

**Professor S. Ravi P. Silva CBE FREng FCAE (foreign member) FEurASc FISC
BA MA PhD (Cantab) CEng CPhys FIET FInstP FNASSL FRSA DFIETI**

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Distinguished Professor, Director, Advanced Technology Institute (ATI), and Professor
of Solid-State Electronics, Director, Nano-Electronics Centre, University of Surrey.
Nationality: British



EDUCATION

1987-1990 University of Cambridge - BA (Hons) Electrical and Information Sciences Tripos EIST
1990-1993 University of Cambridge - PhD Solid State Electronics - thesis titled "Electronic,
Optical and Structural Properties of Semiconducting Diamond-Like Carbon Thin
Films". My thesis showed for the first time it was possible to use amorphous diamond-
like carbon multi-layers to experimentally obtain evidence for quantum size effects.

PROFESSIONAL EXPERIENCE

University of Surrey (1995 - Current) - Selected

**School of Electronics and Physical Sciences (1995-2009), Faculty of Engineering and Physical
Sciences (2009-present) - Selected**

2018 - Current Member, University Sustainability Executive
2018 - Current Coordinator, Surrey-Zhengzhou International Knowledge Hub
2016 - Current Member, University Business Continuity Planning Committee
2011 - Current Member, Management Committee of Electronic Engineering
2005 - Current Director, Advanced Technology Institute
2001 - Current Professor, Solid State Electronics
2020 - 2022 Member, University Carbon Zero 2030 Taskforce
2005 - 2011 Chair, University of Surrey's Vice Chancellor's 'Think Tank' on future strategy
1999 - 2001 Reader, University of Surrey
1998 - 2001 Undergraduate Admissions Tutor - Electronic Engineering
1995 - 1999 Foundation Fund Lecturer in Large Area Electronics & Schools Liaison Officer

External Appointments (2001- Current) – Selected recent

2023 - Current Member, Scientific Assessment of Projects – PE5, European Research Council
2022 - Current Member, UK Government "Researchers at Risk" panel, British Academy
2022 - Current Member, Government Office for Science, Drivers of Technology Needs
2022 - Current Chair, Transforming Systems through Partnership (TSP) panel, RAEng (Newton, ISPF).
2020 - Current Advisory Board Member, CICECO, Aveiro Institute of Materials, Portugal
2020 - Current International Scientific Council, FCT, Portugal
2018 - Current International Committee Member, Royal Academy of Engineering
2018- Current Chief Editor, Wiley journal on 'Energy and Environmental Materials'
2018 - Current Future Leader Fellowship Panel, UKRI
2018 - Current Founder Director, SilverRay Ltd
2018 - Current Chair, Distinguished Visiting Professorship panel, Royal Academy of Engineering
2018 - Current Surrey Energy Partnership
2017- Current European Research Council (ERC), Advanced Investigator Fellowship Panel, Brussels
2020 - 2022 International Task Force on Emerging Technologies, CESAER, EU
2018 - 2021 REF2021 Panel in Engineering
2015 - 2021 Member, Industry-Academia Partnership Programme, Newton Fund
2010 - 2016 Science Advisor, Senior Minister in Charge of Scientific Affairs, Sri Lanka
2008 - 2010 Member, Cross-bench House of Commons-House of Lords Nanotechnology Task Force
2007 - 2010 Member, Technical Opportunities Panel (TOP), EPSRC, UK
2007 - 2010 Science Advisor, Hon. Minister of Science and Technology, Sri Lanka
2005-2009 Member, Research Assessment Exercise (RAE) Panel on Electronic Engineering, UK

PRIZES AND AWARDS – Selected recent

2024 Elected to the Fellowship, Chinese Academy of Engineering (foreign member)
2024 Fellow, International Science Council (FISC)
2022 Distinguished Fellow, The International Engineering and Technology Institute-IETI
2020 Elected to a Commander of the British Empire (CBE) -New Year Honours list
2019 Surrey Distinguished Professor, University of Surrey

2018	James Joule Medal and Award (Institute of Physics) for Applied and Environment
2018	Outstanding Overseas Scientist Office Award, Henan Province, China
2015	Platinum medal of the Institute of Materials, Minerals and Mining.
2014	Institute of Engineering and Technology (IET), JJ Thomson Medal for Electrical Eng.
2013	President's Award, Govt. of Sri Lanka, contributions to Sri Lanka Science and Society
2011	Royal Society Clifford Paterson Lecture for outstanding contributions to Nanoscience.
2009	Royal Society Kan Tong Po Public lecture and Visiting Professorship to Hong Kong.
2009	Elected to a Fellowship, National Academy of Sciences of Sri Lanka.
2008	Elected to the Fellowship, Royal Academy of Engineering (FREng).
2002	Institute of Electrical Engineers (IEE) 'Achievement Award and Medal for 2003'.
2003	UNESCO Albert Einstein Silver Medal & Javed Husain Young Scientist Award

RESEARCH

I am Director of the ATI, a multi-disciplinary institute comprising Electronic Engineers, Physicists and Materials Scientists with 160 researchers working on advanced technologies. The ATI set up in 2002 with Joint Infrastructure Fund grant (£10M) for which I was a named Co-Investigator.

My profile on Google Scholar: > 29,500 citations; 700+ publications; H-index 87. Full publication list: [SRP Silva \(Ravi Silva\) - Google Scholar](#)

I have won competitive research funding in excess of £47M as PI/CoI in the last 20 years. Over £20M as PI from research councils. Directed the ATI over last 20 years and helped secure >£180M for the institute from national, international, industrial- research councils, funding agencies and NGOs. Inventor of 50 patents, six of which are being exploited in spin-out companies (raised venture capital in excess of £18m). Successfully supervised circa **90 PhD** students and supervised circa **100 postdoctoral researchers (RAs)**.

I have published in Nature and Science-series as multi-disciplinary; Advanced Materials-series, NanoLetters, ASC Nano, Nanoscale etc as materials; IEEE-series, APL, PRL, Phys Rev-series, Nanotech. Etc. at regular intervals. Of the 600 conference presentations, over 20% have been keynote, plenary or invited talks. Founder Director of 3 spin-out companies in Nanotechnology, with award winning Surrey NanoSystems.

I lead a large UK activity on next generation perovskite and organic solar cell research, with sustainability at its core. The research is backed by the recent award of £2.3M EPSRC grant (“High-Efficiency Flexible and Scalable Halide-Perovskite”), the UK lead in the EU Horizon program MUSICODE (€5M; Surrey €0.5M) championing renewables & energy materials. Further, the EPSRC grant on TENGs (Triboelectric Nanogenerators for the Internet of Things, £650k) is spearheading the use of devices to power autonomous sensors in IoT. (Nanomanufacturing to enable ambient intelligence via the internet of things, £1.55M, EPSRC). Recent programmes with NPL and QinetiQ resulted in 4 ICASE Studentships.

Facilitated the Institute of Sustainability with the Surrey Living Lab (£140k-2017, Clean Energy Pillar, InnovateUK Industry Strategy), CHeSS (“Clean, Healthy and Sustainable Surrey” initiative, InnovateUK Energy Network, £130k-2019) and the Surrey Energy Partnership, with 50 members in the region. Led university to establish 12.5MW Solar Park at Surrey with a Power Purchase Agreement (PPA) with SSE. Recognised as a “Leader in Materials Science” within the top 100 in the UK by Research.com and in the world top 2% in the field by the Stanford University updated science-wide author database.