

Punniamoorthy Ravirajan

BScHons(Physics)(Jaffna), MSc(Peradeniya), DIC, PhD(London)
(DoB - 11.11.1969)

Commonwealth Scholar and Fellow Senior Professor (Chair) of Physics and Dean / Faculty of Science University of Jaffna, Sri Lanka

Academic and Research Excellence

Academic Qualifications

- BScHons (Physics) University of Jaffna 1991-1994 (Rank 2)
- MSc in Material Physics
 University of Peradeniya
 1997-1999 (Rank 1)
- DIC, PhD in Physics
 Imperial College London
 2001-2004 (5 papers in SCI based on the thesis)

Scholarships & Fellowships

- **General Commonwealth Scholarship** 2001-2004 (5 papers in SCI)
- Imperial College Fellowship 2006 (3 Months) (2 papers in SCI))
- Royal Society Visiting Fellowship 2008 (3 Months) (2 papers in SCI)
- Commonwealth Fellowship 2014 (3 Months) (3 papers)

<u>Impact of the HRNCET project</u> output

- A state-of-the-art Research lab establishment
- Master degree curriculum development
- 35+ papers in Q1/Q2 Journals
- Organised 3 Mega conferences
- 12+ MPhil/PhDs & 9 Masters
- SL's First floating solar plant
- 40+ staff and students exchange



Recognition

- Elected Fellow of the National Academy of Sciences Sri Lanka Since 2023
- Top 100 Asian Scientists by Asian Scientist Magazine

National Awards

- CVCD Excellence Award for the Most
 Outstanding Young Researcher 2006
 Committee of Vice Chancellors and Directors
 (CVCD)
 - Young Scientist Award 2008
 SCOPUS, Elsevier Publisher, The Netherlands and National Science Foundation, Sri Lanka
- Presidential Award for Excellence in Research (5 times) National Research Council 2004, 2005, 2006, 2007, 2008 & 2017
- NRC Merit Award Research Publication 2019

Google Scholar profile

 Support Scheme for Supervision of Research Degrees (SUSRED) Award

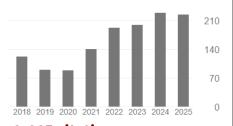
National Science Foundation, Sri Lanka 2023 (for three theses) & 2024

Research Publication Records

Total no. of citations:

- ·3,466 GoogleScholar
- •2,665 <u>Scopus (Elsevier)</u>
- ·2,133 Publons (Web of Science)

	All	Since 2020
Citations	3466	1075
h-index	23	18
i10-index	44	32



280

65 publications listed in SCOPUS with an h-index of 20 and over 2,665 citations

Employment Record

Year of Appointment	Position	Period (years)
October 2017	Senior Professor (in/of Physics)	8
October 2009	Professor in Physics	8
November 2008	Associate Professor in Physics	1
March 2005	Senior Lecturer in Physics	3
December 1996	Lecturer in Physics	8

Visiting Appointment in UK

- Imperial College Fellowship (2006): Undertook a three-month collaborative research programme at Imperial College, University of London, UK.
- **Royal Society Visiting Fellowship (2008):** Engaged in a three-month collaborative research project at Imperial College, University of London, UK.
- **Commonwealth Fellowship (2014):** Completed a three-month collaborative research programme at Imperial College, University of London, and the University of Edinburgh, UK.
- Research Associate (October 2004 March 2005): Appointed at Imperial College, University of London, for collaborative research activities.

Administrative/Leadership role

Year of Appointment	Administrative / leadership role position / member of the governing bodies	Period (years)
Jun. 2020	Dean, Faculty of Science (Re-elected in June 2023)	5
Nov. 2015	Elected Senate member of the Council (Re-elected in Nov. 2018)	5
Jul. 2018	Director, International Collaboration Unit (Re-appointed in Aug. 2021)	5
Nov. 2016	Chairman, University Research Committee (Re-appointed in Nov. 2019)	5
Nov. 2011	Director, Staff Development Centre (Re-appointed in 2014 & 2017)	7
Sep. 2010	Head, Department of Physics (Re-appointed in Oct. 2013)	6

Strategic Focus: Major Contributions to Institutional Development

- Policy Development: Co-authored the following key institutional documents, including:
 - SOP for appointing Adjunct Professors to enhance Institutional visibility through strategic appointments.
 - <u>Circular on utilization of the University Research and Publication Grants</u>, aimed at supporting high-quality research proposals, impactful publications, faculty-level journals, and conference participation.
 - **Guidelines** for the <u>Senate Award</u> for **Excellence in Academic, Research, and Outreach Activities** to recognise and reward outstanding achievements in teaching, research, and community engagement, thereby fostering a culture of academic excellence and societal contribution within the University.
 - **Guidelines** on the Utilisation of Interest Earned from Bond and Violation funds, introduced to **enhance the research capacity and professional development** of academic staff.
 - Codes, policies, and bylaws Coordinated with former Vice-Chancellors(UoP & OU) in drafting key documents.
- Renewable Energy Initiative:(i) Coordinated the installation of <u>country's first floating solar power plant</u> (46kW) (ii) Successfully manufactured prototype solar modules under a national-level multidisciplinary project
- International Conferences: Organised <u>two AMCEHA conferences</u> at the university with the Western Norway University of Applied Sciences, attracting 400+ participants, including 120 researchers from the EU, USA, India ...etc
- Secured UGC Grants: Awarded three competitive UGC grants (2011, 2012, and 2013) totalling LKR 11.5 million to enhance human and physical resource capacity for staff development at the university.

National Contribution & Holistic understanding of Higher education & Research landscape

Name of the National Institution	From	Period (years)
National Research Council (Appointed twice)	February 2019 February 2023	3
Research Council, National Institute of Fundamental Studies (Appointed twice)	June 2020 May 2023	5
Working Committee of the National Science Foundation on Basic Sciences	June 2016	3
UGC Standing Committee on Staff Development (ex officio)	June 2011	7
Member/UGC Standing Committee on Sciences (ex officio)	June 2020	5
One of four Deputy Directors/Manufacturing prototype development of solar cell module project	December 2017	5

Institutional Review Panel Member

- University of Moratuwa (2019)
- University of Colombo (2023)

Programme Review Panel Member

Year	University	Faculty	Programme
2017	Colombo	Arts	BAHons (Buddhist Studies), BAHons (Sinhala), BAHons (English)
2017	Kelaniya	Humanities	BAHons (Performing Arts), BAHons (Visual Arts and Design), BAHons (Image Arts), BAHons (Drama and Theatre)
2018	Wayamba	Business Studies & Finance	BScHons (Business Management)
2020	Peradeniya	Allied Health Sciences	BPham
2022	Moratuwa	Information Technology	BScHons (IT), BScHons(IT and Management)

These review visits to various state universities, including several of Sri Lanka's leading institutions, provided invaluable first-hand exposure to institutional governance, quality assurance frameworks, and academic accountability, while also fostering collaboration with distinguished academics, deans, and former vice-chancellors.

Other National contribution

- Member of the Standing Committee on General Education, since July 1, 2020.
- Member / Task force for establishing a centre for Nanoscience and Nanotechnology -2006.
- Member / Official delegation to the European Organization for Nuclear Research (CERN), Switzerland, for promoting fundamental research and higher education in the field of particle physics in Sri Lanka.
- Member / Expert Panel to advice on provision of points for research dissemination in the scheme of recruitment/promotion for the post of Associate Professorship / Professorship to UGC, 2018-2019.
- Deputy Director for national level project on manufacturing thin film Solar modules.
- Served as one of the members of the setting and evaluation panels for GCE(A/L) examinations.

Managerial Competence:

Financial administration & Human Resource management

National Research Grants

Title of the Project	Investigator(s)/ Deputy Director	Period From - To	Funding Agency	Amount LKR (mn)
Photoluminescence of defects in diamond Optoelectronic properties Metal oxide / Polymer Nanocomposite	Dr. L. Jeyanathan (PI) Dr. S. Sivaraya Mr. P. Ravirajan Dr. P. Ravirajan (PI)	2000-2004	NRC	11.0
Fabrication and characterization of organic / metal oxides Nanostructured PV devices	Prof.P.Ravirajan(PI)	2006 - 2009	NRC	8.4
Characterization of Nanostructured polymer / Fullerene solar cells	Prof.P.Ravirajan(PI)	2007 - 2011	NSF	1.9
Improving the performance of Hybrid TiO ₂ / Polymer solar cell using interface modifiers	Prof.P.Ravirajan(PI)	2011–2015	NRC	8.0
#Thin film Solar Cells towards manufacturing of Proto type Solar Panels	Prof. M.A.K.L Dissanayake (NIFS) Prof. P. Ravirajan – (DD) Prof. S. de Silva (UoK) Dr. B. Dissanayake (UoP)	2017-2023	Ministry of Science, Technology and Research	240

[#] Owing to the COVID-19 pandemic and the economic crisis, only about 50% of the allocated funds were received for developing solar panel prototype facilities at the Universities of Jaffna, Peradeniya, and Kelaniya. The locally fabricated prototype thin-film solar panels were successfully fabricated and demonstrated on 02.02.2024 in the uni.of Kelaniya.

International Research Grants over LKR 400 million through international collaborations.

Title of the Project	Coordinators	Period	Funding Agency	Amount LKR (mn)
Low-cost solar cells based on Nanocrystalline titanium dioxide and vegetable dyes	Prof. P. Ravirajan	2006 -2009	International Foundation for Science (IFS), Sweden	2
'Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies' – HRNCET 1.0	Prof.V.Dhayalan* Prof. P. Ravirajan	2017-2021	Norwegian Centre for International Cooperation in Education	97#
'Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies' – HRNCET 2.0	Prof.V.Dhayalan* Prof. P. Ravirajan	2022-2027	Norwegian Agency for Inter. Cooperation and Quality Enhancement in Higher Education	200#
'Capacity Building and Establishment of a Research Consortium in Nanomaterials for Clean Energy Technologies' - CBERC	Prof. V. Dhayalan* Prof. P. Ravirajan	2018 -2022	Royal Norwegian Embassy	129

#Bulk of the funds for collaborative research work of the MPhil/PhD students at the *Western Norway University of Applied Sciences, University of Bergen and University of Oslo, http://project.jfn.ac.lk.

Instrumental in establishing MoUs with the following institutions.

- Western Norway University of Applied Sciences, Norway
- · University of Bergen, Norway
- Sivananthan Laboratories, USA
- Coimbatore Institute of Technology, India
- Allagapah University, India (Council approved the MoU)
- Southern Illinois University, US (Council approved the MoU)

More information about the collaborative project and conferences







Booklet Conference site

Contributions to Outreach Activities

- Coordinated the <u>Clean Energy Technologies Education Programme</u> with the Jaffna Science Association, benefiting 2,500+ school students and teachers across the Northern and Eastern Provinces.
- Organised <u>STEM outreach initiatives</u> during the Faculty of Science Golden Jubilee, supporting seven student societies to promote STEM education in underprivileged schools.
- Led <u>national observation camps for the 2019 Annular Solar Eclipse</u>, training 200+ teachers and students, engaging 5,000+ participants, and conducting nationwide astronomy awareness programmes.

Prof. P. Ravirajan

12.10.2025