

CURRICULUM VITAE - DR. SUNIL KULATUNGA

Name : Sunil Kulatunga
Date of Birth : 1960-04-01
Sex : Male
Mailing Address : Department of Radiography/Radiotherapy,
Faculty of Allied Health Sciences
University of Peradeniya,
Peradeniya, Sri Lanka.

Present Employment: Senior Lecturer Grade I, University of Peradeniya

Educational Qualifications:

B.Sc. Special degree in Physics (Second class upper division), University of Peradeniya, 1984

M.Sc. in Physics, University of Cincinnati, USA. 1990

Ph.D. in Physics, University of Cincinnati, USA. 1994

Employment Record

January 1985 – August 1985 Temporary Assistant Lecturer, Department of Physics, University of Peradeniya.

September 1985 – May 1994 Assistant Lecturer, Department of Physics, University of Ruhuna. (September 1988 – May 1994 On study leave)

September 1988 – May 1994 Teaching Assistant, Department of Physics, University of Cincinnati, USA.

June 1994 - January 2003 Senior Lecturer Grade II, Department of Physics, University of Ruhuna.

February 2003 – June 2016 Senior Lecturer Grade I, Department of Nuclear Science, University of Colombo.

July 2016 – to date Senior Lecturer Grade I, Department of Radiography/Radiotherapy, University of Peradeniya.

Scholarships and Awards

- Teaching Assistantship and Graduate Scholarship, Department of Physics, University of Cincinnati, USA.

Administrative Experience

- (a) From 2008-03-12 to 2013-04-08 Head, Department of Nuclear Science, University of Colombo
- (b) From 2007-04-05 to 2007-09-30 Head, Department of Nuclear Science, University of Colombo
- (c) From 2002-02-15 to 2002-05-15 Acting Head, Department of Computer Science, University of Ruhuna.
- (d) From 2002-02-15 to 2002-05-15 Acting Director, Computer Unit, University of Ruhuna.

- (e) From 2002-05-15 to 2003-01-31 Head, Department of Computer Science, University of Ruhuna.
- (f) From 2002-05-15 to 2003-01-31 Director, Computer Unit, University of Ruhuna.
- (g) From 2002-02-15 to 2003-01-31 University of Ruhuna project manager of NORAD-IT project. I coordinated the implementation of M-STAS student administration system in the faculties of Science and H&SS. Preparation of Examination, Curriculum and Fees modules of the system was done according to the instructions given by me.
- (h) From 2002-02-15 to 2003-01-31 University of Ruhuna coordinator of SIDA-IT project.
- (i) Student counselor in 1997, 1999, 2000 and 2001.
- (j) From 1995-09-19 to 1998-07-15 Joint Secretary of Ruhuna University Science Teachers Association.
- (k) From 1998-07-15 to 2003-01-15 Treasurer of Ruhuna University Science Teachers Association.
- (l) From 2002-02-15 to 2003-01-31 member of the University of Ruhuna Science Faculty Higher Degree Committee.
- (m) Member of the Science Symposium committee in 2002/2003
- (n) From 2002-02-15 to 2003-01-31 Chairman of the Ruhuna University Web development team.
- (o) From 2002-02-15 to 2003-01-31 member of the UGC Standing committee on Information Technology Development.
- (p) From 2002-02-15 to 2003-01-31 Computer Science Department coordinator of the ADB project and coordinator of the University of Ruhuna Local Area Network.
- (q) From 2002-02-15 to 2003-01-31 member of the UGC Lanka Educational And Research Network (LEARN) management committee.
- (r) Member of the organizing committee of the workshop on “Graduate Unemployment” organized by Ruhuna University Science Teachers Association.
- (s) From 1995 to 1997 member of the Board of Study in Physics, Postgraduate Institute of Science, University of Peradeniya.
- (t) Member of the Science Library committee, University of Colombo.
- (u) Member of the ITU committee, Faculty of Science, University of Colombo.
- (v) Member of the IAEA/RCA project on Medical Physics.

Dissemination of knowledge

- (a) Conducted visiting lectures for Medical Physics M.Sc. course at PGIS, University of Peradeniya, 1996, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 and 2017.
- (b) Conducted lectures for MD Radiology Part I course in 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 and 2017 Postgraduate Institute of Medicine, University of Colombo.
- (c) Conducted visiting lectures for B.Sc. Physics special degree course, University of Kelaniya in 1996/97, 1997/98, 2004/2005 and 2006/2007.
- (d) Conducted visiting lectures for Medical Physics course, Department of Physics, University of Colombo in 2000/2001, 2001/2002, and 2002/2003.

- (e) Conducted visiting lectures for Electromagnetic Theory course, Department of Physics, University of Ruhuna in 2004/2005.
- (f) Conducted lectures for Medical Physics course, Department of Physics, University of Colombo in 2003/2004 , 2004/2005, 2005/2006, 2006/2007 and 2007/2008 .
- (g) Conducted lectures for Nuclear Pharmacy course, Department of Chemistry, University of Colombo in 2003/2004 and 2004/2005.
- (h) Conducted visiting lectures for Medical Physics course, Department of Physics, Open University in 2006.
- (i) Conducted visiting lectures for B.Sc. Radiography Programme, Department of Radiography/Radiotherapy, University of Peradeniya in 2012.

Workshops participated

- (a) IAEA/RCA National Workshop on Nuclear power and Energy Planning, 20-24 March, 1995, Colombo.
- (b) FUTA Workshop on Current Problems in the universities, 10 January, 1997 Colombo.
- (c) Regional Training Course in Physics for College and University Teachers, 11-25 November, 1998, Indian Institute of Technology, Kharagpur, India.
- (d) First National workshop on Computer Based Interactive Physics Teaching, 13-15 February, 2001, Peradeniya.
- (e) IAEA Regional Training Course on Occupational Radiation Protection, 23-27 August, 2004, Philippines.
- (f) International Seminar on Nuclear Safety-Radiation Application Course, 17-28 January, 2005, Tokai, Japan.
- (g) MEXT Nuclear Researcher Exchange Program 2007, 2007-10-01 to 2008-01-31 National Institute of Radiological Science, Inage, Japan

Research Publications

- (a) Endorf RJ, **Kulatunga S**, Spelic DC, DiBianca FA, Zeman HD, Development of a dual-energy kinestatic charge detector, (1993) SPIE Vol1896 pp180-191.
- (b) RJ Endorf, **S. Kulatunga**, DC Spelic, SR Thomas, FA DiBianca, GC Giakos, HD Zeman, Clinical applications of a dual energy KCD, (1994) SPIE Vol 2132 pp222-233.
- (c) R. J. Endorf, V. J. Schmithorst, **S. Kulatunga**, D. C. Spelic, S. R. Thomas, F. A. DiBianca, C. Rodriguez, H. D. Zeman, Z. Zhu, G. C. Giakos, Preliminary performance characteristics of a dual-energy KCD, (1995) SPIE Vol 2432 pp.607-615
- (d) R. J. Endorf, V. J. Schmithorst, **S. Kulatunga**, D. C. Spelic, S. R. Thomas, F. A. DiBianca, C. Rodriguez, H. D. Zeman, Z. Zhu, G. C. Giakos. Dual-Energy Imaging Using A Kinestatic Charge Detector. (1996) SPIE Vol 2708: pp837-848.
- (e) R. J. Endorf, V. J. Schmithorst, **S. Kulatunga**, D. C. Spelic, S. R. Thomas, F. A. DiBianca, C. Rodriguez, H. D. Zeman, Z. Zhu, G. C. Giakos, Dual-energy decomposition using a kinestatic charge detector. (1998) SPIE Vol 3336 pp695-706

- (f) V. J. Schmithorst, R. J. Endorf, **S. Kulatunga**, D. C. Spelic, F. A. DiBianca, C. Rodriguez, H. D. Zeman, Z. Zhu, G. C. Giakos, Feasibility of Using a Kinesthetic Charge Detector for Dual-Energy Chest Radiography, Journal of X-Ray Science and Technology (2004) Vol 12 pp1-11.
- (g) V. J. Schmithorst, R. J. Endorf, **S. Kulatunga**, D. C. Spelic, F. A. DiBianca, C. Rodriguez, H. D. Zeman, Z. Zhu, G. C. Giakos, Optimization of a Dual-Energy Imaging Kinesthetic Charge Detector for Chest Radiography, Journal of X-Ray Science and Technology (2004) Vol 12 pp151-159.

Ph D Dissertation

- Performance parameters of a dual-energy kinesthetic charge detector, University of Cincinnati (1994)

Research Communications

- (a) U W K H de Silva, **S Kulatunga**, T H S Shantha, Determination of patient dose in diagnostic x-ray radiography, SLAAS 2005.
- (b) K S S Kumara, **S. Kulatunga**, T H S Shantha, Breast dose in mammography, SLAAS 2009.
- (c) W. Kulatunga, **S. Kulatunga**, Wastage caused by fabric defects, 11th Asian Textile Conference 2011

Research Supervisions

- (a) U.G. Jayasekera, “Study of fragmentation of upper ureteric calculi by using Extracorporeal Shockwave Lithotripsy (ESWL)”, **MSc in Medical Physics**, Postgraduate Institute of Science, University of Peradeniya, (1999)
- (b) U W K H de Silva, “Determination of patient dose in diagnostic x-ray radiography”, **MSc in Nuclear Science**, University of Colombo (2005)
- (c) G.J.C.N. Peris, “Process validation by dosimetry in a Co-60 Industrial Irradiator”, **MSc in Nuclear Science**, University of Colombo (2007)
- (d) K.S.S. Kumara, A study on the patient dose in mammography”, **MSc in Nuclear Science**, University of Colombo (2008)
- (e) R.A.I.P. Ranatunga, “Investigation on the patient dose in computer tomography examinations”, **MSc in Nuclear Science**, University of Colombo (2008)
- (f) K.V.A.W. Kumara “The accuracy of reconstructed high dose rate brachytherapy source configuration and dose distribution using C-Arm x-ray unit and CT simulator” **MSc in Medical Physics**, Postgraduate Institute of Science, University of Peradeniya, (2014)
- (g) R. A. Weerasinghe, “Evaluation and comparison of thyroid gland receiving surface dose in dental radiography” **MSc in Medical Physics**, Postgraduate Institute of Science, University of Peradeniya, (2016)
- (h) R.M.G.C.S.B. Jayatissa, “Ionization chamber based dosimetric model for small field Photon Beam Radiotherapy” **MSc in Medical Physics**, University of Colombo (2017)

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