

## ARASUMANI M

### Contact

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Postdoctoral Research Fellow  
Dr. V.V. Robin Lab  
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### Position held

Jun 2019 – Present: Postdoctoral Research Fellow, Dr. V.V Robin Lab, Indian Institute of Science Education and Research - Tirupati  
March 2016 – June 2019: Visiting Researcher, Dr. V.V Robin Lab, Indian Institute of Science Education and Research - Tirupati  
February 2016 to March 2016: Research Assistant, National Centre for Biological Sciences, Tata Institute of Fundamental Research, Bangalore.  
September 2015 to January 2016: GIS Analyst, BNR Pvt. Ltd, Chennai.

### Awards

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First Rank - PGD Earth Observation and Geo Information Science, Indian Institute of Remote sensing, Indian Space Research Organization, Dehradun.  
Awarded Gold Medal - District level talent search examination 2007.

### Education

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PhD Remote Sensing in Forest, Ecology and Environment, The Gandhigram Rural Institute (Ministry of Human Resource and Development), Tamil Nadu, India. 2019.  
PGD: Earth Observation and Geo Information Science, Indian Institute of Remote Sensing, Indian Space Research Organization (ISRO), Dehradun. 2014 – 2015 (First class with distinction).  
Master of Earth Remote Sensing and Geo Information Technology, Madurai Kamaraj University, Madurai. 2012 – 2014 (First class with distinction).  
Bachelor of Statistics, St. Joseph's College, Trichy. 2009 – 2012 (First class).

### Research Papers in SCI journals (Google Scholar [link](#))

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1. **Arasumani M**, Khan D, Das A, Lockwood I, Stewart R, Kiran RA, Muthukumar M, Bunyan M, Robin VV. Not seeing the grass for the trees: Timber plantations and agriculture shrink tropical montane grassland by two-thirds over four decades in the Palani Hills, a Western Ghats Sky Island. **PLOS ONE**. 2018 Jan 10; 13(1): e0190003.
2. **M. Arasumani**, Danish Khan, C.K. Vishnudas, M. Muthukumar, Milind Bunyan, V.V. Robin, Invasion compounds an ecosystem-wide loss to afforestation in the tropical grasslands of the Shola Sky Islands, **Biological Conservation**, Volume 230, 2019, Pages 141-150, ISSN 0006-3207, <https://doi.org/10.1016/j.biocon.2018.12.019>.

## **Presentation (Conferences)**

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1. Abhimanyu Lele, V.V. Robin, **M.Arasumani**, CK Vishnudas, Devcharan Jathana, “Determinants of distribution of a montane grassland endemic bird”, International Biogeography Meeting, Ecuador, South America 5-9 August 2019.
2. **M. Arasumani**, M. Muthukumar, “Mapping invasive species (*Prosopis Juliflora*) using Landsat 8 in Dindigul District, Tamil Nadu”, International seminar on Rural Technologies and Management for Sustainable Development organized by Rural Technology Centre, Gandhigram Rural Institute, Gandhigram 30 August 2017
3. **M. Arasumani**, M. Muthukumar & M. Subagunasekar “Optical Remote Sensing Applications” International conference on materials science and technology organized by Mother Teresa University, Kodaikanal 4th August 2017
4. **M. Arasumani**, M. Muthukumar & M. Subagunasekar “Rare Earth Metals Identification using Hyperspectral Remote sensing in Kunavaram District, Andhra Pradesh” International conference on materials science and technology organized by Mother Teresa University, Kodaikanal 4th August 2017
5. **M. Arasumani**, M. Muthukumar & M. Subagunasekar “Hyperspectral Remote Sensing for heavy mineral exploration in Vishakhapatnam coast, Andhra Pradesh” Geospatial Technologies for Rural Development, 2nd February 2017.
6. **M. Arasumani**, M. Muthukumar “Coal Bed Methane (CBM) Identification Using Hyperspectral Remote Sensing in Jharia Coal Field” in one day 1st International Conference on Recent Trends in Structural and Environmental Engineering organized by Department of Civil Engineering, University College of Engineering, Anna University, Chennai - Dindigul campus 23 May 2016.

## **Resource Person and Invited Talk**

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1. Resource person and instructor for training on Geo – Spatial Technologies for Range Officers, Kodaikanal Wildlife Sanctuary. 20th July, 2017.
2. Resource person and instructor for training on Geo – Spatial Technologies for Forest Guards, Kodaikanal Wildlife Sanctuary. 21th July, 2017.
3. Resource person for faculty training on processing of Hyperspectral images, Veltech University, Chennai. 30-01<sup>st</sup> August, 2019.

## **Teaching Experience**

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2019 – Guest Faculty. Remote Sensing (MSc course), Sálím Ali Centre for Ornithology and Natural History (SACON), Coimbatore.

2019 – Teaching Assistant. Remote Sensing (MS and PhD course), Indian Institute of Science Education and Research (IISER), Tirupati.

## **Book Chapter**

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1. **M. Arasumani**, M. Muthukumar & M. Subagunasekar “Heavy Minerals and Rare Earth Minerals mapping using Hyperion (EO-1) in Kunavaram area, Andhra Pradesh” Recent Innovations and Technological Development in Civil Engineering, Ganecon Publications, Queensland, Australia ISBN No. 978-0-6482502-2-7.
2. **M. Arasumani**, M. Muthukumar & M. Subagunasekar “Hyperspectral Remote Sensing for heavy mineral exploration in Vishakhapatnam coast, Shanlax Publications, Madurai, First Edition, Pg.no 108 - 112, ISBN 978-81-933316-3-7.

## **Books**

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**M. Arasumani (2017)**, Assessment of Environmental Degradation using Remote Sensing and GIS. Edited by Hiteesha Bachoo, Lambert Academic Publishing, Saarbrücken Germany ISBN-13:978-3330348783.

## **Workshops and Training course attended**

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1. Landscape Ecology in Wildlife Research and Conservation conducted at Wildlife Institute of India, Dehradun. 7th to 11th October, 2016.
2. One week training course on Hyperspectral Remote Sensing at National Remote Sensing Centre (NRSC), Indian Space Research Organization (ISRO), Hyderabad. July 22-26, 2019.
3. Two weeks training course on LiDAR Remote Sensing & Applications at Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO), Dehradun. July 27-August 09, 2019.

## **Conferences attended**

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International Biogeographical society. Biogeography India meeting. 25th September to 28th September.

## **Grants**

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International Biogeographical society. Travel grant to attend the Biogeography India meeting. 25th September to 28th September.

## **References**

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Assistant Professor,  
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The Gandhigram Rural Institute (Deemed to be University), Tami Nadu – 624 302.

Dr. P. K. Champati Ray, Scientist/Engineer- SG,  
Group Head Geosciences & Disaster Management Studies and Head Geosciences  
& Geohazards Department,  
91-135-2524153, [champati\\_ray@iirs.gov.in](mailto:champati_ray@iirs.gov.in)  
Indian Institute of Remote Sensing (ISRO),  
Department of Space, Government of India, Dehradun.

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Coordinator,  
Academy for Conservation Science and Sustainability Studies

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Indian Institute of Remote Sensing (ISRO),  
Department of Space, Government of India, Dehradun.

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Department of Space, Government of India, Dehradun.

**Declaration**

I hereby declare that statements made in the true complete and correct to the best of my knowledge and belief.

Yours faithfully,  
Arasumani M

Place – Tirupati  
Date – 24/10/2019