Resume

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(2) Date of Birth : 06.11.1967

(3) Designation : Scientist E

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(6) Academic Record:

Sl No	Degree Awarded	Year	University/ Institution	Subject
1	Ph. D	2003- 2007	Indian Institute of Technology Madras	Water Resources Engineering
2	M.E	1996-1998	Tamil Nadu Agricultural University, Coimbatore	Soil and Water Conservation
3	P. G. Diploma	1992-1994	Indian Institute of Ecology and Environment, New Delhi	Ecology and Environment
4	B. Tech	1985-1989	Allahabad University	Agricultural Engineering

(7) Experience:

Organization	**Designation**	**Period**
CWRDM, Kozhikode	Graduate apprentice	December 1990 to December 1991
Naidoo Agencies, Coimbatore	Design Engineer	January 1992 to July 1993
Department of Soil Survey and Soil Conservation, Government of Kerala	Assistant Engineer	June 1999 onwards (on LWA)
Sathyabama University, Chennai	Scientist	2007 Onwards

(8) Number of Publications

(a) International/National Journal : 7

International (6), National (1)

(b) Conferences : 18

International (6)

National (12)

(c) Book Chapter : 1

(9) Details of Publications

Referred International Journals

1. Marykutty Abraham, O. Padmakumari and S. Mohan (2006), “Evapotranspiration and cooling system performance for crop production in greenhouses”, The Journal of Agricultural Engineering Society of Srilanka, 9 (3), 33 - 47.

2. Mohan. S and Marykutty Abraham (2010), “Derivations of simple site-specific recharge-precipitation relationships: a case study from the Cuddalore Basin, India”, Environmental Geosciences, ISSN:1526-0984, 17 (1), 37- 44

3. Vijayalakshmi and Marykutty Abraham (2017), “Analysis of Leachate Contamination Potential of a Solid Waste Dumping Site Using Leachate Pollution Index”, International Journal of Earth and Atmospheric Science, 4(2), 87-98

4. Marykutty Abraham and S. Mohan (2017), “Role of Artificial Recharge Structures in Enhancing Groundwater Quality – A Modeling Study”, International Journal of Earth and Atmospheric Science, 4(2), 107-116

5. Vijayalakshmi and Marykutty Abraham (2017), “Adverse Effects of Physicochemical Parameters of Solid Waste Disposal on Ground water Quality- a Case Study, Research Journal of Pharmaceutical, Biological and Chemical Sciences, 8(3S), 151-163

6. Raji P.K and Marykutty Abraham (2017), An Assessment of Physico Chemical Charecteristics of Nandhivaram Lake Water to Reduce Environmental Impacts, Research Journal of Pharmaceutical, Biological and Chemical Sciences, 8(3S), 173-178

Referred National Journals

1. Marykutty Abraham and S. Mohan (2015), "Effectiveness of Artificial Recharge Structures in Enhancing Groundwater Storage: A Case Study", Indian Journal of Science and Technology, Vol 8 (20), DOI: 10.17485/ijst/2015/v8i20/81596

Book Chapter

1. Mohan. S and Marykutty Abraham (2008), "Roof Water Harvesting Systems", Advances in Water Quality and Management, Research Publishing Services, Singapore, Editors: Sudhakar M. Rao, Monto Mani and N. H. Ravindranath, Indian Institute of Science, Bangalore, ISBN : 978-981-05-9012-3, pages: 266 – 278.

Conferences

International Conferences

1. Mohan. S, Marykutty Abraham and S. K. Pramada, "Study on effects of artificial recharge in confined aquifer", Proceedings of the International Conference on Sustainable Water Resources Management in the Changing Environment of the Monsoon Region organized by United Nations University and National Water Resources Secretariat, Srilanka, pages: 635-640, 17th -19th November 2004.
2. Mohan. S and Marykutty Abraham, "Evapotranspiration Estimation for different Agroclimatic regions", Proceedings of the International Conference on Hydrological Perspectives for Sustainable Development organized by IIT Roorkee, India, pages: 685-693, 23rd -25th February 2005.
3. Mohan. S and Marykutty Abraham, "Assessment on Effects of Artificial Recharge using Ground Water Modeling", Proceedings of the Asia Oceania Geosciences Society 2nd Annual Meeting 2005, Suntech city, Singapore, 20th -24th June 2005, 58-HS-A0794.

4. Mohan. S and Marykutty Abraham, “Development and Application of an Integrated Model to Assess the Effectiveness of Rainwater Harvesting”, Proceedings of the International Workshop on Integrated Water Resources Management, organized by Karnataka Environmental Research Foundation, Bangalore, pages: 82-86, 5th -7th February, 2007.
5. Marykutty Abraham and S. Mohan, “Artificial Recharge- Definition, Concepts Management and Estimation”, Proceedings of the International Conference on Emerging Challenges on Design and Manufacturing Technologies, Sathyabama University, Chennai, 28th -30th November, 2007.
6. Marykutty Abraham and S. Mohan, “Role of Artificial Groundwater Recharge on Climate Change”, International Meet on Impact of Climate Change on Water Resources Development and Management, Karunya University, Coimbatore, 17th - 18th August 2012

National Conferences

1. Marykutty Abraham, O. Padmakumari and S. Mohan, “Evapotranspiration and Water Requirement for Crop Production in greenhouses”, Proceedings of the National Seminar on Perspectives on Agrarian Relations in Water Management organized by Land and Water Management Institute, Bhopal, 9th -10th June 2004.
2. Mohan. S and Marykutty Abraham, “Ground Water Modeling for Artificial Recharge scenario”, Proceedings of the State level Workshop on Traditional Water Harvesting Systems in Tamilnadu organized by Tamilnadu Water and Drainage Board, Coimbatore, 7th – 9th December 2005.
3. Marykutty Abraham, “Water Resources Management”, National Conference on Trends in Renewable Energy Sources, Applications & Climate change, Sathyabama University, Chennai, 23rd -25th July, 2010.
4. Marykutty Abraham and S. Mohan, Effectiveness of Artificial Recharge Structures in Enhancing Groundwater Storage: A Case Study, National Conference on Contemporary Approaches in Mechanical, Automobile and Building sciences (NCCAMAB ’15), Karpaga Vinayaga college of Enginering and Technology, on 27-03-2015
5. Marykutty Abraham, S. Mohan and K. Venugopal (2017) Groundwater Recharge as an adaptation measure to climate change, National conference on Recent advances in Earth and Atmospheric monitoring from space, Sathyabama University, Chennai, 21-22 February, 2017: ISBN No.978-93-83409-28-0

6. Vijayalakshmi.P and Marykutty Abraham (2017) Analysis of leachate contamination potential of a solid waste dumping site using leachate pollution index, National conference on Recent advances in Earth and Atmospheric monitoring from space, Sathyabama University, Chennai, 21-22 February, 2017: : ISBN No.978-93-83409-28-0
7. Raji.P.K and Marykutty Abraham (2017) Comparative study of characteristics of different lakes in Chennai, National conference on Recent advances in Earth and Atmospheric monitoring from space, Sathyabama University, Chennai, 21-22 February, 2017: : ISBN No.978-93-83409-28-0
8. Sivasubramaniam.T and Marykutty Abraham (2017) Estimation of aquifer parameters using geophysical survey in the coastal aquifer of North Chennai, India, National conference on Recent advances in Earth and Atmospheric monitoring from space, Sathyabama University, Chennai, 21-22 February, 2017: : ISBN No.978-93-83409-28-0
9. Santhanam. K and Marykutty Abraham V. E. Nethaji Mariappan, T. G, Amali Jacintha, and Sardhar Maran (2017) Influence of Fracture Controlled Aquifers Identified By Remote Sensing Technique on Cropping Pattern and Ground Water Level – A Case Study of Upper Thurinjalar Water Shed of Ponnaiyar RiverBasin Tamilnadu, Inida, National conference on Recent advances in Earth and Atmospheric monitoring from space, Sathyabama University, Chennai, 21-22 February, 2017: : ISBN No.978-93-83409-28-0
10. Marykutty Abraham, S. Mohan and S.K. Pramada (2017) Study on Groundwater Recharge using recharge wells by Groundwater Modeling, National conference on Advances in water resources and environment research, Sathyabama University, Chennai, 29-30 June, 2017: :ISBN No.978-93-83409-39-6
11. Marykutty Abraham and Riya Ann Mathew (2017) Rainfall runoff modeling for a lake watershed in Tamilnadu, National conference on Advances in water resources and environment research, Sathyabama University, Chennai, 29-30 June, 2017: :ISBN No.978-93-83409-39-6
12. Sivasubramaniam.T and Marykutty Abraham (2017) Integrated analysis Geophysical and Geochemical characteristics of North Chennai coastal aquifer in India, National conference on Advances in water resources and environment research, Sathyabama University, Chennai, 29-30 June, 2017: :ISBN No.978-93-83409-39-6

Ph. D guidance

No. of research Scholars: 8 (Pursuing)

Sl.No.	Research Degree	Name of scholar & Year of registration	Title of thesis	Joint Supervisor	Status
1	Ph.D	K. Santhanam 2012	Assessment of groundwater potential and quality in Upper Thurinjalar watershed	NA	In Progress
2	Ph.D	T. Sivasubramanium 2012	Delineation of aquifer geometrics using integrated approach for effective management of groundwater resources	NA	In Progress
3	Ph.D	P. K. Raji 2013	Biological remediation of lake pollution in urban situation	NA	In Progress
4	Ph.D	P. Vijayalakshmi 2013	Evaluation of leachate contamination by leachate pollution index and assessment of groundwater quality using groundwater models	NA	In Progress
5	Ph.D	R. Saravanan 2013	Mapping of Chennai aquifer system and development of decision support system for its management	NA	In Progress
6	Ph.D	Ezakhimuthu 2014	Treatment of industrial waste water using a combined bio- nano technique	NA	In Progress
7	Ph.D	M. Kavisri 2017	Removal of heavy metal from contaminated groundwater	NA	In Progress
8	Ph.D	B. Priyadarshini 2017	Removal of fluoride from contaminated groundwater	NA	In Progress

(9) Membership in Professional bodies

1. Life Member, Indian Water Resources Society (LM-04-5456)
2. Student Member, ASCE (440743)

3. Member Asia Oceania geosciences society (05S093)
4. Life Member, Indian Society of Remote Sensing (L3178)

(11) Professional Training

1. Participated in a training course on “Watershed based Soil and Water Conservation” organized by the Centre for Water Resources Development and Management (CWRDM) from 8-5-2000 to 18-5-2000

2. Participated in the National Conference on “Advances in Water Engineering for Sustainable Development-NCAWESD-2005”, Conducted by Department of Civil Engineering, IIT Madras, 16-17 May 2005

3. Participated in the Workshop on “Impact of Climate Changes on Water Related Infra Structures in Developing Countries”, Organized by Department of Civil Engineering, IIT Madras and Loughborough University, UK, 25-26 August 2005

4. Participated in an advanced training programme on “Mathematical Modeling in Hydrogeology: Numerical Simulation of Groundwater flow and Solute Transport”, sponsored by Department of Science and Technology, New Delhi and organized by the Department of Geology, Anna University, Chennai from 7th to 30th November 2005
5. Participated in a training programme on “Theory and Practice of Wastewater Management”, sponsored by Japan International Cooperation Agency, New Delhi and organized by the Department of Civil Engineering, IIT Madras, Chennai from 26th October to 2nd November 2006

6. Participated in a continuing education programme on “Environmental Impact Assessment” sponsored by the Tamil Nadu Pollution Control Board and organized by the Department of Civil Engineering, IIT Madras, Chennai from 16/7/2007 to 20/7/2007

7. Participated in a regional workshop on “Water Quality and Water use Efficiency in Tamilnadu” organized by the central groundwater board in Chennai from 19/3/2009 to 20/3/2009

8. Participated in a workshop on “Practical Introduction to MATLAB for Scientific Computing and Engineering” organized by the Karunya University, Coimbatore from 30/9/2016 to 01/10/2016

9. Participated in a three days workshop on “Remote Sensing and GIS for Degradation of Coastal Critical Habitats” organized by Sathyabama University, Chennai from 09/11/2016 to 11/11/2016
10. Participated in a two days International Workshop on “Water & Urban Initiative (WUI): Case Study of Chennai City” organized by IIT MAdras, in collaboration with United Nations University from 25/10/2016 to 26/10/2016
11. Participated in a two days National Conference on “Recent Advances in Earth and Atmospheric Monitoring from Space” organized by Sathyabama University, Chennai from 21/2/2017 to 22/2/2017
12. Participated in a two days training programme on “Know your watershed and give water a hand” organized by Sathyabama University, Chennai from 08/2/2017 to 09/2/2017

(12) Consultancy and sponsored research projects undertaken/Involved

Sl.No.	**Project Title**	**Implementing Agency**	**Description of Roles**
1	Kuttiyadi Irrigation Project, Kerala	CWRDM, Kozhikode	Field surveying for irrigation project, Organizing and assisting training programmes.
2	RIDF (Rural Infrastructure Development Programme) – Malayalappuzha-Changolical watershed	Soil Conservation Division of Agriculture Department, Govt. of Kerala	Watershed Development Programmes, Rainwater harvesting works, and training programmes.
3	NWDPRA (National Watershed Development Project for Rainfed Areas) - Murinjakal watershed	Soil Conservation Division of Agriculture Department, Govt. of Kerala	Watershed Development Programmes, Rainwater harvesting works, and training programmes.
4	WGDP (Western Ghats Development Programme)	Soil Conservation Division of Agriculture Department, Govt. of Kerala	Watershed Development Programmes, water harvesting works, and training programmes.
5	Enhancement of recharge potential in the Neyveli deep seated aquifers	IIT Madras & NLC LTD.	Data collection, analysis and development of groundwater models for artificial recharge study in Cuddalore basin

6	Strategy for increasing per capita availability of water for Gingee town, Tamilnadu	Water Technology Initiative, Department of Science and Technology, Govt. of India	Analysis of the surface and groundwater resources availability in the study area
7	A training programme on to conserve water, a natural resource know your watershed	Department of Science and Technology, Govt. of India	Data collection in respect of water bodies available in the watershed, their status, preparation of presentation materials and organization of the training programme
8	Evolve Strategies through Hydrological modeling of chain of tanks in Guduvanchery, Tamilnadu to increase the utilizable water	NRDMS, Department of Science and Technology, Govt. of India	Hydrological modeling of peri-urban tanks for its effective utilization in the changed land use condition due to urbanisation
9	Adopt a Lake – Renewable water source for societal sustenance (ongoing)	NCSTC, Department of Science and Technology, Govt. of India	To make the youths (NSS volunteers undergoing Engineering degree course) exposed to LAKE SYSTEM consisting of lake watershed, lake inflows and outflows and lake ayacut.
10	A Training Programme on Know your watershed and give water a hand (ongoing)	NCSTC, Department of Science and Technology, Govt. of India	The programme envisages conducting a field oriented watershed awareness programme for School teachers in Guduvanchery watershed followed up by installation of **rain barrels** for collecting roof water runoff.
11	Strategies to harness Runoff Rundown from mountainous watersheds by rejuvenation of tanks and artificial recharge to increase utilisable water: A case of Thiruvannamalai hills, Tamil Nadu	Water Technology Initiative, Department of Science and Technology, Govt. of India	Analysis of the surface and groundwater resources availability in the study area