

Curriculum Vitae of Senior Prof. K. P. S. Chandana Jayaratne

Chairman, Arthur C Clarke Institute for Modern Technologies (ACCIMT) : 2022-24 and 2025 to date.

Chairman, Indu-Lanka Research Projects Evaluation Committee of the Ministry of Science and Technology (Government of Sri Lanka counterpart).

Former Head of the Department of Physics (2020-2025) and

Founder and Director, Astronomy and Space Science Unit, Department of Physics, University of Colombo, Colombo-03, Sri Lanka upto 2026.03.31 and Advisor after that date

Director, Colombo Science and Technology Cell

Editor in Chief, Journal of the Sri Lanka Association for the Advancement of Sci.

Recipient of the National Apex Award - 2022 (a Lifetime Award) in Recognition of Professional Excellence in the Field of Science and Technology.

General President (2018) – Sri Lanka Association for the Advancement of Science (SLAAS)

Director, Student Affairs & Senior Student Counsellor, University of Colombo 1999-2003

Council Member- SLAAS and IPSL, Ex. Council Member -NRC, SLSI, ACCIMT, NIE

National Coordinator - Sri Lankan Olympiads on Astronomy and Astrophysics

Country Coordinator and Board Member - International Olympiads on Astronomy and Astrophysics (IOAA) & International Astronomy Olympiad (IAO)

Chairman, SLAAS All Island School Inventors Competition cum Exhibition(2007-25)

The Asian Scientist magazine, in its 2023 edition, has listed Prof. Chandana Jayaratne as one of the top 100 scientists in Asia.

200+ research publications.

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A.1 - PERSONAL DETAILS

- NAME** Kalu Pathirannahelage Sarath Chandana Jayaratne
- DATE OF BIRTH** 08th September 1960
- PRESENT EMPLOYMENT** **Professor in Physics**
Head of the Department of Physics
Director/Astronomy and Space Science Unit
INSTITUTION Department of Physics, University of Colombo,
Colombo-03, Sri Lanka.
OTHER POSITIONS Past General President-2018, Sri Lanka Association for
the Advancement of Science(SLAAS)
Chairman, Arthur C Clarke Institute for Modern
Technologies (ACCIMT)
- TELEPHONE** Office: 011-2584777; Residence: 011-2515615
Mobile: 0714800800, 0777309385
- E-MAIL** chandana@phys.cmb.ac.lk
chandanajayaratne@gmail.com
- FAX** 011-2584777, 0112515615

7. HOME ADDRESS TO WHICH LETTERS ARE TO BE SENT

42A, Somadevi Place, Colombo – 05, Sri Lanka.

A.2 ACADEMIC & PROFESSIONAL QUALIFICATIONS:

SCHOOL/UNIVERSITY EDUCATION, LIST OF ACADEMIC DEGREES / PROFESSIONAL QUALIFICATIONS / HONOURS AND AWARDS

Educational Levels

School Education

	from	to	
1. Dompe Maha Vidyalaya, Dompe	1966	1971	Primary up to Grade 5
2. Nalanda College, Colombo-10	1971	1978	O/L and A/L

University Education

University of Colombo, Sri Lanka 1979 1983 BSc Special Degree (Honours) in
Physics

Postgraduate Education

University of Colombo, Sri Lanka 1986 1992 PhD in Atmospheric Physics
(sandwich-type PhD with part of the
work in Uppsala University, Sweden)

Academic Degrees

BSc Special Degree in Physics (Honours)

- 2nd Class Upper Division - University of Colombo, Sri Lanka; 1983.

PhD*(in Atmospheric Physics) “On Fairweather and Thunderstorm Electricity -
basis for Construction of an Atmospheric Electrical Station in Sri Lanka” - University of
Colombo, Sri Lanka (sandwich-type PhD program with the Uppsala University,
Sweden); 1992.

- (This was the 1st local PhD in Physics awarded by the Colombo University. The PhD work was performed both in Uppsala University (Institute of High Voltage Research + Dept. of Meteorology), Sweden and Colombo University, Sri Lanka, under a collaborative research link programme between the universities of Colombo, Sri Lanka and the Uppsala University, Sweden).

Postgraduate Diploma in Counselling (merit pass), University of Colombo;
Sep.1997.

Diploma in International Affairs (Bandaranayake Centre for International Studies,
BMICH, Colombo); 2003.

Certificate - Geographical Information Systems, University of Colombo; 2003.

Professional Qualifications

Fellow of the Institute of Physics, Sri Lanka – FIP(SL) and Chartered Physicist.
Member, Professional Counselling Service Association-MPCSA

EMPLOYMENT RECORD

- **Chairman, Arthur C Clarke Institute of Modern Technologies, Katubedda, Moratuwa, 2022.09.08 to 2024.09.30 and from 2025.01.01 to date.**
- **Former Head of the Department of Physics, University of Colombo, Sri Lanka (2020.08.13 to 2025.09.07)**
- **Director, Astronomy and Space Science Unit (ASSU), Department of Physics, University of Colombo, Sri Lanka 2016.10.19 to 2025.09.07**
- **Senior Professor in Physics, Department of Physics, University of Colombo from 2017.11.27**
- **Professor in Physics, Department of Physics, University of Colombo from 2009.11.27 to 2017.11.16**
- 1992 – 2009.11.26 Senior Lecturer (Grade II)
- 1984.01.24 – 1992 March Assistant Lecturer

Honours and Awards (41 in number)

1. **Fellowship(s)** to Uppsala University, Sweden for higher studies form International Science Programmes, Sweden (1986/87, 1988, 1989, 1990/91).
2. **Junior Associate of the International Centre for Theoretical Physics (ICTP)**, Trieste, Italy (1989 - 1992).
3. **“Third World Academy of Sciences Prizes for Young Scientists - The 1991 Prize for Physics”** jointly awarded by TWAS, Italy and NARESA, Sri Lanka in 1991.
4. **GRC (General Research Committee of SLAAS) merit award** in 1992 for my contribution to Sri Lankan Science.
5. **Environment Award – General category (Honorable Mention) for the ozone project, awarded by Environment Committee of the SLAAS in 1996.**
6. **Special mention at the Senate of the University of Colombo on 2019.09.05 on the discovery of a new planetary system (K2-310 (EPIC 212737443)) some 1133 light-years away.**
7. **“Faculty of Science Award for Excellence in Academic Outreach - 2018”** awarded by Faculty of Science, University of Colombo (29.02.2020).
9. **“Faculty of Science Award for Excellence in Academic Outreach - 2019”** awarded by Faculty of Science, University of Colombo (26.03.2021).
10. **Science Communicators Award- 2020 (Individual category - Electronic Media) from the Committee for the Popularization of Science of SLAAS(Awarded at the BMICH on 06.12.2021).**
11. **“Faculty of Science Award for Excellence in Academic Outreach-2020”** awarded by Faculty of Science, University of Colombo (29.04.2022).
12. **“Faculty of Science Research Excellence Award for 2020”** awarded by Faculty of Science, University of Colombo (29.04.2022).
13. **National Apex Award - 2022 (a Lifetime Award in Recognition of Professional Excellence in the Field of Science and Technology.**
14. **University of Colombo Senate Award for Research Excellence 2020.**
15. **University of Colombo Senate Award for Research Excellence 2021.**
16. **The Asian Scientist magazine in their 2023 edition has listed Prof. Chandana Jayaratne**

as one of the top 100 scientists in Asia.

17. “Faculty of Science Award for Excellence in Academic Outreach-2023” awarded by Faculty of Science, University of Colombo (25.04.2025).
18. “Faculty of Science Research Excellence Award for 2023” awarded by Faculty of Science, University of Colombo (25.04.2025).
19. “Faculty of Science Award for Excellence in Academic Outreach-2024” awarded by Faculty of Science, University of Colombo (25.04.2025).
20. “Faculty of Science Research Excellence Award for 2024” awarded by Faculty of Science, University of Colombo (25.04.2025).
21. The prestigious “Iconic Scientist Award (Scientific Laurels)” in recognition of his outstanding and sustained contributions to science, education, and national development by Scientific Laurels - an Indian-based international platform and award organization dedicated to recognizing and promoting excellence in research, innovation, and professional achievement across various scientific and academic disciplines. (2026).

OTHER DISTINGUISHED/NOTABLE HONOURS AND AWARDS RECEIVED

22. **Vidyakeerthi** title by Dharmapala Olcott Memorial International Research Foundation in 1998.
23. Has a citation in the “Sreshta Lanka Puthrayo-ISBN1391-2437”.(1998)
24. **Viswa Vidya Adhi Manovidyavedi** title in 2000 from Sri Jayawardanepura Gunasamru foundation & Mahanayake Theros.
25. Has a citation in “The Millennium Register of Sri Lankan Personalities”.(2000)
26. **Four Avenues of Service Award** from the Rotary International President (2002).
27. PHF - **Paul Harris Fellow** recognition/citation awarded by the Rotary Foundation of the Rotary International (2004).
28. Horana Thakshila College conducts an annual all-island inter-school astronomy competition as “ **Dr. Chandana Jayarante Challenge Trophy**” (since 2004).
29. **Special recognition award** from Rotary Club of Biyagama in appreciation of Humanitarian Services Rendered to the Community in 2005.
30. **Outstanding Commitment to the Promotion and Support of Voluntary Blood Donation Programmes recognition from the Rotary International Global Network** in 2006.
31. “**Special Media Award**” awarded by Mass Communicators Association of Sri Lanka in 2007.
32. **Sasana Deepana** in 2008 (from ACBC, Colombo)
33. **Lokarthachari Vidyavachaspati Desamanya** (from the National Honorary Degree Awarding University Institute approved under the Government of Democratic Socialist Republic of Sri Lanka) in 2008
34. Prestigious “**Nalanda Keerthi Sri**” title from the Nalanda College, Colombo 10 in October 2008 at the BMICH (an award given before only to the Kalasuri Henri Jayasena, former Sri Lankan President Hon. Mahinda Rajapakshe, Diyawadan Nilame of Dalada Maligawa Nilanga Dela Bandara and NASA research scientist Dr. Sarth Gunapala).
35. **Honourable award for distinguished humanitarian services** awarded by Sri Lankan Eye Donation Society in 2013.
36. **Divayuru Puthra** award by Universal Knowledge Research Centre, Kelaniya in 2015.
37. **Special recognition** for commitment to Rotary’s membership growth-A Blue pin- from Rotary International in 2015.
38. **Rotary Gold Member** recognition form Rotary Colombo Central on 28.09.2017.

39. **Siyane Gaurawa Keerthi Sammanaya awarded by Dompe Provincial Council to the most distinguished person born in Siyane Koralaya (Western Province – Sri Lanka) 19.10.2019.**
40. **University of Colombo 35 years Long Service Award- 2020.02.06**
41. **“Sasanabhiwardana Keerthi Sri” title form the All Ceylon Buddhist Congress 2022.11.19.**
42. **Best President – 2nd runners-up medium club category award given at the Rotary District 3220 Sri Lanka and Maldives Annual Award Ceremony 2023/24 held at the Taj Samudra Hotel, Colomb0, Sri Lanka.**

A.3 PRESENT POSITION(S)

- **Chairman, Arthur C Clarke Institute for Modern Technologies (ACCIMT) : 2022-24 and 2025 to date.**
 - **Advisor, Astronomy and Space Science Unit (ASSU), Department of Physics, University of Colombo, Sri Lanka 2026.03.31 on wards**
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OTHER POSITIONS HELD/HOLDING IN THE 2022-2024

1. **Chairman, Arthur C Clarke Institute of Modern Technologies, Katubedda, Moratuwa, 2022.09.08 to 2024.09.30.**
2. **Executive Committee member, OPA(Organization of Professionals Association) 2020 to date.**
3. **Board Member, Board of Governance of Arthur C Clarke Institute for Modern Technologies(ACCIMT).**
4. **Council Member, National Research Council (NRC) of Sri Lanka.**
5. **Council Member, SLAAS (Sri Lanka Association for the Advancement of Science)**
6. **Board Member – Colombo Science and Technology Cell (2021.03.01 onwards)**
7. **Member, Board of Trustees of the Sri Lanka Association for the Advancement of Science**
8. **Council Member, Institute of Physics Sri Lanka (IPSL).**
9. **Chairman Technical Sessions Editorial Committee of IPSL.**
10. **A Trustee of the Sri Lanka Eye Donation Society.**
11. **Founder and President, Methsaviya.**
12. **Chairman, Service Projects, Rotary Club of Colombo Central meet at Hilton.**
13. **Senior Treasurer and Advisor, Astronomy Society, University of Colombo.**
14. **National Coordinator, Sri Lankan Olympiads on Astronomy and Astrophysics.**
15. **Chairman, SLAAS All Island School Inventors Competition.**
16. **Patron, All Ceylon Buddhist Congress**
17. **Head of the panel of experts on "Nawa Nipayum Diriya - INVENT Grant Scheme of Sri Lanka Inventors Commission**
18. **Advisory Board – Sinhala Sabdakoshya (Government Dictionary Department)**
19. **Chief Editor- Journal of the Sri Lanka Association for the Advancement of Science.**
20. **Member, National Science Foundation (NSF) Committee on Media(WCM) 2024.**

A.4.1 EMPLOYMENT POSITIONS HELD DURING THE LAST 15 YEARS

- **Head of the Department of Physics, University of Colombo, Sri Lanka, 2020.08.13 to date.**
 - **Acting Head of the Department of Physics, University of Colombo, Sri Lanka, 2020.07.20 - 2020.08.12.**
 - **Professor in Physics, Department of Physics, University of Colombo from 2009.11.27 to date.**
 - **Principal Research Scientist (Space Science) – Arthur C Clarke Institute for Modern Technologies, Katubedda, Moratuwa (on sabbatical leave): 2003.10.27- 2004.10.26.**
 - **Director Student Affairs and Senior Student Counsellor, University of Colombo from April 2002 - April 2003.**
 - **Senior Student Counsellor, University of Colombo, April 1999 - March 2002 & 2003.**
 - **Senior Lecturer (Gr. II), Department of Physics, University of Colombo, Sri Lanka: 1992.10.01 - 2009.11.26.**
 - **Asst. Lecturer in Physics, Department of Physics, University of Colombo, Sri Lanka: 1984.01.24 - 1992.09.30.**
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A.4.2 OTHER SIGNIFICANT CURRENT / PREVIOUS ACADEMIC POSITIONS HELD

- (i) Visiting lecturer on Guidance and Counselling Psychology to MSc in Physics Education - University of Colombo (2022-2024)
 - (ii) Visiting lecturer on Human Psychology to the IHARA-University of Colombo (2011-2012)
 - (iii) Visiting lecturer on “DY6 : Basic Science – Physics” to the Institute of Workers Education, Colombo University (1996 -2006).
 - (iv) Visiting lecturer on “Science & Technology” to the Institute for Human Resource Advancement(IHRA) of the Colombo University (2007 -2009).
 - (v) Visiting Lecturer on Introduction to Astronomy (ELT 3104/3131) to the Faculty of Arts, University of Colombo (2000-2003).
 - (vi) Visiting Lecturer - MSc in Atmospheric Physics, Dynamical Meteorology and Natural Disaster Preparedness, University of Colombo(2000-2003).
 - (vii) Visiting Lecturer – MSc in Environmental Science, University of Colombo (2006-2007).
 - (viii) Visiting lecturer on Astronomy - NIE Advanced Certificate Course for Science Teachers (2015).
 - (ix) Visiting Lecturer- MSc programme in Physics Education (MEP 5408 Special Topics in Physics: Astronomy and Atmospheric Physics), 2015- to date.
 - (x) Visiting Lecturer on Astronomy to The Open University of Sri Lanka - PYU 3172 Astronomy course (2013 -to date).
 - (xi) Visiting lecturer/MSc in Climate Change and Environment management, Faculty of Science, University of Colombo (2016- to date)
 - (xii) **Supervisor- University of Cambridge International Examinations- GCE (ASL & AL) Physics-Advanced Practical Skills 1 – May/June 2015- Physics Practical Exam - Colombo University Exam Centre 2016,2017, 2018, 2019, 2020 and 2022.**
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A.4.3 Other positions held within the University of Colombo

- (i) **Senior Student Counsellor, University of Colombo, April 1999 up to 2002 and Director Student Affairs and Senior Student Counsellor, University of Colombo from April 2002**

- up to April 2003.
- (ii) **Member of the Senate**, University of Colombo as the Science Faculty Representative (August 95 onwards up to April 2003) and from 2010 to date.
 - (iii) **Senior Treasurer and Adviser**, Astronomical Society and former Mathematical and Astronomical Society, University of Colombo (14.06.94 onwards up to date except 2004).
 - (iv) **Group leader, Atmospheric Physics and Lightning research group of the Department of Physics**, University of Colombo (1986-1998).
 - (v) **Member, Inter-Departmental Committee** on Teaching of Environmental Science in the Faculty of Science, University of Colombo.(1997).
 - (vi) Course Coordinator – MSc in Atmospheric and Dynamical Meteorology. (Nov. 2000 -2003.)
 - (vii) **A Student Counsellor**, University of Colombo (16.05.94 - 15.11.94 & 16.11.94 - 15.05.95).
 - (viii) **Member, Local Organizing Committee Secretariat – Asian Regional College on Microprocessors: Technology and Applications**, organized by Colombo University, in Colombo, Sri Lanka(June 1984).
 - (ix) **Hony. Secretary, University of Colombo Science Teachers’ Association-UCSTA** (1993,1994 and in 2000).
 - (x) **Hony. President, University of Colombo Teachers’ Association-UCSTA** (1995).
 - (xi) **Hony. Secretary, Faculty Centre** of the University of Colombo (1996/97 & up to 2001).
 - (xii) **Member- Science Faculty Exam Grievances Appeals Boards** (2010+, 2018, 2019).
 - (xiii) **Member. Higher Degree Committee of the Faculty of Science**, University of Colombo (2008 - to date).
 - (xiv) **Physics Department representative to the Higher Degree Committee** of the Faculty of Science (2011 -2020)
 - (xv) **Executive committee member of the University of Colombo Alumni Association** 2000/2001.
 - (xvi) **Chairman-Website Development Sub-Committee** of the University of Colombo Alumni Association (2002-2003).
 - (xvii) **Member, Physics Education Committee** and establishment of the Physics Education Unit in the Department of Physics (2008 to date).
 - (xviii) **Member, Sports Board of the University of Colombo** (2008 - 2016).
 - (xix) **Domain Coordinator** of the Domain 9 -Distance Learning of HETC Quality Assurance project- Faculty of Science, University of Colombo (2015/16-2019).
 - (xx) **Chairman- Science Faculty Infrastructure Development Committee** (2015.10.06 to 2019).
 - (xxi) **Member, Quality Assurance (QA) cell of the Faculty of Science**, University of Colombo(2017.03.15 to July 2019).
 - (xxii) Internal Reviewer of the Quality Assurance (QA) Cell of the Faculty of Science, the University of Colombo from August 2019.
 - (xxiii) Member, Faculty Board subcommittee on the formulation of an undergraduate research symposium 2019
 - (xxiv) Member, Faculty Board student mentoring committee 2019 November+
 - (xxv) Postgraduate Advisor, Department of Physics 2011-2020

A.5 LEADERSHIP & ADMINISTRATIVE EXPERIENCE

A.5.1 ADMINISTRATIVE EXPERIENCE-I

- (i) **Senior Student Counsellor and Director Student Affairs, University of**

Colombo (April 1999 up to April 2003) – four years administrative experience with ex-officio to Planning and Development Committee and the Student Welfare and Support committee of the University of Colombo and the person responsible to the Vice-chancellor on the discipline of the university.

(Senior Student Counsellor, University of Colombo, April 1999 up to 2002 and Director Student Affairs and Senior Student Counsellor, University of Colombo from April 2002 up to April 2003).

- (ii) **Founder Course coordinator- MSc in Atmospheric Physics, Dynamical Meteorology Nov. 2000 - October 2003 (3 years) and Course Coordinator- PGD/MSc in Atmospheric Physics, Dynamical Meteorology and Natural Disaster Management -Department of Physics, University of Colombo (Nov. 2007- Nov. 2009). (2 years)- This is the 1st MSc programme started by the Physics Department, University of Colombo and I received an ADB grant for this initiative.**
- (iii) **Principal Research Scientist (Space Science) – Arthur C Clarke Institute for Modern Technologies, Katubedda, Moratuwa (on sabbatical leave - one-year period) : 27.10.2003-26.10.2004.** (Development of GIS and Astronomy divisions of the space application division, manpower development and guiding its research officers develop the division to present status of launching its satellite program with special attention to research and dissemination of knowledge activities particularly at rural level).
- (iv) **President of the Sri Lanka Eye Donation Society (2012.02.20 -2013.06.30). Administrative experience as the CEO of the International Eye Bank, Eye Hospital and International model Tissue Bank** in maintaining international relations with 55 countries to send eye cornea, handling of 50 staff members, vehicle fleet of 10 including an ambulance, maintenance of the four-story building at Vidya Mawatha- Colombo-07 and its annual activities including the 400 odd branches distributed all over the country and annual cash flow over 50 million rupees.
- (v) **Administrative experience as the Hon. General President- Sri Lanka Association for the Advancement of Science(SLAAS) – 2018 and General Secretary, SLAAS (1993-1995)**

With a record in the SLAAS history of 74 years, I as the General President of the SLAAS was able to raise the highest ever amount of funds for the SLAAS in the year 2018 conducting activities worth over Rupees 40 million within a period of one year, launching the 1st Volume of long-awaited (since 1993) “The Journal of the Sri Lanka Association for the Advancement of Science” and to imitate the new building project worth over Rs 88 million – a project tried to implement since the early 90s by SLAAS. SLAAS, the apex body of Scientists in Sri Lanka, was started in 1944 and today it has over 5000 scientists in the country as members with various scientific disciplines. A possess a building of its own at Vidya Mawatha, Colombo-07, a vehicle and about 10 staff members. The General President and General Secretaries are the chief managing officers implementing the Council desiccations. I was serving in the Council for a period of 25 years as a Council member.

- (vi) **Scientific Coordinator Mobile Science Exhibition housed in three Railway Carriages (1994-2001)**

Administrative experience gained as the Scientific Coordinator of the world’s first-ever Mobile Science Exhibition housed in three Railway Carriages commissioned under the Ministry of Science and Technology as a SLAAS initiated project. I dedicated a lot of my time to design the scientific exhibits, incorporate descriptions in writing and preparation of the publication (in newspaper print) and the production of the video describing each and every item. The train has gone all over the country, stay at a remote railway station for about a month so that the school children and the general public in that area will visit the exhibition (Schools are informed in advance through the Ministry of Education). School children are trained as demonstrators at each stay point. This was really an Exploratorium than a mere exhibition where visitors could try and explore the scientific

principles with some fun. The train was operative in the country for nearly 7 years in the 1990s (from 1994 to 2001) with Bank of Ceylon generous sponsorship. It was my task also to look after the proper functioning of the exhibition programme, and I used to visit remote railway stations often for this purpose. I also took the lead role in preparing the Exhibition publication/handout and the CD on the description on science behind the Exploratorium items.

(vii) Founder and National Coordinator of two national Olympiads: (i) Sri Lankan Olympiad on Astronomy and Astrophysics and (ii) Sri Lankan Junior Astronomy Olympiad (2007 to date)

I initiated the “Sri Lankan Olympiad on Astronomy and Astrophysics in 2007” and four years later I started the “Sri Lankan Junior Astronomy Olympiad” in 2011. The purpose of the above Olympiads conducted at national levels is to popularize Astronomy and Astrophysics and to attract bright young school students all over the country to Science stream education and especially towards Astronomy and Astrophysics. These Olympiads are currently attached to the Institute of Physics, Sri Lanka. Other supportive bodies are the Department of Physics, University of Colombo, National Science Foundation and the Sri Lankan Astronomy Olympiad Association. The knowledge of the applicants will be tested with a theory paper on Astronomy. National level competitions are conducted at the examination centers in several universities in the country at the same time in all three languages: Sinhala, Tamil, and English for school students. These Olympiads are organized annually and currently holds in the month of June at the examination centers in the universities of Colombo, Kelaniya, Ruhuna(Matara), Rajarata(Mihinhale), Jaffna and the Open University Centres in Kandy(Polgolla) and Batticaloa. While those who excelled at the examination are awarded with national awards (Gold, Silver and Bronze medals and merit awards) we select the best students and send them to participate at the corresponding International Olympiads. Maximum of five students those who do well in the Sri Lankan Astronomy and Astrophysics Olympiad Competition (for grades 10-13 students) will have the chance to participate at the International Olympiad on Astronomy and Astrophysics(IOAA). Meanwhile maximum of three students those who excelled at the Sri Lankan Junior Astronomy Olympiad competition (for grades 6-9) will send to the International Astronomy Olympiad(IAO) together with a university lecturer who act as the coordinator and leader of the team. (see IPSL website www.ip-sl.org and refer the Astronomy Olympiad page for syllabus, past papers and details). Selected students will be trained vigorously at the Colombo University, Sri Lanka Planetarium and at The Arthur C Clarke Centre Space Science Division before they are sent to the International Olympiads

At the 1st IOAA held in Thailand (2007) Sri Lanka reached to the 13th place at with three of our students receiving honourable mention awards. Similarly, students selected from subsequent SLOAAs represented Sri Lanka at the 2nd IOAA held in Bandung, Indonesia in 2008, 3rd IOAA held in Tehran, Iran in 2009, 4th IOAA in China in 2010 and 5th in Poland in 2011, 6th IOAA in Brazil (2012), 7th IOAA in Greece, 8th IOAA in Romania and 9th IOAA in Indonesia and had won several awards binging fame to the country. This continues up to date. In 2018 I as the local Chair conducted the 23rd IAO. In the year 2027 the IOOAJr - is scheduled to held in Sri Lanka with me as the local Chair.

(viii) Project Chair - Implementation of a Rs 12.4 million worth nation-wide Teachers training programme on Change education towards STEM education through inquiry-based learning for Sri Lankan schools (2018) conducted under the patronage of the Ministry of Education

Administrative experience on planning and development as the project Chair of this project conducted jointly with Science & Technology Advisory Committee (STAC) of the Sri Lanka Association for Advancement of Science (SLAAS) in collaboration with the Ministry of Education, Sri Lanka and the Ministry of Science, Technology, Research, Skills Development & Vocational Training and Kandyan Heritage, Sri Lanka in 2018. The above project was initiated to train school teachers on STEM education. Science teachers selected from grades 6-9 were trained in all nine districts in Sri Lanka through three-day in-house residential training programmes as a pilot project to implement STEM education in the country to face the about 70% loss of existing jobs in the next two decades due to development of artificial Intelligence and automation.

- (ix) **Chief Supervisor- University of Cambridge International Examinations- GCE (ASL & AL) Physics-Advanced Practical Skills 1 – May/June 2015- Physics Practical Exam - Colombo University Exam Centre (2015.05.19).**

Administrative experience as budget preparation, preparation of practical setups, managing academic and non-academic staff, etc.

- (x) **Chairman-Local Organizing Committee of Hosting and conducting the 23rd International Astronomy Olympiad(IAO) 6-14 October 2018, Colombo, Sri Lanka (This is the first-ever International Olympiad that hosted in Sri Lanka).**

Administrative experience in conducting this Rs. 20 million program. The Sri Lanka Associations for the advancement of science (SLAAS), under the patronage of the Ministry of Science, Technology and Research and jointly with Institute of Physics Sri Lanka (IPSL), University of Colombo, Arthur C Clarke Institute for Modern Technologies (ACCIMT), Sri Lanka Planetarium and Sri Lankan Astronomy Olympiads Associations hosted the 23rd International Astronomy Olympiad (IAO) -2018 in Sri Lanka as an activity to celebrate the country's 70th Independence. The activities of the program were planned from 6th October to 14th October this year and this was the first-ever International Olympiad to have in Sri Lanka. 22 countries and 130 foreign delegates participated (with local group and organizers -150). The opening ceremony was held at Eagles Lake Side – Aththidiya and closing ceremony at Pegauses Reef Hotel, Wattala where the guests were accommodated for 10 days. Cultural displays and events were included in those two ceremonies to flash our countries exposure to the international community.

The competition consisted of the theoretical and observational examination rounds which are mostly held at the Pegauses Reef Hotel. The observation examination will be carried out by Arthur C Clarke Institute at Moratuwa university grounds. The program includes two main excursions (one full day) visiting Anuradhapura and Dow-south Maduganga.

- (XI) **The chief organizer of the Science and Technology exhibition held at the Science Faculty premises, University of Colombo to mark the Golden Jubilee year of the SLAAS. Dec. 1994. and Co-Chair of the “S&T 70” Science and Technology Educational Exhibition held in Science Faculty and UCSC premises in concurrence with the 74th Annual Session of the SLAAS.**

The 74th Annual Session of SLAAS under the theme “Space Science and Technology Applications for Sustainable Development” was held at the Faculty of Science Premises, together with School Inventors Competition and an Exhibition (S & T 70 Exhibition) Open to the General Public to Celebrate 70 Years of Independence together with the UCSC and Faculty of Science indicating 70 of Science and Technology achievements. Though SLAAS will coordinate the above events, the S&T 70 Exhibition shall be a joint venture: SLAAS, Faculty of Science and UCSC. I was able to provide RS 50000-70000 per department from SLAAS to construct exhibits and this was a showcase of the activities of the Faculty of Science. The exhibition in 2018 was held from 5th – 8th December 2018 under my position as the General President of SLAAS, while in 1994, me as the General Secretary of SLAAS.

- (XII) **Head of the Department of Physics from 2021.08.13 to 2025.09.07**

Apart from routine administrative work, a major curriculum revision of the decades-old Physics Syllabi was done with introducing three new honours programmes: Astronomy with Data Science, Physics Education and Material Physics. Filling up non-academic vacancies were done, and academic vacancies are in progress. Long felt a new extension to the Physics Building was initiated. Physics Museum established. Started Diploma in Adtronmy and Cetificate course on Astronomy.

- (XII) **Chairman – SLAAS All Island School Inventors Competition cum Exhibition for over 15 years up to date.**

Virtually single-handed, I am conducting the above event with the vision of developing a nation with an innovative culture. This competition is an annual two-day event conducted in concurrence with the Annual Scientific Sessions of the Sri Lanka Association for the Advancement of Science (SLAAS), and in many years it was conducted in the Faculty of Science, University of Colombo, Colombo-07, Sri Lanka. Applications are called in October by sending a letter to the schools. More than 2000 applications are received, and we select about 300 at the first screening. Those selected students will come with their inventions for the competition physically. A judging panel under the guidance of Sri Lanka Inventors Commission will judge the inventions. Gold, Silver, and Bronze medals and merit awards are given to the best inventors selected separately under four different categories namely: Grades 6-7, 8-9, 10-11 and 12-13 in the following day. As such, students from grades 6 to 13 can participate at this competition. Apart from the awards, all participants will receive a certificate of participation.

Refreshments (morning and evening tea) , lunch and accommodation are provided to all students and nighttime accommodation is provided for students coming more than 100 km distance.

Moreover, since 2024, those who have excelled in this competition also has the added advantage of attending the Sahsasak Nimayum National Inventors' competition and Presidential Awards competitions without going through the regional level competitions, and also the guidance to obtain a patent for their inventions through the Sri Lanka Inventors' Commission of the Ministry of Education.

A.5.2 ADMINISTRATIVE EXPERIENCE -II

- AS A MEMBER OF BOARDS OF MANAGEMENT/BOARDS OF STUDY IN UNIVERSITIES/HIGHER EDUCATIONAL INSTITUTIONS

- **Member, Board of Study of Labour Education** – Institute of Workers' Education, University of Colombo and now IHRA(Institute of Human resource Advancement) (1996 - 2009).
- **Faculty Board representative to the Senate of the University of Colombo** (1995/96) and 2005-11 and as a Professor from 2011 to date.
- **Member of the Academic Syndicate, Institute of Workers Education**, University of Colombo and now IHRA(1996- 2009).
- **Member, Board of Management of Graduate Foundation**, University of Colombo (2000).
- **Member Higher Degree Committee of the Faculty of Science**, University of Colombo (1998 February -2003 and 2005 – to date).
- **Faculty representative to the Sports Board of the University of Colombo** (2008 - 2016).
- **Member, Board of Study on Physics Foundation course- Institute of Physics, Sri Lanka** (2021+)

A.5.3 ADMINISTRATIVE EXPERIENCE -III

- AS ABOARD MEMBER OF NATIONAL /INTERNATIONAL STATUTORY BODIES

- Council (Board) member- the Governing body of the **Sri Lanka Standards Institution -(SLSI)** 2006-2008.
- Council member, **National Institute of Education(NIE)** 2006-2009.
- Member – **Board of Governance of Arthur C. Clarke Institute for Modern Technologies.-** 2014 to date.
- Board Member, Board of Governors-Cabinet, approved Four Member interim board to set up the **National Centre for Lightning Safety** -2012-2016.
- Board Member, **International Board on Astronomy and Astrophysics Olympiad (IOAA)** comprising of over 40 countries- 2007 to date.
- Board Member & Director/Chairman Service Projects – **Rotary Colombo Central**, 2012-15, Board member from 2012 to 2022.

- Council Member, **Institute of Physics, Sri Lanka (IPSL)** 1984-86, Several occasions in the 90s and 2007-2026.
- **Trustee, Sri Lanka Eye Donation Society** (2006 - Jan. 2012 and 2015.08.15 up to 2024).
- **Member, Audit and Management Committee of ACCIMT** (2014 to 2018)
- **Council Member of the National Research Council (2020 to 2024)**

A.6 PROFESSIONAL AFFILIATIONS

A.6.1 POSITIONS / POSTS HELD IN SRI LANKA ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (SLAAS) AND CONTRIBUTIONS MADE TO SLAAS

My association with SLAAS is over 30 years and during this period I was actively supported SLAAS in various capacities and had raised over Rs 40 million funds for various activities through various donors/sponsorships and through the lightning safety seminars that I conducted annually for some time. I am the General President SLAAS for 2018 and a General Secretary of the SLAAS, Secretary International Relations, Secretary BOT and Chairman of CPS, MRS, etc. for several years and had represented SLAAS at various national and international Institutes/events (eg. SLSI, ACCIMT, Indian Science Congress). As a resource person I have participated to well over 100 CPS Science days conducted all over the country since 1986, conducted more than 100 Radio Programs through SLBC Vidylokaya program (as an SLAAS activity) by inviting scientists to talk about their research findings and on topics interested to the general public to upgrade their scientific knowledge, involve with establishing the Media Resource Service of SLAAS with then Gen. President Prof. V.K Samaranayake; also a mastermind in establishing and maintaining multimillion rupees worth SLAAS project on the Mobile Science Exhibition Housed in three Railway carriages consisting of Exploratorium type exhibits to bring science to the general public (The train was operative in the country for nearly 7 years (from 1994 to 2001) with Bank of Ceylon generous sponsorship. It was my task also to look after the proper functioning of the exhibits and I used to visit remote railway stations often for this purpose.), also coordinated the steering committee with SLAAS leadership to obtained the biggest telescope in Sri Lanka (45 cm GOTO) received as a Japanese grant and now located at the Arthur C Clarke Institute for Modern Technologies. After the mobile science exhibition, a fixed Exploratorium was established at the bare land adjacent to the SLAAS building by constructing a temporary shed (which is still there protecting the land) through an Rs. one million funds obtained from the Ministry of Science and Technology under the Gen. President-ship of Prof. Indraratne. I am also the founder of the School Inventors competition cum exhibition holds annually as a part of the SLAAS annual sessions. I was a member of the SLAAS Council consecutively from 1993 to date. Some of my activities related to are listed below.

1. **Chairman, Ethics Committee**, Sri Lanka Association for the Advancement of Science (2019)
2. **Chairman, Buildings Committee**, Sri Lanka Association for the Advancement of Science (2019, 2020) and completed the construction of Science Tower new Building on 2020.03.10.
3. **Vice-Chairman, Board of Trustees**, Sri Lanka Association for the Advancement of Science (2019)
4. **General President**, Sri Lanka Association for the Advancement of Science (2018)
5. **Chairman- Science and Technology Advisory Committee -SLAAS (2018)**
6. **General President-Elect -SLAAS (2017).**
7. **Chairman- House and Finance Committee -SLAAS (2017)**
8. **General Secretary**, Sri Lanka Association for the Advancement of Science (1993-1995) inclusive of Golden Jubilee year.
9. **Council member, Sri Lanka Association for the Advancement of Science (SLAAS) 1993-2026.**
10. **Secretary, Board of Management of the Media Resource Service (MRS)**, Sri Lanka, established to initiate better communication between journalists and scientists. 1994.
11. **Secretary, Advisory Committee of the Media Resource Service (MRS)**, Sri Lanka (1994/1995).
12. **Chairman, Committee for the Popularization of Science (CPS)** of the Sri Lanka Association

for the Advancement of Science in two years 1998 & 1999.

13. **Chairman, Environment Committee (EC)** of the Sri Lanka Association for the Advancement of Science- 2000.
14. **Secretary – Board of Trustees (BOT)** of the Sri Lanka Association for the Advancement of Science **(2001-2005)**.
15. **President Section E1 (Physical Sciences)**, Sri Lanka Association for the Advancement of Science-2002.
16. **Convener – Buildings Committee meeting** – 2003.
17. **Workshop coordinator-** SLAAS Workshop on lightning protection of persons, buildings and equipment (as a fund raising activity) – 2003.
18. **Secretary-International Relations** of the Sri Lanka Association for the Advancement of Science **(2003-2006)**.
19. **Chairman, Media Resource Service (MRS)** Committee of the Sri Lanka Association for the Advancement of Science – 2015.
20. **Chairperson, School Inventors’ Competition Committee** of the Sri Lanka Association for the Advancement of Science (2007-2025).
21. Member, Environment Committee of the Sri Lanka Association for the Advancement of Science-SLAAS- (2007-2012).
22. Member, Committee for the Popularization of Science, SLAAS 2010-2015 (also served as a resource person for CPS science day programmes since 1984).
23. Committee Member, Section E1 of Sri Lanka Association for The Advancement of Science (SLAAS) -2011.
24. **Author of the SLAAS booklet on ‘Niwese Viduliya Anaturu Walakaganimu’ 1994.**
25. Elected as a Council member of the SLAAS from time to time from 1996 to date when there are no statutory positions.
26. **Represented SLAAS at the Indian Science Congress in January 1996 and in January 2003.**
27. Member of the 11 member committee appointed by the Hon Minister of Power and Irrigation to study and make recommendations regarding the advance of Sri Lanka Standard Time by one hour-SLAAS representative. (1996).
28. Member Astronomy Steering Committee of the SLAAS (1996).
29. SLAAS Council Nominee to the GRC award panel of judges-1996 and 1997.
30. Committee Member, 4 members Technical Evaluation Committee on the purchase of Rs 23 million worth 45 cm telescope to Arthur C. Clarke Centre for Modern Technologies. (Appointed by the Ministry of Industries, Science and Technology, 20.07.1994).
31. Committee Member of the 4-member committee which founded and implemented the SLASS coordinated Mobile Science Exhibition Housed in three railway carriages in view of enhancing the awareness on Science and Technology among people in rural areas.
32. Member, GRC of SLAAS -2013.
33. Conducted more than 50-night sky observation camps using telescopes for schools all over the country as CPS activities.
34. Resource person to the SLAAS_EC seminar on environment education - Teachers Training college-Unawatuna(2011.11.02).
35. Member, SLAAS Fund raising committee, 2011.
36. Resource Person- SLAAS Theme seminar- Lightning risk management for sustainable development, Theme Seminar of Sri Lanka Assoc. Advent. (on Science for Sustainable Development and prosperity), 67th Annual Session, Colombo, Dec.10, 2012.
37. SLAAS Scientific Sessions Coordinator for 70th Technical Sessions held in Faculty of Science, University of Colombo (and similar support in almost all occasions when the Sessions were held in University of Colombo).
38. Member, Board of Trustees of SLAAS, 2019-2026.

A.6.2 ADMINISTRATIVE/POSITIONS HELD (OTHER THAN SLAAS) AS A CHAIRMAN/ PRESIDENT/ SECRETARY OR COORDINATOR

1. **Executive Secretary, World University Service**, Sri Lanka Branch (1984).
2. **Joint Secretary of the Institute of Physics**, Sri Lanka (1984/85 and 1985/1986).
3. **Asst. Secretary, Federation of University Teachers' Association (FUTA)** 1995/96
4. **Director**, Community Services, Rotary Club of Colombo Central (97/98 & 98/99 & 99/2000 with several awards obtained for conducting the best project).
5. Patron, and founder, Rocket and Space Science Society, Sri Lanka (2001 onwards).
6. **Chairman**, Educational Development Committee of the Nalanda College Old Boys Association 1998 and 1999.
7. **President**, Rotary Club of Colombo Central (2004/2005).
8. **Founder and National Coordinator of the Sri Lankan Astronomy and Astrophysics Olympiad-SLAAO** (commenced in 2007 and continue till to date).
9. **Patron**, All Ceylon Buddhist Congress (2007-to date).
10. **District Chairman-** Environment Committee – Rotary International District 3200 - Sri Lanka (2007/2008).
11. **Assistant District Governor**-Rotary International District 3220, Sri Lanka (2008/2009)
12. **President, Institute of Physics, Sri Lanka (IPSL)** 2009-2010 and 2010-11.
13. Immediate Past President, Institute of Physics, Sri Lanka (IPSL) 2011-12 and Vice President, IPSL 2013- 2014.
14. **Founder and National Coordinator of the Sri Lankan Junior Astronomy Olympiad-SLJAO** (commenced in 2011 and continue till to date).
15. **Founder and President**-Methsaviya with membership over 6000 (2003 to date).
16. **President**, All Ceylon Avihimsa Ekabadda Maha Sammelanaya. (2008-2010).
17. **Patron-** Samastha Lanka Avihimsa Ekabadda Maha Sammelanaya (2010 -2012).
18. **Chairman**, Membership Committee of the Institute of Physics, Sri Lanka(2011/12).
19. **Chairman/Director**, Rotary Foundation of Rotary Colombo Central (2011/2012).
20. **Chairman**, Service Projects, Rotary Colombo Central (2012-2015, 2019-2022).
21. **Chairman**, Membership, Rotary Colombo Central (2016/2017/2018).
22. **Chairman, Sahasak Nimayum National Inventors Competition - Energy and Transport sector (2015).**
23. **Chairman** of subsection and a member of the selection committee on selection of Presidential Awards of National Inventors' Commission 2015, 2016.
24. **Chairman, Local Organising Committee of the 23rd International Olympiad on Astronomy held in Sri Lanka from October 6-14, 2018.**

A.6.3 MEMBERSHIP OBTAINED/POSITIONED HELD IN INTERNATIONAL SOCIETIES/ COMMITTEES

- (i) Member, Royal Astronomical Society of Canada (17.01.1996).
- (ii) Member, The Planetary Society (07.02.1996).
- (iii) Member, New York Academy of Sciences.
- (iv) Member, British Astronomical society.
- (v) Member, International Board on Astronomy and Astrophysics Olympiad (IOAA) 2007- to date.
- (vi) Jury Member, International Olympiad on Astronomy (2012 to date).
- (vii) Member, International Committee on Space Research (COSPAR), 2013+.

- (viii) Secretary, South Asian Network on Astronomy Education (2014).
- (ix) Member, International Meteor Organization-IMO(2019+)

A.6.4 CONTRIBUTIONS TO NATIONAL ACTIVITIES (OTHER THAN STATED ELSEWHERE)

1. **Member, Ministry of Science, Technology and Research Advisory Committee on the Sri Lanka Planetarium, 2017.02.01 to date.** (with a mandate to form the Department of National Planetarium and Observatory) (Activities conducted: Advisory panel on planetarium modernization project-2017-1018, selection and purchasing of 5 full-dome films for planetarium: 2019.08.008, technical support to the establishment Kulasinghe memorial Exploratorium with 30 hands-on items-2019.10.26, TEC and bid evaluation committees on purchasing mobile planetarium and a telescope to the planetarium-2019.11.22).
2. **2017 Member, Sri Lanka Planetarium refurbishment committee.**
3. **Theme Leader, NSF activity on Establishment of a National Science Centre** -the 1st theme out of 12 -Big Bang to today (2014.07.30 to date).
4. **Chairman -Technical Expert Committee on Digital Full Dome 4D projector system installation of the Sri Lanka Planetarium** (2015).
5. **Jury member, Sahasak Nimayum National Inventors Competition organized by the Sri Lanka Inventors' Commission. (2014 - to date).**
6. **Member, National Coordinating Council for "Science for All" of Coordinating Secretariat for Science Technology and Innovation (COSTI) (2014-2016).**
7. **Member, COSTI committee on the establishment of the National Science Centre(2014).**
8. **Member of Lightning Disaster Management Apex body** appointed by the Minister of Disaster Management (2011-2014).
9. **Member, Standing Committee on General Education, National Education Commission (2012-2015).**
10. **Chief of the panel of Judges** on the CHOGM All Island School Oratorical Contest organized by the Ministry of Education and telecast on Sri Lanka Rupavahini Corporation (2013).
11. **Member, NASTEC Panel on the Review of the National Science Foundation** (2013).
12. **Member, National Committee on naming Cyclones** - coordinated by Department of Meteorology (2013).
13. **Committee Member, National Climate Programme Committee (20.05.94+).**
14. **Member, Presidential task force on Integrated Programme on Science and Technology (1998).**
15. **Member, NSF Sub-Committee on Establishing a National Olympiad Federation (2010-12-15).**
16. **Member, A/L Physics Syllabus Revision Committee** of National Institute of Education (2010-2011).
17. **Member, Telecommunications Regulatory Commission** of Sri Lanka Committee on Construction of Telecommunication Towers-Public Concerns regarding Safety - (2008-2010).
18. **Resource Person – UNESCO Regional Workshop** on Lightning Physics held in Sri Lanka. (2003).
19. **Working Committee on Science Education and Popularization, National Science Foundation (1999).**
20. **Departmental Review Committee, Department of Physics, University of Sri Jayawardanapura (1997).**
21. **Member of the Committee Appointed to Study and make recommendations regarding advancing the clock by an hour** - Ministry of Irrigation, Power and Energy (1996).
22. **Chief Examiner of the G.C.E. (A.L.) Examination:** supervised a panel of examiners evaluating answer scripts of the subject Physics (1992-1998) & 2020.

A.6.5 INTERNATIONAL/REGIONAL ACTIVITIES ATTENDED AS SRI LANKA-COUNTRY REPRESENTATIVE

- **Chairman**-Local Organizing Committee of Hosting and conducting the **23rd International Astronomy Olympiad(IAO) 6-14 October 2018, Colombo, Sri Lanka** (This is the first-ever International Olympiad that hosted in Sri Lanka).
- **Country Representative**, Expert Group meeting on Scientific and Technological Culture, Commonwealth Secretariat and Commonwealth Science Council, Singapore (1997).
- **Country representative** + Sri Lanka country report on the management of Ozone Depletion Substances (ODS) phase-out in SMEs, Asian Regional Workshop on the management of Ozone Depletion Substances (ODS) phase-out in Small and Medium Scale Enterprises (SMEs), New Delhi, India, February 1995.
- **Country coordinator & Team leader** of the National Team to the 24th International Astronomy Olympiad(IAO), Romania, 2019.
- **Country coordinator & Team leader** of the National Team to the 11th International Olympiad on Astronomy and Astrophysics, Thailand, 2017.
- **Country coordinator & Team leader** of the National Team to the 10th International Olympiad on Astronomy and Astrophysics, India, 2016.
- **Country coordinator & Team leader** of the National Team to the 11th Asia Pacific Astronomy Olympiad (APAO), Bangladesh, 2015.
- **Country coordinator & Team leader** of the National Team to the 9th International Olympiad on Astronomy and Astrophysics, Indonesia, 2015
- **Country coordinator & Team leader** of the National Team to the 8th International Olympiad on Astronomy and Astrophysics, Romania, 2014
- **Country coordinator & Team leader** of the National Team to the 18th International Astronomy Olympiad(IAO), Lithuania, 2013.
- **Country coordinator & Team leader** of the National Team to the 7th International Olympiad on Astronomy and Astrophysics(IOAA), Greece, 2013.
- **Country coordinator & Team leader** of the National Team to the 17th International Astronomy Olympiad (IAO), South Korea, 2012.
- **Country coordinator & Team leader** of the National Team to the :
6th International Olympiad on Astronomy and Astrophysics(IOAA) in Brazil, 2012; **5th IOAA in Poland, 2011; 4th IOAA in China, 2010; 3rd IOAA in Iran, 2009; 2nd IOAA in Indonesia, 2008; and 1st IOAA in Thailand, 2007.**

A.6.6 POSITIONS HELD/SERVICES RENDERED IN THE DEVELOPMENT OF ASTRONOMY/GENERAL EDUCATION AND PSYCHOLOGICAL COUNSELLING

- Postgraduate Diploma in Psychological Counselling (University of Col.)
- Vice President, Sri Lanka National Institute of Professional Counsellors (SLNIPC)-2019
- Visiting lecturer on Human Psychology, IHRA, University of Colombo.
- Visiting lecturer on Abnormal Psychology, Institute of Psychological Studies.
- Ex. Council member, National Institute of Education
- Member, National Education Commission Working Group on Educational Reforms
Former Senior Student counsellor & Director Student Affairs, University of Colombo
- **Resource person to the UNESCO-ACCIMT Teachers training programme on Astronomy** with the distribution of 75 Galileo telescopes (2010.11.04).
- **Resource person to NIE Teachers training programme** conducted at district level on new A/L physics curricula (2011).
- **Resource person - workshop on General Education Policy** – organized by National

Education Commission (NEC) at Hotel Janaki (2013.06.13).

- **Resource person – NIE Workshop on preparing a question bank for AL(Advance Level)-2014**
- **Resource person - Workshop on Drafting National Policy on General Education - NEC-** held at Palm Village Hotel.(2014.08.28-29).
- **Resource Person- NIE Advanced Certificate Course for Grades 6-11 Science Teachers** 2015.02.06-12
- **Resource Person- Pre-Conference Workshop 2019 on “Aeronautical and Aerospace Engineering Applications for Sustainable Development of Sri Lanka”** organised by Organized by: Department of Aeronautical Engineering, Faculty of Engineering, General Sir John Kotelawala Defence University and talk on “Effect of space weather events on Aeronautical and Aerospace industry and the establishment of a space weather related geomagnetic storm measuring station in Sri Lanka” (2019.08.24)

A.6.7 OTHER POSITIONS HELD/SERVICES RENDERED

- (ii) **Trustee**, and founder member Sumathipala Nahimi Anusmarana Bavana Aspuwa, Knduboda, Delgoda (2002 onwards).
- (iii) **Vice President, Rotary Colombo Central** (2002/2003) with citation received for best Rotarian on four avenues of service from the Rotary International President.
- (iv) **Vice President, Institute of Physics, Sri Lanka** (1995/96).
- (v) **Board Member, Advisory Board of the Young Astronomers Association**, Sri Lanka (02.05.94-1998).
- (vi) **Life Member, United Nations Association** in the Democratic Socialist Republic of Sri Lanka (2000 onwards).
- (vii) **Resource person to the UNESCO-ACCIMT Teachers training programme on Astronomy** with a distribution of 75 Galilio telescopes (2010.11.04).
- (viii) **Main resource person - Lightning Safety Awareness program organized by DMC and Met. Dept** in Dehiowita and Ruwanwella Divisional Secretariat (2012)
- (ix) **Main resource person, ACCIMT Workshop on Introduction to Astronomy** – (2012.12.21-22)
- (x) **Panellist, Developing a Media Policy on Promoting and establishing an Innovative Culture in Sri Lanka** organized by Sri Lanka Inventors Commission (2017.08.31).

A.7 RESEARCH EXPERIENCE

A.7.I (A) Development of research capacity and institutional capability to locally award postgraduate degrees (by research) leading to MPhil and PhDs. (using the field of Atmospheric Physics, Thunderstorm Electricity and Lightning Physics at the Department of Physics, University of Colombo)

I graduated in 1983 and in 1984 became an Asst. Lecturer(probationary). At that time the existing research link established by Prof. M. L. T. Kannagara in the latter part of the 1970s with Uppsala University, Sweden has almost reached to an end due to the non-returning of PhD students sent to Sweden on Sandwich type programmes. At that time I decided to offer my self to get a locally awarded PhD in view of strengthening such capabilities in Sri Lanka. I joined the Atmospheric Research Group in 1986 and got registered for a local Mphil/PhD degree programme(and the break through was not so easy as there were no solid rules on local sandwich-type PhDs at that time and I were to suffer a lot from beurocratic problems till I received the PhD as the forerunner of local PhD progrmmes in Physics in Sri Lanka). I gradually started up to develop the Atmospheric research laboratory from nothing, i.e no equipment at all at the beginning. At that time my local supervisor Prof O. W. Jayaratne was the only group member. My Swedish supervisor Prof Sven Israleson and his research scientist Eng Edgar Knudseon visited Sri Lanka at a time many foreigners were reluctant to visit Sri Lanka due to terrorist propaganda. By the late 80s I was able to invite Prof Vernon

Cooray of the Institute of High Voltage Research to Sri Lanka.. By 1990 the Atmospheric and Lightning research lab was built to the regional standards due to my sole efforts.

In 1992 I defended my PhD thesis **“On Fair Weather and Thunderstorm Electricity - basis for Construction of an Atmospheric Electrical Station in Sri Lanka” - University of Colombo, Sri Lanka; 1992”**.

(This was the 1st ever local PhD in Physics awarded by the Colombo University. The PhD work was performed both in Uppsala University (Institute of High Voltage Research + Dept. of Meteorology), Sweden and Colombo University, Sri Lanka, under a collaborative research link programme between the universities of Colombo, Sri Lanka and the Uppsala University, Sweden).

Up to the year 1998, I was the **group leader** of the Atmospheric Physics and Lightning research group. I had two challenges to meet a) Development of the research laboratory from the scratch to regional training standards & b) Recruiting new permanent members to the group.

By 1993-94, I was working alone in the group (with some research assistants) as Prof O.W Jayaratne too got retired. *(The page 10 of 1994 travel report issued by Prof. Lennart Hasselgren the Director/International Programme in the Physical Sciences(IPPS) written after his visit to Sri Lanka-. Extracts from the report are: “2.1.4 Atmosphere Physics/Lightning Research Group: Also for this group, the progress has been slower than expected but improved tremendously during the last years. IPPS started the support to this group in 1977/78 and out of totally 6 people so far trained through IPPS, there are only one left(viz. Dr Chandana Jayaratne) in the group and one that has retired (Viz. Prof O W Jayaratne) ...”*

Soon after my PhD I was able to recruit three 1st class Physics special degree students (R Lelewala, IMK Fernando and G A C Gomes) and convince them to register for a local PhD degree programme and to do research under the collaborative research link between the universities of Uppsala, Sweden and Colombo, Sri Lanka(while all of them were having the good opportunities to go to USA for their PhDs they agreed to join and today all of them were serving the Department of Physics as Senior Lecturers. During my tenure of group leadership, millions worth grants were received from the IPPS, Sweden (both for personnel development and equipment) was taken. The amount received up to 1993 was Swedish Kronor 2102873 (more than Rs 20 million) (please read one of my annual reports(1998) written to IPPS- Sweden)

Amount of time that I spent on procurement of equipment, preparation of project reports and grants requests, strengthening international collaborations, providing local hospitality to visiting foreign scientists under the collaborative research link programme, supervising the PhD students and look into the related beurocratic work, conducting research work day-and-night in the case of lightning, for nearly a period of 15 years has paved the way for future generation in this country to conduct research in lightning and atmospheric physics and to obtain PhDs locally in this filed (particularly at a time when everyone was scared to get a local PhD degree).

Today the atmospheric and lightning research group is functioning with sufficient manpower and advance lab equipment, serving locally as well as regionally with special attention to lightning physics and lightning protection. Acquiring the local capability of awarding MPhils and PhDs degrees too has given a tremendous boost to the development of research capabilities within the university and in the country.

A.7.I (B) NO. OF RESEARCH STUDENTS SUPERVISED

COMPLETED

PhD

- a. Study of Gamma-ray Emission from the BLAZAR 1ES 2200+420 by Mr. K L I Gunawardhana, supervised by Prof KPSC Jayaratne and Dr Udara Abaysekera.
- b. Mode Identification of Oscillations of Delta-Scuti Stars using Multicolor Photometry and High Resolution Spectroscopy, Janaka Addasuruya, March 2021; Supervised by Prof K P S C Jayaratne and Prof Sashikaan Ganesh (Astronomy and Astrophysics Division, Physical Research Laboratory, Ahmedabad 3800090, India).
- c. Development of a simulation model for a communication tower to mitigate lightning hazards, M U. Mendis, Dec. 2019; Supervised by Prof. K P S C Jayaratne and Prof. Rohan Lucas.
- d. Studies on the basic atmospheric electrical parameters of fair-weather and related processes in the electrode layer, R. Lelwala, University of Colombo, April-2001; Supervised by Dr. K P S C Jayaratne and Prof. Sven Israelsson.

- e. On the nature of Lightning with special attention to remote sensing of lightning current, G A C Gomes, University of Colombo, August 1999. Supervised by Dr. K P S C Jayaratne and Prof. Vernon Cooray.
- f. Measurements and Analysis of Fast Transient Electromagnetic Fields Generated by Ground and Cloud Flashes with Special Attention to Lightning Direction Finding, by I M K Fernando, University of Colombo (2001); Supervised by Dr. K P S C Jayaratne, Prof. Vernon Cooray and at a later stage (in 1999) Prof. D U J Sonnadara's name too was added.

M.Phil/MTech

- a. Study of the Binary System V367 Cygni, by R A S Saraj Gunasekera, Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP) in Dehradun, India, December 2011, Supervised by Prof. K P S C Jayaratne and Prof. N M Ashok of Ahamadabad, India.
- b. Photometric Study of Short Period Variable Stars by Janaka Addasuriya, Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP) in Dehradun, India, July 2015, Supervised by Prof. K P S C Jayaratne and Shashikiran Ganesh of Physical Research Laboratory, Ahamadabad, India
- c. A search for extrasolar planets around M-type dwarf stars, by M V Y Herath supervised by Prof K P S C Jayaratne and Mr. Saraj Gunasekera (September 2021)
- d. Establishment of a wide field telescopic system compatible with the All-Sky camera network for observing Near Earth Objects (NEO) entering into the atmosphere near Sri Lankan sky by Subath Amaradasa and supervised by Prof. GDK Mahanama, Prof KPSC Jayaratne and Prof Chandra Wickramasinghe (August 2021).
- e. Spatial mapping of radiofrequency electromagnetic radiation levels in Sri Lanka due to communication towers and wireless networks by Mr. S A T U W K Suraweera supervised by Prof KPSC Jayaratne (2022 Dec)

M.Sc

1. Effect of Sea Surface Temperature (SST) and outgoing longwave radiation (OLR) on convective activity in the Indian Ocean Region, N R Wijesekera, University of Colombo, September-1995, Supervised by Dr. W. L. Sumathipala and Dr. K P S C Jayaratne.
- a. Impact of Ecological Factors on Crop Environment and Productivity of Tea Lands in Sri Lanka, M K S L D Amrathunga, University of Colombo, May-2000, Supervised by Dr. K P S C Jayaratne and Dr. M A Wijeratne
- b. Variation of ozone column density over Sri Lanka using solar UV radiation received at ground level, J A P Bodhika, , University of Colombo July 2004. Supervised by Dr. K P S C Jayaratne
- c. Effect of El Nino on Sri Lanka by G M R D Aponsu, University of Colombo July 2004. Supervised by Dr. K P S C Jayaratne
- d. Effect of solar activity on weather changes and occurrence of extreme events, I J C Fernando, University of Colombo, April 2007. Supervised by Dr. K P S C Jayaratne
- e. Effectiveness of Astronomical night sky observation camps for the development of astronomical knowledge of grade 9 students, K R M G Karunaratne, University of Colombo, October 2011, Supervised by Dr. K P S C Jayaratne
- f. On the Study of Property Damages Due to Lightning in Sri Lanka, A.W.M.B. Wijekoon, Supervised by M.A.R.M. Fernando of Faculty of Engineering, Peradeniya University and Prof. K P S C Jayaratne February, 2014

- g. Development of an upper-air meteorological data gathering system using aircraft data acquisition techniques, W.S.I.J. PERERA, University of Colombo March 2013,. Supervised by Prof. K P S C Jayaratne
- h. Effect of meteoritic dust on the variation of global rainfall, Upali Jayasinghe, University of Colombo February 2013. Supervised by Prof. K P S C Jayaratne
- i. Developing a statistical model to predict the rainfall at onset of Maha season in the eastern part of the dry zone in Sri Lanka, AMAHD Alagiyawanna, University of Colombo March 2013. Supervised by Prof. K P S C Jayaratne and Mr. K H M S Premalal.
- j. Use of satellite imagery as a tool for specifying precipitation based climatic conditions in Sri Lanka, K M Silva, University of Colombo March 2013. Supervised by Prof. K P S C Jayaratne and Ms Shiromani Jayawardena

CONTINUING MPhil/PhD PROGRAMMES

Name	Degree	Title	Date of Registration
Mr. K G C Weerasekera	PhD(Part time)	Influence of Dark Energy on Gravitational Lensing	2015.05.12
L K M I Randu	MPhil (Full Time)	Constructing BLAZAR high energy emission model using temporal correlation between MeV and GeV flux	2018.02.12
A. D. Manjula Ranasinghe	PhD(Part Time)	Establishment of a Geomagnetic Field Measuring Station in Sri Lanka and Study of Characteristics of Geomagnetic Field and Equatorial Electro Jet (EEJ) Variation with solar activity	2018.01.01
Saumya Kumari	MPhil(Full Time)	Thermal Modeling of Cometary Nuclei to Monitor Volatile Sublimation Driven Evolution of the Nuclear Shape and Rotation	2018.07.13
Jayasooriya Kankanamge Hansana Madushan	MPhil	On the study of Sun-Moon relative position on Earth's weather changes	2019.07.30
S. B. Bamunuarachchige	MPhil	Correlation between solar activity and precipitation on Earth	2020.01.22
H. S. Chathuranga Peries	MPhil	On the study of the Urban Canyon's height-to-width ratio and nocturnal heat island effect in Colombo	2020.01.22
K Lakshani Madubhashni	MPhil	An Investigation into Sympathetic Flaring on the Sun in Relation to Other Solar Phenomena	2021.04.24
Maduranthahan Viveganadam	MPhil	Design and construction of compact high-resolution spectrograph with remote control facility for small telescopes	2022.07.04

A.7.II NO. OF GRANTS RECEIVED

1. International Programme on Physical Sciences, Uppsala, Sweden 1986-1998 on Postgraduate Infrastructure and capacity building in the field of Atmospheric Physics and Lightning Physics - **Swedish Kronor 2102873 (more than LKR 41 million).**
2. Postgraduate capacity building – To initiate MSc programme in Atmospheric Physics and Dynamical Meteorology- the first postgraduate degree programme started at the Department of Physics, University of Colombo -ADB grant (2000) **US \$ 353000 (LKR 63 million)**

3. Strengthening the lightning protection research in Sri Lanka, HETC Project – QIG – Window 3 (2013-2015) **LKR 6,000,000.00**
4. “Establishment of a geomagnetic field measuring station in Sri Lanka” NRC Grant No. 16-098 in 2016 **LKR 1,441,900.00**
5. MAGDAS9 magnetometer installation from Space and Earth Electromagnetism Laboratory, Department of Earth and Planetary Sciences, Graduate School of Sciences, Kyushu University Hakozaki, Fukuoka, Japan 2016, **LKR 5,000,000.00**
6. “Establishment of a wide field telescopic system compatible with the All-Sky camera network for observing Near Earth Objects (NEO) entering into the atmosphere near Sri Lankan sky” NRC Grant 16-012, 2016, **LKR 3,748,000.00**
7. NSF Equipment Grant RG/2016/EQ/12 received in 2017 to purchase a Selective Radiation Meter **LKR 2,100,000.00**
8. Change education towards STEM education through inquiry-based learning for Sri Lankan schools -A project conducted by the Science & Technology advisory committee (STAC) of the Sri Lanka Association for Advancement of Science (SLAAS) in collaboration with the Ministry of Education, Sri Lanka and the Ministry of Science, Technology, Research, 2018, Ministry Grant of **LKR 12,400,000.00**.
9. Development of a mobile-based contact tracing and tracking mobile application (app) “SWARAKSHA” to mitigate COVID-19 and similar pandemics. NRC Rapid Response Grant-RD Interventions against COVID-19. Grant No. NRC CVD 20-05 for **LKR 250,000.00**
10. On the study of Sun-Moon relative position on Earth’s weather changes. Investigator Driven Grants 2020- NRC Grant No. 20-219 signed on 2022.03.09 for **LKR 1,900,000.00**.

A.7.III JOURNAL PUBLICATIONS

1. Development of a low-cost, IoT-based high-frequency weather monitoring system for detecting atmospheric anomalies during the 2024 super new moon in Sri Lanka, J. K. H. Madushan, H. S. C. Peiris and K. P. S. C. Jayaratne, Madushan et al. Discover Electronics (2026) 3:51, pp 1-18, <https://doi.org/10.1007/s44291-026-00204-z>
2. e-CALLISTO FITS Analyzer: A Software Framework For CALLISTO Solar Radio Data G.L.S.S. Liyanage, J. Adassuriya, K. P. S. C. Jayaratne, C. Monstein, and P. K. Manoharan, arXiv:2603.26086v3 [astro-ph.SR], 2026.
3. Refinement of Stellar Parameters for the Eclipsing Binary System KIC 8569819 using Stellar Modeling Approach, Dinesha Dharmathilaka, Janaka Adassuriya, Chandana Jayaratne, Jordi Gutiérrez, arXiv preprint arXiv:2603.20471 (2026).
4. Curve of Growth Analysis of SZ Lyn., Adassuriya, J., Ganesh, S., De Cat, P., Joshi, S., & Jayaratne, C., Astro-ph.SR. ArXiv. /abs/2405.12817(2024). <https://doi.org/10.48550/arXiv.2405.12817>
5. Evaluation of NASA POWER Daily Rainfall Products Against Ground Observations in Sri Lanka. Madushan, H., Jayaratne, C. & Wijemannage, A., Remote Sens Earth Syst Sci , pp1-9.(2024) <https://doi.org/10.1007/s41976-024-00173-5>
6. The analysis of type II and type III solar radio bursts: GUI for the e-CALLISTO data, Yashan Hettiarachchi, Janaka Adassuriya, Chandana Jayaratne, Sasani Jayawardhana, Christian Monstein. New Astronomy, Vol..109, 102194, pp 1-9, (2024) <https://doi.org/10.1016/j.newast.2024.102194>.
7. Analysis of the spatial distribution and comparison of the levels of radiofrequency pollution in Sri Lanka’s two most populous cities, Suraweera, S.A.T.U.W.K., Jayaratne, K.P.S.C., Environ Monit Assess 195(7), 839.(2023). <https://doi.org/10.1007/s10661-023-11444-x>

8. Evaluation of the cellular and Wi-Fi radiofrequency pollution levels in the Western Province of Sri Lanka, Thushara Udayanga Wasantha Kumara Suraweera Suraweera Arachchilage, Chandana Jayaratne, *Journal of the Sri Lanka Asso. Advmt. Sci*, 5, 1, (2023) DOI: <https://doi.org/10.5281/zenodo.8281188>
9. AlphaTg: GUI application for flux and limb derivatives of UBVRI, Kepler and TESS pass-bands for asteroseismology, J.Adassuriya, K.Sellahewa, **K.P.S.C.Jayaratne**, and S.Ganesh, Elsevier, *Astronomy and Computing* 42, pp1-8, (2023)
10. AlphaTg: GUI application for flux and limb derivatives of UBVRI, Kepler and TESS pass-bands for asteroseismology, J.Adassuriya, K.Sellahewa, **K.P.S.C.Jayaratne**, and S.Ganesh, Elsevier, *Astronomy and Computing* 42, pp1-8, (2022) <https://doi.org/10.1016/j.ascom.2022.100670>
11. Short-time variation in atmospheric pressure, humidity, and temperature during the annular solar eclipse of December 2019 in Sri Lanka. Madushan, H., **Jayaratne, C.**, and Wijemannage, A., *Science, Engineering and Health Studies*, 16, pp1-7, 22020003 (2022).
12. Analytical Study of Urban Heat Spot Patterns in Colombo District from 1988 – 2019 based on Landsat Data, Saumya Chathuranga, and **Chandana Jayaratne**, *Int. J. Dis. Manag.* 5:1, pp 15-34, (2022). <https://doi.org/10.24815/ijdm.v5i1.24081>.
13. Identifying Variable Stars from Kepler Data Using Machine Learning, J Adassuriya, JANSS Jayasinghe, **KPSC Jayaratne**, *European J. of Applied Physics*, 332-37, (2021).
14. Seasonal variation of inter-hemispheric field-aligned currents deduced from time-series analysis of the equatorial geomagnetic field data during solar cycle 23–24, Manjula Ranasinghe, Akiko Fujimoto, Akimasa Yoshikawa & Chandana Jayaratne, *Earth, Planets and Space*, 73, 146 (2021). <https://doi.org/10.1186/s40623-021-01481-6>
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16. Long-Term Analysis of Day-To-Day Equatorial IHFACs Variations During Solar Cycle 23-24, Manjula Ranasinghe, Akiko Fujimoto, Akimasa Yoshikawa & Chandana Jayaratne, *Research Square* (2021). <https://doi.org/10.21203/rs.3.rs-139626/v16>.
17. Determination of oscillation frequencies and stellar properties of three Delta Scuti variable stars using Kepler data, J. Adassuriya, K.P.S.C. Jayaratne, P.T.L.V. Cooray and M. L. C. Attygalle, *Journal of the National Science Foundation of Sri Lanka*, 48(4),367-378, 2020.
18. Characterizing the possible interior structures of the nearby Exoplanets Proxima Centauri b and Ross-128 b", Mahesh Herath, Saraj Gunesequera, and Chandana Jayaratne, *Monthly Notices of the Royal Astronomical Society(MNRAS)*, Volume 500, , Issue 1, 333-354, 15th Oct., 2020.
19. A Robotic Camera for Monitoring Meteors Entering the Earth's Atmosphere near the Equator H.D.S. Amaradasa, G.D.K. Mahanama, S.S. Abeywickrama, A.G.P.D. Alahakoon, K.P.S.C. Jayarathne, N.C. Wickramasinghe, *Advances in Astrophysics*, Vol. 4, No. 3, 86-95, August 2019
20. Two temperate sub-Neptunes transiting the star EPIC 21273744, Mahesh Herath, Tobias C. Hinse, John H. Livingston, Jesús Hernández, Daniel F. Evans, Robert Wells, Saraj Gunesequera, Jeremy Tregloan-Reed, Markus Rabus, Jesper Skottfelt, Martin Dominik, Uffe G. Jørgensen, Chandana Jayaratne and Cuc T. K. L'ý, *Monthly Notices of the Royal Astronomical Society(MNRAS)*, Volume 488, Issue 1, 536-546, 14th June 2019.
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22. Analysis of type II and type III solar radio bursts, J.V. Wijesekera, K. P. S. C. Jayaratne and J. Adassuriya, *J. Phys.: Conf. Ser.*, 1005, 012046, 2018.
23. Transient Impedance Characteristics of Soil and Sand, M Udara Mendis, KPS Chandana Jayaratne, S. Nanayakkara, Mahbubur Rahman, *Int. J. Innovation in Science and Mathematics*, Vol. 4, Issue 4, pp. 150-154, July 2016.

24. A Method to Estimate the Cooling Time of Ultra-Relativistic Electrons in Pulsar Wind Nebulae, K. L. I. Gunawardhana, K. P. S. C. Jayaratne, J. Adassuriya. American Journal of Astronomy and Astrophysics. Vol. 3, No. 3, 63-69, 2015.
25. Study of Property Damages Due to Lightning in Sri Lanka, A.W.M.B. Wijekoon, M.A.R.M. Fernando and K.P.S.C. Jayaratne, Transactions of Institution of Engineers(SL), Vol.1, Part B, pp 464-471,2011.
26. Locating cloud to ground lightning flashes with simultaneous two station measurements, DUJ Sonnadara, AB Weerasekera, IMK Fernando, R Lelwela, KPSC Jayaratne, TR Ariyaratne, S. Namasivayam & KRA Bandara, Sri Lanka Journal of Physics Vol 1(2000) 11-22.
27. Study of the Performance of Direction Finding Stations Prior to the Implementation of a Lightning Locating System in Sri Lanka, IMK Fernando, DUJ Sonnadara, KPSC Jayaratne, TR Ariyaratne, S. Namasivayam & KRA Bandara, Ceylon Journal of Science 5, pp 65-73 (1998)
28. Comparison of preliminary breakdown pulses observed in Sweden and in Sri Lanka, Chandima. Gomes, Vernon Cooray and Chandana Jayaratne, J. Atmos. Solar-Terr. Phys., 60(10), 975-979, 1998.
29. Measurement of space charge density over flat ground in the nearly neutral stratified atmospheric surface layer, R. Lelwala, S. Israelsson and K. P. S. C. Jayaratne, J. Atmos. Electricity., 17(02),59-68, 1997
30. Some characteristic features of radiation field signatures from tropical cloud flashes, K. P. S. C. Jayaratne and W. J. M. Samaranyake, J. Inst. Phys., Sri Lanka; 11(B), 1, 1995.
31. Power frequency characteristics and over-voltage disturbances (impulses) in 230 VAC electric power distribution systems in Colombo, Sri Lanka, K. P. S. C. Jayaratne and A.G. Dayananda, J. Inst. Phys., Sri Lanka; 11(B), 3, 1995.
32. Characteristics of lightning flashes observed in Sri Lanka in the tropics, V. Cooray and K. P. S. C. Jayaratne, J. Geophys. Res., 99, 21051-21056, 1994.
33. The lightning HF radiation at 3 MHz during leader and return stroke processes, K. P. S. C. Jayaratne and V. Cooray, J. Atmos. Terr. Phys., 56(4), 493-501, 1994.
34. A radiation technique for the measurement of wave activity on seashore, K. P. S. C. Jayaratne, P. R. D. Rajapakshe and K. G. Dharmawardane, J. Inst. Phys., Sri Lanka; 2, 18-22, Colombo,1986.
35. Preliminary studies of the earth's fair-weather electric field in Sri Lanka, K. P. S. C. Jayaratne and A. S. Dissanayake, J. Inst. Phys., Sri Lanka, 2, 23-28, Colombo, 1986.
36. An investigation of sources of errors by space charge measurements using the Obolensky filter method, E. Knudsen, K. P. S. C. Jayaratne and S. Israelsson, J. Atmos. Terr. Phys., 51(6), 529-531, 1989.

A.7.IV FULL PAPERS/ABSTRACTS OF PRESENTATIONS AT INTERNATIONAL SCIENTIFIC MEETINGS

37. BLACK HOLES AS ENERGY-ABSORBING REACTORS: A FRAMEWORK FOR ELEMENT, P. A. Liyanage, J. Adassuriya, K.P.S.C. Jayaratne, M B Rathnayake, Proc. Int. Con. on Emerging Concepts and Research in Integrated Sustainable Adaptation (ECRISA 2026), P 28, 29-30 January 2026.
38. Super Nyquist Analysis of Combined Quarters of Kepler Light Curves: KIC 8264492, J.A.D.M. Dharmathilaka, J.A.D.M. Dharmathilaka, J. Adassuriya, K.P.S.C. Jayaratne, Jordi L. Gutiérrez, Proc. Int. Con. on Emerging Concepts and Research in Integrated Sustainable Adaptation (ECRISA) 2026, P 35, 29-30 January 2026.
39. Assessing Thermal Discomfort Trends in Colombo: A 30 year Perspective, H S C Peries, K.P.S.C. Jayaratne, Jordi L. Gutiérrez, Proc. Int. Con. on Emerging Concepts and Research in Integrated Sustainable Adaptation (ECRISA) 2026, P 29, 29-30 January 2026.

40. LONG-TERM ANALYSIS OF INTERHEMISPHERIC FIELD-ALIGNED CURRENTS AND SEASONAL VARIATIONS IN DAWN, NOON, AND DUSK SECTORS UTILIZING EQUATORIAL MAGNETIC FIELDS AT DAVAO STATION, PHILIPPINES, Manjula Ranasinghe, Akiko Fujimoto, Akimasa Yoshikawa and Chandana Jayaratne, United Nations / Germany Workshop on the International Space Weather Initiative: Preparing for the Solar Maximum Neustrelitz, Germany 10 – 14 June 2024.
41. Adjustable High-Resolution Spectrograph Design for Celestron CPC Series Telescopes: An Engineering Approach M Viveganandam¹, J Adassuriya, K P S C Jayaratne, Book of Abstracts of the 2nd International Engineering Research Symposium 2024 (IERS 2024) © National Engineering Research and Development Centre of Sri Lanka.
42. DEVELOPMENT OF A COMPACT HIGH-RESOLUTION SPECTROGRAPH WITH OPTIMISED MECHANICAL COUPLING FOR CASSEGRAIN TELESCOPES WITH ALT-AZIMUTH MOUNTS, M. Viveganandam, J. Adassuriya and K.P.S.C. Jayaratne, Proceedings of the International Research Conference of the Open University of Sri Lanka (IRC-OUSL 2024).
43. Long wave antenna design for CALLISTO system, S. Liyanaarachchi, J. Adassuriya, and K P S C Jayaratne, *2021 From Innovation To Impact (FITI)*, 2021, pp. 1-5, IEEE publication, doi: 10.1109/FITI54902.2021.9833069.
44. Study of temporal variation of radiofrequency electromagnetic radiation levels in two bedrooms in urban and rural locations in Sri Lanka – a case study, S.A.T.U.W.K. Suraweera and K.P.S.C. Jayaratne, Int. Conf. Multidisciplinary Approaches in Science 2021, Faculty of Science, University of Colombo, ICMAS-C033, p 104, Dec 24-26, 2021. URL: <https://science.cmb.ac.lk/icmas2021/> icmas/conference-tracks/advances-in-basic-sciences-towards-technological-development/
45. Modelling Exoplanet interiors: The structures of Proxima b, Bernard Star b and Ross-128 b, M.V.Y. Herath., S. Gunsekera., K.P.S.C. Jayaratne., 43rd COSPAR scientific assembly 2021, Sydney, Australia (Oral).
46. Development of a Low-Cost Transducer with Data Acquisition Software for the Continuous Measurement of Greenhouse Gas Percentages in Sri Lanka, H.G.K. Abeywickrama and K.P.S.C. Jayaratne, Proc. of the 25th Int. Forestry and Environment Symposium 25, 50, Jan 2021.
47. Mendis, M.U., Chandana Jayaratne, K.P.S. “Lightning transient on neighbourhoods of communication towers: a simulation case study” Asia-Pacific International Conference on Lightning, Hong Kong, 2019, P. ID147.
48. Observations of transiting exoplanets around host stars with near-by companions, M.V.Y Herath., T. C Hinse., K.P.S.C Jayaratne., S. Gunsekera., 2019, “, European Planetary Science Congress 2019, Geneva, Switzerland. URL:<https://meetingorganizer.copernicus.org/EPSC-DPS2019/EPSC-DPS2019-1847-1.pdf>
49. Gihan Weerasekera, Thulsi Wickramasinghe and Chandana Jayaratne, The significance of the peculiar motions of the objects in the gravitational lensing time delay calculations, 30th Texas Symposium on Relativistic Astrophysics, December 2019, Portsmouth, United Kingdom.
50. Herath M. V. Y, Hinse T. C., Jayaratne K.P.S.C., Gunsekera S., “Possible discovery of two Mini-Neptune type planets around a dim K-star”, European Planetary Science Congress, 2018, Berlin, Germany.(<https://meetingorganizer.copernicus.org/EPSC2018/EPSC2018-244.pdf>)
51. Astrossiometry of SZ Lyn using very high-resolution photometry in BVR bands, Janaka Adassuriya, Chandana Jayaratne, & Shashikiran Ganesh. Asteroseismology of SZ Lyn using very high time resolution photometry in BVR bands. Zenodo. Physics of Oscillating Stars (PHOST), Banyuls-sur-mer, France, 2-7 September 2018, published in <http://doi.org/10.5281/zenodo.1463699> Oct. 2018.
52. Installation of a MAGDAS-9 magnetometer in Sri Lanka to measure magnetic field variations near the dip equator, K P S C Jayaratne, A D M P Ranasinghe and A. Yoshikawa, 6th Conference on Sri Lanka-Japan Collaborative Research-2018, 1st of September 2018, Peradeniya, Sri Lanka.

53. A spectral analysis of the BL-Lac type AGN 1ES 1959+650 in the X-ray and Gamma ray energy bands, M.V.Y. Herath, A U Abeysekra, and K.P.S.C Jayaratne., National Astronomy Meeting 2017, Hull, United Kingdom. URL: <https://nam2017.org/schedule-by-session/form/27/369-a-spectral-analysis-of-the-bl-lac-type-agn-1es-1959-650-in-the-x-r-ay-and-gamma-ray-energy-band>
54. On the Calculation of the Time Delay Between Gravitationally Lensed Images When Peculiar Motions are into Account, Gihan Weerasekra, Thulsi Wickramasinghe and Chandana Jayaratne, 4th Conf. of the Polish Society on Relativity, September 2017.
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56. Effects of lightning and possible health hazards due to the erection of telecommunication towers, J A K Maduranga, S R D Kalingamudali and K P S C Jayaratne, Proc. Wayamba University Int.Conf., p 248, Aug.19-20, 2016.
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59. Effect of solar activity on the occurrence of weather extreme events, K. P. S. Chandana Jayaratne and Joe C. Fernando, 26th IAGA Workshop on Geomagnetic Observatory Instruments, Data Acquisition and Processing, , Hyderabad, India, Oct 7-16, 2014.
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63. Public Perceptions and Lightning Safety Education in Sri Lanka, K. P. S. Chandana Jayaratne and Chandima Gomes, Proc. Int. Conf. Lightning Protection(ICLP),Vienna, Austria, September 2012.
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66. Cloud Charging Mechanisms, K P S C Jayaratne, UNESCO Regional Workshop on Lightning Physics, 23.04 -07.05.2003, Colombo, Sri Lanka,2003.
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A.7.V ABSTRACTS / FULL PAPERS OF PRESENTATION AT SCIENTIFIC MEETINGS IN SRI LANKA

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81. Probing the hidden nature of the universe by high energy physics simulations of Big Bang nucleosynthesis and AGN P. A. Liyanage, J. Adassuriya, K. P. S. C. Jayaratne, M. B. Rathnayake, Proc. Annual Res. Symposium, University of Colombo, Sri Lanka, 181, 2025.
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200. Polar conductivity profiles of the lower atmosphere under fair-weather conditions, K. P. S. C. Jayaratne, H. G. S. Siriwardane, D. L. N. Jayathilaka, F. L. Karunaratne and S. V. K. Manchanayake, J. Inst. Phys., Sri Lanka; 4, 25-31, Colombo, 1988.
201. The effect of distorted atmospheric electric field lines on the measurement of small ion densities, K. P. S. C. Jayaratne, H. G. S. Siriwardane, D. L. N. Jayathilaka, F. L. Karunaratne and S. V. K. Manchanayake, J. Inst. Phys., Sri Lanka; 4, 18-24, Colombo, 1988.
202. Values of space charge density under fair weather conditions, K. P. S. C. Jayaratne and T. M. R. Tennakoon, Proc. Sri Lanka Assoc. Advmt. Sci., E55,183, Colombo, Dec. 1986.

A.7.VI PATENTS

1. International Patent(PCT) received on 2021.04.15: WO/2021/069993 - “Automatic Shading Mechanism For A Camera” H.D.S. Amaradasa, A.G.P. D Alahakoon, S.S. Abeywickrama, G.D.K. Mahanama, K.P.S.C Jayaratne, N.C Wickramasinghe University of Ruhana & National Research Council.
2. NIPO(National Intellectual Property Office of Sri Lanka) published on 2022.16.12: No 20804 - “Automatic Shading Mechanism For A Camera” H.D.S. Amaradasa, A.G.P. D Alahakoon, S.S. Abeywickrama, G.D.K. Mahanama, K.P.S.C Jayaratne, and N.C Wickramasinghe
3. Pending: Day and night time imaging capable automated all-sky camera, LK20432, 2019 Mar 29, National Research Council (Based on Research Grant 16-012) :”
4. Divisional Patent Applied: Intelligent shading apparatus for cameras with wide-field of view. 2019.05.28 12, H.D.S. Amaradasa, A.G.P. D Alahakoon, S.S. Abeywickrama, E.M. Ranatunga, G.D.K. Mahanama, K.P.S.C Jayaratne, N.C Wickramasinghe

A.7.VII RESEARCH COLLABORATIONS

(a) International

- I. Dr. Sashikaran Ganesh, Astronomy and Astrophysics Division, Physical Research Laboratory, Ahmedabad, INDIA.
- II. Dr. Akimasa Yoshikawa, Space and Earth Electromagnetism Laboratory, Department of Earth and Planetary Sciences, Graduate School of Sciences, Kyushu University, Hakozaki, JAPAN.
- III. Dr. A. U. Abeysekara (High Energy Astrophysics), Department of Physics & Astronomy, The University of Utah, USA.
- IV. Prof T. Wickramasinghe (Dark matter and Gravitational Lensing), Dept. of Physics, The College of New Jersey, USA.
- V. Prof. (Mrs). B. Veenadhari, Observatory and Data Analysis Division, Indian Institute of Geomagnetism, Mumbai, INDIA.
- VI. Dr Aniket Sule, Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Mumbai, INDIA.
- VII. Dr. Bhuwan Joshi, MountAbu Astronomical Observatory, Udaipur, INDIA.
- VIII. Dr. G. Pearce, Aston University, Birmingham UK

ii. Local

- I. Mr. Saraj Gunasekera, Head of the Division, Space Applications Division, Arthur C. Clarke Institute for Modern Technologies, Katubedda, Moratuwa, Sri Lanka.
- II. Prof. V P S Perera, The Head, Department of Physics, The Open University of Sri Lanka, Nawala, Nugegoda.
- III. Prof. G D K Mahanama, The Head, Department of Physics, University of Ruhuna, Matara.

A.7.VIII EDITORIAL BOARDS AND RESEARCH-RELATED ACTIVITIES

- Chief Editor, Journal of the Sri Lanka Association for the Advancement of Science. (2022-2024).
- Executive Editor, Journal of the Sri Lanka Association for the Advancement of Science (The Journal was founded in 2018 under my General Presidentship of SLAAS) (2018 to date).
- Chairman, Technical Sessions Editorial Committee of the Institute of Physics, Sri Lanka (2013-2022) and member (29.03.2010 - 26.03.2012).
- Member, Editorial Board of the Journal of Institute of Physics, Sri Lanka(2011 to date).
- Postgraduate Advisor of the Department of Physics, University of Colombo (2012 -2020)
- NASTEC Reviewer of Research Projects (2016).
- Member, Higher Degree Committee of the Faculty of Science, University of Colombo (2005 - to date).
- University of Colombo Annual Research Symposium- Physics Department editorial coordinator(2012-2020)
- Served as a reviewer of abstracts/papers from SLAAS and several other symposia and International/National conferences(University of Colombo Ann. Res. Sym., IRSPAS-University of Kelaniya, ICMA – University of Sri Jayewardenepura, RISTCON-University of Ruhuna)/Journals(IPSL, NSF)
- Group Leader *Atmosphere Physics/Lightning Research Group of the Colombo University (1992-1999)*

A.7. IX TEXTBOOKS AND MONOGRAPHS

- Tharaka Vidyawa (Astronomy in Sinhala) 1&2 in print.(Sri Lankan Astronomyolympiads Association), 2020.

- Astronomy –Unit 1 (Textbook) Published by The Open University of Sri Lanka, 2013, 115 pages.
- Astronomy–Unit 2 (Textbook) Published by The Open University of Sri Lanka, 2013, 120 pages.
- Popularizing Science and Technology-Some Asian Case Studies, AMIC/Commonwealth Secretariat 1999 (ISBN 9971-905-73-6), Chapter on Sri Lanka by K P S C Jayaratne
- Sri Lanka Standard for Lightning Protection Systems (SLS 1261:2004),UDC 699887.2, a 138 page document is out as a publication of SLSI. I was a key member of the working group.
- Co-author of the UNDP funded book on "Akunu Ananthuru Awama Karamu (Lets minimize the lightning casualties " published by the Ministry of Disaster Preparedness.(2011.09.15).
- Monograph: Science and Society-1: Nivase Viduliya Ananthuru Walakaganimu Prevention of Accident at Home due to Electricity) –K P S C Jayaratne, A publication of the Sri Lanka Association of the Advancement of Science,1993.
- Ratree Ahasa Taraka Sithiyama (Map of the Night Sky in Sinhala), 2003.
- Monograph: The instruction sheet prepared on behalf of SLRC as a part of the National Programme to educate the public on viewing of Haley's Comet appeared in 1986 ; Printed in all three languages- Sinhala, Tamil & English.

A.8 ANY OTHER RELATED INFORMATION

A.8.1 Some consultancy/services undertaken :

Consultancy Title	Type **	Institution/ project attached	Country	Year started	Duration
Setting up the National Astronomical Observatory, Sri Lanka (obtaining the JICA funded telescope)	Technology Adaptation	Ministry of Industries, Science and Technology, Government of Sri Lanka	Sri Lanka	1992	4 Years
Consultant to the ACCIMT- Astronomy and Space Applications Division	Technology Adaptation	Arthur C Clarke Institute for Modern Technologies	Sri Lanka	1997	16 Years
Preparation of Sri Lanka Standards for Lightning Protection Systems((SLS 1261:2004) - a member of the group.	Policy/Management Issues	Sri Lanka Standard Institute	Sri Lanka	1997	6 Years
Member, Technical Evaluation Committee of Science and Technology Personal Development Project –ADB Loan No. 1535 SRI(SF)	Policy/Management Issues	Ministry of Science and Technology	Sri Lanka	1999	3 Years
Preparation of Regulations on Antenna Structure – Regulation No 1/2008 -as a member of this committee	Policy/Management Issues	Telecommunication Regulatory Commission (TRC) of Sri Lanka.	Sri Lanka	2008	3 years
Preparation of National Lightning Safety Centre act – as member of Cabinet approved Four Member interim board to set up the National Centre for Lightning Safety	Policy/Management Issues	Department of Meteorology	Sri Lanka	2012	2Years

National Science Centre – Theme1 Leader	State of art of reporting	National Science Foundation	Sri Lanka	2014	2 Years
Team Member - Preparation of National Policy on General Education of Sri Lanka	Policy/Management Issues	National Education Commission	Sri Lanka	2014	3 years
Chairman -Technical Expert Committee on Digital Full Dome 4D projector system	New process	Sri Lanka Planetarium	Sri Lanka	2015	1 Year
Implementation of a Rs 12.4 million worth Teachers training programme on Change education towards STEM education through inquiry-based learning for Sri Lankan schools (also the Chairman of the Activity Group and Science and technology Advisory Committee of SLAAS)	Policy/Management Issues	Ministry of Education and Ministry of Science, Technology and Research	Sri Lanka	2018	1 Year
Hosting and conducting the 23 rd International Astronomy Olympiad being the Chairman of the Local Organizing Committee, 6-14 October, Colombo, Sri Lanka (This is the first ever International Olympiad that hosted in Sri Lanka.	State of art of reporting	Council of the International Astronomy Olympiad	Russia	2018	10 Days (Work Plan 1 year)

A.8.2 Contributions made to the Arthur C Clarke Institute for Modern Technologies

Served as the Principal Research Scientist - Space Applications (on contract basis) from 27.10.2003 – 26.10.2004 for a period one year on sabbatical. Since then I was serving the ACCIMT as a Consultant up to date. Some of the major contributions made during this period are as follows:

1. Initiated the six-day Residential Workshop on Introduction to Practical Astronomy programme series at ACCIMT. From December 2003 up to dated 6 workshops have been conducted and had trained a large number of students. Space Science Society was formed at ACCIMT for the students.
2. Initiated the Certificate Course on Astronomy at ACCIMT in 2004.(Six months programme). A teachers' training programme is in pipeline.
3. Supported the Vidartha programme of the Ministry of Science and Technology by visiting some Vidartha centers as a resource person on conducting Lightning protection workshops.
4. Initiated the workshop series on Lightning protection at the ACCIMT for technical officers at the Vidartha Centers all over the country in view of the distribution of the knowledge on lightning protection at village level through Vidartha Centers. Already three programs had been conducted for more than 300 TOs by me as the resource person and had given a CD with PowerPoint presentation, a large poster and a booklet on lightning protection enabling the Vidartha officers to transfer that knowledge at the village level.
5. Assisted and guided the ACCIMT space application personnel on Astronomy research leading to several research publications.
6. Assisted and guided the GIS research officer to initiate research activities, particularly on assessing the Tsunami disaster using satellite pictures.
7. Made the public aware through mass media whenever there is an astronomical event of importance to the general public.

8. Supported the development of Astronomy through University-ACCIMT interaction by introducing more than 6 (several) undergraduate final year students on research projects to conduct astronomy-related research.
9. Supported several school activities by conducting astronomy night sky observation camps at the school level. As a mark of respect, the Astronomical Association of the Horana Taxila Central College has initiated an annual event called “Dr. Chandana Jayaratne Challenge Trophy- Inter School Astronomy Quiz Competition” from 2004.

I was involved in the ACCIMT astronomical telescope observatory science its inception, technical evaluation committee on the preparation of specification and up to its installation. I served as a consultant to the ACCIMT before the above period as well and has done a yeoman service to the ACCIMT to bring its Space Applications Division into present form.

A.8.3 Dissemination of Knowledge-Scientific & Literacy Communications

A.8.3.1 Orations/Keynote or Presidential address and overseas invited guest lectures

- **Convocation Address** at the BMICH for the Open University of Sri Lanka Convocation 2025.01.08 Session I
- **Keynote Address at the inaugural ACCIMT Research Symposium on Science & Technology 2024.12.17**
- Keynote Address -NIE Convocation on awarding National Diploma in Teaching-2022.10.22 at BMICH, on "Knowledge transferring at school level towards sustainability in the face of invading artificial intelligence, machine learning and automation technologies."
- Mailvaganaum Memorial Oration 2020 held in 2021 February – an annual oration organised by the Institute of Sri Lanka in memory of father of Physics and 1st Physics professor in Sri Lanka, held on 25.02.2021 at NPLT, University of Colombo and via Zoom platform.
- **Invited guest speaker (plenary session speech) of the 5th Ruhuna International Science and Technology Conference-RISTCON 2019** of Ruhuna University - Spoke on "Need of knowledge transferring at school level towards sustainability in the face of invading artificial intelligence, machine learning and automation technologies "
- **SLAAS Presidential Address of General President, 2018**, Space Science and Technology Applications for Sustainable Development at the BMICH Main Conference Hall, 2nd December 2018.
- Prof. E. M. Jayasinghe Memorial Oration 2017 (Inaugural Oration) - “Lightning Risk Assessment and how to prevent lightning-related hazards” organised by the Open University of Sri Lanka (OUSL), at OUSL Science Faculty Seminar Room, Nawala, 26th July 2017.
- **Korean Astronomical Society invited lecture** - Popularization of astronomy as a tool to attract bright young students into the science stream, **Fall Meeting of Korean Astronomical Society**, October 17 -19, 2012, Gwangju, South Korea.
- **Sugunadasa Athukorala Memorial Oration 2016** – “Understanding the new problems faced by student in the 21st Century” at New Town Hall (organised by Nalanda Vidyalaya Old Boys Association jointly with Nalanda Retired Teachers Association 18th Nov. 2016).
- **SLAAS Section E1 Presidential Address, 2002**, Atmospheric electrify and Lightning Research in Sri Lanka.
- **Institute of Physics Sri Lanka - Presidential Address** "Development of Astronomy in Sri Lanka" 2011.03.26.
- **SLAAS Them Seminar address** on "Lightning Risk management for sustainable development" 2012.12.10.
- **Keynote address** at the International Ozone day Ceremony 16.09.1999.
- **NASTEC- National science week** lecture “Space Mining” at Planetarium organized by National Science and Technology Commission (NASTEC) of the Ministry to mark the National Science Week, 4th-8th November 2014.

- **Singapore-** Buddhist Research Society Invitation- series of guest lectures-05-11 April, 2007.
- **Saudi Arabia - Sri Lanka Embassy** invitation for a guest lecture series, 7-14 May, 2012.
- **Riyadh- Sri Lanka Embassy** in Riyadh invitation for a guest Lecture series to Sri Lankan expatriates in Riyadh, 15-21 May 2011.
- **UAE-Dubai-** Invited Guest Lecture on Psychology of Personality Development and Goal Setting for Nalanda College Alumni – UAE (NCA UAE) 2015.04.03.
- **Dubai-** Olcott schools UAE and Dubai - Invited Guest Lecture **on** How to Study Effectively and Pass Examinations, 2015.04.04.

A.8.3.2 Popular Science Lectures and Public Lectures/Astronomical Night Sky Observation Camps

I have delivered **over 500 lectures** since 1984 to date mainly by participating as the Chief Guest of School Science Days or Astronomy Days in various parts of the country and through programmes organized by various Government Ministries on scientific topics related to lightning safety, Sea Level Rise and Global Warming, Greenhouse Effect, Climate Change, El Niño and La Niña, Atmosphere Pollution, Laser Applications, Nano Technology, Depletion of the Ozone Layer, Space Science, Space Mining, Artificial Satellites and their Applications, History Development of Astronomy, Current Understanding of the Universe etc.

The number of Astronomical Night Sky Observation Camps conducted at the school/university/Educational District level is over 100.

A.8.3.3 Use of Print-media to bring science to the general public

Awareness programmes on lightning protection and other topics of public interest were made through paper articles. Celestial events of astronomical interests like appearing of comets, eclipses, meteor showers etc. were announced for the public in advance and those events were used to popularize science among the public. The number of such press releases, news items, articles published by newspapers are over 200 and few are attached as an annex. In the case of announcing astronomical events of importance like eclipses, I was doing a yeoman service to the country by solely handling this for nearly two decades and even at periods like 1980s where no information was available through the internet.

A.8.3.4 Use of Electronic-media to bring science to the general public

Awareness programmes on lightning protection, lasers, Electricity, Astronomy and other topics of public interest were made through TV and Radio programmes. Celestial events of astronomical interests like appearing of comets, eclipses, meteor showers etc. were announced for the general public in advance and those events were used to popularize science among the general public.

- a. More than 100 TV programmes in SLRC and ITN (Including a series 12+1 half-hour programmes on Astronomy (for Viswaye asiriya – Marks claimed separately) + a series of 25 ten-minute programme on astronomy with computer graphics (Asirimath ahasa), and several educational programmes such as Lasers, Sound, Microwave oven, Refrigerator, Lightning, Nonimi Iyawa science series, Electronic IC's etc.)
- b. Number of radio programmes done in SLBC: More than 200 including a 42-programme series on astronomy and conducting of school science quiz programmes (as the quizmaster), coordinator of the Vidya Lokaya weekly science programme (1/2 hr through which a discussion was made with

an invited scientist from a Sri Lankan university/research institute to disseminate the new knowledge for a period of 2 years (1995/96).

A.8.3.5 Two national-level joint programmes on outreach and research activities during rare Annular Solar Eclipse of December 26, 2019

(the next annular solar eclipse visible to Sri Lanka is in 2031)

Astronomy melds into every society, influencing its culture and the intellectual atmosphere. It is an essential component of education, science, research and promotes technological advancement. Unfortunately, Sri Lanka ranks very low in the development of this discipline as judged from educational programs, research and outreach activities.

The annular solar eclipse of 26th December 2019 is a good opportunity to launch a founding program in astronomical education and research in Sri Lanka. The annular part of the solar eclipse is visible only to the Jaffna area (Northern part of Sri Lanka) while to the rest of the country, the eclipse will be visible as a partial solar eclipse. We are planning to conduct outreach activities and research level measurements during the time of the eclipse.

A broader impact of the program is to expose the society to the intellectual power of astronomy, using this rare opportunity. The program will also serve as an important step in generating astronomy research interest among academics, undergraduates, school teachers and students. Further, these activities enhance the partnerships and create trust among communities affected by more than three decades of the civil war. Astronomy awareness is expected to have an impact on society at large in abandoning superstitious thinking detrimental to almost all human activities.

The broader goals of these activities/programmes are:

- Invigorate Sri Lanka's North and South scientific dialogue and inculcate it as a means of promoting social harmony.
- Create an interest in science among young in Sri Lanka, especially physics and mathematics.
- Use astronomy as a "tool" to demonstrate the fallacy of superstitions and their inherent danger.
- Initiate astronomical research in Sri Lanka.

The following two national-level activities/programmes are conducted

1. Astronomy and Space Science Unit of the Department of Physics and the Astronomical Society, University of Colombo to provide technical and other supports for the joint national annular eclipse viewing programme planned to conduct in Jaffna together with University of Jaffna, National Institute of Fundamental Studies and Western Norway University of Applied Sciences. Main activities involved are : (a) Two main Solar Eclipse Observing Camps, one in Jaffna University and other in Colombo University. Plans are also made to conduct scientific measurement during the eclipse. The solar observing telescope due to donate by Colombo University Faculty of Science Alumni Association (CUFSA) in USA will be used for this purpose. (b) Conduct early awareness programs by holding press conferences and conducting all-island competition/exam among school children on eclipses. Activity is co-sponsored and financially supported by the Ministry of Science, Technology and Research, Sri Lanka and HRNCET projects and the Jaffna University will handle the financial part (LKR 1.7 million).
2. Astronomy and Space Science Unit of the Department of Physics University of Colombo to conduct the national solar eclipse viewing programme at 256 Vidatha Centres all over the country directly under the patronage of the Ministry of Science, Technology and Research by a) training Vidatha centre officers in Colombo on 22.11.2019 by educating them on safe viewing of solar eclipses and way to register school children for the local observation camps planned on Dec. 26, 2019 and way of awarding certificates for the winners. Each Vidatha centre will be provided with a take home pack of 10 eclipse glasses (3000 to receive free from International Astronomy Union), Astronomy and Space Science Unit (ASSU) produced video(DVD) on solar eclipses edited by FOS media, a poster prepared by ASSU on solar eclipses and a toolkit to produce home-made eclipse shades. The total cost of this project is LKR 3.9 mil. and the Ministry of Science, Technology & Research will handle the financial part.

A.8.4 Contributions made to Buddhism and related work

My efforts to develop an ethical nation in Sri Lanka using the Buddhism – the religion followed by the majority of population in Sri Lanka was exceptional. One of those personal work was constructing

a Chathya in Indolamulla Purana Viharaya. With the support of his Methsaviya meditation group, I have initiated a project to rehabilitate the SALAPATHALA MALUWA of the ancient Mirisawetiya Chaitha in Anuradhapura by laying huge granite stones while preserving the more than 2000 years old historical identity, toilet system in Nagadeepa temple, Jaffna, the tallest buddha statue in Sri Lanka with no back support in Mahiyanganaya Rajamaha Viharaya worth over Rs 95 million etc etc.

Conducted more than 50 full Moon Poya Day programmes(5-6 hour lectures) at temples on invitations up to date. These programmes explain the Science behind Buddhism.

Conducted over 200 TV programmes and panel discussions on Buddhism (eg Full moon day 1 1/2 hour live TV programme for youths "Youn Sithata Daham Sisila" with Ven. Bandarawela Amithanada has completed 5 years to 2006 December in Sinhala medium on National Television(SLRC), "Sadaham Sisila" 1 ½ hr programme on full moon poya days in Derana TV Channel (from June 2007 up to date), Buddhist TV programme in TV Lanka on full moon poya days from May 2007 up to date (with Kalasoori Arisen Ahubudu), and guided insight meditation TV programme on full moon days night at Channel Eye in English medium, Amadahara Buddhist TV series telecast live on every other Wednesday from 9.30 p.m. – 10.00 p.m. in TNL channel(together with Ven. Dodampahala Rahula Thero), more than 200 radio programmes on Buddhism (e.g. the Programme series Maranin Mathu Pewathma(life after death) with Ven Bellana Ganawimala Mahanayake Thera and Ven. Meegoda Panghaloka Thera and Dr. K G. Dharmawardane; Salapathal Maluwa since June 2007 with Ven Nauane Ariadamma Thero at SLBC, newspaper articles on Buddhism and Science.

- (i) A resource person to the International Workshop and Seminar on "Scientific Look Into Buddhism" Buddhist held at Buddhist Research Society, Singapore, 07-08 April 2007 and presented a paper on "The origin and nature of the universe and formation of life on earth: as described in Buddhist cosmology and ascertained by modern astronomy".
- (ii) A resource person to the International Buddhist Conference on How to Practice and Protect Buddhism in this Millennium held in BMICH, Colombo, 14th January 2007 and presented a paper on "Science behind the benefits of listening to Buddhist Paritta (Pirit) Chants". (organized by International Buddhist Organization-Singapore).
- (iii) A resource person to the International Buddhist Conference held in Kandy- Sri Lanka, 11-12 August 2006 and presented a paper on "Buddhism and Science".
- (iv) Member of the Sri Lankan delegation to the Tipitaka Studies and Pilgrimage held in Thailand, Rose garden Hotel, 12-15 January 2006 organized by the Dhamma Society-Thailand.
- (v) Member of the Sri Lankan delegation to the International Conference on Buddhism, BMICH, Sri Lanka, 9-14 Sep. 1999.
- (vi) Vice President, Buddhist Research Foundation, Kanduboda, Delgoda, Sri Lanka.
- (vii) Patron, Matitree Padanama (A Buddhist foundation with its aims as spreading loving-kindness to the world), Sri Lanka
- (viii) A patron of the All Ceylon Buddhist Congress (ACBC) , Baudhaloka Mawatha, Colombo-07, Sri Lanka.
- (ix) Treasurer, Indolamulla Purana Viharaya Chaithya Development society.
- (x) Member, Meditation Masters' Association (Bavana Kammatanaacharya Varunge Sabgamaya), C/o Kaduboda Samatha Vipassana International Meditation Centre, Kanduboda, Delgoda.
- (xi) Member of the three-member committee appointed by the Minister of Tourism Hon. Milinda Moragoda on the recommendation of the Buddhist Priests' Advisory Committee to classify all meditation centers in Sri Lanka in view of teaching Buddhist meditation for foreign nationals, and to find out their shortcomings of such meditation centers to give financial assistance. (2007/2008).
- (xii) Received several awards and Titles from Buddhist organizations in recognition of my service to Buddhism (see Awards and Title in above section -10).
- (xiii) President, National Avhinsa Ekabadda Sammaelanaya established under the Ministry of Cultural Affairs, Isurupaya, Battaramaulla, Sri Lanka. (2008 Nov. -2010).
- (xiv) **President and founder of the Methsaviya – Manasa Educational Development Forum (A national Buddhist organization based in Sri Lankaramaya, Lesli Ranagala Mawatha, Borella, Colombo-08, through which thousands of young people have learnt meditation.**

As a meditation teacher – I have trained more than 7000 people in a deeper way on Samatha and Vidarsana (insight) meditation on Sunday meditation classes conducted at Wellawatta Sri Vijayaramaya, Dahmma Gaveshi Bauddha Asramaya in Bullers Road Colombo-07 and, Sri Lankaramaya, Lesli Ranagala Mawatha, Colombo-08 since 2003 (as the founder and President of the Methsaviya forum).

Religious and community services done by me under the Methsaviya

(see www.methsaviya.lk for full information)

Meth Saviya association is a registered religious organization in Sri Lanka started in 2003 with the aim of building up the mentalities of the people by teaching Samata and Vidassana practices of Buddhist meditation. Its current membership exceeds over 7000, all trained through our four months meditation programme. Methsaviya Meditation Centre is currently located at the Sri Lankaramaya, 55, Lesli Ranagala Mawatha, Colombo-08, Sri Lanka. Apart from teaching Buddhist meditation and conducting scientific research on the benefits of Buddhist meditation, up to this date we have silently performed many welfare activities throughout the Island. They range from water facilities, toilet facilities in various sacred places and to mention the work a few special places as repairing the stone paved court yard of Mirisaveti Chetiya in Anuradhapura, constructing the toilet complexes in Nagadipa Vihara in Jaffna and Kilinochchiya Lumbini Vihara after the damages done by the terrorists. Our services included the supply of drinking water to Mahiyangana Vihara and supplying medicines to many rural hospitals. Donation of hospital equipment to many hospitals, providing dry rations to people under disasters like floods, conducting eye camps for the poor and donation of free spectacles, free medical camps, conducting a pre-school in Kaluthara giving free education to kids.

The Meth Saviya in 2012 started to construct the tallest Buddha statue with no back support in Sri Lanka over 100 feet in height in commemoration of the 2600th anniversary of the Enlightenment of the Lord Buddha. The cost of the project is over LKR 100 million. The organization chose the premises of Mahiyangana sacred temple premises for this purpose as it is considered as the first place that Lord Buddha trod, and as it was the site where a stupa was built enshrining the Lord's relics during His life time.

A.8.5 As a Social Worker and a Rotarian

Prof. Chandana Jayaratne has also not forgotten his civic responsibilities, and besides his scientific, astronomical, religious, psychological counselling and environmental work he is continuously involved in community service using his personal money as well as through public support and through the Rotary Club of Colombo Central and Rotary Club of Dompe.

Prof. Chandana Jayaratne was inducted as a Rotarian in 1996 by Governor Mangala and since then he has held several posts like Director Community Service and Vice President for several years in the Rotary Club of Colombo Central. He was the President of the Rotary Club of Colombo Central in the Rotary Millennium year 2004/2005 as well as the District Chairman-Functional Literacy in 2006/2007 and District Chairman of the Environment Committee in 2007/2008. Resource person to Rotary District 3220 Community Service Seminar held on 2nd September 2007-“Global Warming-What Rotary can do”.

Best Assistant District Governor(1st runners up) of the Rotary District 3220-Sri Lanka (2008/2009). He became a Paul Harris Fellow (PHF) in 2004 and bestowed as a double Paul Harris Fellow (PHF) in 2010. He is a person whose service was recognized by the Rotary International and in the year 2002 he received the Four Avenues of Service Award from the RI President and Outstanding Commitment to the Promotion and Support of Voluntary Blood Donation Programmes recognition from the RI Global Network for Blood Donation in 2006, and Special recognition award from Rotary Club of Biyagama in appreciation of Humanitarian Services Rendered to the Community in 2005. Special recognition for his commitment to Rotary's membership growth (A blue pin) in 2015.10. 08.

In the Rotary Club of Colombo Central which meets at Colombo Hilton Hotel on Wednesdays he served as the Chairman four avenues of Service (2010/11), Chairman cum Director Rotary Foundation 2011/12), Director/Chairman Service Projects- 2012/13, Souvenir Editor - Installation of 33rd President (2012 Aug.), Director/Chairman Service Projects-2013/14/15, Chairman, Membership (2016/17-2018/19), Chairman, Club Administration, (2019/20); Chairman, Membership (2020/2021). Introduced more than 15 members to the Rotary Colombo Central with 6 members in 2017/18 as the Chairman/Membership, In the year 2022 December 6th he chartered a new club – Rotary Club of Dompe and became the Charter President in 2022/23

and 2023/24. Asst. District Governor - 2024/25 and District Community Service Chair - 2025/26

In the rotary year 2023/24 under his chairmanship, he lead the club to win the District Best Poster(Video) award and at the awards night in 2024 bagged a large number of awards given for the medium size club category (1. 2nd Runner-Up: Best Club, 2. Best Club President: Rtn Prof. Chandana Jayarathne, 3. Best Club – Club Administration (Joint Award), 4. Excellence in Membership Growth and Retention, 5. Achieved the District Citation, 6. Top 5 Per Capita Contributing Clubs to the Rotary Foundation: 4th Highest, 7. Highest Attendance at the RI President’s Visit (Intercity Meeting): 2nd Highest

Through Rotary he was involved under his project leadership the massive projects like

Construction of a Pediatric Hospital in Hambegamuwa to eradicate child mortality problem of the poorest of the poor in Thanamalwila area (2002), and a Sewing Training Centre in Hambegamuwa-Thanamalwila as an attempt to divert Ganja growing poor people by providing an alternative mean of living (1999); Rehabilitation of a huge irrigation tank – Malewana Weva in Welawaya,(2003); Developing a preschool in Malewanayaya in the Monaragala District (2002); Building-up a talking computer library for the blind undergraduate students of the University of Colombo and numerous Tsunami Relief work in the cost line areas of Sri Lanka from Jaffna-Tricomalee-Batticaloa-Hambantota-Matara-Galle-Hikaduwa and Negambo (2004/2005). He was also responsible for establishing the two Rotary Village Corps (RVS) come under our rotary club the Rotary Village Corp in Hambegamuwa and the Rotary Village Corp in Malewanayaya (2000), Ranminithenna Pre School and RCC in 2001. A computer center with 10 computers and a building in Dompe as a vocational service project. His Rotary projects have won district best awards in the past. Project leader-construction of Rs 1.5 million Kalutthara Rotary pre-school. Received a district grant worth Rs 2.3 lakhs to develop Indolamulla primary school library facilities. Distribution of spectacles and RS 3.3 million worth hearing aids through an eye camp received the district citation for Health care in 2017/18, Establishment of a school library using a District Grant at Indolmulla Kanishta Vidyalaya, Dompe 2018, Distribution of 123 spectacles after an eye testing camp for 1000 and free cataract operations for 13 people with project value about 1.0 million, In 2019/20 and 2020/21 organized the economic development project in support of Rotractors at the Horowpathana village in North Central Province by donating Rs. 1.8 million worth of milking cows, irrigation water pumps for cultivation. Construction of 1.2 million worth water tower for the Dompe Primary School-2024, rehabilitation of Radavana Hospital (Rs 2 Million) in 2022-2024, Establishment of 3 interact clubs in 2024.

A. 8.6 OTHER INFORMATION

Language proficiencies:

Fluent in (1)**Sinhala**, (2)**English** and moderate fluency in (3)**Swedish**

Other languages learned:

(4)**Tamil** (followed the Open University course-1994, and BMICH courses)

(5)**German** (Gothe Institute -Colombo); (6)**Russian** (Followed at Nalanda College).

A.8.7 Countries visited (on research activities, link programmes, conferences & seminars, workshops and on invitation to deliver guest lectures etc.):

USA(2024), Nepal(2024), Thailand(2017), Bangaldesh(2015), Brazil(2012), China(2010, 2017), Denmark(1986,1988), Germany(1988), Greece(2013), India(1996, 2003, 2009, 2011, 2013, 2014, 2016, 2025), Indonasia(2008, 2015), Iran(2009), Italy(1986, 1987), Japan (1996), Lithuania(2013), Mayanmar (2020), Netherlands (1988, 1992), Norway(1987), Poland(2011, 2023), Romania(2014, 2019), Russia (1989), Saudi Arabia(2011, 2012), Singapore(2007), South Korea(2012), Sweden (1985, 1986/87, 1988, 1989, 1990/91, 1992, 1994, 1995, 1996), Switzerland(1990), Thailand (2006, 2007, 2010, 2013, 2017), United Kingdom(1987, 1989).

A8.8 Description of special mention at the Senate of the University of Colombo on 2019.09.05

A new planetary system 1133 light-years away was discovered by three Sri Lankan Scientists, including Prof. Chandana Jayaratne.

Discovery of a new planetary system 1133 light years away from our solar system by a University of Colombo M Phil student Mr. Mahesh Herath of Department of Physics, Faculty of Science, University of Colombo working in Sri Lanka under the guidance/supervision of Prof. Chandana Jayaratne (University of Colombo) and Saraj Gunasekara (ACCIMT)

- *A major discovery in cutting edge science with wide publicity received in the national and international astronomy arena.*
*Description attached**

A. 9 A BRIEF OVERVIEW OF APPLICANT- *Prof K P S Chandana Jayaratne*

Professor K P S Chandana Jayaratne is an old boy of the Nalanda College, Colombo-10 and also a recipient of the “Nalanda Keerthi Sri Award” given only to less than 10 eminent personalities produced by Nalanda. He entered in to the Faculty of Science, the University of Colombo in 1979 and passed out in 1983 with a BSc Physics Special Degree (Honours) and serving in the same university as a lecturer in Physics since 1984. Currently, he is serving as the Head of the Department of Physics, and the Director of the Astronomy and Space Science Unit, Department of Physics, University of Colombo, Colombo-03, Sri Lanka. He was the General President of the Sri Lanka Association for the Advancement of Science in 2018, where he raised funds to a record-breaking amount of nearly 40 million to conduct science and technology promoting activities in the country and also started the construction of the Science Tower building in the adjacent land which was not possible for over 30 years of struggling to construct the building by SLAAS in the past. He has done a yeomen service to develop astronomy as well as Lightning Physics research and lightning protection work in Sri Lanka in addition to his never-ending dedicated efforts on popularizing science in Sri Lanka.

He was also a person involved in establishing the biggest telescope in the country at the Arthur C Clarke Institute for Modern Technologies in Moratuwa. He is the National Coordinator and founder of the Sri Lankan Astronomy and Astrophysics Olympiad (2007) and Sri Lankan Junior Astronomy Olympiad (2011). The number of public talks, newspaper articles, TV and radio programmes on astronomy and science-related subjects came from him are well over 1000.

His PhD work has led to the Construction of an Atmospheric Physics and Thunderstorm electricity research laboratory in Sri Lanka and the development of PhD and other postgraduate degree awarding facilities in this field locally. He has supervised several PhD, MPhil and MSc research students. He is the founder Course Coordinator of the MSc Programme on Atmospheric Physics, Dynamical Meteorology & Natural Disaster Preparedness in the University of Colombo - the 1st MSc programme started at the Physics Department.

Prof Jayaratne has published over 150 research articles and publications in local and international journals. To his credit, he received in 1991 the “Third World Academy of Sciences Prizes for Young Scientists - The 1991 Prize for Physics awarded by NSF and in 1992, the GRC (General Research Committee of SLAAS) merit award for his contribution to Sri Lankan Science and in 1996. In recognition of his services, skills and capabilities, he was honoured by various national and international organizations with several distinguished honorary awards and citations with the number exceeding 20.

Prof Jayaratne has served in several Boards and Councils such as NIE, ACCIMT, SLSI, SLAAS, NRC, Institute of Physics and had been a chairman of a large number of committees and societies. His service as the Senior Student Counsellor of the Colombo University with the initiation of Counselling Centre, Cultural centre, Scholarship programmes for needy students and a talking library for visually handicapped students is commended by many. He is also a social worker involved in constructing large projects using his personnel money as well as through public support and through Methsaviya and the Rotary Club of Colombo Central.

This overview will be concluded with the extracts from the speech of the Chief Guest then Hon. Minister of Science, Technology and Research Mr. Susil Premajayantha delivered at the Induction ceremony of Prof. Jayaratne as the General President of SLAAS in 2018 “ Prof. Chandana Jayaratne is much more than just a distinguished scientist. He is a well known public figure and TV personality who had dedicated a large part of his professional life to promoting and popularizing science all over Sri Lanka. He has worked with academics and school teachers, school children and young inventors, politicians and administrators. Many young students will never forget the exposure to stars and planets they received through his personal efforts. His work in promoting and rewarding young schoolboy and schoolgirl inventors, with the assistance and sponsorship of the Sri Lanka Inventors Commission, has helped create a much-needed culture of innovation in Sri Lanka. He is a visionary with a wonderful track record of getting the job done. He has shown tremendous capacity that he has in institutional development in many occasions. The Sri Lanka Association

for the Advancement of Science could not find a better leader to guide it through the year 2018 and, hopefully, beyond.”



Date: 2026.03.31

Prof. K. P. S. Chandana Jayaratne

***A8.8 Description of special mention at the Senate of the University of Colombo on 2019.09.05**

A new planetary system 1133 light years away was discovered by three Sri Lankan Scientists including Prof. Chandana Jayaratne.

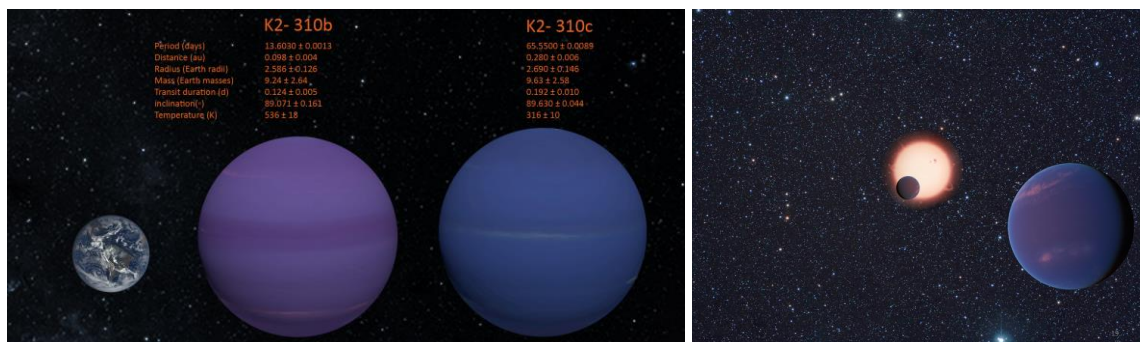
Discovery of a new planetary system 1133 light years away from our solar system by a University of Colombo M Phil student Mr. Mahesh Herath of Department of Physics, Faculty of Science, University of Colombo working in Sri Lanka under the guidance/supervision of Prof. Chandana Jayaratne (University of Colombo) and Saraj Gunasekara (ACCIMT)

- *A major discovery in cutting edge science with wide publicity received in national and international astronomy arena.*

Working in Sri Lanka, on June 14, 2019, we reported the discovery of a new planetary system around the star K2-310 (EPIC 212737443) using a combination of photometry, follow-up high-resolution imaging and spectroscopy. The planetary system consists of two sub-Neptune sized transiting planets with radii : 2.6 and 2.7 earth radii, orbital periods of 13.6 and 65.5 days, equilibrium temperatures of 536 and 316 K, respectively. Since the discovery was made using data obtained from a space mounted telescope called Kepler K2 mission, the orange colour star having a surface temperature 4684 K (less hotter than our sun) is named as K2- 310 while the two new planets that we discovered are named as K2-310b and K2-310c following the international convention of naming new planets (using the name of the telescope used to gather data).

The most important thing in this discovery is that the outer planet has the longest precisely measured orbital period from among the exoplanets so far discovered using Kepler mission as well as the lowest equilibrium temperature for a planet orbiting a star of spectral type earlier than M. Moreover, the second planet lies close to the inner boundary of the habitable zone for this system indicating a possibility of existing life. For the purpose of getting an early publication we obtained the information about the star from some foreign researchers and as such the publication which announced this discovery had several other authors too.

This is the first planetary system discovered by a team of Sri Lankan scientists and even in India there is only one such discovery made and that too was made in last year(2018). The publication on this discovery is available in Monthly Notices of the Royal Astronomical Society, Volume 488, Issue 1, p536-p546, 14th June 2019 under the title “Two temperate sub-Neptunes transiting the star EPIC 212737443”.



The two new planets compared to our own planet earth (at left), and the two exoplanets and the orange colour star K2-310 (at right).

Senior Professor K P S Chandana Jayaratne – Short Profile
(Vidyakeerthi Professor K P S Chandana Jayaratne)

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Email: chandana@phys.cmb.ac.lk, chandanajayaratne@gmail.com



Professor K P S Chandana Jayaratne is an old boy of the Nalanda College, Colombo-10 and also a recipient of the “Nalanda Keerthi Sri Award” given only to less than 10 eminent personalities produced by Nalanda. He entered in to the Faculty of Science, University of Colombo in 1979 and passed out in 1983 with a BSc Physics Special Degree (Honours) and serving in the same university as a lecturer in Physics since 1984. Currently he is serving as the Head of the Department of Physics, Professor in Physics, Department of Physics, University of Colombo, Colombo-03, Sri Lanka and also as the Director of the Astronomy and Space Science Unit of the department. He was the General President of the Sri Lanka Association for the Advancement of Science in 2018,)-the premier body of almost all the scientists in Sri Lanka. He has done a yeomen service to develop the astronomy as well as Lightning Physics research and lightning protection work in Sri Lanka in addition to his never ending dedicated efforts on popularizing science in Sri Lanka.

He was also a person involved in establishing the biggest telescope in the country at the Arthur C Clarke institute for Modern Technologies in Moratuwa and was consultant to the Astronomy and Space Science division of ACCIMT for over two decades. Prof Jayaratne is also serving in the Ministry of Science and Technology advisory Committee on Sri Lanka Planetarium. He is the National Coordinator and founder of the Sri Lankan Astronomy and Astrophysics Olympiad (Since 2007) and Sri Lankan Junior Astronomy Olympiad (Since 2011) and also the Sri Lankan representative and a Board member of the International Board on Astronomy and Astrophysics Olympiad (since 2007) and a Member of International Committee on Space Research (COSPAR). The 23rd International Olympiad on Astronomy was held in Sri Lanka in October 2018 under the Chairmanship of Prof Jayaratne is rated as one of the best international Astronomy Olympiads conducted since the inception of IAO.

He is the Chairman of the SLAAS All-Island School Inventors Competition since 2007. Number of public talks, newspaper articles, TV and radio programmes on astronomy and science related subjects came from him are well over 1000.

His PhD work has led to the Construction of an Atmospheric Physics and Thunderstorm electricity research laboratory in Sri Lanka and development of PhD and other postgraduate degree awarding facility in this field locally. He has supervised several PhD, MPhil and MSc research students. He is the founder Course Coordinator of the MSc Programme on Atmospheric Physics, Dynamical Meteorology & Natural Disaster Preparedness in University of Colombo - the 1st MSc programme started at the Physics Department.

To mention a few of his activities in the field of lightning, Prof. Jayaratne was involved in preparation of Sri Lanka Standards for Lightning Protection Systems for SLSI(Sri Lanka Standards Institute) and was also a Member of the Advisory Committee on Lightning Protection Systems formulated under the directive of a Parliament Consultative Committee(since 2010) to Investigate Safety Against Lightning Hazards and a member

of the Governing Body(Interim), Establishment of National Lightning Safety Centre. Prof Jayaratne is also a member of the Telecommunications Regulatory Commission of Sri Lanka - committee on preparation of National Policy on Antenna Structures (Since 2008) which led to the construction of the tallest Lotus Tower in the city of Colombo to replace large numbers of antennas in the city by one. He is also the principal trainer on lightning protection under the Ministry of Science and Technology VIDARTHA program and had trained about 400 graduate technicians in Vidartha Centers all over the country on lightning protection technique fundamentals.

Prof Jayaratne has served in several Boards and Councils such as NIE, ACCIMT, SLSI, SLAAS, NRC, Institute of Physics and had been a chairman over 50 committees and societies. He was a Committee Member, National Climate Programme Committee (1994); Committee member of the National Education Committee Board on formulation of the General Education Policy of Sri Lanka; Member, Presidential task force on Integrated Programme on Science and Technology(1998) and a Member of the Education Policy and Curriculum Development Committee based on STEM Education under the Ministry of Education.

His service as the Senior Student Counsellor of the Colombo University with initiation of Counselling Centre, Cultural centre, Scholarship programmes for needy students and a talking library for visually handicapped students is commended by many. He is also a social worker involved in constructing large projects such as Irrigation tanks and hospital wards, school libraries etc in remote areas using his personal money as well as through the public support and through Methsaviya and the Rotary Club of Colombo Central.

Prof Jayaratne has published over 150 research articles and publications in local and international journals. To his credit he received in 1991 the "Third World Academy of Sciences Prizes for Young Scientists - The 1991 Prize for Physics awarded by NSF and in 1992, the GRC (General Research Committee of SLAAS) merit award for his contribution to Sri Lankan Science and in 1996. In recognition of his services, skills and capabilities, he was honored by various national and international organizations with several distinguished honorary awards and citations with number exceeding 40.

National Apex Award - 2022 (a Lifetime Award) to Prof Chandana Jayaratne of the Department of Physics, University of Colombo in Recognition of Professional Excellence in the Field of Science and Technology



Prof. K P S Chandana Jayaratne of the Department of Physics, University of Colombo, was conferred with a lifetime award – the National Apex Award 2022 in Recognition of Professional Excellence in the Field of Science and Technology at the 3rd National Apex Awards Ceremony and the inauguration of the 35th Annual Conference of the Organization of Professional Associations(OPA) held at Cinnamon Lake Side Hotel on 16th of August, 2022. The award was presented to him by H. E. the President of Sri Lanka, Hon Ranil Wickramasinghe.

This award is presented to persons with dedicated professional envision, innovative, and strategically focused to develop the profession by carrying out progressive changes to the society for its wellbeing and, frequently champions change, in pursuit of continuous improvement and gaining a strategic advantage for the profession, serving as an ambassador par excellence for the profession whilst engaging in a process that contributes to the profession and keeps abreast in continuing professional development to be an outstanding achiever.

FIVE SCIENTISTS FROM SRI LANKA LISTED AMONG TOP 100 IN ASIA



Chathuranga Ranasighe



Ashani Savinda Ranathunga



Asha Devos



Rohan Pethiyagoda



Chandana Jayaratne

The Asian Scientist magazine in their 2023 edition has listed Sri Lankan scientists Chathuranga Ranasighe, Ashani Savinda Ranathunga, Asha DeVos, Rohan Pethiyagoda and

Chandana Jayaratne among the top 100 scientists in Asia.

Chathuranga Ranasighe (University of Colombo) received the 7th Sheikh Fahad Hiroshima-Asia

Sports Medicine and Science Award in 2022. This award is given once in four years to a medical expert from Asia for their contribution to sports medicine. **TO PAGE 02**

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5 Sri Lankans among top 100 scientists in Asia – Sri Lanka Mirror – Right to Know. Power to Change



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5 Sri Lankans among top 100 scientists in Asia



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Five renowned scientists from Sri Lanka have been listed among the top 100 scientists in Asia.

Dr. Rohan Pethiyagoda, Prof. Chandana Jayaratne, Dr. Asha DeVos, Dr. Chathuranga Ranasighe from the University of Colombo and Dr. Ashani Savinda Ranathunga from the University of Moratuwa have been named in the ASIAN SCIENTIST 100 Magazine's 2023 edition.

<https://srilankamirror.com/news/5-sri-lankans-among-top-100-scientists-in-asia/>

Senior Professor Kalu Pathirannahelage Sarath Chandana Jayaratne - A Legacy of Excellence in Physics and Advancement of Science

FB tabled Summarized CV

Snr. Prof. Chandana Jayaratne was born on the 08th of September 1960 and raised in Dompe, and is the eldest of 03 siblings. He started his primary education at Dompe Kanishta Vidyalaya and secondary education from Grade 6 onwards at Nalanda College, Colombo. Subsequently, he received the prestigious “Nalanda Keerthi Sri Award” given only to less than 10 eminent personalities produced by Nalanda.

After completing his GCE advanced level examination at the Nalanda College, he entered the Faculty of Science, University of Colombo, in 1979. After two years, he got selected to follow the B.Sc. Special Degree in Physics (Honours) and graduated in 1983. Soon after graduation, he joined the Department of Physics, University of Colombo, as an assistant lecturer.

In 1986, he started his postgraduate research under a sandwich-type PhD program with Uppsala University, Sweden and Colombo University, Sri Lanka, paving the way for others to receive a PhD in Physics in Sri Lanka. In 1992, he defended his PhD thesis at the Institute of High Voltage Research, Uppsala University, “On Fairweather and Thunderstorm Electricity - basis for Construction of an Atmospheric Electrical Station in Sri Lanka” and obtained the PhD degree from Colombo University, the very 1st PhD in Physics awarded by the Colombo University.

Since then, he has contributed to the development of the Department of Physics as a teacher and as a researcher. He became a Professor in 2009 and a Senior Professor in 2017. From 1992-1998, he was the Group Leader of the Atmospheric Physics and Lightning Research Group of the Department of Physics. He is the founder and Course Coordinator of the MSc Programme started in the year 2000 on Atmospheric Physics, Dynamical Meteorology & Natural Disaster Preparedness- the very first MSc program started by the Department of Physics, University of Colombo.

He was the Senior Treasurer of the Astronomical Society (former Mathematical and Astronomical Society) since 1994. He established the Astronomy and Space Science Unit (ASSU) of the Department of Physics, University of Colombo, in 2016, and started the Students for the Exploration and Development of Space – University of Colombo (SEDS-UOC) student society in 2022 and has conducted over 1000 school astronomical night sky observation camps throughout the country with the undergraduate students of those societies.

Prof. Jayaratne was the Senior Student Counsellor of the University of Colombo from 1999 – 2003, and Director of Student Affairs, University of Colombo from 2002 - 2003. During this period, he moved the student counselors building from Science Faculty to the current central location in the Arts Faculty premises, established the student counselling unit by creating a cadre position for a psychological counsellor and recruiting a professional counselor, established a talking library for the visually handicapped students, taken initiatives to establish the Cultural centre, started a Scholarship programmes for needy students. His efforts to eradicate ragging from the university were commended by many.

Prof. Jayaratne was the Head of the Department of Physics from 2020 to 2025 and has provided yeoman service to improve the quality of academic courses, enhance the visual beautification of the interior and exterior, install energy-saving solar panels, introduce the 5S practice, and implement several initiatives to elevate student and staff welfare. Certificate in Astronomy, and Diploma in Astronomy programs were started during this period. He has served in several other committees and sub-committees at the university and faculty level and was a Director of the Colombo Science and Technology Cell from 2022-2025.

Beyond his university commitments, Professor Jayaratne has contributed to advancing science in Sri Lanka, focusing on popularizing science among the young generation. His leadership within SLAAS and other scientific organizations has inspired young scientists and policy makers, strengthening the country's scientific landscape and encouraging innovation. Presently, he serves as the Chairman of the Arthur C Clark Institute for Modern Technologies; Chairman, Indu-Lanka Research Projects Evaluation Committee of the Ministry of Science and Technology (Government of Sri Lanka counterpart); Chairman, Ministry Committee on preparation of the Space Policy of Sri Lanka, and Editor-in-Chief, Journal of the Sri Lanka Association for the Advancement of Science. He was the President of the Institute of Physics, Sri Lanka,

from 2009-2010, a General Secretary of the SLAAS (1993-1995). He became the General President of the SLAAS in 2018, and an earmarked achievement was made by the construction of the new Science Tower building in the adjacent land, which was not possible in the past, though it struggled for over two decades. As the Chairman of the School Inventors Competition Committee of the SLAAS for over two decades, he has developed many young inventors into entrepreneurs, inculcating the invention and innovation culture for the economic growth of Sri Lanka. His contribution on developing the SLAAS Mobile Science Exhibition housed in 3 railway carriages was praised by the Commonwealth Secretariat and Commonwealth Science Council, with a book chapter written on it and leading to the development of such mobile exhibitions in several other countries. Prof. Jayaratne has also served in several other Boards and Councils, such as NIE, ACCIMT, SLSI, SLAAS, and NRC.

He has done a yeoman service to develop Astronomy as well as Lightning Physics research and lightning protection work in Sri Lanka, in addition to his never-ending dedicated efforts on popularizing science in Sri Lanka.

To mention a few of his activities in the field of lightning, Prof. Jayaratne was involved in preparation of Sri Lanka Standards for Lightning Protection Systems for SLSI (Sri Lanka Standards Institute) and was also a Member of the Advisory Committee on Lightning Protection Systems formulated under the directive of a Parliament Consultative Committee in 2010 to Investigate Safety Against Lightning Hazards, and a member of the Governing Body(Interim) on the Establishment of National Lightning Safety Centre in Sri Lanka. Prof. Jayaratne is also a member of the Telecommunications Regulatory Commission of Sri Lanka - committee on preparation of National Policy on Antenna Structures in 2008. This also led to the construction of the tallest Lotus Tower in the city of Colombo to replace large numbers of mobile towers in the city by a single tower. He is also the principal trainer on lightning protection under the Ministry of Science and Technology VIDARTHA program and has trained about 400 graduate technicians in Vidartha Centres all over the country on lightning protection technique fundamentals.

He was also a person involved in establishing the biggest telescope in the country at the Arthur C Clarke Institute for Modern Technologies in Moratuwa and was a consultant to the Astronomy and Space Science division of ACCIMT for over two decades. Prof. Jayaratne is also served in the Ministry of Science and Technology advisory Committee on Sri Lanka Planetarium. He is the National Coordinator and founder of the Sri Lankan Astronomy and Astrophysics Olympiad (in 2007) and the Sri Lankan Junior Astronomy Olympiad (in 2011). He is also the Sri Lankan country representative and a Board member of the International Board on Astronomy and Astrophysics Olympiad (since 2007) and a Member of the International Committee on Space Research (COSPAR). The 23rd International Olympiad on Astronomy was held in Sri Lanka in 2018 under the Chairmanship of Prof. Jayaratne, and it is rated as one of the best international Astronomy Olympiads conducted since the inception of IAO.

He has produced nearly 30 PhD, MPhil and MSc postgraduate students supervised by him and 5 more are pending. A team of three scientists, including Prof. Chandana Jayaratne and one of his research students, in 1919 had made a ground-breaking discovery of a new planetary system with a star and 2 planets, some 1133 light years away, which received wide national and international publicity.

Prof. Jayaratne has made national and international level 20 orations and keynote addresses, done over 250 TV programmes, over 200 radio programmes, over 300 newspaper articles and press releases, published over 10 textbooks and monographs, holds 4 patents, and has published over 200 research articles and publications in local and international journals. In several years he has received the "Faculty of Science Award for Excellence in Academic Outreach", the "Faculty of Science Research Excellence Award" awarded by the Faculty of Science, University of Colombo, "the University of Colombo Senate Award for Research Excellence", and the "Presidential Award for Research Excellence".

To his credit, he received in 1991 the "Third World Academy of Sciences Prizes for Young Scientists - The 1991 Prize for Physics awarded by NSF and in 1992, the GRC (General Research Committee of SLAAS) merit award for his contribution to Sri Lankan Science and in 1996, the OPA Lifetime Apex Award for Science and Technology in 2022. In recognition of his services, skills and capabilities, he was honoured by various national and international organisations with 42 distinguished honorary awards and citations.

Prof. Chandana Jayaratne is much more than just a distinguished scientist. He is a well-known public figure who has dedicated a large part of his professional life to promoting and popularising science all over Sri Lanka. Prof. Jayaratne has shaped generations of scientists and researchers through his leadership and vision. Throughout his career, Professor Jayaratne has pioneered research in physics, astronomy, and space science, establishing new research directions. Professor Jayaratne's influence at the University of Colombo is profound. He has led initiatives to expand the department's research infrastructure, enhance curriculum development, and promote interdisciplinary studies. He has provided the nation with greater opportunities

for student engagement in scientific exploration. His enduring influence is seen in the continued growth of the University of Colombo's scientific community and has lasting contributions to Sri Lankan science.

The Asian Scientist magazine, in its 2023 edition, has listed Prof. Chandana Jayaratne as one of the top 100 scientists in Asia.

In the year 2026, Prof. Chandana Jayaratne is bestowed with the prestigious Iconic Scientist Award (Scientific Laurels) in recognition of his outstanding and sustained contributions to science, education, and national development by Scientific Laurels - an Indian-based international platform and award organization dedicated to recognizing and promoting excellence in research, innovation, and professional achievement across various scientific and academic disciplines.
