

Punniamoorthy Ravirajan

BScHons(Physics)(Jaffna), MSc(Peradeniya), DIC, PhD(London)

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

Educational Qualifications

- BScHons (Physics)
 University of Jaffna
 1991-1994
- MSc in Material Physics University of Peradeniya 1997-1999
- DIC, PhD in Physics Imperial College London 2001-2004

Scholarships & Fellowships

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

Impact of the HRNCET project output

- A state-of-the-art Research Lab
- SL's First floating solar plant
- 35+ papers in Q1/Q2
- 3 Mega conferences
- Master degree curriculua
- 12+ MPhil/PhDs & 9 Masters
- 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
- Support Scheme for Supervision of Research Degrees (SUSRED) Award

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

											000
Research Publication re	cords	All	Since 2020								280
Total no. of citations:								_			210
iotal no. of citations:	Citations	3466	1075								
·3,466 - Google scholar	Oltations	0100	1010			_					140
13,466 - Google Scholar	h-index	23	18								110
·2,665 - <u>Scopus (Elsevier)</u>	i10-index	44	32								70
		77	02								
·2,133 - <u>Publons (Web of Sci</u>	ence)										0
, <u> </u>				2018 201	9 2020	2021	2022	2023	2024	2025	0

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 (Chair)	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 2024 March 2025): 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. 2023)	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 2015 & 2017)	7
Sep. 2010	Head, Department of Physics (Re-appointed in Oct. 2013)	6

Major Contributions to Institutional Development

- **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.
- Policy Development: Co-authored the following key institutional documents.
 - <u>Circular on 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.
 - SOP for appointing Adjunct Professors to enhance Institutional visibility through strategic appointments
 - Coordinated with experts (former VCs) for drafting important Codes, policies, and bylaws of the university.
- International Conferences: Organised <u>two AMCEHA conferences</u> with the Western Norway University of Applied Sciences, attracting 400+ participants, including 120 international delegates.
- **Renewable Energy Initiative**: Coordinated the installation of <u>Sri Lanka's first floating solar power plant</u> (46 kW) at the Kilinochchi premises in 2020.

National Contribution

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 – June 2019	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

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)

Institutional Review Panel Member

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

These review visits to various higher education institutions, including Sri Lanka's leading universities, provided valuable first-hand **exposure to institutional governance, quality assurance frameworks, and academic accountability**, while 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.

National Research Grants

Title of the Project	Investigator(s)/Deputy Director	Period From - To	Funding Agency	Amount LKR (mn)
Optoelectronic properties of hybrid Metal oxide / Polymer Nanocomposite (Served as PI since May 2005)	Dr.L.Jeyanathan(PI) Dr.S.Sivaraya Dr.P.Ravirajan	2000-2004 2000-2005 2005-2008	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 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 40% of the allocated funds were received for developing solar panel prototype facilities at the Universities of Jaffna, Peradeniya, and Kelaniya. The locally fabricated thin-film solar panels were successfully demonstrated on 02.02.2024 in the university of Kelaniya..

International Research Grants over LKR 400 million through international collaborations.

The state of the s							
Title of the Project	Deputy Director / 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 wok 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







Contributions to Outreach Activities

- Coordinated the Clean Energy Technologies Education Programme with the Jaffna Science Association, benefiting 2,500+ school students and teachers across the Northern and Eastern Provinces.
- Organised STEM outreach initiatives 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