

Dr. Shehan G.M de Silva

97, Wijerama Mawatha.
Colombo 07, Sri Lanka
Mobile No: +94 (0) 772293580
Email : shehan.desilva@forever.surrey.ac.uk

EMPLOYMENT

Oct 2015 - Present	Sri Lanka Institute of Nanotechnology Senior Scientist / Head – Strategic Planning <ul style="list-style-type: none">• Principle Investigator of Plasma generation project which was awarded a National Science Foundation grant for research. This project has successfully generated a near atmospheric plasma environment for the first time in Sri Lanka• Principle Investigator of direct graphite to graphene exfoliation research program• Principle Investigator of designing test protocols for Graphite and GNP plasma functionalization.• Founder of the Strategic Planning division at SLINTEC. Tasked with identifying long-term vision, R&D focus and actionable steps
Jan 2010 – Oct 2015	Sri Lanka Institute of Nanotechnology Manager – Strategic Planning / Senior Scientist <ul style="list-style-type: none">• Principle Investigator in Plasma generation project which was awarded a National Science Foundation grant for research. This project has successfully generated a near atmospheric plasma environment for the first time in Sri Lanka• Founder and Manager of the Strategic Planning division at SLINTEC. Tasked with identifying long-term vision, R&D focus and actionable steps• Set up framework for transitioning Research to Commercial Innovations.• Pioneered the business development activity at SLINTEC, while attracting many project partners, clients, collaborative research partners, joint venture partners and founder tenants to the first research park in Sri Lanka.• Ritsumikan University Collaboration - Nano Electro Mechanical Systems / MEMS Group Leader• United Nations Industrial Development Organization fellow and architect of proposal for setting up a National High and Nanotechnology based Research park.• Lead strategist for the Ministry of Technology and Research-Korean Development Institute Advanced Manufacturing Incubator at the Nanotechnology Park.
2004 Placement	Sri Lanka Telecom, Colombo, Sri Lanka Engineering Section <ul style="list-style-type: none">• IP/VPN setup• Lease line circuit maintenance
2000 Placement	Sri Lanka Telecom, Colombo, Sri Lanka Data Communication Section

EDUCATION

2004 - 2009	PhD in Nanotechnology : Integration of Bio potential sensors based on Carbon Nanotubes utilising SAW backscatter device Advanced Technology Institute , University of Surrey, Guildford <i>Key competencies:</i> <ul style="list-style-type: none">• Plasma Enhanced Chemical Vapor deposition based Carbon nanotube growth
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	<ul style="list-style-type: none"> • Low power Body Sensor Networks of active, hybrid or passive methods of operation • Lithography (Electron beam, Focus ion beam, UV, Nano imprint) • Fabrication of Carbon nanotube based Bio-sensors • Material growth & deposition (CVD, RF & DC Sputtering, evaporation etc) • Material characterization (AFM,SEM,TEM,XRD,EDX,UV-VIS-NIR,FTIR) • Surface Acoustic Wave (based on ZnO thin film) device design and fabrication • R.F & Microwave communications (including antenna & RFID design) • Active Wireless body area sensor design and fabrication • Embedded systems development –PIC, AVR, ARM, x86 (Linux/XPe) (including implementing communications protocols) • Circuit design and fabrication • MAPLE, MATLAB modelling • C (including client-server architectures), Embedded C, Perl, Java, .NET
2001 - 2004	<p>BEng Electronic Engineering - Upper 2nd class (Honors) University of Surrey, Guilford, Surrey Final Year Project: Implemented a Broadband 2.4GHz AV transmitter controlled via (I²C) PC GUI or optical encoder <i>Key competencies:</i> strong problem solving ability, numerate skills, leadership and teamwork skills.</p>
1999 - 2001	<p>GCE London Advanced Levels – 2001 Colombo International School, Colombo, Sri Lanka Pure & Applied Mathematics, Physics, Computing</p>
1988 - 1998	<p>GCE Ordinary Levels – 1998 Royal College, Colombo, Sri Lanka</p>

POSITIONS OF RESPONSIBILITY

2011 - Present	<p>Committee member of the following National Committees Robotics, Advanced Design & Manufacturing Innovation and Techno- entrepreneurship</p>
2010 - Present	<p>Stakeholder in the creation of regional Nanotechnology regulation and policy framework Conceptualized and drafted a proposal for the Sri Lankan component of a regional Nanotechnology regulatory framework funded by the IDRC (Canada). The awarded grant has allowed National level representation with India (TeRI) and Pakistan (Preston Uni) counterparts for a common regional policy, governance and regulation.</p>
2014 - Present	<p>Member – Institute of Electrical and Electronic Engineers (IEEE)</p>
2012 - Present	<p>Board Member – Shraddha Media Network</p>
2005 - 2006	<p>External Liaison Officer at The YM IEE (now IET) Liaising with external professional bodies, industries and academia.</p>
2006 – 2007	<p>Postgraduate Union Executive at University of Surrey Students Union (USSU) Extensive student interaction, decision making at a university-wide level, interfacing between students and senior management of the university and the USSU</p>

INTERESTS

Volunteering	<ul style="list-style-type: none">• Cancer hospital in Sri Lanka, in an effort to take care of post-operation & terminal patients• First responders for 2004 Tsunami in Sri Lanka where 30,000 people were killed and 2.5 million displaced. Subsequently joined SL Red Cross for medical and emergency provision distribution, health care clinics & rescue operations.• Rotary charity event organizer for internally displaced people (2008)
Sports	<ul style="list-style-type: none">• Rowing• Swimming• Camping & Off-roading
Hobbies	Photography, Electronics, Reading, Traveling, Eco Travel

REFERENCES – AVAILABLE ON REQUEST