# **CURRICULUM VITAE**

**Dr. S. MUTHUSAMY** 31/93C, First Street, west, Kandhan colony, Near Govt.Polytechnic, Tuticorin – 628008, Tamilnadu, INDIA.



Mobile: +91-9894924240 E-Mail: <u>muthu.geo@voccollege.ac.in</u> <u>smuthusamy.geo@gmail.com</u>

#### **OBJECTIVE**:

To obtain a challenging position in the discipline of Earth and Atmospheric sciences that offers opportunity for advancement and personality development and fully utilizes in an environment, where I would have to learn and improve myself and thus be an asset to the organization.

#### WORKING EXPERIENCE:

✓ Currently working as an **Assistant Professor** in Department of Geology, V.O.Chidambaram College, Thoothukudi-628008, Affiliated to Manonmaniam Sundaranar University (Tirunelveli), Tamil Nadu, India from  $29^{\text{th}}$  December 2022 to till date.

✓ Worked as an Assistant Professor (**RMS**) in Department of Geology, V.O.Chidambaram College, Tuticorin, affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India from  $1^{st}$  July 2016 to  $28^{th}$  December 2022.

\* Subject handled – Both UG & PG (16 hours per week under UGC aided college norms).

 $\checkmark$  Worked as a **Research Scientist** in University of Madras Consultancy Project in Department of Applied Geology, Chennai, Tamilnadu, India. Project entitled "Monitoring of Sea Beds, Sea Water Quality, Ambient Air Quality, Noise Pollution and Potable Water Quality in V.O.Chidambaranar Port, Tuticorin, Tamilnadu, India'' from **March 2014 to June 2016.** 

\*Handled field sample collections (quarterly) and analysis, Preparation of Environmental Monitoring Project report.

✓ Worked as a **Guest Lecturer** in Department of Applied Geology, University of Madras, Chennai, Tamilnadu, India, from **February 2015 to April 2015**.

\* Subject handled – Geochemistry, Petrology (Theory & Practical [megascopy]), and Remote sensing/GIS practical.

**EDUCATIONAL QUALIFICATIONS:** 

✓ DOCTOR OF PHILOSOPHY (PH.D) IN Applied Geology, April 2011- November 2014, Highly Commented, Department of Applied Geology, University of Madras, Chennai, Tamilnadu, India.

- ✓ MASTER OF PHILOSOPHY in Applied Geology (M.Phil), 2009-2010, Aggregate 85.5%, Department of Applied Geology, University of Madras, Chennai Tamilnadu, India.
- ✓ Master of Science in Applied Geology (M.Sc.), 2007-09, Aggregate 65.64%, Department of Applied Geology, University of Madras, Chennai, Tamilnadu, India.
- ✓ Bachelor of Science in Geology (B.Sc.), 2003-06, Aggregate 59.8%, Department of Geology, V.O.Chidambaram College, Tuticorin, affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India.

✓ Higher Secondary Course Certificate (HSCC) March 2003, Aggregate 62.4%
 St. Mary's Boys Higher Secondary School, Tuticorin, State Board of Tamilnadu, India.

✓ Secondary School Leaving Certificate (SSLC) March 2001, Aggregate 72.2% St. Mary's Boys Higher Secondary School, Tuticorin, State Board of Tamilnadu, India.

## DOCTOR OF PHILOSOPHY (PH.D) TITLE OF THE THESIS:

## "ENVIRONMENTAL ASSESSMENT OF MANAKUDY ESTUARY, SOUTHWEST COAST OF INDIA: GEOCHEMICAL AND REMOTE SENSING IMPLICATIONS".

## MASTER OF PHILOSOPHY DEGREE DISSERTATION TITLE: (M.PHIL)

"Geo-Environmental Analysis for Land Use and Land Cover changes using Multitemporal Satellite data and GIS techniques for Bhavani River Basin, Tamilnadu".

MASTER OF SCIENCE DEGREE DISSERTATION TITLE: (M.SC)

"Recent benthic foraminifera from diverse ecological settings in and around Tuticorin, Southeast coast of India".

# Academic / Research Network identification:

VIDWAN-ID: 174556 (<u>https://vidwan.inflibnet.ac.in/profile/174556</u>) ORCiD id: <u>https://orcid.org/0000-0001-9144-646X</u>

Web of Science Researcher ID: <u>AAT-1829-2020</u> (Clarivate/Web of Science/Publons).

Tamilnadu Employment registration number: MDP2015M00042731.

VOC-College staff website id: <u>https://voccollege.ac.in/our\_team/mr-s-muthusamy/</u>

https://www.researchgate.net/profile/Muthu-Samy

# AWARD's:

✓ Received on award entitled "IRSD International Preeminent Academic Excellence Award 2022-IRSD/2022/C1-026" at 8th International Conference on Interdisciplinary Research for Sustainable Development (IRSD) held on 30<sup>th</sup> September 2022 at Mahatma Gandhi State Institute of Public Administration (MGSIPA) Chandigarh, organized by International Institute of Organized Research - I2OR (A Registered MSME with Ministry of MSME, Government of India and Green ThinkerZ<sup>TM</sup> (A Registered Society with Government of Punjab, India) in association with Centre for Smart Modern Construction, Western Sydney University, Australia and IIT Bombay Spoken Tutorial.

✓ Received on award entitled "**I2OR National Elite Teacher Award 2022**" (Ref No. I2OR/2022/NETA-029)" by International Institute of Organized Research (I2OR), registered MSME with Ministry of MSME, Government of India. Registration Number: UDYAM-PB-20-0002405. Received on 5<sup>th</sup> September 2022. <u>http://www.i2or.com</u>

✓ Received on award entitled "**I2OR International Eminent Ed-trainer Award 2021**" (Ref No. I2OR/2021/IA-116) by International Institute of Organized Research (I2OR), registered MSME with Ministry of MSME, Government of India.( Registration Number: UDYAM-PB-20-0002405) on 15'th August 2022. <u>http://www.i2or.com</u>

✓ Received on award entitled "Top Professors in India 2022" by FOXCLUES.Pvt.Ltd, Indian Prime Awards, Chanidgarh, Punjab, India. Announced on March 2022. Received on 06.05.2022. <u>https://indiaprimeawards.com</u>

✓ Received on award entitled "Student Project Programme of the year 2022" (20211SPP2) By Institute of Scholars (<u>www.insc.in</u>), Bengaluru-560091, Karnataka, India on  $3^{rd}$  March 2022.

Project Team member's name: Dr.G.M.Moorthy, Dr.S.Selvam, **Dr.S.Muthusamy**, Shri.R.Karthik, P. Muthukumar, J. Mithu and B.Bala Vignesh.

✓ Received on award entitled "Student Project of the year 2021" (SPA012201) by Institute of Research, (<u>www.inres.in</u>), Wayanad – 673121, Kerala, India on  $25^{\text{th}}$  February 2022.

Project Team member's name: Dr.G.M.Moorthy, Dr.S.Selvam, **Dr.S.Muthusamy**, Shri.R.Karthik, P. Muthukumar, J. Mithu and B.Bala Vignesh.

 $\checkmark$  Awarded under the category of

(i) Academic Excellence award (AEA042105) on September 2021,

(ii) Distinguished Professor award (DPA042102) September 2021

(iii) Student Project of the Year (SPA062101)-2021 – November -2021

Project Team member's name: Dr.S.Muthusamy, Dr.G.M.Moorthy, Shri.R.Karthik,

P. Muthukumar, M.Mayasidhusankar, P.Marimuthu, D.Arul Praksh Prince, M.Athinarayanan and S.Lakshmi Sankar.

by Institute of Research, (<u>www.inres.in</u>), Wayanad – 673121, Kerala, India. [Registered under Ministry of MSME, Govt.of.India & An ISO 9001:2015 certified

Institute by International Accreditation Forum, Accredited by UAF].

✓ Awarded under the category of

- (i) Best Teacher award (3BTA23) on April 2020,
- (ii) Research Excellence award (3REA43) on April 2020,

(iii & iv) Young Achiever awards **(twice)** (3YAA44 & 3REA94) on April 2020 <u>https://www.insc.in/awards/singleinfo.php?tid=2880</u> https://www.insc.in/awards/singleinfo.php?tid=3330 and

(v) Student Project Programme of the year 2020 (4SPP3) on May 2020. https://www.insc.in/awards/singleinfo.php?tid=3816

Project Team member's name: P.Sivasubramanian and **Dr.S.Muthusamy** 

A.Samuel Durai, A.Micheal Renu, M.Riaz Sheriff and P. Muthukumar.

By Institute of Scholars, Bengaluru-560091, Karnataka, India. (<u>www.insc.in</u>). [Registered under Ministry of MSME, Govt.of.India, (KR09E0002001) & An ISO 9001:2015 certified Institute by International Accurate Certification, Accredited by UASL, -UASL 2510/QMS/0818].

✓ Conferred with the "Best Young faculty Award" by Novel Research Academy [Ref: NRS/BYSA/0111133/2019-2020], (UAN: PY03D0003488- A registered Enterprise under the Govt.of.India), Puducherry, on 01.02.2020.

✓ Conferred with "International Distinguished Researcher in Geology" by RULA INTERNATIONAL AWARD {Accredited by World Research Council (WMC) and United Medical Council (UMC)} on 26.01.2020.

 $\checkmark$  Awarded as a University Research fellow **(URF)** in the Department of Applied Geology, University of Madras, Chennai, Tamilnadu, India, from December 2011 to March 2014.

# **INTERNATIONAL JOURNAL REVIEWER/Editor:**

✓ Reviewer in Asian Journal of Research in Computer Science, from August 2022, (ISSN: 2581-8260), <u>https://journalajrcos.com/index.php/AJRCOS</u>

✓ Editor role for the book series titled "Futuristic Trends in Physical Sciences" with Series Code IIP\_V2\_2022\_BS\_07\_01 in the Iterative International Publishers (IIP), Chikkamagaluru, Karnataka-577102, India. From 25<sup>th</sup> June 2022 to 1<sup>st</sup> Nov.2022. Editor id: IIPER1655895492, <u>https://iipproceedings.org</u>

✓ Reviewer in International Journal of Environment and Climate Change, from January 2022, (ISSN: 2581-8627), NAAS score (2021):5.13. <u>https://www.journalijecc.com/index.php/IJECC/about</u>

✓ Reviewer in Journal of Asian Journal of Agricultural Extension, Economics & Sociology, from September 2021 (ISSN: 2320-7027) NAAS score (2021): 4.86. <u>https://www.journalajaees.com/index.php/AJAEES</u> ✓ Reviewer in Journal of Global Ecology and Environment, from August 2021 (ISSN: 2454-2644) NAAS score (2021): 3.94. <u>https://www.ikprress.org/index.php/JOGEE</u>

✓ Reviewer in Journal of Geography, Environment and Earth Science International, from July 2021 (ISSN: 2454-7352) NAAS score (2020): 4.21. <u>http://dx.doi.org/10.9734/jgeesi https://www.journaljgeesi.com/index.php/JGEESI/indexx</u> <u>https://review.asiapacificpublishers.com</u>

✓ Reviewer in Current Journal of Applied Science and Technology from May 2021, NAAS score (2021): 4.71. ISSN: 2457-1024 <u>https://dx.doi.org/10.9734/cjast</u> <u>https://www.journalcjast.com/index.php/CJAST</u>

✓ Reviewer in Environmental Science and Pollution Research (ESPR), Under Springer Journal, Impact Factor: 3.056, Electronic ISSN 1614-7499, Print ISSN 0944-1344, from December 2020. <u>https://www.editorialmanager.com/espr/default.aspx</u>

✓ Reviewer in Environmental Earth Sciences, Under Springer Journal, Impact Factor: 2.180, Electronic ISSN: 1866-6299, Print ISSN:1866-6280, from December 2020. <u>https://www.editorialmanager.com/enge/Default.aspx</u>

✓ Reviewer in Science of the Total Environment, under Elsevier journals, Impact Factor: 6.419, SJR: 1.661, ISSN: 0048-9697, from June 2020. <u>https://wwwcf.editorialmanager.com/STOTEN/default.aspx</u>

✓ Reviewer in Arabian Journal of Geosciences, Under Springer Journal, Impact Factor: 1.327, Electronic ISSN 1866-7538, Print ISSN 1866-7511, from April 2020. <u>https://www.editorialmanager.com/ajgs/default.aspx</u>

✓ Reviewer in Springer - Environment, Development and Sustainability Journal, Since December 2013. ISSN: 1573-2975 (Online). <u>http://www.editorialmanager.com/envi</u>

✓ Reviewer in EnviroGeoChimica Acta (EGCA) Since December 2013. ISSN: 2348 – 7259 (Online), <u>http://www.egcacta.com</u>.

# INTERNATIONAL MEMBERSHIP

Selected as an Life Member of International Institute of Organized Research (**I2OR**) on 08.October.2022 (Membership Number: I2OR/2020/00885) by International Institute of Organized Research (I2OR) Greater Mohali, Punjab -140301, India. [I2OR is a registered MSME with Ministry of MSME, Government of India Registration Number: UDYAM-PB-20-0002405].

Selected as a Lifetime Member in the Green ThinkerZ<sup>TM</sup> Society, Kharar-140301, Punjab, India, on 19<sup>th</sup> September 2022. (Green ThinkerZ<sup>TM</sup> Society -A Registered Society advocating United Nations Sustainable Development Goals (SDGs): 2030),

My Membership No: GT2022LM0268, [Green ThinkerZ® is Registered at NGO Darpan, NITI Aayog, Govt. of India PB/2022/0310139.]

Selected as a **Lifetime Member** in the Geological Society of India, Bengaluru-560085, Registered under Govt.of.India since 1958. My Membership number: 0243 from 6<sup>th</sup> September 2022. <u>http://www.geosocindia.org</u>

Selected as an "Individual Member of the year 2022 & 2023", International Association of Geo Chemistry (IAGC), Columbus, OH 43210, USA. from 28<sup>th</sup> March 2022. (Membership id: 63614391) <u>https://www.iagc-society.org/</u>

Selected as a **life member** in the "Indian Society of Remote Sensing", (Registered under Societies Act, 1860-REGN.NO.1357/73-74) Indian Institute of Remote Sensing Campus, Dehradun - 248 001, Uttarakhand, India from 11<sup>th</sup> March 2022. Approved from 4<sup>th</sup> July 2022. (Membership id: L-5839) <u>http://www.isrs-india.org/</u>

Selected as an Individual membership in the "International Society of Photogrammetry and Remote Sensing" (ISPRS), Hannover, Germany from 11<sup>th</sup> March 2022 to Dec 2023. <u>www.isprs.org</u> (Membership id: 63314).

Selected as an "Individual Member of the year 2022 & 2023", in The Indian Society of Soil Science (ISSS) came into existence on December 22, 1934 in Calcutta under Act XXI of 1860 (Registration No. 8164/252 of 1934-35). My Membership voter number: 862 [M/M/931] (Jan-Dec.2022). <u>http://www.isss-india.org/</u>

Honorary Rosalind Member of London Journals Press (id: **#RL33172**) in London Journal Press, Journals Press Inc. Headquarters, 1210<sup>th</sup>, Arlington Business Park, Theale, United Kingdom from 26<sup>th</sup> June 2021. <u>https://journalspress.com/</u>

Life Member (LM042114) in Institute of Research, (<u>www.inres.in</u>), Wayanad – 673121, Kerala, India from 20<sup>th</sup> September 2021. [Registered under Ministry of MSME, Govt.of.India, & An ISO 9001:2015 certified Institute by International Accreditation Forum, Accredited by UAF].

Professional Member (Id no: InSc202003735) in Institute of Scholars (<u>www.insc.in</u>) from April 2020. [Registered under Ministry of MSME, Govt.of.India, & An ISO 9001:2015 certified Institute by International Accurate Certification, Accredited by UASL].

American Geophysical Union (AGU) Member in 2014 (Member id 10052363) <u>https://www.agu.org/</u>.

## ORGANIZED - WORKSHOP/CONFERENCE/SEMINAR/Symposium

Organized (*Co-Convener*) a one day International workshop entitled "Mineral **Exploration**" Organized by PG & Research Department of Geology, on 15<sup>th</sup> December 2017 at Golden Jubilee hall, V.O. Chidambaram College, Tuticorin - 628008, Tamilnadu, India.

Organized (*Co-Convener*) two day International workshop entitled "**Sediment Geochemistry and Career orientation for Geologist**" Organized by PG &Research Department of Geology, on 1<sup>st</sup> and 2<sup>nd</sup> March 2018 at Golden Jubilee hall, V.O. Chidambaram College, Tuticorin - 628008, Tamilnadu, India.

## ACADEMIC PUBLICATIONS:

## **BOOK PUBLICATION**

Book Published into Germany-Lambert Academic Publishing entitled "A study to evaluate the effectiveness of cold cabbage leaves compression on breast engorgement among post natal mothers (IUD, abortion) in medical college hospital at Tirunelveli district, India" G.M.Moorthy, **S. Muthusamy** and K.Sakthi Karbagam ISBN: 978-620-5-49176-8 on August 2022. <u>https://www.lap-publishing.com/</u> Lambert Academic Publishing is a brand of Omni Scriptum S.R.L. Registration number:1018600021562.

Book Published into Germany-Lambert Academic Publishing entitled "Geochemical Behaviour of Core Sediments from Deep Sea off Gulf of Mannar, Bay of Bengal, India" G.M.Moorthy, **S. Muthusamy** and P.Mohana ISBN: 978-620-5-48819-5 on July 2022.

Book Published into Germany-Lambert Academic Publishing entitled "Geo-Environmental Analysis and Land Use and Land Cover Change (LUCC) Studies using Multitemporal Satellite data and GIS techniques – A case study for Bhavani River Basin, Tamilnadu, India" **S. Muthusamy**, V.Gopal, R.R.Krishnamurthy, ISBN: 978-620-0-30027-0 on September 2019.

Book Published into Germany-Lambert Academic Publishing entitled "A Baseline Study of Physicochemical Parameters and Trace Metals in Waters of Manakudy, South-west Coast of India" **S. Muthusamy**, V.Gopal, M.Jayaprakash, ISBN: 978-620-0-30722-4 on September 2019.

Book Thesis Published into Germany-Lambert Academic Publishing entitled "Geochemical assessment and sediment characteristics of Manakudy estuarine surface sediments, SW-Coast of India" **S. Muthusamy**, V.Gopal, M.Jayaprakash, ISBN: 978-620-0-30918-1 on September 2019.

Book Published into Germany-Lambert Academic Publishing entitled "Recent Benthic Foraminifera in Tuticorin Southeast Coast of India", **S.Muthusamy** and N. RajeswaraRao, ISBN: 978-3-659-12238-5 on 18 May 2012.

## **ARTICLE / MANUSCRIPT PUBLICATIONS:**

- "Geochemical evaluation of groundwater around Chromepet tannery belt, Southern India" G.Kanagaraj, P. Mohana, S. Muthusamy, G.M. Moorthy, P. Amaladas, N.S. Magesh in the International Journal of Ground Water for Sustainable Development, Elsevier, Volume 22, Issue on May 2023, ISSN: 2352-801X, Impact Factor: 1.075 (2023). https://doi.org/10.1016/j.gsd.2023.100963
- "Shoreline Change Statistics for the Coastline of Pulicat Lake to Ennore Port, North Chennai, India" K. Ilayaraja, P. Mohana, S. Muthusamy and G.M. Moorthy in the OUTREACH -A Multi-Disciplinary Refereed Journal (2021) Sept.2022, Volume; XIV Issue 2021, page; 57 – 65, ISSN: 0975-1246 (Print) & 2321-8835 (online). <u>http://www.voccoutreach.in</u>
- "Submarine groundwater discharge and associated nutrient influx in surroundings of the estuary region at Gulf of Mannar coast, Indian Ocean" S.Selvam, P.Muthukumar, Priyadarsi D.Roy, S.Venkatramanan, S.Y.Chung, Hussam Eldin Elzain, **S.Muthusamy** and K.Jesuraja in the Chemosphere (2022) Elsevier, Vol;305,135271,Page 1-11, 0045-6535, 12<sup>th</sup> June 2022. ISSN: 0045-6535.

https://doi.org/10.1016/j.chemosphere.2022.135271 Impact factor: 7.086 (2021).

"Heavy metal contamination and the assessment of health risks in groundwater in Arani industrial zones in Southern India" Mohana Perumal, Selva Ganapathy Velusamy, Muthusamy Subramanian, P. M. Velmurugan, T. Naveen Raj and M. Sunandana Reddy in the Arabian Journal of Geosciences – Springer (2022) 15:948, on 7<sup>th</sup> May 2022. <u>https://doi.org/10.1007/s12517-022-10223-1</u>

Impact factor: 1.83(2020). ISSN: 1866-7538(E), ISSN: 1866-7511(P).

- "Geospatial and an AHP approach for delineating potential groundwater zone for Sakkottai block, Tamil Nadu" Rajani Ramachandran, Mohana Perumal, Udayaganesan Palaniraj, **Muthusamy Subramanian** and Dhinesh Selvam in the Arabian Journal of Geoscience, S.I – CES frame work, vol.15, article number 633, page 1-12 on 26<sup>th</sup> March,2022. Impact factor: 1.83(2020). ISSN: 1866-7538(E), ISSN: 1866-7511(P). <u>https://doi.org/10.1007/s12517-022-09783-z</u>
- "Agriculture Drought Management in Ramanathapuram District of Tamil Nadu, India" SivakumarK, Prabakaran.K, Muthusamy.S, PK.Saravanan, Kongeswaran.T, Muruganantham.A, Gopalakrishnan.G in the Journal of Climate Change, vol. 8, no. 1, pp. 59-65, 21<sup>st</sup> February 2022, ISSN : 2395-7611 (P), ISSN 2395-7697 (E), DOI: <u>10.3233/JCC220005</u>. https://content.iospress.com/journals/journal-of-climate-change/8/1
- "Appraisal on water chemistry of Manakudy estuary, south west coast, India" Muthusamy Subramanian, Sivakumar Karthikeyan, Shanmugasundaram Arumugam and Jayaprakash Muthumanickam Elsevier-Acta Ecologica Sinica Publication on October2021. (Article in Press- Volume: 41, Issue: 5, Page no:463-478). Online ISSN: 1872-2032, Impact factor: 1.40. <u>https://doi.org/10.1016/j.chnaes.2021.07.004</u>

"Elemental geochemistry of surface sediments from Manakudy estuary, south-west coast of India: Inferences to sources of elements and their accumulation" **Muthusamy Subramanian**, Jayaprakash Muthumanickam, Sivakumar Karthikeyan, Venkatramanan Senapathi, Prasanna Mohan Viswanathan, Selvam Sekar, Chidambaram Sabarathinam. Geological Journal in **Wiley** Publication on 24<sup>th</sup> March, **2021**. Volume: 56, Issue: 5, Page no: 2360-2378. Online ISSN: 1099-1034, Impact factor: 1.595. <u>https://doi.org/10.1002/gj.4125</u>

"Causes of heavy metal contamination in groundwater of Tuticorin industrial block,

Tamil Nadu, India" Sivakumar Karthikeyan, Shanmugasundaram Arumugam, Jayaprakash Muthumanickam, Prabakaran Kulandaisamy, **Muthusamy Subramanian**, Ramachandran Annadurai, Venkatramanan Senapathi, Selvam Sekar, Environmental Science and Pollution Research (Springer), **January 2021**, Volume:28, Page no: 18651–18666, Electronic ISSN:1614-7499, Print ISSN:0944-1344. Impact factor: 4.23, <u>https://doi.org/10.1007/s11356-020-11704-0</u>.

"Use of Earth Observation Images and GIS Techniques for Groundwater Exploration in Hard Rock Terrain" P. Mohana, **S. Muthusamy**, Journal of Geography and Cartography, Vol.2. Issue - 1. page. 1- 10, June **2019**, ISSN: 2578-1979 (Online). <u>doi:10.24294/jgc.v2i1.904.</u>

An Article is Published in the International Journal of Advanced Scientific Research–Multi-Disciplinary (IJAMSR - ISSN – 2581-4281) entitled "*Groundwater – Quartzite Area Study Using Square Array Method In Puthukottai, Tuticorin District, Tamilnadu, India*" A. Antony Ravindran, **S. Muthusamy**, G.M. Moorthy, J. Vinothkingston, P. Mohana , On December 2018. International Scientific Indexing (*ISI*) -Cross Ref <u>DOI: 10.31426/ijamsr.2018.1.10.1016</u>.

- "Environmental Impact Assessment of Thamirabarani River Basin, Tamil Nadu Using Remote Sensing and GIS Techniques", P.Mohana, Nagamani, S.Muthusamy, P.M.Velmurugan, in Indian Journal of Science and Technology 11(22):1-7 · June 2018.
   <u>DOI: 10.17485/ ijst /2018/v11i22/106246</u>, RG Journal Impact: 0.68. ISSN (Print): 0974-6846 ISSN (Online): 0974-5645.
- Presented and Published a paper entitled "Ockhi Cyclone and its Impact in the Kanyakumari District of Southern Tamilnadu, India: An Aftermath Analysis"
  S. Muthusamy, K. Sivakumar, A. Samueldurai, M. Riaz Sheriff and P. Siva Subramanian, International Journal of Recent Research Aspects (IJRRA), Special Issue: Conscientious Computing Technologies, 19<sup>th</sup> April 2018, pp. 466-469, ISSN: 2349-7688.
- "Shallow sediment physiognomies of Manakudy estuary southwest coast of India" Muthusamy S, A. Shanmugasundharam and M. Jayaprakash, in the International Journal of Global Environmental Issues, Vol. 17, No 1. Y, Jan – 2018, pp.64-79, InderScience Enterprises Ltd. ISSN online: 1741-5136, ISSN print: 1466-6650. <u>https://doi.org/10.1504/IJGENVI.2018.090648</u>.

- "Application of post Classification in Landuse & Landcover Stratagies at north Chennai Industrial Area" Sivakumar K, Muthusamy S, Jayaprakash M et al.. J Adv Res GeoSci Remote Sensing, December 2017; 4(3&4): 1-13. ISSN: 2455-3190.
- "Shrinking of Vann Island, Gulf of Mannar, SE coast of India: assessing the impacts" M. Jayaprakash, K. Sivakumar, S. Muthusamy, R. R. Krishnamurthy, J. K. Edward Patterson in Springer, Natural Hazards Journal, August 2016, Volume 84, issue 3..pp.1529-1538. DOI 10.1007/s11069-016-2496-5, Impact factor: 1.901 (Thomson Reuters).
- "Spatial Diversity of Major Ionic Absorption in Ground water: Recent study from the industrial region of Tuticorin, Tamilnadu, India", K.Sivakumar, Priyajames, S.Muthusamy, P.Saravanan, M.Jayaprakash, Special Issue in EnviroGeoChimicaActa ISSN: 2348 – 7259, (March-2016) volume 3, issue 1, pp.138-147.
- "Bioavailable trace metals in micro-tidal Thambraparani estuary, Gulf of Mannar, SE coast of India" M. Jayaprakash, Arya Viswam, V. Gopal, S. Muthuswamy, P. Kalaivanan, L. Giridharan and M.P. Jonathan, in Elsevier Ltd, Estuarine, Coastal and Shelf Science 146 (May-2014) 42-48. ISSN: 0272-7714, Impact factor: 2.324 (Thomson Reuters).
- "Landuse/Landcover Change Detection Analysis Using Remote Sensing in and Around Manakudy Estuary, Sw Coast of India", **S.Muthusamy**, P.Mohana, M.Jayaprakash and T.Venugopal, in EnviroGeoChimicaActa (April-2014) 1(4):249-263, ISSN: 2348 7259.
- "Hydro geochemistry and assessment of quality of groundwater in parts of Kancheepuram district, Tamilnadu, India", Kanagaraj.G., Sridhar, S.G.D., **Muthusamy.S**, and Jayaprakash.M, Research Expo international Multidisciplinary research journal December 2013, volume III, Issue –IV, pp 45-57, Paper ID#3407, ISSN: 2250-1630. **Impact factor: 2.235** (ISRA).
- "Geo-Environmental Analysis using Multitemporal satellite data and gis techniques a case study for Bhavani River basin, Tamilnadu, India" **S.Muthusamy**\*, R.R.Krishnamurthy, M.Jayaprakash and P.Mohana, Research article published in the International Journal of Advanced Remote Sensing & GIS, Cloud Publication, may 2013, Volume 2, Issue 1, pp. 110-121, Article ID Tech-66, ISSN 2320 – 0243. **Impact factor: 1.62**\*
- "Evaluation of Total Trace Metals (TTMS) in the Soils Around Neyveli Lignite Mining Industrial Complex, Tamil Nadu, India" S.P.KRISHNAKUMAR; S.MUTHUSAMY, V.GOPAL, ARYAVISWAM, R.KALAIVANAN L.GIRIDHARAN and M.JAYAPRAKASH in the Asian Academic Research Journal of Multidisciplinary, volume 1, issue 8, pp.310-324, April 2013, ISBN:2319-2801. Impact factor: 2.015 (ISRA).
- "Groundwater Geochemistry of Neyveli Lignite Mine-Industrial Complex, Tamil Nadu, India and Its Suitability for Irrigation", Jayaprakash M<sup>1</sup>, Nagarajan R<sup>2</sup>, **Muthusamy S<sup>1</sup>**, Gopal V<sup>1</sup>, Arya Viswam<sup>1</sup> and Kalaivanan P<sup>1</sup>,Research Article Published in the

International Journal of Advanced Earth Science and Engineering, Cloud Publication, 2012, Volume 1, Issue 1, pp. 27-42, Jan 2013, Article ID Sci-67, ISSN 2320 – 3609. **Impact factor: 1.62\*** 

- "LANDSLIDE HAZARD ZONATION USING THE RELATIVE EFFECT METHOD IN SOUTH EASTERN PART OF NILGIRIS, TAMILNADU, INDIA", Naveen Raj, T.Ram Mohan.V, Backiaraj And S.**Muthusamy.S**, Research Article Published in the International Journal of Engineering Science and Technology (IJEST) Vol. 3 No. 4 April 2011, pp.3260- 3266, e-ISSN: 0975-5462. IC VALUE: 3.14.
- "Land Use and Land Cover Changes Detection Using Multitemporal Satellite Data, Cuddalore Coastal Zone, SE Coast of India", **Muthusamy.S<sup>1</sup>**, Rosario Arunkumar.X<sup>1</sup>, Naveen Raj.T<sup>2</sup>, Lakshumanan.C<sup>3</sup> and Jayaprakash.M<sup>1</sup> Research Article Published in the INTERNATIONAL JOURNAL OF GEOMATICS AND GEOSCIENCES Volume 1, No 3, 2010, pp.610-619, Research article, ISSN 0976 – 4380, **IJGGS IC VALUE 4.39**.
- "Recent Benthic Foraminifera from Diverse Ecological Settings in and around Tuticorin, Southeast Coast of India, Tamilnadu", N.Rajeswara Rao, **S.Muthusamy**, C.Geetha, and S.Shanmugavel, GOND. GEOL.MAGZ, V.25 (1), June 2010. Pp.33-42, Research article published in the Special Issue on "Applied Micropaleontology" ISSN 0970-261X.

#### **CONFERENCE/SEMINAR EXPOSURE:**

Participated in the DST-SERB Sponsored International Seminar titled "Recent Development in Geo Sciences (RDG-2023)" organized by Department of Geology, Periyar University, Salem-636011,Tamilnadu, India from 23<sup>rd</sup> to 24<sup>th</sup> February 2023.

Participated in the  $3^{rd}$  International Virtual Workshop on Global Seismology & Tectonics (IVWGST) – 2022, Organised by Geoscience & Technology Division, CSIR-NEIST, Jorhat - 785006, Assam (India), during  $20^{th}$  September –  $30^{th}$  September 2022.

Participated in the "National Intellectual Property Awareness Mission (NIPAM)" conducted by Intellectual Property Office, India, Office of Controller General of Patents, Designs and Trade Marks (CGPDTM), Govt.of.India, Ministry of Commerce and Industry, IPR awareness/training program under the special mission called NIPAM, training held at V.O.Chidambaram College, Thoothukudi on 08/08/2022.

Presented a Research topic entitled "Detection of Shoreline Changes in Tuticorin, Southeast Coast of India using Geospatial Digital Shoreline Analysis Methodology" **Muthusamy.S**, Samuel.D, Mohana.P, Sivakumar.K, John Prince.S and Sivasubramanian.P in the two day International Conference Proceeding on "Computational Environmental Earth Science" (CEES 2020), Supported by DST-SERB and NCESS-MoES, Govt. of India held at Department of Geology, V.O.Chidambaram College, Thoothukudi, India during 29<sup>th</sup> and 30<sup>th</sup> April 2022. (ISBN: 9789354067112).

Presented a Research topic entitled "Study of Microplastics in marine water and Quality of Surface Marine sediments in old Harbour of Thoothukudi, SE Coast of India" S.**Muthusamy** and C.S.Gowshik in the three-day national-level event **Geo-Innovation Challenge** on **'Geospatial Science and Technology on Meteorology and Ocean Science'** to be held at Centre for Remote Sensing and Geoinformatics (CRSG), Sathyabama Institute of Science and Technology, Chennai, Supported by National Geospatial Program (NGP) & Department of Science and Technology (DST), Govt. of India, New Delhi during 20<sup>th</sup> April to 22<sup>nd</sup> April 2022. (Reg no: 2021SVTDST Geo-Innovation Challenge 01819).

Participated in the "National Intellectual Property Awareness Mission (NIPAM)" conducted by Intellectual Property Office, India, Office of Controller General of Patents, Designs and Trade Marks (CGPDTM), Govt.of.India, Ministry of Commerce and Industry, IPR awareness/training program under the special mission called NIPAM, training held at V.O.Chidambaram College, Thoothukudi on 08/04/2022.

Participated in the National Conference on "Advances in Biological Sciences" Organised by PG & Research Department of Botany, V.O.Chidambaram College, Thoothukudi on 30<sup>th</sup> March, 2022.

Participated in two days Workshop entitled "RAD7 Radon Detector" under the scheme of "Scientific Social Responsibility Program For Research Scholars and Faculties" Sponsored by DST-SERB, New Delhi, Organised by PG and Research Department of Geology, V.O.Chidambaram College, Tuticorin from 2<sup>nd</sup> march to 3<sup>rd</sup> march 2022.

Participated in one day online workshop titled "Geospatial Modeling Driven Urban Hazard and Risk Analysis" conducted by Indian Institute of Remote Sensing (IIRS- ISRO Outreach Programme, Dept. of Space, Govt. of India, Dehradun, Uttarakhand, India) Concerned IIRS Nodal Centre at Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin-628008, India on 21<sup>th</sup> December 2021.

Participated in the 2<sup>nd</sup> International Virtual Workshop on Global Seismology & Tectonics (IVWGST-2021) Organised by CSIR-NEIST, Jorhat, Assam (India) during 20 to 30 October 2021.

Participated in the Three days International E - Colloquium on "Environmental Degradation and Climate Change" organized by the Centre for Environmental Science, University of Madras, Chennai, India in collaboration with Department of Geology and Environmental Science, Christ College (Autonomous) Thrissur, Kerala, India and Department of Geology, University of Madras. Chennai, India during  $26^{th} - 28^{th}$  August 2021.

Participated in the online training programme on "Basic Principles of Disaster Management" organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India in collaboration with Sathyabama Institute of Science and Technology Chennai during on 25<sup>th</sup> Aug 2021 to 27<sup>th</sup> Aug 2021.

Participated in **two week** International Workshop On "Emerging Trends in the Field of Science and Technology" Organised by Science and Humanities & Dept.of.Physics, Sathyabama Institute of Science and Technology, Sathyabama University, Chennai-600119, on 16<sup>th</sup> August to 26<sup>th</sup> August 2021.

Participated in International Webinar under UGC STRIDE SCHEME on "Effective research writing and scholarly publishing" Organised by IQAC, V.O.Chidambaram College Thoothukudi on 19<sup>th</sup> August to 20<sup>th</sup> August 2021.

Participated in one day online workshop titled "Remote sensing for Lunar Science" conducted by Indian Institute of Remote Sensing (IIRS- ISRO Outreach Programme, Dept. of Space, Govt. of India, Dehradun, Uttarakhand, India) Concerned IIRS Nodal Centre at Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin-628008, India on 11<sup>th</sup> August 2021.

Participated in one day online workshop titled "SAR Application for flood hazard mapping and monitoring" conducted by Indian Institute of Remote Sensing (IIRS- ISRO Outreach Programme, Dept. of Space, Govt. of India, Dehradun, Uttarakhand, India) Concerned IIRS Nodal Centre at Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin-628008, India on 16<sup>th</sup> July 2021.

Participated in one day online workshop titled "Earth Observation based Mapping, Monitoring and Modeling of Landslide: Recent trends and support to early warning system" conducted by Indian Institute of Remote Sensing (IIRS- ISRO Outreach Programme, Dept. of Space, Govt. of India, Dehradun, Uttarakhand, India) in the Nodal Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin-628008, India on 21<sup>st</sup> April 2021.

An Article was Presented entitled "SHORELINE CHANGE STATISTICS FOR THE COASTLINE OF PULICAT LAKE TO ENNORE PORT, NORTH CHENNAI, INDIA" K. Ilayaraja, **S.Muthusamy**, P.Mohana, G.M.Moorthy and M.Riaz sheriff, in the National Conference on Advances in Natural Resource Management and Hazard Mitigation Strategies ((ANRM-2020- on Virtual Platform) (**ISBN:978-93-83409-594**)) conducted by Centre for Remote Sensing and Geoinformatics in association with ISRS Chennai Chapter, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India, during 5<sup>th</sup> and 6<sup>th</sup> November 2020.

An Article was Presented entitled "Long-term evaluation of coastal / shoreline erosion and accretion processes along the north-east coast of Tamil Nadu using Remote Sensing and GIS techniques" Amaladas.P, Srinivasa Raju.K, **Muthusamy.S**, Mohana.P, in the National Conference on Advances in Natural Resource Management and Hazard Mitigation Strategies (ANRM-2020 on Virtual Platform) (**ISBN:978-93-83409-594**) conducted by Centre for Remote Sensing and Geoinformatics in association with ISRS Chennai Chapter, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India, during 5<sup>th</sup> and 6<sup>th</sup> November 2020.

Participated Two days National Level workshop on "GPS Concepts & Its Applications" organised by Centre for Remote Sensing and Geo-informatics, Sathyabama University,

Chennai - 119 and a jointly association with Indian Society of Remote Sensing, India, during 5<sup>th</sup> March to 6<sup>th</sup> March 2020.

Participated one day National Seminar on "Climate Change: Building Resilience and Mitigation Strategies" sponsored by Indogeo Consultency pvt.ltd, and organised by Department of Geology, National College, Tiruchirappalli-620001, Tamilnadu, India on 27<sup>th</sup> February 2020.

Participated in one day online workshop titled "Remote Sensing of the Moon by Indian Lunar Missions with Emphasis on Spectroscopic Analysis", conducted by the Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin on 23-12-2019. The participant has attended the workshop at IIRS Outreach network Centre.

An Article is presented entitled "GEOCHEMICAL WEATHERING INDICES OF SURFACE SEDIMENTS STUDIES IN MANAKUDY ESTUARY, SW COAST OF INDIA" **S.Muthusamy**, R.Karthik, G.M.Moorthy, S. Richard Abishek and M.Jayaprakash in the International Conference on Advanced Materials and their Applications, (**ICAMA-2019**), held at Department of Chemistry, V.O.Chidambaram College, Tuticorin, Tamilnadu, India on 13<sup>th</sup> December 2019. ISBN: 978-93-5396-091-9.

An Article is presented entitled An Article is presented entitled "Appraisal of heavy metal pollution in surface sediments studies using geochemical approaches in Manakudy estuary, Southern Coast of Tamilnadu" **S.Muthusamy**, R.Karthik, G.M.Moorthy, J.Vinoth Kingston and M.Jayaprakash in the International Conference on Advanced Materials and their Applications, (**ICAMA-2019**), held at Department of Chemistry, V.O.Chidambaram College, Tuticorin, Tamilnadu, India on 13<sup>th</sup> December 2019. ISBN: 978-93-5396-091-9.

An Article is Presented in the National Conference on Recent Advances in Anthropogenic Disaster Monitoring (**RAADM 2019**) entitled "Implications of rapid urbanization in north Chennai industrial area: assessment of the impact", **S.Muthusamy**, P.M.Velmurugan and M.Jayaprakash, Sponsored by MoES, Govt.of.India, New Delhi, Organized by Center for Remote Sensing and Geoinformatics, Sathyabama Institute of Science and Technology, Chennai and Association with International Journal of Advanced Multidisciplinary Scientific Research, Vijayawada, A.P., India, (IJAMSR- ISSN: 2581-4281) during  $22^{nd} - 23^{rd}$  October 2019.

An Article is Presented and Published in the National Conference on Recent Advances in Anthropogenic Disaster Monitoring (**RAADM 2019**) entitled "Mapping of Urban Heat Islands and Land Cover Changes–A Case Study in Chennai City, India" P. Mohana , G.Raghul and **S. Muthusamy**, Sponsored by MoES, Govt.of.India, New Delhi, Organized by Center for Remote Sensing and Geoinformatics, Sathyabama Institute of Science and Technology, Chennai and Association with International Journal of Advanced Multidisciplinary Scientific Research, Vijayawada, A.P., India, (IJAMSR- ISSN: 2581-4281), during 22<sup>nd</sup> to 23<sup>rd</sup> October 2019.

Participated in one day online workshop titled "Machine Learning for Remote Sensing Data Classification", conducted by the Centre for Remote Sensing and GIS, V.O.Chidambaram

College, Tuticorin on 01-06-2019. The participant has attended the workshop at IIRS Outreach network Centre.

Participated in the one day workshop "**Scholarly writing and publishing research papers**", organized and sponsored by Internal Quality Assurance cell (IQAC) V.O.Chidambaram College, Tuticorin, Tamilnadu, India on 02/02/2019.

An Article is Presented and Published in the International Journal of Advanced Scientific Research–Multi-Disciplinary (IJAMSR -ISSN– 2581-4281) entitled "Groundwater – Quartzite Area Study Using Square Array Method In Puthukottai, Tuticorin District, Tamilnadu, India" A. Antony Ravindran, S. Muthusamy, G.M. Moorthy, J. Vinothkingston, P. Mohana, International Scientific Indexing (*ISI*) - Cross Ref DOI: 10.31426/ijamsr.2018.1.10.1016, Organised by IJAMSR Research Foundation [Under the Registered of Firms as no; 341 of 2018], Vijayawada, Andhra Pradesh(A.P), India on 9<sup>th</sup> December 2018.

Participated in the two day training Programme on "Application of Remote Sensing and GIS with Special reference to Disaster Management", Sponsored by DRDO, Organized by Center for Remote Sensing and Geoinformatics, SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, Chennai, during  $10^{th} - 11^{th}$  December 2018.

Participated in the national workshop on "**STATUS OF PETROLEUM EXPLORATION IN INDIA**", sponsored by ONGC, Cavery Basin, India, conducted by Department of Geology, V.O.Chidambaram College, Tuticorin, Tamilnadu, India on 5<sup>th</sup> and 6<sup>th</sup> October 2018.

Participated in the science Academies lecture workshop on " **Geophysical prospecting: present and future scenario**" sponsored by the Indian Academy of sciences, Bangalore, Indian Science Academy(ISA), New Delhi and the National Academy of Science India (NASI), Allahabad, conducted at Department of Geology, V.O.Chidambaram College, Tuticorin, Tamilnadu, India, on 26<sup>th</sup> and 27<sup>th</sup> July 2018.

Successfully completed the Off-Campus Outreach Certificate Programme Course on "Geospatial Inputs for Enabling master plan Formulation under AMRUT Sub-Scheme" Conducted/ Sponsored by Indian Institute of Remote Sensing (IIRS- ISRO Outreach Programme, Dept. of Space, Govt. of India, Dehradun, Uttarakhand, India) in the Centre for Remote Sensing, V.O.Chidambaram College, Tuticorin, during  $23^{rd} - 27^{th}$  July 2018.

Participated in one day online workshop titled "Geo Spatial Technologies and Sendai framework for Disaster Risk Reduction-One Day online Workshop", conducted by the Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin on 10-07-2018. The participant has attended the workshop at IIRS Outreach network Centre.

An Article is Presented and Published entitled as "Ockhi Cyclone and its Impact in the Kanyakumari District of Southern Tamilnadu, India: An Aftermath Analysis" S. Muthusamy, K. Sivakumar, A. Samueldurai, M. Riaz Sheriff, P. Siva Subramanian, at the International Conference entitled "International Journal of Recent Research Aspects" (IJRRA), Special Issue: Conscientious Computing Technologies, 19<sup>th</sup> & 20<sup>th</sup> *April 2018*, pp. 466-469, ISSN: 2349-7688. <u>https://www.ijrra.net/April2018.php</u>.

An Article is Presented entitled as "Submarine ground water discharge study using magnetic and 2d CF-ERT method in manapad head land, South India"

A. Antony Ravindran, **S. Muthusamy**, at the International Conference entitled "International Journal of Recent Research Aspects" (IJRRA), Special Issue: Conscientious Computing Technologies, 19<sup>th</sup> & 20<sup>th</sup> *April 2018*, pp. 01-09, ISSN: 2349-7688.

**Presented a paper entitled** "Analysis and assessment of Landuse and Landcover Changes and its Environmental impacts in Pallikaranai wetland area, Chennai, Using Remote Sensing and GIS", P. Mohana, **S. Muthusamy**, K. Nagamani, M. Jayaprakash, *February 16<sup>th</sup> and 17<sup>th</sup> 2017*, in the Proceeding of the National Symposium on Climate Change impact and adaptation: **Current scenario in Indian Fisheries & Aquaculture** (CCIFA-2017) Organised by Centre for Ocean Research , Sathyabama University, Chennai-600119, Sponsored by Science & Engineering Research Board (SERB), DST-Ministry of Science and Technology, NewDelhi-110070, ISSN:9789384893989.

Participated in two days workshop on "Effect of National Education Policy 2016 in the **Present Scenario**" held on 8<sup>th</sup> & 9<sup>th</sup> September, 2016 at B.Ed Hall, V.O.C. College of Education, Thoothukudi.

Participated in the Short Term Training on 'Application of Isotope Techniques in Water **Resources Management**' organized by centre for water resources development and management (CWDRM) in Kozhikode, Kerala, India, Sponsored by Department of science and technology, Government of India, during 14-19 March 2016.

Participated two days National Seminar on "GROUND WATER AND COASTAL AQUIFERS" held during 9<sup>th</sup> and 10<sup>th</sup> March 2016 Organized by Department of Geology, University of Madras, Chennai, Tamilnadu, India.

Participated two days National Seminar on "Quaternary Stratigraphy, Sedimentation and Sea level Changes (QSSS)" held during 19-20 March 2015, organized by Department of Geology, University of Madras, Chennai, Tamilnadu, India.

Participated two day National Conference entitled "**Climate Change Impacts and Coastal Area Management**" Organized by Department of Applied Geology, University of Madras, Chennai, Tamilnadu, India held during 27-28 February 2015.

Participated two day workshop on "**Recent Developments in Micropaleontology and Its Applications**" Organized by Department of Geology, University of Madras, Chennai on 05&06/11/2014.

**Presented a paper** entitled "High Energy Environmental evidence from Holocene Estuarine Core Shell sample using AMS Dating in Manakudy Estuary South West Coast of India", **S.Muthusamy**, M.Jayaprakash, R.Kalaivanan, V.Gopal and A.shanmugasundharam, in the International Conference on Environmental Earth Sciences: Accomplishments, Plans and Challenges, 19-22 March, 2014, Chennai, India.

Participated one day workshop on "COASTAL CLIMATE CHANGE" Organized by Department of Geology, University of Madras, Chennai on 30/09/2013.

**Presented a paper** entitled "A Baseline Study of Physico-Chemical Parameters and Trace Metals in Waters of Manakudy, South-West Coast of India", **S.Muthusamy**\*, M.Jayaprakash, R.Kalaivanan, V.Gopal, in the International Conference, *The fourth IGCP 588:* **Preparing for Coastal Change' in Chennai, India**" Organized by Department of Geology, Anna university, Chennai-25, Tamilnadu, India, between 20/05/2013 and 24/05/2013.

Attended the UGC sponsored short term course on "Short Term Course on Research Methodology, Techniques of Writing Research Articles for SCI Journals and Ph.D Thesis Preparation" Organized by Department of Geology, Anna university, Chennai, between 06/03/2013 and 07/03/2013.

Participated in 2 Day workshop on "Marine Geosciences Research in India: Current Status and Future Directions" organized by National Institute of Oceanography (NIO) and National Centre for Antarctic and Ocean Research (NCAOR) at Dona Paula, Goa, between 21/02/2013 and 22/02/2013.

Participated the 4'th **R&D session of Indian National Committee for Ground water** organized by Ministry of Water Resources, Govt.of India, held at central ground water board, Southern Coastal Region, Chennai on 07.02.2013.

**Presented a paper** entitled "Assessment of Landuse Landcover changes and its Environmental impacts in and around Pallikaranai wetland area, Chennai Using Remote Sensing and GIS" in the International Open Science Conference "Global Environmental Change Challenges and Innovations in the Department of Applied Geology, University of Madras, Chennai held on February 21<sup>st</sup> to 24<sup>th</sup> 2012.

**Published a paper** entitled "The Integration of Remote Sensing and GIS Technologies for the Development of a Land Use/Cover Change Detection Using Multitemporal Satellite Data, Cuddalore Coastal Zone, SE-Coast of India" **S.Muthusamy\*** and M.Jayaprakash in Proceedings of the 3<sup>rd</sup> (2011) **CUTSE** International Conference Miri, Sarawak, Malaysia, 8-9 Nov, 2011, pp.738-744.

Participated in the two day's workshop on **Micropalentological Techniques**, **With Special Reference to Foraminifera and Ostraocoda** at Department of Applied Geology Guindy, Chennai-25, held on 30<sup>th</sup> and 31<sup>st</sup> March 2011.

Participated in **"98<sup>th</sup> Indian Science Congress"** held during January 3<sup>rd</sup> to 7<sup>th</sup> 2011 Quality education and excellence in scientific research in Indian universities at SRM University, Chennai.

Participated in the National Conference on **Natural Hazards and Climate Change**, Organized by Department of Geology and Centre for Natural Hazards and Disaster studies, University of Madras, Chennai -25 - March 11<sup>th</sup>- 13<sup>th</sup> 2010.

Participated in the international workshop on "*Local climate change and disaster resilience in Chennai*" held during 18<sup>th</sup> & 19<sup>th</sup> February 2010 at Department of Applied Geology, University of Madras, Chennai, India.

**Presented a paper** in the National seminar on "Recent Trends in Water Research" titled held on 2<sup>nd</sup> and 3<sup>rd</sup> March 2009 "Geo-environmental assessment for sustainable development of Water resources in Tuticorin coastal region using ground based Remote sensing and GIS" at Department of Earth Sciences, Annamalai University, Tamilnadu, India.

**Undergone training** on **"Analysis of ground water sample, Interpretation, and Graphical Presentation"** at Central Ground Water Board, Southern Region, Chennai, Tamilnadu, India, during the period from 1<sup>st</sup> Dec to 11<sup>th</sup> Dec 2008.

Participated in the training Programme entitled "**Groundwater Management**" in Rajiv Gandhi National Ground water Training & Research Institute, Chennai, during 28<sup>th</sup> & 29<sup>th</sup> March 2008.

**Presented a paper** on the national level technical symposium **GEOHORIZON'08** entitled "Identification of Groundwater potential Zones in Pambar Basin, Dharmapuri district, Tamil Nadu using Remote Sensing and GIS" Held at Institute for Remote Sensing, Anna University, Chennai, during 7<sup>th</sup> & 8<sup>th</sup> march, 2008.

# WEB / MOOC CERTIFICATE COURSE's:

✓ Successfully completed Massive Open Online Course (**MOOC**) entitled "The Health Effects of Climate Change" at **edX** – **Harvard University** & Massachusetts Institute of Technology (MIT), USA, completed on 23<sup>rd</sup> May 2020.

• The following Massive Open Online Course – (**MOOC**) was successfully completed at **Environmental Systems Research Institute** (*ESRI*) Online Training Institute-California, USA.

2 Hours and 35 Minutes module about "GIS Basics Certificate" on 29th April, 2020,

6 weeks module about "Cartography" completed on 28<sup>th</sup> May, 2020,

50 Minutes module about "ArcGIS Maps for Office Basics" Completed on 8th June 2020,

1 Hour 15 Minutes module about "Basics of Java script web Apps" completed on 6<sup>th</sup> July 2020,

4 weeks module about "Do-it-Yourself Geo Apps" during 29th July to 26th August 2020,

6 weeks module about "Going Places with Spatial Analysis" during 12<sup>th</sup> August to 23<sup>rd</sup> September 2020,

6 weeks module about "Spatial Data Science: The New Frontier in Analytics" during  $28^{th}$  October –  $9^{th}$  December 2020.

6 weeks module about "The Location Advantage" during 14<sup>th</sup> April –23<sup>rd</sup> May 2021.

6 weeks module about "Imagery in Action" during 11<sup>th</sup> Aug to 22<sup>nd</sup> Sep 2021.

6 weeks module about "Spatial Data Science: The New Frontier in Analytics" during  $28^{th}$  October –  $4^{th}$  December 2021.

6 weeks module about "Transform AEC Projects with GIS and BIM" 14.September.2022 to 12.October.2022.

6 weeks module about "Going Places with Spatial Analysis" during  $1^{st}$  February to  $20^{th}$  March 2023.

6 weeks module about "Cartography" during 22<sup>nd</sup> February to 10<sup>th</sup> April 2023.

### CURRICULUM VITAE OF S.MUTHUSAMY

4 weeks module about "Transform AEC Projects with GIS and BIM" during 3<sup>rd</sup> May 2023 to 1<sup>st</sup> June 2023.

Completed a MOOC course on "Nature-based Solutions for Disaster and Climate Resilience" a course developed by experts from the United Nations Environment Programme (UNEP) and the Partnership for Environment and Disaster Risk Reduction (PEDRR) with support from the European Union, in collaboration with the SDG Academy and the EdX Platform from 1<sup>st</sup> June to 12<sup>th</sup> June 2023.

## **IIRS-Off-Campus Outreach Certificate Programme Courses**

In the following below Off-Campus Outreach Certificate Programme Courses at Conducted/ Sponsored by Indian Institute of Remote Sensing (IIRS- ISRO Outreach Programme, Dept. of Space, Govt. of India, Dehradun, Uttarakhand, India) in the Nodal Centre for Remote Sensing and GIS, V.O.Chidambaram College, Tuticorin-628008,Tamilnadu,India.

Participated in the Online Course titled "Overview of Free and Open Source Software for Geospatial Technology (FOSS4G)" during 24-04-2023 to 28-04-2023 (Total course duration was = 7 hours and 30 minutes). (IIRS Course no;116).

Participated in the Online Course titled "SAR Data Processing & its Application with Special Emphasis on RISAT-1A/EOS-4" during 10-04-2023 to 14-04-2023 (Total course duration was = 7 hours and 30 minutes). (IIRS Course no;115).

Participated in the Online Course titled "Advances in Remote Sensing Techniques for Geological Applications" during 13-03-2023 to 24-03-2023 (Total course duration was = 15 hours). (IIRS Course no;114).

Participated in the Online Course titled "Geospatial Modeling Driven Urban Hazard and Risk Analysis" which was conducted during 13-02-2023 to 17-02-2023 (Total course duration = 7 hrs & 30 min ). (IIRS Course no;107).

Participated in one day online workshop titled "Space Technology and its Applications" on 10-01-2023. (IIRS Course no;1029).

Participated in the Online Course titled "Advances in Monitoring and Modeling of Hydro-Meteorological Hazards using Geospatial Technology and Process based Models" DURING 05-12-2022 to 09-12-2022 (Total course duration was = 7 hours and 30 minutes). (IIRS Course no;111).

Participated in the Online Course titled "Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System" during 22-08-2022 to 25-11-2022 (Total course duration = 79 hrs & 30 min). (IIRS Course no;103).

Participated one day IIRS online workshop entitled "UAV Remote Sensing" on 21-11-2022.

Participated in the Online Course on "Geo-data sharing and Cyber Security" this online course was conducted during 17-10-2022 to 21-10-2022. (Total course duration was = 7 hours and 30 minutes).

Participated in one day online workshop titled Applications of Geospatial Technology in Paleo channel Studies: Potential And Future Trends on 11-10-2022.

Participated in one day online workshop titled Water Quality studies using Hyperspectral Remote Sensing for the Indian Coastal and Inland Waters, conducted by this institute on 05-08-2022.

Successfully Completed the **MOOC** entitled "Remote Sensing & GIS for Urban Studies and Environmental Modeling" during 06.July.2022 to 05.August.2022. (Total time spent in the course = 11 hours and 18 minutes).

"Remote Sensing & GIS Applications in Agriculture" this online course was conducted during 25-07-2022 to 29-07-2022 (Total course duration was = 7 hours and 30 minutes).

"Satellite Remote Sensing of Atmosphere" this online course was conducted during 11-07-2022 to 15-07-2022 (Total course duration was = 7 hours and 30 minutes).

"Machine Learning to Deep Learning: A Journey for Remote Sensing Data Classification" this online course was conducted during 04-07-2022 to 08-07-2022 (Total course duration was = 13 hours and 30 minutes).

"Geo-spatial Applications for Forest Ecosystem Analysis" this online course was conducted during 20-06-2022 to 25-06-2022 (Total course duration was = 7 hours and 30 minutes).

Participated in one day online workshop entitled "Planetary Exploration of the Moon: Findings from Indian Remote Sensing Missions" on 20-05-2022.

Participated in one day online workshop entitled "Status, Challenges and Opportunities for Geospatial Technology Applications in Irrigation Water Management" on 17-05-2022.

"Artificial Intelligence (AI) for Earth Observation (EO) and Geo data Handling and Processing" this online course was conducted during 02-05-2022 to 13-05-2022 (Total course duration was = 10 hours and 30 minutes).

Successfully Completed the **MOOC** entitled "SAR Data Processing & Its Applications". This MOOC was conducted during 04/April/2022 to 09/May/2022, (Total time spent in the course = 09 hours and 25 minutes).

"Advanced Geospatial technologies for Disaster Risk Reduction (DRR)" This online course was Conducted during 18-04-2022 to 29-04-2022 (Total course duration was = 15 hours).

"Hyperspectral and Microwave Remote Sensing Techniques for Geological Studies" This online course was conducted during 07-03-2022 to 17-03-2022, (Total course duration was = 13 hours and 30 minutes).

"Global Navigation Satellite System and Location based services" This Online Course Was Conducted During 21-02-2022 to 04-03-2022, (Total course duration was = 15 hours).

"Geo-informatics for Biodiversity Conservation Planning" this online course was conducted during 06-12-2021 to 17-12-2021 (Total course duration was = 9 hours).

"Geospatial Inputs for Enabling Master Plan Formulation for AMRUT sub scheme" this online course was conducted during 11-10-2021 to 15-10-2021. (Total course duration was = 7 hours and 30 minutes).

"Geospatial Modelling for Watershed Management" this online course was conducted during 02-08-2021 to 06-08-2021 (Total course duration was = 7 hours and 30 minutes).

"Geospatial technology for hydrological modelling" this online course was conducted during 19-07-2021 to 30-07-2021 (Total course duration was = 13 hours and 30 minutes).

"Overview of Web GIS Technology" this online course was conducted during 21-06-2021 to 02-07-2021 (Total course duration was = 15 hours).

"Earth Observation for Carbon Cycle Studies" this online course was conducted during 21-06-2021 to 25-06-2021 (Total course duration was = 7 hours and 30 minutes).

"Geospatial Technology for Archaeological Studies" this online course was conducted during 17-05-2021 to 21-05-2021 (Total course duration was = 7 hours and 30 minutes).

Participated in online WGCapD Webinar Series on "SAR Data Processing" The webinar was conducted by Indian Institute of Remote Sensing (IIRS), ISRO, during  $7^{\text{th}}$  May to  $28^{\text{th}}$  May, 2021 (Total Course Duration Was = 6 hours).

"Geoinformatics for Disaster Management" this online course was conducted during 05-04-2021 to 16-04-2021(Total course duration was = 18 hours).

"Advances in SAR- Polarimetry & Interferometry", during 14-12-2020 to 18-12-2020 (Total course duration = 7 hours and 30 minutes),

"Remote Sensing of Land Degradation" during 01-12-2020 to 07-12-2020, (Total course duration = 7 hours and 30 minutes),

"Basics of Remote Sensing Geographical Information System and Global Navigation Satellite System" during 17-08-2020 to 20-11-2020, (Total Course Duration = 84 Hours).

"Understanding of Coastal ocean processes using Remote Sensing and Numerical Modeling", during 21-09-2020 to 25-09-2020, (Total course duration = 7 hours and 30 minutes).

"Remote Sensing Applications in Agricultural Water Management", during 03-08-2020 to 07-08-2020,

"Geospatial Inputs for Enabling Master Plan Formulation, during 27-07-2020 to 31-07-2020,

"Satellite Photogrammetry and its Application", during 29-06-2020 to 03-07-2020,

"Health GIS : Geoinformatics for COVID19", during 15-06-2020 to 19-06-2020 .

"Overview of Planetary Geosciences with special emphasis to the Moon and Mars", during 08-06-2020 to 12-06-2020,

"RS and GIS in Urban and Regional Planning", during 09-12-2019 to 20-12-2019,

"Global Navigation Satellite System", during 12-09-2019 to 24-09-2019,

"Remote Sensing and Digital Image Analysis", during 19-08-2019 to 11-09-2019,

"Satellite remote sensing for Air pollution Studies", during 5<sup>th</sup> August to 9<sup>th</sup> August 2019,

"Digital Photogrammetry based on 3D Modelling" 29th July to 2nd August 2019,

"Geo processing using Python" during 22<sup>nd</sup> to 26<sup>th</sup> July 2019,

"Geospatial Inputs for Enabling master plan Formulation under AMRUT Sub-Scheme" during  $23^{rd} - 27^{th}$  July 2018.

### Faculty Development Programme & Short Term Training Programme from 2020

Participated One week FDP entitled "ESG Framework for Business" Organised by PG & Research Department of Commerce, V.O.Chidambaram College during 27.October.2022 to 03.November.2022.

Participated One week FDP entitled "Restructuring Management Education towards Innovation: From Enhancement to Transformation" Organised by BBA, V.O.Chidambaram College during 27.June.2022 to 03.July.2022.

Participated Seven Day Faculty Development Programme on Enhancing Quality by Unearthing Innovative Practices jointly organized by Mannar Thirumalai Naicker College (Autonomous), Madurai & A.P.C. Mahalaxmi College for Women, Thoothukudi, Tamilnadu in collaboration with IQAC CLUSTER-INDIA from 18<sup>th</sup> April 2022 to 24<sup>th</sup> April 2022.

Participated in 'Meteorological day Celebration' 7 days FDP Program on "Advances and Innovative Challenges in Hydro-meteorological and Climate Information for Disaster Risk Reduction" Organized by Centre for Remote Sensing & Geoinformatics, & Centre for Ocean Research in association with ISRS – Chennai Chapter, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India during 23<sup>rd</sup> March to 28<sup>th</sup> March 2022.

One Week Virtual Faculty Development Programme on "Revised NAAC Framework Guidelines-2020" Under UGC Paramarsh scheme, organized by IQAC, V.O.Chidambaram College, Thoothukudi – 628008, 26<sup>th</sup> July to 30<sup>th</sup> July 2021.

6 days AICTE Sponsored Online **STTP** about "Basic of Remote Sensing, GIS and GNSS"-Phase-II organized by Department of Civil Engineering, Francis Xavier Engineering College, Tirunelveli-627003, Tamilnadu, India, from 21<sup>st</sup> September to 26<sup>th</sup> September 2020.

10 days **e-Training** about "Alteration Zone Mapping Using Image Processing of Multispectral and Hyperspectral Data for Mineral Investigation" organized by PGRS Division, Geological Survey of India Training Institute, Hyderabad, India, from 25<sup>th</sup> August to 4<sup>th</sup> September 2020.

2 days **FDP** about "Quality Sustenance and Enhancement Parameters - NAAC and NIRF Ranking Framework" organized by IQAC, Marudhar Kesari Jain College for Women Vaniyambadi, Tamilnadu, from 6<sup>th</sup> to 7<sup>th</sup> August 2020.

**2 Months** Special Course on "Hands on Skills Using RS & GIS" organised by Col. Dr. Jeppiaar Research Park, Centre for Remote Sensing & Geoinformatics, Sathyabama Institute of Science and Technology (Deemed to be University), Jeppiaar Nagar, Chennai, from 15<sup>th</sup> June to 15<sup>th</sup> August 2020.

5 days National Level **FDP** about "Applications of Geospatial Technology" organised by Sathyabama Institute of Science & Technology, Centre for Remote Sensing and Geo-informatics Chennai, from 3<sup>rd</sup> to 8<sup>th</sup> August 2020.

2 days **FDP** about "Virtual Teaching-Learning Experience" organized by Department of Chemistry, PSG College of Technology, Coimbatore-641004, Tamilnadu, from 29<sup>th</sup> to 30<sup>th</sup> July 2020.

4 days International **FDP** on "Data Drives" organized by Department of Computer Application, Bishop Cotton Academy of Professional Management, Yelahanka New Town, Bengaluru – 560064, India, (Affiliated to Bengaluru Central University) from 15<sup>th</sup> to 18<sup>th</sup> July 2020.

3 days **FDP** about "Sustainable Water Resource Management" organized by Department of Civil Engineering, Karpaga Vinayaga College of Engineering & Technology, Chengalpattu-603308, Tamilnadu from 14<sup>th</sup> to 16<sup>th</sup> July 2020.

3 days **STRIDE** - **FDP** Programme about "Research Capacity Building" organized by IQAC, V.O.Chidambaram College, Thoothukudi, from 15<sup>th</sup> to 17<sup>th</sup> June 2020.

5 days **STTP** about the "Post Covid Challenges in Infrastructural and Environmental Engineering" organized by Department of Civil Engineering, Pillai HOC College of Engineering & Technology Rasayani-410207, Maharashtra, India from 8<sup>th</sup> June to 12<sup>th</sup> June 2020.

One week **FDP** about the "Advanced Statistical Analysis for Management and Social Sciences" organised by Amity Institute of Behavioural & Allied Sciences, Amity University, Lucknow-226010, Uttar Pradesh, India, from 3<sup>rd</sup> June to 9<sup>th</sup> June 2020.

5 days **FDP** about the "Indigenous Knowledge Systems and Modern Education" organised by Sree Ayyappa College for Women and Shiksha Sanskriti Utthan Nyas (SSUN), Tamil Nadu, from 25<sup>th</sup> May to 29<sup>th</sup> May 2020.

One week **FDP** about the "Challenges in Higher Education" Organised by IQAC, Kovai Kalaimagal College of Arts and Science, (Autonomous), {Affiliated to Bharathiar University}, Coimbatore, Tamilnadu from 18<sup>th</sup> May to 23<sup>rd</sup> May 2020.

5 days **FDP** about the "Evolution of Teaching Learning Process –Post Covid19" organised by Bharath Institute of Higher Education and Research (BIHER), Bharath Deemed University, Selaiyur, Chennai, from 11<sup>th</sup> May to 15<sup>th</sup> May 2020.

### **FIELD EXPERIENCE:**

 Monitoring of Sea Beds, Sea Water Quality, Ambient Air Quality, Noise Pollution and Potable Water Quality in V.O.Chidambaranar Port Area, Tuticorin, Tamilnadu, India, for a Period of Two Years (2009-2011) for Department of Geology, University of Madras, Chennai, Tamilnadu, India.

- \* Monitoring of Sea Beds, Sea Water Quality, Ambient Air Quality, Noise Pollution and Potable Water Quality in Coastal Energen Pvt Ltd, Melamaruthur Village, Tuticorin District, Tamilnadu, India, for a Period of Two Years (2011-2013) for "ENVIRONMENTAL MONITORING AND ASSESSMENT SOLUTIONS" (EMAS), Chennai-600100, Tamilnadu, India.
- \* Geophysical Resistivity survey around Southeast Coast of India.
- \* A Sedimentological study has been carried out such as texture and sediment particle size analysis of offshore samples.
- \* GPS survey for southeast coast of India.
- \* Geological mapping around Tuticorin using GIS techniques.
- Visit of various mines and geological formations in parts of India, especially Neyveli lignite coal mine and Mansar Manganese mines etc.

## RESEARCH LABORATORY-INSTRUMENT HANDLED

- \* Atomic Absorption Spectrophotometer (AAS Perkin Elmer AA700)
- \* UV-Spectrometer (Elico SL 159)
- \* Flame photometer (Elico CL 378)
- \* Multi parameter for water quality analyzer
- \* RADON Monitor meter (RAD7)

## FIELD SAMPLING INSTRUMENTS

- \* Gravity corer for core sampling in sediments in shallow/deep Sea sediments
- \* Mud Grab for surface sediment collection shallow/deep Sea
- \* Aqua sampler for sampling in water in shallow/deep Sea water
- \* RESPIRABLE DUST SAMPLER Envirotech APM 460BL
- \* AMBIENT FINE DUST SAMPLER PEM ADS 2.5/10
- \* Total Station (Resistivity Survey)
- \* Handheld GPS.

#### **SOFTWARE EXPOSURE:**

\* Successfully Completed Digitization and Cartography in Geographical Information System (GIS) using TNT MIPS at V.O.Chidambaram College, Tuticorin, on during the year 2006.

\* Mapping Software:

Module Certificate Course completed entitled

"ArcGIS 9.3 (40 hours Module), ArcGIS- Spatial Analyst (24 hours Module) and

Introduction to programming Arc Object with VBA (40 hours Module)"

at ESRI India – Authorized Learning centre at Chennai, on 2007.

- ✓ Remote Sensing / Image processing Software: ERDAS 8.4, ENVI 4.7
- \* Statistical Software: SPSS V.17
- \* Graphic Tool: Wind Rose Diagram
- \* Ternary diagram plotting software: **Tridarw** or Tri-plot
- Microsoft office

### **EXTRA CURRICULAR ACTIVITIES:**

- \* Certified by NSS in School Level (Year-2008) (St.Marys boys Hr. Sec. School, India)
- \* Certified by NCC 'A' in School Level (Year-2009) (2'TN Army Directorate, India).
- \* **'B'**& **'C** 'NCC Certificate holder in college Level (Year 2005 & 2006)
   (3'TN Naval Directorate, INDIA).
- \* DST-Inspire camp Quiz Organizer (2011-2014).

### **PERSONAL DETAILS:**

Father's name	:	P. Subramanian
Mother's name	:	S. Kasduri
Date of Birth	:	25-06-1986
Gender	:	Male
Nationality	:	Indian
Native	:	Thoothukudi
Married Status	:	Single
Blood Group	:	O +
Language known	:	English, Tamil
Aadhaar number	:	326009749251

#### **REPUBLIC OF INDIA**

Passport Details

Passport No: R0084753 Issue date: 25/04/2017 Expiry Date: 24/04/2027.

**REFERENCES:** 

#### Dr. P.Sivasubramanian

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#### Dr. C.Veerabahu

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#### **Dr.M.Jayaprakash** (late) Professor &

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#### Prof. K. K. Sharma

Professor (former) Dept.of Applied Geology University of Madras Guindy Campus Chennai – 600 025 Tamilnadu, INDIA Mobile: 9444686616 <u>kksharma25@hotmail.com</u>

#### **International REFERENCES:**

#### Dr. M.P.Jonathan

Professor Investigador Titular "C" (SNI Nivel 2) Centro Interdisciplinario de Investigaciones y Estudios sobre Medio Ambiente y Desarrollo (CIIEMAD), Instituto Politécnico Nacional (IPN), Calle 30 de Junio de 1520, Barrio la Laguna Ticomán ,C.P. 07340, Del. Gustavo A. Madero, México, D.F.MEXICO, Ph: +52 55 5729 6000, E-mail: <u>mpjonathan7@gmail.com</u>

### Dr. R. NAGARAJAN,

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#### DECLARATION

I hereby declare that the information furnished above is correct and to the best of my knowledge and belief.

Yours Sincerely

Date: 15.June.2023

(Dr. S.MUTHUSAMY)