

Contact Information

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Personal Data

Nationality: Sri Lankan Sinhalese

Marital status: Married

Children: Two

Education

- **Post Graduate Studies:**

Degree	Subject	University	Year
Post Graduate Diploma	Applied Statistics	University of Sri Jayewardenepura, Nugegoda Sri Lanka	1999
MPhil	Mathematics	University of Ruhuna, Matara, Sri Lanka	2004
PhD	Mathematics	University of Ruhuna, Matara, Sri Lanka	2012

MPhil Dissertation Advisers:

- J. M. J. J. Peiris, Department of Mathematics, University of Ruhuna, Matara, Sri Lanka.
- K.C. N. Shanthidevi, Department of Mathematics, University of Ruhuna, Matara, Sri Lanka.

MPhil Dissertation Title: Representations of analytical and numerical solutions of some coupled reaction-diffusion systems arising in chemical kinetics

PhD Dissertation Advisers:

- Dr. Janak R. Wedagedera, Department of Mathematics, University of Ruhuna, Matara, Sri Lanka.
- Dr. Hugo van den Berg, Mathematics Institute, University of Warwick, United Kingdom

PhD Dissertation Title: Investigation of formation of coral patterns via a Reaction-Advection-Diffusion type Mathematical Model

- **Undergraduate Studies:**

Period	Degree	Subjects	University
1991–1993	BSc(General) Degree Level I & Level II	Matheatics, Physics, Further Mathematics	University of Ruhuna Matara, Sri Lanka
1993-1995	BSc(Special) Degree Level I & Level II	Mathematics	University of Kelaniya Kelaniya, Sri Lanka

- **Class obtained for B.Sc.:-** First Class

- **Primary and Secondary Education:**

Period	Name of school	Name of qualification or examination	Year
1976-1982	Malwala Maha Vidyalaya Ratnapura, Sri Lanka	-	-
1982-1984	Sri Gnanobasa pirivena, Ratnapura, Sri Lanka	G.C.E.(Ordinary Level)	1984
1985-1987	St. Aloysius College, Ratnapura, Sri Lanka.	G.C.E.(Advanced Level)	1987

Employment details

Post	Duration	Place
Senior Lecturer	August, 2004 to up-to-date	Department of Mathematics, University of Ruhuna, Matara, Sri Lanka
Probationary Lecturer	July, 1998 to August, 2004	Department of Mathematics, University of Ruhuna, Matara, Sri Lanka
Temporary Assistant Lecturer	April, 1997 to July, 1998	Department of Mathematics, University of Ruhuna, Matara, Sri Lanka
Temporary Tutor	December, 1995 to April, 1997	Department of Mathematics, University of Ruhuna, Matara, Sri Lanka

Research Experience

- Research done for the MPhil Degree.
- Research done for the PhD Degree.

Major areas of research interest

- Reaction-Diffusion and Reaction-Diffusion-Advection equations,
- Reaction Diffusion and Reaction-Diffusion-Advection Patterns formations,
- Numerical and Analytical Partial Differential Equations.
- Mathematical Modelling in biological and physical systems,
- Dynamical systems-Ordinary Differential Equations and Partial Differential Equations,

Research Publications

- L. W. Somathilake, J. R. Wedagedera, Stationary Solutions of a Mathematical Model for Formation of Coral Patterns, Applied Mathematics, 6(2015), 1099-1106
- L. W. Somathilake, J. R. Wedagedera, A Reaction-Diffusion type Mathematical model for formation of Coral Patterns, Journal of National Science Foundation, Sri Lanka, Vol 42, No 4 (2014), 341-349

- L. W. Somathilake, J. R. Wedagedera, On the Stability of a Mathematical Model for Coral Growth in a Tank, *British Journal of Mathematics and Computer Science*, 2(4): 255-280, 2012
- L.W. Somathilake, Numerical Solutions of Reaction-Diffusion systems with coupled diffusion terms, *Ruhuna Journal of Science*, Vol. 4, Sep. 2009, pp. 1-12.
- L.W. Somathilake, Numerical Solutions of some pattern formation Reaction-Diffusion Systems Using Finite Difference Techniques, *International Journal of Mathematical Modeling, Simulation and Applications* (Vol. 1, No. 2, pp. 163-174, 2008)
- L. W. Somathilake, J. M. J. J. Peiris, Global solutions of a Strongly Coupled Reaction-Diffusion System with different diffusion coefficients. *Journal of Applied Mathematics* (Volume 2005, Number 1, pp. 23-37, 16 February 2005)

Presentations

- L. W. Somathilake, J. R. Wedagedera, Numerical solutions of a Mathematical Model of pattern formation in coral reefs, *Presented at 8th Science Symposium, Faculty of Science, University of Ruhuna, Sri Lanka*, December 21, 2011.
- L. W. Somathilake, J. M. J. J. Peiris, K. C. N. Shanthidevi, Numerical solutions of some mathematical models arising in population dynamics, *Presented in the abstract on SLAAS (Sri Lanka Association for the Advancement of Science), Dec. 2004*
- L. W. Somathilake, J. M. J. J. Peiris, K. C. N. Shanthidevi, Pattern formation by Reaction Diffusion Systems, *Presented in the abstract on SLAAS (Sri Lanka Association for the Advancement of Science), Dec. 2004*
- L. W. Somathilake, J. M. J. J. Peiris, K. C. N. Shanthidevi, On some mathematical models arising in chemical kinetics, *Presented in the abstract on SLAAS (Sri Lanka Association for the Advancement of Science), Dec. 2004*

Participated workshops

- Indo-European Modelling Week and Study Group Meeting on Industrial Problems(IEMWSGMIP2012) at the Center for Industrial Mathematics, Faculty of Technology and Engineering, MSU, Vadodara, India (3rd -8th and 10th-15th December 2012).
- Study Group Meeting on Mathematics and Statistics for Industry (SGMMSI-2014) at the Department of Mathematics, University of Ruhuna, Sri Lanka (2nd -5th December 2014).

Other academic activities

- Conducted some lecture series for the undergraduates at Open University of Sri Lanka, Matara regional center.
- Served as a Student Councilor-(Two Years).
- Served as a Mentor for undergraduates- (Three years)
- Coordinating whole Industrial Mathematics Research Projects of B.Sc. (General Degree level I, Level II and Level III students)-(Two years).
- Supervising some Industrial Mathematics Research Projects of undergraduates.
- Supervising some Research Projects of B.Sc. (Special) Degree Students.
- Member of the organizing committee of the *1st Ruhuna International Science and Technology Conference-2014*.

Academic Referees:-

Prof. Janak R. Wedagedera,

Present address:

Senior Research Scientist,
SimCYP-CERTAR Limited
Blades Enterprise Centre,
Sheffield, United Kingdom, S2 4SU
Email: janak.wedagedera@certara.com
janakrw@yahoo.com

Past Adress:

Professor of Mathematics,
Department of Mathematics,
University of Ruhuna,
Matara, Sri Lanka.

Mr. M. P. A. Wijayasiri. Head of the Department, Department of Mathematics, University of Ruhuna, Matara, Sri Lanka. Email: wijaya@maths.ruh.ac.lk	Dr. Jayantha Pasdunkorale Arachchige Senior Lecturer Department of Mathematics, University of Ruhuna, Matara, Sri Lanka. Email: jayantha@maths.ruh.ac.lk
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