CURRICULUM VITAE—Prof. W.G.D. Dharmaratna Deputy Vice Chancellor

Saegis Campus, Nugegoda, Sri Lanka

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ORCID: <u>http://orcid.org/0000-0002-6366-837X</u> ResearcherID:F-6745-2018

Google Scholar Record

https://scholar.google.com/citations?user=FvxJwSwAAAAJ&hl=en

As of May, 2023

 Citations
 59753

 h-index
 78

 i10-index
 231



World Scientist and University Rankings 2023

Ranked 2nd among Sri Lankan Scientists

EDUCATION:

Ph. D. in Theoretical Physics, 1989

Tufts University, Department of Physics and Astronomy, USA.

Post graduate studies (MSC+PHD) GPA =4.0

M. Sc. in Physics, 1984

Tufts University, Department of Physics and Astronomy, USA.

B. Sc. (Special in Physics), 1978

University of Peradeniya, Peradeniya, Sri Lanka

School Education: Sri Palee College, Horana Until 1973

EXPERIENCE:

2021- to date Professor Emeritus, University of Ruhuna

2020- to date Director/Academic Affairs, Saegis Campus, Nugegoda

2008–2020 Senior Chair Professor of Physics, Dept. of Physics, Univ. of Ruhuna, Sri Lanka.

2001-2008 Chair Professor of Physics, Dept. of Physics, Univ. of Ruhuna, Sri Lanka.

2004-2005 Visiting Professor, Dept. of Physics, Florida State University, USA.

2000-2001 Professor in Physics

1993-2000 Senior Lecturer, Department of Physics, University of Ruhuna, Matara, Sri Lanka

1990-93 Post-Doctoral Research Associate, Dept. of Physics, University of Florida, USA.

1985-89 Research Assistant, Dept. of Physics & Astronomy, Tufts University, USA.

1984-89(Summer) Faculty Member

Summer School, Tufts University, USA.

1982-85 Teaching Assistant

Dept. of Physics & Astronomy, Tufts University, USA.

1979-90 Assistant Lecturer (on leave from 1982-1990)

Department of Physics, University of Ruhuna, Matara, Sri Lanka.

1978-79 Temporary Assistant Lecturer

Department of Physics, University of Peradeniya, Sri Lanka

RESEARCH EXPERIENCE:

Experimental Physics:

- -- High Energy Physics (CMS Experiment, CERN, Initiated the HEP research in a Sri Lankan Universities for the first time)
- -- Condensed matter Physics
- -- Photoelectrochemical cells
- -- Thermal Conductivity
- -- Energy Saving Devices
- -- Noise Pollution and Lightning

CMS: Country representative for CMS Experiment – 2018-todate

Lead the Sri Lankan team of Physicists to get the full membership of CMS experiment at CERN from Dec. 2017. Presented the application for Sri Lanka at the CMS CB meeting held in Rio de Janeiro on 29th Sep 2017

Initiated the research collaboration between CMS Experiment at CERN and Ruhuna. Signed an Expression of Interest between Ruhuna University and CMS Experiment (2006). Produced the first PhD from a Sri Lankan University in HEP based on research at CERN.

Served as a Postdoctoral Research Associate with the HEP Group of Florida State University for D0 experiment at FNAL (1989-1993). Has joined the CMS experiment at CERN as a member of the HEP group at Florida State University (2004 - 2011).

D0: Made a significant contribution in Computer Simulations of D0 detectors, in the development of software for data acquisition and analysis, and in testing and calibration of EM calorimeter modules at D0 experiment. Study the effects of dead materials of the calorimeter and muon response in EM calorimeter.

Theoretical Physics:

- --Particle Interactions (Quantum Chromodynamics)
- --Spin Physics
- -- Transverse Polarization
- -- Computational Physics

Calculation of cross-sections and helicity amplitudes for scattering of elementary particles in quantum

field theory, analytical calculations by using symbolic manipulation programs in computers, construction of theoretical models and numerical calculations in computers.

Supervision of Postgraduate Students:

a)	Kalpanie M. Liyanage	- PhD	in HEP (CMS) -Started in 2018)
b)	Nimantha Perera	- PhD	in HEP (CMS) - Started in 2018
c)	S.M.N. Sethunga	- PhD	Completed (2022)
d)	D.A.Madarasinghe	- MPhil	Completed (2020)
e)	Ms. Nadeesha Wickramage	- PhD	Completed in 2014 (CMS experiment, 1st from a
			Sri Lankan University))
f)	Ms. K.M.E.M. Karunawardan	a - MPhil	Completed in 2010
g)	Mr. E.M. Ranatunge	- MPhil	Completed in 2010
h)	Mr. J.A.P. Bodhika	- PhD	Completed in 2009 (University of Colombo)
i)	Mr. J. Peiris-	- MPhil	Completed in 2008 (Supervised at the Final stage)
j)	Mr. Kapila Hewaparakrama	- MPhil	Completed in 1998

Publications:

Link to Google Scholar:

http://scholar.google.com/citations?user=FvxJwSwAAAAJ&hl=en

POSITIONS HELD IN PROFESSIONAL ORGANIZATIONS:

Deputy Vice Chancellor (Jan 2023 – to date), Saegis Campus, Nugegoda

Director/Academic Affairs (2020 Sep to Dec 2022), Saegis Campus, Nugegoda

Dean (2016 Aug. – 2020 Feb) – Faculty of Technology, University of Ruhuna

Dean (2010 – 2016 July) – Faculty of Science, University of Ruhuna

Board Member, PGIS (2012 – 2016) – Science Standing Committee Nominee to Board of PGIS

Director (2007-2011) - Postgraduate Studies, University of Ruhuna

Head (1994-2004) - Dept. of Physics, University of Ruhuna

President (2004) - Ruhuna Univ. Science Teachers Association

President (2002/2003) - Institute of Physics, Sri Lanka

President (2001/2002) - Institute of Physics, Sri Lanka

Committee Member (1997-2000) - SLASS, Section E1

Vice-President (1998 - 1999) - Institute of Physics, Sri Lanka

Council Member (1997, 2000, 2003) - Institute of Physics, Sri Lanka

President (1997-2001) - Ruhuna Univ. Science Teachers Association

PERSONAL:

Date of Birth: 1955-02-12 Place of Birth: Maha Induruwa

Marital Status: Married

PROFESSIONAL ORGANIZATIONS:

Fellow - Institute of Physics, Sri Lanka

Life Member- SLAAS Member of Lions Club of Matara

CONFERENCES PARTICIPATED AND INVITED TALKS

- 1) Keynote Address, "Role of an Academic" CCPDHE Certificates Awarding Ceremony Dec 23rd 2021
- 2) CMS WEEK 2019 Dec 10-19, 2019, Bangkok, Thailand
- 3) Invited Talk: Fundamental Building Blocks of the Universe: have we discovered them? Sep 11th, 2019 at General Sir John Kotelawala Defense University, 12th International Research Conference, KDU -IRC (Basic Science and Applied Science Session)
- 4) Invited oration at the 16th Academic Sessions and 15th Vice Chancellor's Awards Ceremony of University of Ruhuna was delivered on 'Fundamental Building Blocks of the Universe', Mar 2019
- 5) 2nd CERN-South Asian high Energy Physics Instrumentation (SAHEPI -2) Workshop on Detector Technology and Applications. Held in Colombo, Sri Lanka from Feb 20-21, 2019. Chairperson, Local Organizing Committee. Presented the status report.
- 6) 6th Ruhuna International Science and Technology Conference RISTCON 2019, Jan 2019 Member of the Advisory Committee.
- 7) Invited Oration- Fundamental Building Blocks of the Universe, RISTCON 2019
- 8) Research Management Workshop, Nov. 2017, Organized by NSF, Sri Lanka
- 9) CMS Collaboration Meeting and CMS Physics Week, Rio de Jeneiro, Brazil, Sep. 2017, Presented "An application seeking CMS membership for a consortium of Sri Lankan Physicist"
- 10) South Asian High Energy Physics Instrumentation Workshop on Detector Technology and Applications, Kathmando University, Nepal, June 2017Presented the "Overview of HEP Activities in Sri Lanka",
- 11) CERN, European Organization for Nuclear Research, Visited on Invitation from the Ministry of Science, Technology and Research, leading the Group of Sri Lankan Physicists for discussions at CERN, May 2017, Participated in discussions with the CMS group Leaders, Minister of Science and Technology and the Sri Lankan Ambassador to Switzerland.
- 12) BICOST 2016, Colombo, Presented the working committee report on FOCUS Area 10: Action plan
- 13) 3rd RISTCON 2016, University of Ruhuna
- 14) 2nd RISTCON 2015, University of Ruhuna
- 15) BICOST 2014, Colombo, Presented the committee report on FOCUS Area 10: Basic Science, Emerging Technologies and Indigenous Knowledge
- 16) 1st RISTCON 2014, University of Ruhuna
- 17) 10th Academic Session, Univ. Ruhuna, Mar 2013.
- 18) 9th Ruh. Sci. Sym., Jan 2013.
- 19) 7th Asia-Pacific International Conference on Lightning, Chengdu, China, Nov. 1-4, 2011
- 20) 8th Ruh. Sci. Sym., Dec. 2011
- 21) 29th International Conference on Lightning Protection, Uppsala, Sweden, A research student (J.A.P. Bodika) made a presentation, June 2008
- 22) CMS Collaboration Meeting and CMS Physics Week, CERN, Switzerland, Oct. 2006
- 23) 62nd Annual Sessions of SLAAS, A research student (E.M. Ranatunga) made a presentation, Dec. 2006
- 24) Annual U.S. CMS Collaboration Meeting and CMS Physics Week, Fermilab, USA, Apr. 2005
- 25) 2nd Science Symposium, Univ. of Ruhuna, A research student (L.D. Premarathna) made a presentation, (2004)
- 26) 59th Annual Sessions of SLAAS, A research student (E.M. Ranatunga) made a presentation, Dec. 2003
- 27) 58th Annual Session of SLAAS, A research student (P.W.C. Roshan) made a presentation, 2002.
- 28) 18th Technical Session of IPSL, A research student (P.W.C. Roshan) made a presentation, Mar. 2002.

- 29) 1st Sci. Sym., University of Ruhuna, A research student (P.W.C. Roshan) made a presentation, Dec. 2002.
- 30) Workshop on Collaborative Action Research as a strategy for linking higher education and basic education. (July 2001)
- 31) 57th Annual Session of SLAAS, A research student (P.W.C. Roshan) made a presentation (2001)
- 32) Invited resource person Presented a review paper on "Discoveries in High Energy Physics in the 20th Century" at the 57th Annual Session of SLAAS, Nov. 30th, 2001
- 33) 17th Technical Session of IPSL. A student (K.N. Cems) made a presentation. (Mar. 2001)
- 34) Fifth Workshop on Low-Cost Electronic Materials, Solar Cells and Renewable Energy Sources, Colombo, Sri Lanka. Served in the Organizing Committee. A student (K.N. Cems) made a presentation. (Feb. 2000)
- 35) 16th Technical Session of IPSL. A student (K.N. Cems) made a presentation. (Mar. 2000)
- 36) 56th Annual session of SLAAS, A student (K.N. Cems) made a presentation (2000)
- 37) Young Scientist Forum, NASTEC (June 2000)
- 38) Conference on Space Science & Technology-Applications for National Development", Colombo, Sri Lanka. (Jan 1999)
- 39) 13th Topical Conference on Hadron Collider Physics, Tata Institute of Fundamental Research, Mumbai, India. (Jan. 1999)
- 40) Workshop on Renewable Energy Sources, Peradeniya, Sri Lanka. (1999)
- 41) 15th Technical Session of IPSL, A student (K.N. Cems) made a presentation (1999)
- 42) 55th Annual Session of SLAAS, A student (K.N. Cems) made a presentation (1999)
- 43) Workshop on Renewable Energy Sources, Colombo, Sri Lanka. (Feb. 1998)
- 44) 14th Technical Session of IPSL. A research student (P.R.T.N. De Silva) made a presentation. (1998)
- 45) 54th Annual Session of SLAAS, A research student (P.R.T.N. De Silva) made a presentation. (1998)
- 46) Talk on "Using top Quarks for Testing QCD Predictions and for Searching New Physics, 13th Technical Session of IPSL. (1997)
- 47) Regional Workshop on Low-Cost Electronic Materials and Solar Cells, Colombo, Sri Lanka. (March 1997)
- 48) 53rd Annual Session of SLAAS, A research student (D.M.W. Daaundasekara) made a presentation. (1997)
- 49) 52nd Annual Session of SLAAS, A research student (D.M.W. Daaundasekara) made a presentation. 1996
- 50) Fifth Asian Conference on Solid State Ionics, Kandy, Sri Lanka. (Dec. 1996)
- 51) Invited Talk: "Spin Asymmetries in P P Collisions", D0 (All Jets) Analysis Group Meeting, (1995)
- 52) Invited Talk: "Possible Improvements on the Electron Calibration in D0 Detector", FSU group meeting, FNAL, USA. (1994)
- 53) Workshop on Nuclear Power & Energy Planning, Colombo, Sri Lanka. (1994)
- 54) Talk on "Effect of Dead Materials on Calorimeter Response and Monte Carlo Simulation", 3rd International Conference on Calorimetry in High Energy Physics, Corpus Christi, Texas, USA. (1992)
- 55) 7th Meeting of the American Physical Society- Division of Particles & Fields, Fermilab, Batavia, Illinois, USA. (1992)
- 56) Talk on "Jet Energy Scale in D0 Detector", D0 Conference, Lawrence Berkeley National Lab., Berkeley, California, USA. (1991)
- 57) Invited Talk: "Gluon Fusion as a Source of Massive Quark Polarization", Dept. of Physics, University of Florida, Tallahassee, USA. (1989)
- 58) Invited Talk: "Transverse Polarization of Quarks from QCD Processes", Cornell University, Nuclear Studies Center (CESR), Ithaca NY, USA. (1989)
- 59) Invited Talk: "Gluon Fusion as a Source of Massive Quark Polarization", 8TH International Symposium on High-Energy Spin Physics, Minneapolis, USA. (Sep 1988).

Services to the Ruhuna University.

- 1) Pioneering Dean- Faculty of Technology, University of Ruhuna (Aug. 2016 Feb 2019)
- 2) Dean- Faculty of Science, University of Ruhuna (2010- Jul. 2016)
- 3) Senate Committee, Evaluation of Applications for Emeritus Professor Posts (2011-2020)
- 4) Management Committee, Distance Education Unit (2012-2016)
- 5) Senate Nominee to the Council University of Ruhuna (2007-2010)
- 6) Director, Graduate Studies-University of Ruhuna (2007-2011) Established the Faculty of Graduate Studies.
- 7) Senate Committee Chairman: Higher Degrees By-Law Review Committee (2009-2020)
- 8) Senate Committee Chairman: University Logo Correction (2009)
- 9) Senate Committee Chairman: Conduct of University Examinations and Release of Results (2009)
- 10) Editorial Board Ruhuna University Journal (ROHANA) (2009-2010)
- 11) Editor in Chief Ruhuna Journal of Science (2006- to date)
- 12) Senate Committee Chairman: External Degree Programme Review (2008)
- 13) Disciplinary Board University of Ruhuna (2008)
- 14) Faculty representative to University Quality Assurance Unit (2008 to 2016)
- 15) Senate Committee Chairman: Verification of grades for undergraduate examinations (2008)
- 16) Senate Committee Chairman: Design the format for University Transcripts (2008).
- 17) Redesigned Degree/Diploma Certificates (2008)
- 18) Member of the Convocation Committee Photography and Video (2007 & 2016)
- 19) Senate Committee Member- Work Norms & Annual Salary Increment for Academics 2004
- 20) Senior Treasure-Student Union, Faculty of Science, 2002/2003/2004.
- 21) Staff development centre 2000/2001, Executive Committee Member until 2004
- 22) Chairman, Organizing Committee, Second Science Symposium, Faculty of Science-2004
- 23) Head of the Department from Sep. 1994 2004.
- 24) Chairman, Staff Development Unit, Faculty of Science 2003-2004
- 25) Chairman, Organizing Committee, First Science Symposium, Faculty of Science-2003
- 26) Member of the organizing committee, First Academic Sessions, University of Ruhuna, 2003
- 27) Chairman of the Logistic and Public Services Committee- Silver Jubilee-2003
- 28) Senate Committee Member- Non-academic Services Problems- 2002
- 29) Examination offenses investigation 1996-1999
- 30) External Degree Examination offenses investigation 1998-2000
- 31) Establishment of a staff development unit 1999
- 32) Member of the Technical Evaluation Committee for Computers- 1998-1999
- 33) Served in a large number of selection committees for Labourers to Senior Lecturers and Professors. Furthermore, set the question papers for relevant selection examinations.
- 34) Served in a number of various committees in Faculty of Science (Timetables and Examination time tables for several (five) years, Course units development, Students Request committee etc.)
- 35) Member of the Students Disciplinary Board for a couple of years since 2000
- 36) Resource Person- CV writing workshop, Carrier Guidance Unit (Oct. 2000)
- 37) Advisor- "Kala Parshadaya", University of Ruhuna, 2000
- 38) Editorial Board ROHANA magazine 2000/2001 and 2009-2020
- 39) Technical evaluation committee for computers- 2000/2001
- 40) Committee Member Establishment of the Faculty of Engineering
- 41) President Ruhuna University Science Teachers Association- from May 1997- Aug. 2001
- 42) Served in a number of Committees appointed by Faculty of Science (Since 1993)
- 43) Student Counsellor 1980/81 and 1979/80
- 44) Member of the Sports Advisory Board 1980/81

NATIONAL ACTIVITIES

- 1) Vice Chairman, University Services Appeal Board (USAB) Five Years from 1st July 2021
- 2) Chairman, Subject Benchmark Committee on Physics and Electronics 2020
- 3) A stall on Particle Physics and CERN collaboration was held, with posters and videos at the "Shilpa Sena" exhibition held at BMICH-2019
- 4) Leading the Sri Lanka CERN Collaboration since 2018.

 Made the presentation to CMS collaboration to obtain the full membership of CMS experiment in 2017.
- 5) Chaired the Local Organizing Committee, 2nd CERN-South Asian High Energy Physics Instrumentation, Feb 20-21-2019.
- 6) Chairman, NSF Working Committee on Basic Sciences (July 2016 July 2019)
- 7) National Committee for Physics Syllabus Review GCE A/L Examination 2016)
- 8) Invited Participant- In-houses Seminars at the National Institute of Fundamental Studies, May 2018 and contribute your expert opinion to further develop and finalize the Basic Science Research Policy- May 2018
- 9) Committee member development of the Basic Science Research Policy for Sri Lanka 2017/2018
- 10) Committee Member, Establishment of National Science Centre, Sub-Committee "Big Bang to Today"
- 11) Chairman, Experts Committee, Thrust Area 10: Basic Sciences, Emerging Technologies and Indigenous Knowledge, Ministry of Technology and Research, 2014
- 12) Board Member, PGIS (2012 2016) Science Standing Committee Nominee to Board of Postgraduate Institute of Science, Peradeniya.
- 13) Made a significant contribution in introducing High Energy Physics at CERN in Sri Lanka (Since 2006). Produced the first PhD from a Sri Lankan University based on Research at CERN.
- 14) Served as a Selection Committee member for the post of Professor in Several Universities.
- 15) Evaluated applications for the post of Professor/Associate Professor in several universities.
- 16) Member of National Research Council (NRC) Review Committee 2014
- 17) Co-controlling Chief Examiner for Physics GCE/AL Examination –2016
- 18) Co-controlling Chief Examiner for Physics GCE/AL Examination –2014
- 19) Co-controlling Chief Examiner for Physics GCE/AL Examination –2013.
- 20) Co-controlling Chief Examiner for Physics GCE/AL Examination –2011.
- 21) Co-controlling Chief Examiner for Physics GCE/AL Examination –2010.
- 22) National Committee for Physics Syllabus Review GCE A/L Examination 2011 (appointed in 2009)
- 23) Teachers Guide preparation committee, GCE A/L Examination 2011 (in 2009/2010)
- 24) Set sample questions for A/L examination 2011, appointed by Dept. of Examination (2009)
- 25) Member of the Subject (Physics) Committee of the University Grant Commission (2009)
- 26) Served as Member of the Subject Review Committee (QAAC) for the review of Dept. of Physical Science, South-eastern University (2009)
- 27) Organized the Sri Lankan Astronomy and Astrophysics Olympiad Competition- 2009 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 28) Organized the Sri Lankan Junior Science Olympiad Competition- 2009 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 29) Organized the Sri Lankan Physics Olympiad Competition- 2009 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 30) Organized a preliminary round of the Interschool quiz competition 2009 at the Department of Physics, which is an activity of the International Association of Lions Clubs.
- 31) Member of the Coordinating Committee, Sri Lanka Institute of Tourism & Hotel Management, 2009
- 32) Member of the Editorial Board IPSL Journal of Physics (1999 to date)

- 33) Co-controlling Chief Examiner for Physics GCE/AL Examination –2008.
- 34) Served in the panel of setters for A/L Physics Examination- 2008.
- 35) Served as a referee to Annual Research Symposium –2008, University of Kelaniya.
- 36) Served as a member of the Board of Consultants Physics Syllabus for year 10-13. Appointed by NIE, 2008
- 37) Organized the Sri Lankan Astronomy and Astrophysics Olympiad Competition- 2008 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 38) Organized the Sri Lankan Junior Science Olympiad Competition- 2008 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 39) Organized the Sri Lankan Physics Olympiad Competition- 2008 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 40) Organized a preliminary round of the Interschool quiz competition 2008 at the Department of Physics, which is an activity of the International Association of Lions Clubs.
- 41) Member of the Advisory Board Physics Syllabus for year 10-13. Appointed by NIE. (2007)
- 42) Organized the Sri Lankan Astronomy and Astrophysics Olympiad Competition- 2007 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 43) Organized the Sri Lankan Physics Olympiad Competition- 2007 at the Department of Physics, University of Ruhuna, organized by the Institute of Physics, Sri Lanka.
- 44) Organized a preliminary round of the Interschool quiz competition 2007 at the Department of Physics, which is an activity of the International Association of Lions Clubs.
- 45) Co-controlling Chief Examiner for Physics GCE/AL Examination –2007.
- 46) Served in the panel of setters for A/L Physics Examination- 2007.
- 47) Co-controlling Chief Examiner for Physics GCE/AL Examination –2006.
- 48) Served in the panel of setters for A/L Physics Examination- 2006.
- 49) Chairman Ruhuna Information Technology Society- 2004
- 50) Co-controlling Chief Examiner for Physics GCE/AL Examination –2004.
- 51) Served in the panel of setters for A/L Physics Examination 2004.
- 52) Co-controlling Chief Examiner for Physics GCE/AL Examination –2003.
- 53) Served in the panel of setters for A/L Physics Examination 2003.
- 54) Have served as an External Examiner for M. Phil./Ph.D. Degree in Physics in University of Colombo, University of Kelaniya, University of Peradeniya (PGIS).
- 55) Served as a Reviewer for Initial Proposals for QEF (7-proposals).
- 56) Served as a Reviewer for evaluation of QEF Split Proposals (2-proposals)
- 57) Committee Member SLAAS Section E1, year 2000.
- 58) Council Member Institute of Physics, Sri Lanka, year 2000.
- 59) Served in the Organizing Committee for the 5th Workshop on Low Cost Electronic Materials, Solar Cells and Applications of Renewable Energy Sources, Jan. 2001
- 60) Have served as referees for Journal/Conferences in other Universities and NSF.
- 61) Have evaluated applications for Professor of Physics in other Universities.
- 62) Have served as a UGC nominee for selection committees in other Universities.
- 63) Organized several Workshops in the Department of Physic for Advanced Level Physics Teachers in Southern Province. Also, served as a resource person.
- 64) Served as a Visiting Lecturer- University of Sabaragamuwa-1999
- 65) Visiting Lecture (Solid State Chemistry)-Institute of Chemistry, 2000-2004.
- 66) Served in the Organizing Committee for the 5th Workshop on Low Cost Electronic Materials, Solar Cells and Applications of Renewable Energy Sources. Jan. 2000
- 67) GCE A/L Technology Curriculum Review Committee, NIE, 1998.
- 68) Served as a Referee, IPSL Journal of Physics, 1999/2000

69) Served in the organizing committee for the workshop on Graduate Unemployment organized by RUSTA, Matara, 1996.

INVENTIONS AND INNOVATIONS

- Universal Cuff for Blood Pressure Meters, won the **first place** at the Southern Province Competition and **Bronze medal** at the National Competition at "Sahasak Nimavum – 2019"
 Applied for the Patent.
- 2) Novel Device for Bending PVC Pipe for Plumbing Purposes, N.A.A.K. Sanjaya, W.G.D. Dharmaratna, and E.M. Ranatunga,

Received the **Second Place** – University and Tertiary Educational Institutes Category Under the Technical Field of Engineering, National Exhibition for Inventions and Innovations, Sahasak Nimavum 2017.

Received the **First Place** – Southern Province Exhibition held at university of Ruhuna - 2017

POPULAR ARTICLES AND LECTURES:

- 1) Invited Oration The 16th Academic Sessions and 15th Vice Chancellor's Awards Ceremony of University of Ruhuna on 6th March 2019
- 2) Popular Article (The Universe- a challenge for Physicist) in Vidusara –June 23rd 2010
- 3) Invited Lecture as the Chief Guest- Science Day, Sujatha Vidyalaya, Matara, Jun. 2009.
- 4) Invited Lecture- Delivered the main lecture at the World Science Day celebration at Matara, Organized by Vidatha Center, Matara and Divisional Secretariat, Matara, Nov. 2007
- 5) Invited Lecture as the Chief Guest, Science Day, Mahinda College, Galle- 2007
- 6) Invited Lecture as the Chef Guest, at the closing data of two-week Astronomy Workshop, Vijitha Central College, Dickwella, Oct. 2nd, 2006.
- 7) Invited Lecture Main Lecture at the "Science Day 2006", Sujatha College, Matara, Apr. 04th, 2006.
- 8) Invited Lecture Invited by Astronomical Society, Dickwella Central College, Mar. 16th, 2004
- 9) Invited Lecturer- Science Day, Rahula College, Matara, Apr. 29th, 2004
- 10) Organized a training programme on Electronics at Rahula College as requested by Electronic club at Rahula College, Feb 21st, 2003
- 11) Organized a two-day workshop for Physics Teachers at the Department of Physics in collaboration with Institute of Physics, (also served as a resource person), Nov. 6-7, 2003.
- 12) Invited Lecture as the Chief Guest at Computer Day, Technical College, Matara, Sep. 2003.
- 13) Invited Lecture A Lecture on Physics for A/L students at Dharmasoka College, Ambalangoda, organized by alumini Association of Univ. of Peradeniya, Feb. 09th, 2003
- 14) Invited Lecture St. Thomas College, Matara, May 19th, 2002.
- 15) Invited Lecture As the Guest of Honour at the Science Day, Sujatha Vidyalaya, Nov. 28th, 2002
- 16) "Elementary Particles Discovered by Physicists in Twentieth Century" Bauthikavidya Magazine –by IPSL (to be published in 2001)
- 17) Live radio programme- for A/L Physics students. Invited by RDB (July 2001)
- 18) Lecture at Monaragala- Solar and wind energy for rural development, YSF, NASTEC (May 2001)
- 19) Invited Lecture-Space Science Society, Mahinda College, Galle (2001)
- 20) Organized a training session at the Electronic Workshop held on May. 25th, 2000 at Rahula College, Matara.

- 21) Resource person Regional Workshop on Project Work in Science at Ruhuna University, organize by SLAAS, May 15th, 2000.
- 22) Invited Lecture-Science Day, St. Marry's Convent, Matara (Oct. 2000)
- 23) Invited Lecture-Astronomical Society, Sujatha College, Matara (Dec. 2000)
- 24) Invited Lecture- Science Day, St. Marry's College, Mathugama, (Apr. 2000).
- 25) "BASIC CONSTITUENTS OF THE UNIVERSE"- Magazine (THE HORIZON) of the Physics Society, University of Ruhuna, 1995.
- 26) "USE OF COMPUTERS FOR THE DEVELOPMENT OF PHYSICS"- Magazine (UNICOM 96) of the Computer Society, University of Ruhuna, 1996.
- 27) Discussion on the "FORMATION OF THE UNIVERSE"- Magazine (DIYATHA) of Zoology Society, University of Ruhuna, 1997/98.
- 28) Invited Lecture- Science Association, Rahula College, Matara, (Jan. 1999).
- 29) Invited Lecture- Physics Society, University of Ruhuna, (1999).
- 30) Invited Lecture- Science Week, Rahula College, Matara, (May 1998).
- 31) Invited Special Lecture on Louis Pasteur- Alliance Française De Matara, (Mar. 1997).
- 32) Invited Lecture-Science Society, Rahula College, Matara, (Jan. 1997)
- 33) Invited Lecture- Science Day, Sujatha Balika Maha Vidyalaya, Matara, (Mar. 1996).
- 34) Invited Lecture as the Chief Guest- Science Day, Our Lady of Victories Convent Moratuwa, (Sep. 1994)
- 35) Invited Lecture- Physics Society, University of Ruhuna, 1994.
- 36) Invited Lecture- Mount Holyok college, Iowa, USA., 1989.
- 37) Invited Lecture- Boston College, Boston, USA, 1989.

LIST OF PUBLICATIONS and COMMUNICATIONS Prof. W.G.D. Dharmaratna

REFREED JOURNAL PUBLICATIONS

More than 300 publications: See the following link.

http://scholar.google.com/citations?user=FvxJwSwAAAAJ&hl=en

CONFERENCE PUBLICATIONS are listed below

- 1. A preliminary study on hearing problems of workers due to exposure of high occupational noise for a long period, S.M.N. Sethunga, U. Abeysuriya, J.A.P. Bodhika, W.G.D. Dharmaratna, S.A. Wickramasinghe, Proc. 6th RISTCON, Univ. of Ruhuna, Sri Lanka, 2019.
- Sound Absorption characteristics of two selected fruit plants, Anacardium occidentale (cashew) and Mangifera indica (mango), measured by reverberation room method, Proc. 6th RISTCON, Univ. of Ruhuna, Sri Lanka, 2019.
- 3. Characteristics of thunder pertinent to tropical lightning, J.A.P. Bodhika, W.G.D. Dharmaratna, Mahendra Fernando, Vernon Cooray, 34th Int. Conf. on **Lightning Protection (ICLP) Sep 2018, Poland.**
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