Leave Committee, University Higher Degree Committee, Senior
  Management Committee, Land and building Review Committee, etc).
- Served as Student Counsellor, Faculty of Science, Eastern University, Sri Lanka
   From16.11.2006 to 15.11.2007; from 04.06.2014 to 03.06.2015
   From 28.09.2016 to 27.09.2017; from 15.01.2018 to 24.02.2019
- Served as Coordinator, Internal Quality Assurance Cell (IQAC), Faculty of Science,
   EUSL, from 04.11.2013 to 08.06.2016.
- Served as Deputy Coordinator (Activity-1), Quality & Innovation Grant (QIG), HETC
   Project, from 01.01.2013 to 31.12.2013.
- Served as Coordinator for Soft-skills of the University Development Grant (UDG),
   HETC Project, Faculty of Science. From 17.02.2012 to 16.02.2015

#### Representations/Memberships/Contributions at EUSL and at other HE Institutions

- Served as Senate Nominee in the Professorial promotion evaluation panels of Dr. K. Vignaroopan (Physics, Jaffna), Dr. N. Varnakulendran (Unit of Siddha Medicine, EUSL), and Dr. K.T. Suntharesan (FHCS, EUSL).
- Chaired Professorial promotion evaluation panels of Dr. M. Sithambaresan and Dr. S. Arasaratnam (Chemistry, EUSL) and Dr. C.G. Devadason (Zoology, EUSL) and served in the selection committee.
- Served as **Senate Nominee** in the Grade I promotion evaluation panels of Mrs. Subathini Priyadharshan, Mr. T. Baskar, and Dr. P. Pretheepa.
- Reviewed the Partnership Research Proposal of Establishment of Centre for Nanodevices
   Fabrication and Characterization (CNFC) for the Faculty of Technology of the at
   Sabaragamuwa University of Sri Lanka through STHRD project.
- Served as **Selection Committee Member** for appointing Director/Staff Development Centre (SDC) and Chief Security Officer (CSO), and recruitment of many academics.

- Served as **Senate Nominee to Campus Board, Trincomalee Campus**, Eastern University, Sri Lanka from 19.09.2014 to 09.01.2016.
- Served as **Member of the Sports Advisory Committee**, EUSL from 05.05.2015 to 04.05.2016, 01.11.2016 to 30.10, 01.11.2016 to 30.10.2018, and from April 2023 to date.
- Contributed as a Member of the Self Evaluation Report (SER) Writing Team, Institutional
   Review (2016); Criterion 5: Student Assessments and Awards.
- Contributed as Member for Self Evaluation Report (SER) Writing for Programme Review (2022); Criterion 6: Innovative and Healthy Practices.
- Served as Member of Internal Quality Assurance Unit (IQAU), EUSL from 20.05.2015 to 19.05. 2018.
- Contributed as Member in the Senate Sub-committee to develop criteria to evaluate Applications of Emeritus Professorship.
- Contributed as Member in the Sub-committee of Leave and Awards Committee to study
  and prepare a report on Progress Review of the Annamalai University, India-Postgraduate
  Degree Programmes under intermittent/spread over study leave/ other entitled leave.
- Served as Chairman for Search Committee to identify and encourage potential candidates to apply for the post of Director/SVIAS at EUSL
- Served as **Chairman, Technical Evaluation Committee** for commissioning of Heavy Duty Generators, solar-net metering system, purchase a vehicle under lease agreement, etc.
- Served as **Academic Counsellor** at the Faculty of Science, EUSL for the Physical Science Students of academic year 2013/2014.
- Served as Member of Logistic Committee, International Conference held at EUSL in 2014.

### Awards, Fellowship and Prizes

- **President's Award for Scientific Publication-2015** by National Research Council (NRC) and Presidential Secretariat, Sri Lanka.
- **President's Award for Scientific Publication-2014** by National Research Council (NRC) and Presidential Secretariat, Sri Lanka.
- NRC Merit Award for Scientific Publication-2013 by National Research Council (NRC),
   Sri Lanka.
- NSF Travelling Fellowship under Overseas Special Training Programme (OSTP) by National Science Foundation (NSF), Sri Lanka, for research at the University of Johannesburg in South Africa from 02.08.2018 to 30.08.2018.

- **Doctor Sabaratnam Prize for Interventional Research-2016,** Annual General Convocation, EUSL held on 10.10.2016.
- **Commonwealth Scholarship** for PhD Study, Commonwealth Commission UK, 2008-2010.
- **Doctoral Merit Award** for PhD study, University of Johannesburg, South Africa, 2008.

#### **Research Grants**

- Awarded a research grant (40 million) for a research project on Optimizing Thermoelectric
  Performance of Rare-earth based Strongly Correlated Cage Materials by Electronic
  Substitution, under Development Oriented Research (DOR, 1-STEM) Grants of AHEAD
  project, EUSL.
- Awarded a research grant by EUSL for a research project on Design, construction and performance investigation of solar drying systems for agricultural and fishery products.
- Applied a research grant (7.24 million SL rupees) on Thermoelectric power generation from waste-heat using strongly correlated f-electron systems under Investigator Driven Research at the National Research Council (NRC) in November 2017 (not awarded).

# PhD/MPhil Thesis Evaluation

- Evaluated PhD thesis of A. A Hassan Altayeb (Student No: 3482090) on Chemical pressureinduced transition of the magnetic ground state from ferromagnetic to antiferromagnetic
  order in CeCuGe and DyCuln, University of the Western Cape, South Africa.
- Evaluated MPhil thesis of Mr. HDCN Gunawardana (ID No: 1816111003) on Surface
  potential and its local distribution on mixed films of polar and nonpolar molecules, and
  served as examiner for viva-voice at Sabaragamuwa University of Sri Lanka on 17.12.2021.
- Evaluated MPhil thesis of Mr. G.D.K.V. Maduwantha (ID. No: 2016111002) on Room temperature phosphorescience from pure organic molecules in benzyl framework, and served as examiner for viva-voice at Sabaragamuwa University of Sri Lanka on 14.07.2023.

# Postgraduate/Special Degree Research Supervision

Supervised Mr. T. Kamalakanthan's (Reg. No. EU/PGS/2013/MSCED/13) research project
 on Challenges faced by students in achieving expected level of proficiency in the
 engineering technology subject in G.C.E (A/L) technology stream in Batticaloa district
 schools, for partial fulfilment of MSc in Science Education degree.

Supervised Ms. A. Hamigah's Special Degree Research Project titled on Design and

Construction of an apparatus for Low-Temperature Magnetic Susceptibility Measurements

**Research Interests** 

Principal research interests lie in the synthesis of novel cage structured strongly correlated

electron materials, and investigating the underlying physical processes (as a function of

external control parameters of temperature and magnetic field) which results exotic

electronic ground states of 4f-electron magnetism due to enigmatic electron-electron

interactions. Detail available at: https://esn.ac.lk/research/research-groups

Secondary research interest lie in development and performance evaluation of solar drying

systems for agricultural and fishery products.

**Publications Emanating from Research** 

(a) Scientific Articles in International Indexed Journals

Detail available at:

Scopus ID: https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=36537891200&zone=

Publons (Web of Science): https://www.webofscience.com/wos/author/record/454494;

**ResearcherID:** http://www.researcherid.com/rid/D-5075-2018

Google Scholar: https://scholar.google.com/citations?hl=en&user=5thLQoEAAAAJ

• D.D. Khalyavin, A.D. Hiller, D.T. Adroja, A.M. Strydom, P. Manuel, L.C. Chapon,

P. Peratheepan, K. Night, P. Deen, C. Ritter, Y. Muro and T. Takabatake, Long-range

magnetic order in CeRu<sub>2</sub>Al<sub>10</sub> studied via muon spin relaxation and neutron diffraction,

Physical Review B 82 (2010) 100405(R).

No of times cited: 129

Publisher: The American Physical Society (APS)

• A.M. Strydom and P. Peratheepan, Magnetism and electronic correlations in the iron

aluminides  $RFe_2Al_{10}$  (R = Y, Yb), Physica Status Solidi-Rapid Research Letters 4 (2010) 356.

No of times cited: 15

Publisher: Wiley-VCH Verlag GmbH & Co.KGaA, Weinheim

• A.M. Strydom, P. Peratheepan, R. Sakar, M. Baenitz, and F. Steglich, Electronic correlation

effects in LaFe<sub>2</sub>Al<sub>10</sub> (Ln = Y, Yb), Journal of the Physical Society of Japan **80** (2011) SA043.

No of times cited: 7

Publisher: The Physical Society of Japan

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A.M. Strydom, P. Khuntia, M. Baenitz, P. Peratheepan, and F. Steglich, Fluctuations and ferromagnetic instability in YFe<sub>2</sub>Al<sub>10</sub>: the role of Fe stoichiometry, Physica Status Solidi B 250 (2013) 630.

No of times cited: 3

Publisher: Wiley-VCH Verlag GmbH & Co.KGaA, Weinheim

D.T. Adroja, A.D. Hillier, Y. Muro, J. Kajino, T. Takabatake, P. Peratheepan, A.M. Strydom,
 P.P. Deen, F. Demmel, J.R. Stewart, J.W. Taylor, R.I. Smith, S. Ramos, and M.A. Adams,
 Competing 4f-electron dynamics in Ce(Ru<sub>1-x</sub>Fe<sub>x</sub>)<sub>2</sub>Al<sub>10</sub> (0≤x≤1.0): magnetic ordering emerging
 from the Kondo semiconducting state, Physical Review B 87 (2013) 224415.

No of times cited: 32

Publisher: The American Physical Society (APS)

P. Khuntia, P. Peratheepan, A. Strydom, Y. Utsumi, K.-T. Ko, K.-D. Tsuei, L. H. Tjeng, F. Steglich, and M. Baenitz, Contiguous 3d and 4f magnetism: towards strongly correlated 3d electrons in YbFe<sub>2</sub>Al<sub>10</sub>, Physical Review Letters 113 (2014) 216403.

Supplement Material: http://link.aps.org/supplemental/10.1103/PhysRevLett.113.216403

No of times cited: 15

Publisher: The American Physical Society (APS)

• **P. Peratheepan** and A.M. Strydom, *Electronic, magnetic, and transport properties of the isotopic aluminides*  $SmT_2AI_{10}$  (T = Fe, Ru), Journal of Physics: Condensed Matter **27** (2015) 095604.

No of times cited: 7

Publisher: Institute of Physics, UK

D.T. Adroja, A.D. Hillier, C. Ritter, A. Bhattacharyya, D.D. Khalyavin, A.M. Strydom,
 P. Peratheepan, B. Fak, M.M. Koza, J. Kawabata, Y. Yamada, Y. Okada, Y. Muro, T. Takabatake, and J. W. Taylor, Contrasting effect of La substitution on the moment direction in the Kondo semiconductor CeT<sub>2</sub>Al<sub>10</sub> (T = Ru, Os), Physical Review B 92 (2015) 094425.

No of times cited: 10

Publisher: The American Physical Society (APS)

E. Carleschi, B.P. Doyle, J.L. Snyman, E. Magnano, S. Nappini, I. Pis, F. Bondino,
 P. Peratheepan, and A.M. Strydom, Evidence for strong f-d hybridization in intermetallic ferromagnet CePdIn<sub>2</sub>, Physical Review B 92 (2015) 235137.

No of times cited: 3

Publisher: The American Physical Society (APS)

P. Peratheepan, A.M. Strydom, and D. Britz, Effects of Y- and La-doping on the magnetic ordering, Kondo effect, and spin dynamics in Ce<sub>1-x</sub>MxRu<sub>2</sub>Al<sub>10</sub> J. Phys.: Condens. Matter 33 (2021) 275602.

#### No of times cited: 1

Publisher: Institute of Physics, UK

- **P. Peratheepan**, P. Maheshwaran, F.C. Ragel, *Review of strongly correlated cage compounds* and its potentiality for thermoelectric applications, submitted to the journal of The African Review of Physics.
- P. Peratheepan, M.O. Ogunbunmi, and A.M. Strydom, Spin-glass state formation and excitonic mass enhancement in the heavy-fermion compound PrRuSn (to be submitted to Physical Review B).
- **P. Peratheepan**, K. Ramesh Kumar, and A.M. Strydom, Magnetism and its interplay with crystal field effects in PrFe<sub>2</sub>Al<sub>10</sub> and PrRu<sub>2</sub>Al<sub>10</sub> (in preparation).
- **P. Peratheepan**, B.N. Sahu, and A.M. Strydom, Magnetoresistance and magnetocaloric effect in the field-induced metamagnetic compound GdRu<sub>2</sub>Al<sub>10</sub> (in preparation).

## (b) Scientific Articles in Peer-Reviewed Journals/Proceeding

- **P. Peratheepan**, C. Nishan, and F.C. Ragel, Design, construction, and performance evaluation of a solar tunnel dryer with an auxiliary flat-plate solar air heater for bitter gourd drying (*Momordica charantia*), (submitted to Journal of Science in December 2022).
- P. Peratheepan, J.C.N. Rajendra, and B.S.B. Karunaratna, Study on physical and mechanical properties of Bambusa vulgaris and Dendrocalamus gigantius for industrial flooring, Ceylon Journal of Science: Physical Sciences, 14 (2008) 39.
- P. Peratheepan and N. Pathmanathan, Construction of Hartshorn bridge and AC susceptibility measurements on para and diamagnetic materials, Proceeding of the 2<sup>nd</sup> Annual Research Session, Eastern University, (2002) 121.

#### (c) Abstracts in Peer-Reviewed Proceedings of the Conferences

• **P. Peratheepan** and A.M. Strydom, *Exploratory studies of the cage-type compound*  $SmFe_2AI_{10}$ ,  $54^{th}$  Annual Conference of South African Institute of Physics, University of Kwazulu-Natal, Durban, South Africa (2009).

- P. Peratheepan, A. Thamizhavel, and A.M. Strydom, Exploratory physical properties of single crystal CeRu<sub>2</sub>Al<sub>10</sub>, 54<sup>th</sup> Annual Conference of South African Institute of Physics, University of Kwazulu-Natal, Durban, South Africa (2009).
- **P. Peratheepan** and A.M. Strydom, *Evolution of magnetic phase transition in Ce<sub>x</sub>La<sub>(1-x)</sub>Ru<sub>2</sub>Al<sub>10</sub> compounds*, 55<sup>th</sup> Annual Conference of South African Institute of Physics, CSIR, Pretoria, South Africa (2010) p. 75.
- **P. Peratheepan** and A.M. Strydom, *Electronic and Thermal Transport Properties in the Ce<sub>x</sub>La<sub>(1-x)</sub>Ru<sub>2</sub>Al<sub>10</sub> system, 55<sup>th</sup> Annual Conference of South African Institute of Physics, CSIR, Pretoria, South Africa (2010) p. 79.*
- P. Peratheepan and A.M. Strydom, Thermal transport in the cage-compounds RFe<sub>2</sub>AI<sub>10</sub> (R=Y, Yb), 56<sup>th</sup> Annual Conference of South African Institute of Physics, UNISA, Pretoria, South Africa, (2011) p. 131.
- D.T. Adroja, A.D. Hillier, P. Peratheepan, A.M. Strydom, Y. Muro, J.R. Stewart, J. Taylor, F. Demmel, P.P. Deen, and T. Takabatake, Neutron scattering and μSR studies of spin gap formation in Ce<sub>1-x</sub>La<sub>x</sub>Ru<sub>2</sub>Al<sub>10</sub>, International Conference on Strongly Correlated Electron Systems, United Kingdom, (2011).
- J.L. Snyman, A.M. Strydom, and P. Peratheepan, The magnetocaloric effect in CePdIn<sub>2</sub>,
   International Conference on Strongly Correlated Electron Systems, United Kingdom, (2011).
- D.T. Adroja, P.P. Deen, A.D. Hillier, Y. Muro, J. Kajino, T. Takabatake, A.M. Strydom, P. Peratheepan, F. Demmel, J. R. Stewart, and J. Taylor, Evidence of a spin gap above the magnetic ordering temperature and crystal field excitations in CeOs<sub>2</sub>Al<sub>10</sub>, International Conference on Magnetism, Korea (2012) p. 333.
- D.T. Adroja, A.D. Hillier, Y. Muro, J. Kajino, T. Takabatake, P. Peratheepan, A.M. Strydom,
   P.P. Deen, J. R. Stewart, J. Taylor, F. Demmel, and M. Adams, Study of long-range magnetic ordering and spin gap formation in Ce(Ru<sub>1-x</sub>Fe<sub>x</sub>)<sub>2</sub>Al<sub>10</sub> through μSR and neutron scattering measurements, International Conference on Magnetism, Korea (2012) p. 334.
- P. Peratheepan and A.M. Strydom, Effects of Fe substitution for isoelectronic Ru on the magnetic and transport properties of CeRu<sub>2</sub>Al<sub>10</sub>, The European Conference Physics of Magnetism, Poznań, Poland (2014) p. 76.
- S. Hamigah, P. Peratheepan, and F.C. Ragel, Development of an apparatus for lowtemperature magnetic susceptibility measurements, Wayamba University International Conference, Sri Lanka (2014) p. 20.

#### (d) Reviewer/Editorial Board

- Serving as **reviewer for the Journal of Physics: Condensed Matter**, Institute of Physics, UK.
- Serving as a Member in the Editorial Board, Journal of Science (JSc), EUSL.
   https://fsc.esn.ac.lk/jsc/board.html

## **Guest Speech/Presentation in Conferences and Seminars**

- Delivered a guest speech on Recent Advances in Renewable Energy Technologies for Sustainable Development at the 5<sup>th</sup> International Research Conference (TRInCo 2022) held at Trincomalee Campus, EUSL on held on 10<sup>th</sup> November 2022.
- Presented a poster on a comparative study of Y- and La-doping on the magnetism in Ce<sub>1-x</sub>M<sub>x</sub>Ru<sub>2</sub>Al<sub>10</sub>, 6<sup>th</sup> August 2013 in the International Conference on Strongly Correlated Electron Systems, University of Tokyo, Tokyo (2013).
- Presented two posters on exploratory studies of the cage-type compound SmFe<sub>2</sub>Al<sub>10</sub> and on exploratory physical properties of single crystal CeRu<sub>2</sub>Al<sub>10</sub>, 54<sup>th</sup> Annual Conference of South African Institute of Physics, University of Kwazulu-Natal, Durban, South Africa (2009).
- Presented a poster on evolution of magnetic phase transition in Ce<sub>x</sub>La<sub>(1-x)</sub>Ru<sub>2</sub>Al<sub>10</sub> compounds,
   55<sup>th</sup> Annual Conference of South African Institute of Physics, CSIR, Pretoria, South Africa (2010).
- Delivered a talk in the promotional seminar on electronic correlation effects in the cagestructured rare-earth system  $RT_2Al_{10}$  (R = rare-earth and T = d-electron element), 13<sup>th</sup> October 2011 at the Physics Department in University of Johannesburg, South Africa.
- Delivered a talk in the seminar on a comparison study: magnetic, thermal and transport properties of antiferromagnetic compounds  $SmT_2Al_{10}$  (T=Fe,Ru),  $30^{th}$  April 2010 at the Physics Department in University of Johannesburg, South Africa.
- Delivered a talk in the National Conference on Advance Materials for Emerging Technologies
  on study on physical and mechanical properties of Bambusa vulgaris and Dendrocalamus
  gigantius for industrial flooring, University of Peradeniya, Sri Lanka (2007)

#### **Workshops, Seminars, and Training Programmes**

- Delivered a talk on *Employment Rate and Areas of the Employment of Graduates of the Faculty*, at the Faculty Day of Science held on 1<sup>st</sup> October, 2022 at EUSL.
- Conducted a workshop on Introduction to Career Pathways to the Faculty of Applied
   Science students of the Trincomalee campus on 10<sup>th</sup> March 2021.

- Conducted a workshop on Personality Development and Positive Mental Attitude (2 hours) organized by the Career Guidance Unit (CGU), EUSL on 19<sup>th</sup> Sept 2018.
- Conducted a Workshop on Positive attitude, self-motivation and self-esteem for better personality development (3 hours) organized by the Career Guidance Unit (CGU), EUSL on 25<sup>th</sup> September 2018.
- Conducted Orientation Programmes on Examination Rules, Regulations, Offences, and Punishments for students of the academic years: 2013/2014, 2015/2016, 2016/2017, and 2017/2018.
- Attended three days intensive residential training programme on Student Centred Learning (SCL) conducted by the Staff Development Centre of the Wayamba University of Sri Lanka from 28<sup>th</sup> to 30<sup>th</sup> March 2014.
- Attended workshop on e-Learning Material Development conducted by the Staff Development Center, Eastern University, on 20<sup>th</sup> May 2017.
- Attended the National Training Seminar and the Workshop on Developing the Technology and Innovation Support Centre Project and Innovation Support through Access to Technological Knowledge conducted by the National Intellectual Property Office (NIPO) and World Intellectual Property Organization (WIPO) on 4<sup>th</sup> and 5<sup>th</sup> September 2013.
- Attended the Seminar on Scientific Research: Planning, Implementation and Dissemination, conducted by the Staff Development Center (SDC), Eastern University on 21<sup>st</sup> September, 2016.
- Attended the Workshop on Human Values and Work Ethics conducted by the Staff Development Center (SDC), Eastern University on 19<sup>th</sup> January, 2016.
- Attended the Workshop on Organizational Results Framework (ORF) for EUSL conducted by the Staff Development Center (SDC) on 23<sup>rd</sup> April 2016.
- Attended the Workshop on *Power of Positive Thought* conducted by the Staff Development Center (SDC), Eastern University on 20<sup>th</sup> June, 2017.
- Attended the workshop on Student Counselling, conducted by the Staff Development Center (SDC), Eastern University on 3<sup>rd</sup> February, 2018.
- Attended the Workshop on Land Laws: Current Issues in Land Administration conducted by the Staff Development Center (SDC), Eastern University on 4<sup>th</sup> July, 2017.

- Attended an Interactive Programme on Transforming Education for the Digital Age, conducted by the Microsoft Sri Lanka at the General Sir John Kotelawala Defence University on 10<sup>th</sup> January 2014.
- Attended a two-days Training Programme on Developing Enterprising Graduates-Creating a
  university enterprise and entrepreneurship agenda conducted by the Ministry of Higher
  Education from 11<sup>th</sup> to 13<sup>th</sup> March 2015 in Colombo.
- Attended the workshop on Sri Lanka Qualifications Framework (SLQF) for Sciences Faculties
  in the University System, UGC, Sri Lanka, 24 June 2016.
- Attended the workshop on *Moderanizing Carriculam*, Faculty of Science, Eastern University, 19-20 January, 2015.
- Attended the workshop on *Horizon 2020: Collaborating with EU Researches for Research Excellence*, UGC, Sri Lanka, 2 December 2014.
- Participated in the intensive Residential Training Program on Student Centered Learning,
   Staff Development Centre, Wayamba University of Sri Lanka, 28-30 March 2014.
- Participated in the National Training Workshop and Seminar on Developing the Technology and Innovation Support Centre Project and Innovation Support through Access to Technological Knowledge, National Intellectual Property Office and World Intellectual Property Organization, 4-5 September 2013.
- Participated in the 6<sup>th</sup> Science Conclave, Indian Institute of Information Technology (IIIT),
   Allahabad, 8-14 December 2013.
- Participated in the training workshop on Participatory Rural Appraisal and Planning (PRAP),
   Office of CIDA Restore Project, Eastern University, Sri Lanka, 2007.
- Attended the National Conference on Advanced Materials for Emerging Technologies
   (NCAMET), Postgraduate Institute of Science (PGIS), University of Peradeniya, 21-22 July
   2007.
- Attended the International Conference on Reviewing the Past and Reshaping the Future,
   EUSL, 7-8 December 2006.
- Asian Conference on Solar Energy Materials and Solar Cells, PGIS, University of Peradeniya,
   14-16 June 2006.
- Attended workshop on Corporate Plan, Faculty of Science, Eastern University, 25 April 2006.
- Attended workshop on Scientific Writing, Postgraduate Institute of Science, University of Peradeniya, 26<sup>th</sup> March 2004.

# **Professional Qualifications**

- Successfully completed the Teaching Methodology Course conducted by the Staff
   Development Centre of Eastern University, Sri Lanka on 23<sup>rd</sup> June 2011
- National Certificate in Computer Applications (NCCA) conducted by the Department of Examinations (1998).
- Proficiency Test in English conducted by the English Language Teaching Unit, Eastern University, Sri Lanka (1997).
- Diploma in Computer Systems Engineering (Software) conducted by the Myown Computer Systems Pvt (Ltd) (1996).

#### **Teaching and Scientific Communication**

- Lectures conducted for BSc General Degree: General Physics (PH 1013), Thermodynamics (PH 2021), Electromagnetic Phenomena (PH 2062), Atomic Physics (PH 3021), and Energy and Environment (PH 3091).
- Lectures conducted for BSc Special Degree: Classical Mechanics (PH 4022), and Electromagnetic Theory and Waves (PH 4073).
- Lectures conducted for MSc in Science Education: Physics Pedagogy (MSED 2556), Teaching
   Basic Concepts in Physics (MSED 2557), and Nuclear Physics (MSED 2564).
- Moderator and Second examiner for Faculty of Applied Science, Trincomlee Campus, EUSL:
   Electricity and Magnetism (EE 1224), Elementary Quantum Mechanics (PH 2123), Solid State
   Physics (PH 2121), and Physics of Energy (PH 3224).
- Moderator and Second examiner for Faculty of Technology, EUSL: Fundamentals of Physics (MDS 11042(R), MDS 11022), Macroscopic Physics (MDS 12011), Renewable Energy Systems (BST 23061), and Bioenergy Systems (BST 24022).
- Moderator and Second examiner for Faculty of Applied Sciences, South Eastern University
   (SEUSL): Advanced Classical Mechanics (PHS 73132).

#### **Competency in Advanced Experimental Techniques for Research**

 Performing various low-temperature temperature- and magnetic field-dependent physical property measurements in computer controlled Quantum Design (QD) PPMS, QD MPMS, and QD Dynacool systems using MultiVu data acquisition software. Performing X-Ray Diffraction measurements on computer controlled Philips PanAnalytical X'Pert
 Pro powder diffractometer, and scanning electron microscopy (SEM) and electron probe
 microanalysis (EPMA) on JEOL and CAMECA analysis system respectively.

# **Contributions at National Level and at HE Institutions**

• Conducted the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> introductory workshops as resource person on Science Research Projects Competition (SRPC) conducted by National Science Foundation (NSF).

Dates: 01.07.2015, 28.06.2016, and 22.06.2017, 26.06. 2018

Served as Evaluator/Chief Editor for Compilation of Science Text Books under New Syllabus,
 organized by the Educational Publication Department.

Text Books: G.C.E (A/L) Science for Technology (Physics, Part-II) – Tamil Medium

Grade 11 Part I and II – Tamil medium

Grade 11 Smart Book – Tamil Medium

Grade 10- Part I and II – Tamil Medium

Grade 8 – Second Edition – Tamil medium

Grade 6 – part I and II – Tamil and English Medium

- Conducted Teacher Training Programme to introduce Teacher's Guide with New Physics
   Syllabus for G.C.E (A/L) Teachers organized by the National Institute of Education (NIE) of
   Sri Lanka on 29<sup>th</sup> June 2018.
- **Served as Chief Examiner for Physics**, G.C.E (A/L) Examination, Department of Examinations in 2014-2017, 2019-2022.
- Served as Co-controller of Examination for G.C.E (A/L) Physics Examination, Department of Examinations from 2020 to date.
- Contributed in the National Seminar conducted for developing the Basic Science Research
  Policy for Sri Lanka, by the National Science and Technology Commission (NESTEC) at the
  National Institute of Fundamental Studies (NIFS) in Kandy on 16<sup>th</sup> May 2018.
- Visiting Lecturer in Physics, Faculty of Natural Sciences (Batticaloa Branch), Open University of Sri Lanka (OUSL), Sri Lanka. [PYU 1160 /PHU 3300, PYU 1161, PYU 1162, PYF 2204]
- Visiting Lecturer in Physics, Department of Applied Sciences, South Eastern University of Sri
   Lanka. [PHS 41052 (Special Degree), PHC 17 & PHM 171 (General Degree)]

#### **Professional Referees**

1. Prof. A.M. Strydom

Research Professor and former Vice-Dean: Research and Postgraduate Studies

Department of Physics, University of Johannesburg

PO Box 524, Auckland Park 2006, South Africa

Office: +27 (0)11-559-2320/2327

E-mail: amstrydom@uj.ac.za

2. Prof. F.C. Ragel

Professor of Physics and former EUSL Vice Chancellor

Department of Physics, Eastern University

Vantharumoolai, Chenkalady 30350, Sri Lanka

Office: +94 (0)65-224-0754

E-mail: chalmusragel@esn.ac.lk

3. Prof. J.C.N. Rajendra

Senior Professor in Physics and former Dean/ Faculty of Natural Sciences

Faculty of Natural Sciences, Open University Sri Lanka

PO Box 21, Nawala, Nugegoda, Sri Lanka

Office: +94 (0)11-288-1096

E-mail: jcraj@ou.ac.lk

I do hereby certify that the above particulars are true and accurate to the best of my

knowledge.

Prof. P. PERATHEEPAN

B.Sc.(Heris) (EUSL), M.Sc.(PGIS, UPDN),
PhD (Johannesburg, South Africa)
Professor in Physics
Department of Physics
Eastern University, Sri Lanka

Signature 04.08.2023

-Date