

# Punniamoorthy Ravirajan

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

(Date of Birth: **11.11.1969**, Place of Birth: **Colombo** & Citizenship: **Sri Lanka**)

Fellow of the National Academy of Sciences of Sri Lanka, **Tier 4\* Researcher**

Commonwealth Scholar and Fellow, UK



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, University of London

2001-2004 (**5 papers in SCI based on the thesis**)



### Scholarships & Fellowships

- General Commonwealth Scholarship**

2001-2004 (5 papers in SCI)



COMMONWEALTH  
SCHOLARSHIPS

- Imperial College Fellowship**

2006 (3 Months) (2 papers in SCI))

- Royal Society Visiting Fellowship**

2008 (3 Months) (2 papers in SCI)



THE ROYAL SOCIETY

- Commonwealth Fellowship**

2014 (3 Months) (3 papers)

### Impact of the HRNCET project 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 of Sri Lanka** since 2023



- Top 100 Asian Scientists** by Asian Scientist Magazine in **2024 - 2025**



### 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, 2006, 2007, 2008 & 2017**



- NRC Merit Award**

Research Publication 2019

- Support Scheme for Supervision of Research Degrees (SUSRED) Award**

National Science Foundation  
2023 (for three theses) & 2024



### Research Publication Track Record

**Total no. of citations:**

**•3,466 - GoogleScholar**

**•2,666 - Scopus (Elsevier)**

**•2,133 - Publons (Web of Science)**



Citations

h-index

i10-index

All Since 2020

3466

23

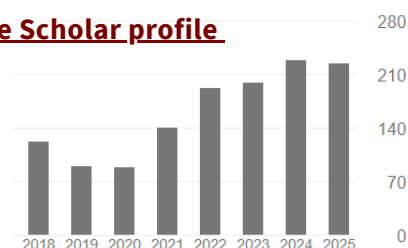
44

1075

18

32

### Google Scholar profile



175 + Publications (includes abstracts) in **Google Scholar** with an **h-index of 23** and **3400+ citations**  
65+ publications (full papers) listed in **SCOPUS** with an **h-index of 21** and **2,650+ 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

*Over 11 years of administrative experience as Dean/Science or Head/Physics, as well as service as a Council member*

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

*Repeated **reappointment and re-election to extended administrative and leadership** tenures stand as evidence of an unblemished track record.*

### 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**.
  - **Circular on utilisation of the University Research and Publication Grants**, aimed at supporting high-quality research proposals, impactful publications, faculty-level journals, and conference participation
  - **Guidelines** for the **Senate Award 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 Fund 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 **country's first floating solar power plant** (46kW)  
(ii) Successfully **manufactured prototype solar modules** under a national-level multi-institution project
- **International Conferences:** Organised **two AMCEHA conferences** at the university with the Western Norway University of Applied Sciences, attracting 400+ participants, including 120 researchers from the EU, USA, India ...etc
- **Secured three competitive UGC grants** in 2011, 2012, and 2013, totalling LKR 11.5 million, through the submission of **three independent proposals** aimed at enhancing the **human and physical resource** capacity for staff development.

## National Contribution & Holistic understanding of the Higher Education & Research landscape in Sri Lanka

*Active involvement in the implementation of the respective policies*

Name of the National Institution	From	Period (years)
National Research Council ( <b>Appointed twice</b> )	February 2019 February 2023	3
Research Council, National Institute of Fundamental Studies ( <b>Appointed twice</b> )	June 2020 May 2023	5
Working Committee of the National Science Foundation on Basic Sciences	June 2016	3
Standing Committee on Staff Development, University Grants Commission (UGC) ( <i>ex officio</i> )	June 2011	7
Member/Standing Committee on Sciences, UGC ( <i>ex officio</i> )	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 Colombo (2023)
- University of Moratuwa (2019)



**QUALITY ASSURANCE COUNCIL**  
University Grants Commission - Sri Lanka



### 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 (Active involvement in the implementation of the respective policies)

- 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 Organisation 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 advise on the 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 a **national-level project** on prototype manufacturing of thin-film Solar modules.
- Served on both the **question-setting panel** and the evaluation panel for the GCE (A/L) examinations.
- Member of the Standing Committee on Sciences — I Proposed amendments to the Teachers' Service Minutes to promote professionally trained teachers (**core subjects plus a minimum of 25 credits in Education – 3 + 1 model**). The proposed changes would enable graduates with BSc (Hons), BCom (Hons), or BA (Hons) degrees with Education to qualify for teaching appointments (**Class 2 – Grade II**).

# 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 <b>Dr. P. Ravirajan (PI)</b>	2000-2004 2005-2008	NRC	11.0
Fabrication and characterization of organic / metal oxides Nanostructured PV devices	<b>Prof.P.Ravirajan(PI)</b>	2006 - 2009	NRC	8.4
Characterization of Nanostructured polymer / Fullerene solar cells	<b>Prof.P.Ravirajan(PI)</b>	2007 - 2011	NSF	1.9
Improving the performance of Hybrid TiO <sub>2</sub> / Polymer solar cell using interface modifiers	<b>Prof.P.Ravirajan(PI)</b>	2011-2015	NRC	8.0
*Thin film Solar Cells towards manufacturing of Proto type Solar Panels	Prof. M.A.K.L Dissanayake (NIFS) <b>Prof. P. Ravirajan – (DD)</b> 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	<b>Prof. P. Ravirajan</b>	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* <b>Prof. P. Ravirajan</b>	2017-2021	Norwegian Centre for International Cooperation in Education	97 <sup>#</sup>
'Higher Education and Research collaboration on Nanomaterials for Clean Energy Technologies' – HRNCET 2.0	Prof.V.Dhayalan* <b>Prof. P. Ravirajan</b>	2022-2027	Norwegian Agency for Inter. Cooperation and Quality Enhancement in Higher Education	200 <sup>#</sup>
'Capacity Building and Establishment of a Research Consortium in Nanomaterials for Clean Energy Technologies' - CBERC	Prof. V. Dhayalan* <b>Prof. P. Ravirajan</b>	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

**Project site**



**Booklet**



**Conference site**



### Professional Communication and Major Contributions to Outreach Activities

- Organised two AMCEHA conferences at the university with the Western Norway University of Applied Sciences, attracting 400+ participants, including 120 researchers from the EU, USA, India ...etc
- 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 national observation camps for the 2019 Annular Solar Eclipse, training 200+ teachers and students, engaging 5,000+ participants, and conducting **nationwide** astronomy awareness programmes.

October 2025

Senior Professor P. Ravirajan, Dean/Science