**Dr. D. KARUNANIDHI**, M.Sc., M.Phil., Ph.D. DST-SERB - ECR (Young Scientist) Awardee

# 2/239 Balaji Nagar, Malumicampatti (Post), COIMBATORE – 641021, Tamil Nadu, India.

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#### **Educational Qualifications:**

Course	Institute/ University	Year of passing	% of marks
Ph.D. (Applied Geology)	Anna University, Chennai-600025, India	January 2014	-
M.Phil. (Applied Geology)	ogy) Annamalai University, Chidambaram - 608002, India		67%
M.Sc. (Applied Geology)	2.2.50.		65%
<b>B.Sc.</b> (Applied Geology)	Government Arts College Salem -636007, Tamil Nadu, India	May 2004	59%
M. Phil .Thesis Title  Satellite Image Processing for Mineral Resources in Dharmapuri District of Nadu		of Tamil	
Ph.D. Thesis Title Integrated Remote Sensing and GIS Based Hydrogeological Studies in Omalur Taluk, Salem District, Tamil Nadu, India.			ır

#### **Professional Experience**

S.No	Name of the post	Institute	Duration
1	Professor	Department of Civil Engineering, Hindusthan College of Engineering and Technology, Coimbatore-641062, India	Feb -2023- Till date
2	Professor	Department of Civil Engineering, Sri Shakthi Institute of Engineering and Technology, Coimbatore-641062, India	June-2021- January - 2023
3	Associate Professor	Department of Civil Engineering, Sri Shakthi Institute of Engineering and Technology, Coimbatore-641062, India	June 2014 – May -2021
4	Associate Professor	Department of Civil Engineering, AVS Engineering College, Salem, India	June 2013 - May 2014
5	Lecturer to Associate Professor	Department of Civil Engineering, Jayam College of Engineering and Technology, Dharmapuri, India	July 2008- May 2013

## **Teaching and Research Interest**

Environmental Hydrogeology

\* Remote Sensing and GIS

Environmental Geochemistry

\* Medical Geology

#### Google Scholar citations and impact

✓ Total number of refereed publications : 60

✓ Communicated Papers : 2 (2023)

✓ Total number of ISI-citations : 2021

✓ h-index : 28

✓ i10-index : 43

#### **Major Funded Projects**

S.No	Title of the Project	Funding	Budget	<b>Duration/Status</b>	Role
		agency	(Lakhs)		
1	Identification of hydrogeochemical controls on occurrence of high fluoride in bed rock aquifers of Shanmuganadhi Subbasin, Amaravati River, Tamil Nadu – a special stress on remediation by managed aquifer recharge.	(ECR Scheme) DST-SERB, Govt of India	26.27	2017-2020 <b>Completed</b>	Principal Investigator
2	Geospatial technology in promoting recharge in Lower Bhavani basin in between Bhavanisagar to Bhavani Town, Erode District, Tamil Nadu.	DST- NRDMS, Govt of India	14.80	2016-20018 <b>Completed</b>	Principal Investigator

#### **Research Guidance**

# Anna University Recognized Supervisor in (ID: 2470255) Geology and Civil Engineering Departments

S.No	Name of the Scholar	Title of the thesis	Institute /University	Year of Registration	Completion details
1	B. Anand	Integrated geospatial techniques for promoting groundwater recharge in Lower Bhavani basin, South India	Anna University, Chennai Full-time (Thesis work completed by DST- NRDMS Project)	2017	2020
2	D. Sakthivel	Hydrogeophysics investigation and groundwater quality modelling using GIS and ANN for semi- arid region of Kangayam Taluk, Tiruppur District, Tamil Nadu	Anna University, Chennai Full-time (Thesis work completed by DST- SERB Project)	2015	2021

3	S. Vignesh	Assessment of groundwater quality using geochemical modelling and remediation of MAR techniques	Anna University, Chennai <b>Part-time</b>	2019	Course Work Completed
4	R. Mythili	Hydrogeological investigation with special emphasis on groundwater pollution of Salem Region of Tamil Nadu	Anna University, Chennai <b>Part-time</b>	2019	Course Work Completed
5	P. Aravinthasamy	Integrated hydrogeochemical modelling and groundwater quality for Arjunanadi river basin of Tamil Nadu	Anna University, Chennai Full-time	2021	Course Work Completed
6	Meera Rajan	Impact of Municipal Solid Waste Disposal site on Groundwater Resources in and around Coimbatore Region of Tamil Nadu	Anna University, Chennai Full-time	2023	Under Course Work

## **Conference/ Workshop/Training Programme Grant received and Organized:**

S.No	Name of the event	Date/Role	Venue	Funded by	Amount in Rupees
1	Second International conference on Recent advances in water science and technology (ICRAWST-2022) www.icrawst.in	07-09 Dec, 2022 Organizing Secretary	SSIET*	Self-supported	2,88,000/- (Registration Fee)
2	Climate change impacts on groundwater quality and human health risks: present status and future challenges	14-16 Sep, 2022 Organizing Secretary	SSIET	DST-SERB & BRNS, Govt of India	3,00,000
3	First International e- conference on Recent advances in water science and technology (ICRAWST-2021)	02-03 Dec, 2021 Organizing Secretary	SSIET Zoom Platform	Self-supported	2,62,500/- (Registration Fee)
4	International Workshop on Climate Change Impacts on Groundwater Quality and Health Issues: Review and Way Forward	22-23 April, 2021 Organizing Secretary	SSIET Zoom Platform	Self-supported	1,57,300/- (Registration Fee)

## Curriculum vitae

5	International e-conference on Recent advances in conservation and utilization of water	26-27 Aug, 2020 Organizing Secretary	SSIET Zoom Platform	AICTE (Govt. of India)	50,000
6	Indo-US bilateral workshop on Integrated hydrochemical modeling for sustainable development and management of water supply aquifers	02-04, Jan, 2020 Organizing Secretary	SSIET	IUSSTF	8,00,000
7	National Level workshop Recent advancement in water quality monitoring and sustainable management for human health care	03-05 Jan, 2019 Organizing Secretary	SSIET	DST-SERB & BRNS Govt of India	2,00,000
8	National Level workshop Recent Advanced Techniques for Aqua Chemical Characteristics and Sustainable Development of Bed Rock Aquifers	22-24 Aug, 2017 Organizing Secretary	SSIET	DST-SERB & BRNS, Govt of India	3,00,000
9	National Level workshop Advanced techniques for monitoring water quality and management of Stressed groundwater aquifers	01-03 Feb, 2017 Organizing Secretary	SSIET	DST-SERB, Govt of India	1,25,000
10	Indo-German bilateral Workshop on Recent advancement in online/remote water quality monitoring and management technologies	6-4 Feb, 2016 Organizing Secretary	Anna University Chennai	IGSTC	17,80,000
11	National Level workshop Geoinformatics Applications in Disaster Management	25-27 Feb, 2015 Organizing Secretary	SSIET	MoES (Govt. of India)	90,000
12	National Level workshop Geospatial Technology and its Applications	3-8 May, 2014 Organizing Secretary	AVSEC**	DST-NRDMS (Govt. of India)	2,15,000
13	Inspire Internship Camp - 2012	06-10 Aug, 2012 Organizing Secretary	JCET***	DST (Govt. of India)	9,75,000
14	National Level workshop Geospatial Technology	28-30 June, 2012 Organizing Secretary	JCET	DST-NRDMS (Govt. of India)	2,50,000
15	Inspire Internship Camp - 2011	23-27 Feb, 2012 Organizing Secretary	JCET	DST (Govt. of India)	9,75,000
16	Inspire Internship Camp - 2011	06-10 Feb, 2012 Organizing Secretary	JCET	DST (Govt. of India)	9,75,000
17	National Level Staff Development Programme Advanced Surveying	19-24 Dec, 2011 Organizing Secretary	JCET	AICTE (Govt. of India)	2,07,000

18	National Level Staff Development Programme Applications of Remote Sensing & GIS on Engineering Geology	22-27 Aug, 2011 Organizing Secretary	JCET	MoES (Govt. of India)	1,50,000
19	National Level Seminar Applications of Remote Sensing & GIS on water resource management	16-17 Mar, 2011 Organizing Secretary	JCET	DoS (Govt. of India)	25,000
20	National Level workshop Computer Application in Modern Electronic Surveying	17-23 Feb, 2011 Organizing Secretary	JCET	AICTE (Govt. of India)	3,50,000
21	National Level workshop Geographic Information System (GIS)	17 July, 2010 Organizing Secretary	JCET	DoS (Govt. of India)	25,000
22	National Level software hands on training Geographic Information System	03-06 Mar, 2010 Organizing Secretary	JCET	AICTE (Govt. of India)	2,75,000

<sup>\*</sup>SSIET- Sri Shakthi Institute of Engineering and Technology, Coimbatore, India

#### **Honors and Awards**

- ✓ Early Career Research Award (ECR) Science and Engineering Research Board-Department of Science and Technology (SERB-DST), Government of India.
- ✓ Young Scientist Fellow (May 2011 to June 2011), National Geophysical Research Institute, Hyderabad, India. (Sponsored by Tamil Nadu State Council for Science and Technology, (Government of Tamil Nadu) Chennai, India)

#### **Details of Patents:**

✓ An Innovation nutrient sensor to test soil conditions for agriculture practices (File No: 202214013950)

#### **TOP 25 Hottest Articles**

- ✓ Evaluation of the groundwater quality feasibility zones for irrigational purposes through GIS in Omalur Taluk, Salem District, South India
  - **D. Karunanidhi**, G. Vennila, M.Suresh, SK Subrmaniyan *Envi Scien and Poll Resh*, *Volume 20, Issue 2, Pages 7320-7333* (2013)

#### **List of Publication in International and National Journals**

**1.** D Karunanidhi, T Subramani, K Srinivasamoorthy, K Shankar, Qingchun Yang, H Chandra Jayasena, 2023 Coastal groundwater dynamics, environmental issues and sustainability: A

<sup>\*\*</sup>AVSEC - AVS Engineering College, Salem, India

<sup>\*\*\*</sup> JCET – Jayam College of Engineering and Technology, Dharmapuri, India

- synthesis. Marine Pollution Bulletin. https://doi.org/10.1016/j.marpolbul.2023.114973. (Elsevier; Impact Factor: 6.553).
- 2. K. Sankar., D. Karunanidhi., K. Kalivanan., T. Subramani., 2023. Hydrogeophysical investigations for demarcation of groundwater potential and vulnerability zones in the hard rock terrain of southern India. Chemosphere. <a href="https://doi.org/10.1016/j.chemosphere.2022.137305">https://doi.org/10.1016/j.chemosphere.2022.137305</a> (Elsevier; Impact Factor: 8.943).
- **3.** Aavudai Anandhi, **D. Karunanidhi**, G. Muthu Sankar, Sudhanshu Panda, Narayanan Kannan. **2022.**, A Framework for Sustainable Groundwater Management. Journal of Water, <a href="https://www.mdpi.com/2073-4441/14/21/3416">https://www.mdpi.com/2073-4441/14/21/3416</a> (MDPI; Impact Factor: **3.001**)
- **4.** Prerna Joshi, N Janardhana Raju, N Siva Siddaiah, **D Karunanidhi, 2022.** Environmental Pollution of Potentially Toxic Elements (PTEs) and its Human Health Risk Assessment in Delhi Urban Environs, India. Urban Climate. <a href="https://doi.org/10.1016/j.uclim.2022.101309">https://doi.org/10.1016/j.uclim.2022.101309</a>. (Elsevier; Impact Factor: **6.668**)
- **5.** E Kumar, T Subramani, **D Karunanidhi**, **2022** Integrated approach of ecosystem services for mine reclamation in a clustered mining semi-urban region of South India. Urban Climate. <a href="https://doi.org/10.1016/j.uclim.2022.101246">https://doi.org/10.1016/j.uclim.2022.101246</a>. (**Elsevier**; **Impact Factor**: **6.668**)
- **6. Karunanidhi, D.,** Subramani, T., Srinivasamoorthy. K., Quinjan Yang. **2022** Environmental chemistry, toxicity and health risk assessment of groundwater: Environmental persistence and management strategies. Environmental Research. <a href="https://doi.org/10.1016/j.envres.2022.113884">https://doi.org/10.1016/j.envres.2022.113884</a>. (**Elsevier; Impact Factor: 8.431**)
- 7. **Karunanidhi, D.,** Aravinthasamy, P., Subramani, T., Jayasena. H.C,. **2022**. Perchlorate Contamination in Groundwater and Associated Health Risks from Fireworks Manufacturing Area (Sivakasi region) of South India. Exposure and Health. <a href="https://doi.org/0.1007/s12403-021-00453-1">https://doi.org/0.1007/s12403-021-00453-1</a>. (**Springer; Impact Factor: 11.422**)
- **8.** Aayandurai, R., Venkateswaran, S., **Karunanidhi.D**. **2022.** Hydrogeochemical assessment of groundwater quality and suitability for irrigation in the coastal part of Cuddalore district, Tamil Nadu, India. Marine Pollution Bulletin. <a href="https://doi.org/10.1016/j.marpolbul.2021.113258">https://doi.org/10.1016/j.marpolbul.2021.113258</a>. (**Elsevier; Impact Factor: 6.553**)
- **9. D. Karunanidhi.**, P. Aravinthasamy., T. Subramani., Deepak Kumar, Raj Setia. **2021.** Provincial and seasonal influences on heavy metals in the Noyyal River of South India and their human health hazards. Environmental Research.

- https://doi.org/10.1016/j.envres.2021.111998 (Elsevier; Impact Factor: 8.431)
- 10. K. Shanmuga Priya., P. Balamurugan., M. Kirubakaran., R. Nagavinotheni., P. Prasanth., Maciej Thomes., D. Karunanidhi., 2021. Integration of multi criteria decision analysis and GIS for evaluating the site suitability for aquaculture in southern coastal region, India. Marine Pollution Bulletin. <a href="https://doi.org/">https://doi.org/</a>: 10.1016/j.marpolbul.2021.112907 (Elsevier; Impact Factor: 6.33)
- **11. D. Karunanidhi.,** P. Aravinthasamy., T. Subramani., Deepak Kumar, Raj Setia. **2021.** Investigation of health risks related with multipath entry of groundwater nitrate using Sobol sensitivity indicators in an urban-industrial sector of south India. Environmental Research. https://doi.org/10.1016/j.envres.2021.111726 (Elsevier; Impact Factor: **8.431**)
- 12. D. Karunanidhi., P. Aravinthasamy., T. Subramani., Raj Setia. 2021. Groundwater suitability estimation for sustainable drinking water supply and food production in a semi-urban area of south India: A special focus on risk evaluation for making healthy society. Sustainable Cities and Society. https://doi.org/10.1016/j.scs.2021.103077 (Elsevier; Impact Factor: 10.696)
- **13. D. Karunanidhi.,** P. Aravinthasamy., T. Subramani., Deepak Kumar, G. Venkatesan. **2021.** Chromium contamination in groundwater and Sobol sensitivity model based human health risk evaluation from leather tanning industrial region of South India. Environmental Research. https://doi.org/10.1016/j.envres.2021.111238 (**Elsevier**; **Impact Factor: 8.431**)
- 14. D. Karunanidhi., P. Aravinthasamy., T. Subramani., Raj Setia. 2021. Effects of COVID-19 pandemic lockdown on microbial and metals contaminations in a part of Thirumanimuthar River, South India: A comparative health hazard perspective. Journal of Hazardous Materials. https://doi.org/10.1016/j.jhazmat.2021.125909 (Elsevier; Impact Factor: 14.588)
- **15. D. Karunanidhi,** T Subramani, Priyadarsi D Roy, Hui Li. **2021.** Impact of groundwater contamination on human health. Environmental Geochemistry and Health. https://doi.org/10.1007/s10653-021-00824-2. (**Springer; Impact Factor: 4.609**)
- 16. P. Aravinthasamy., D. Karunanidhi., K. Shankar., T. Subramani., Raj Setia., Prosun Bhattacharya., Sayani Das. 2021. COVID-19 lockdown impacts on heavy metals and microbes in shallow groundwater and expected health risks in an industrial city of South India. Environmental Nanotechnology Monitoring & Management. https://doi.org/10.1016/j.enmm.2021.100472. (Elsevier; Site score: 6.8)

- 17. Peiyue Li., D. Karunanidhi., T. Subramani., K. Srinivasamoorthy. 2021. Sources and Consequences of Groundwater Contamination. Archives of Environmental Contamination and Toxicology. https://doi.org/10.1007/s00244-020-00805-z. (Springer; Impact Factor: 2.804)
- **18. Karunanidhi, D.,** Aravinthasamy, P., Deepali, M., Subramani, T &Shankar.K. **2021**. Groundwater pollution and human health risks in an industrialized region of Southern India: Impacts of the COVID-19 lockdown and the monsoon seasonal cycles. Archives of Environmental Contamination and Toxicology. <a href="https://doi.org/10.1007/s00244-020-00797-w">https://doi.org/10.1007/s00244-020-00797-w</a>. (**Springer; Impact Factor: 2.804**)
- 19. Subba Rao, N., Dinakar, A., Kumari, B. K., Karunanidhi, D., Kamalesh, T. 2021. Seasonal and Spatial Variation of Groundwater Quality Vulnerable Zones of Yellareddygudem Watershed, Nalgonda District, Telangana State, India. Archives of Environmental Contamination and Toxicology. doi:10.1007/s00244-020-00783-2 (Springer; Impact Factor: 2.804)
- **20. Karunanidhi, D.,** Aravinthasamy, P., Subramani, T., Manish Kumar. **2020**. Human health risks associated with multipath exposure of groundwater nitrate and environmental friendly actions for quality improvement and sustainable management: a case study from Texvalley (Tiruppur region) of India. Chemosphere. https://doi.org/10.1016/j.chemosphere.2020.129083 (**Elsevier; Impact Factor: 7.086**)
- 21. Aravinthasamy, P., Karunanidhi, D., Subba Rao, N., Subramani, T., Srinivasamoorthy, K. 2020. Irrigation risk assessment of groundwater in a non-perennial river basin of South India: implication from irrigation water quality index (IWQI) and geographical information system (GIS) approaches. Arab J Geosci 13, 1125. https://doi.org/10.1007/s12517-020-06103-1. (Springer; Impact Factor: 1.827)
- **22. Karunanidhi, D.,** Aravinthasamy, P., Deepali, M., Subramani, T., Barbara C. Bellows., &Peiyue Li. **2020**. Groundwater quality evolution based on geochemical modeling and aptness testing for ingestion using entropy water quality and total hazard indexes in an urbanindustrial area (Tiruppur) of Southern India. Environ Sci Pollut Res (2020). <a href="https://doi.org/10.1007/s11356-020-10724-0">https://doi.org/10.1007/s11356-020-10724-0</a>. (**Springer; Impact Factor: 4.223**)
- 23. Karunanidhi, D., Aravinthasamy, P., Subramani, T., Balakumar, K. G., & Chandran, N. S. 2020. Health threats for the inhabitants of a textile hub (Tiruppur region) in southern India due to multipath entry of fluoride ions from groundwater. Ecotoxicology and Environmental Safety, 204, 111071. doi:10.1016/j.ecoenv.2020.111071 (Elsevier; Impact Factor: 6.292)

- **24.** Venkatesan, G., Subramani, T., **Karunanidhi, D.**, Sathya, U., & Li, P. **2020**. Impact of precipitation disparity on groundwater fluctuation in a semi-arid region (Vellore district) of southern India using geospatial techniques. Environmental Science and Pollution Research. doi:10.1007/s11356-020-10790-4 (**Springer**; **Impact Factor**: **4.223**)
- **25. D. Karunanidhi.** P. Aravinthasamy. M. Deepali. T. Subramani. Emmanuel Daanoba Sunkari.**2020**. Appraisal of subsurface hydrogeochemical processes in a geologically heterogeneous semi-arid region of south India based on mass transfer and fuzzy comprehensive modeling. Environ Geochem Health <a href="https://doi.org/10.1007/s10653-020-00676-2">https://doi.org/10.1007/s10653-020-00676-2</a> (Springer; Impact Factor: **4.609**)
- **26.** Venkatesan, G., Subramani, T., Sathya, U., **Karunanidhi, D. 2020.** Evaluation of chromium in vegetables and groundwater aptness for crops from an industrial (leather tanning) sector of South India. Environmental Geochemistry and Health. doi:10.1007/s10653-020-00665-5 (**Springer; Impact Factor: 4.609**)
- 27. Deepali Marghade, Deepak. B. Malpe, **Karunanidhi Duraisamy**, Pravin D. Patil & Peiyue Li. 2020. Hydrogeochemical evaluation, suitability, and health risk assessment of groundwater in the watershed of Godavari basin, Maharashtra, Central India. Environmental Science and Pollution Research. doi:10.1007/s11356-020-10032-7 (**Springer**; **Impact Factor**: 4.223)
- **28. Karunanidhi, D.,** Anand, B., Subramani, T., & Srinivasamoorthy, K. **2020**. Rainfall-surface runoff estimation for the Lower Bhavani basin in south India using SCS-CN model and geospatial techniques. Environmental Earth Sciences, 79(13). doi:10.1007/s12665-020-09079-z. (**Springer; Impact Factor: 2.784**)
- **29. Karunanidhi, D.,** Aravinthasamy, P., Subramani, T., & Muthusankar, G. **2020**. Revealing drinking water quality issues and possible health risks based on water quality index (WQI) method in the Shanmuganadhi River basin of South India. Environmental Geochemistry and Health. doi:10.1007/s10653-020-00613-3 (**Springer**; **Impact Factor**: **4.609**)
- 30. B. Anand &D. Karunanidhi& T. Subramani. 2020. Promoting artificial recharge to enhance groundwater potential in the lower Bhavani River basin of South India using geospatial techniques. Environmental Science and Pollution Research https://doi.org/10.1007/s11356-020-09019-1 (Springer; Impact Factor: 4.223)
- **31. Karunanidhi, D.,** Aravinthasamy, P., Kumar, D., Subramani, T., & Roy, P. D. **2020**. Sobol sensitivity approach for the appraisal of geomedical health risks associated with oral intake and dermal pathways of groundwater fluoride in a semi-arid region of south India. Ecotoxicology and Environmental Safety, 194, 110438. doi:10.1016/j.ecoenv.2020.110438 (**Elsevier; Impact Factor: 6.292**)

- **32.** Palanisamy, A., **Karunanidhi, D.,** Subramani, T., & Roy, P. D. **2020**. Demarcation of groundwater quality domains using GIS for best agricultural practices in the drought-prone Shanmuganadhi River basin of South India. Environmental Science and Pollution Research. doi:10.1007/s11356-020-08518-5(**Springer**; **Impact Factor**: **4.223**)
- **33.** Arya, S., Subramani, T., **Karunanidhi, D. 2020.** Delineation of groundwater potential zones and recommendation of artificial recharge structures for augmentation of groundwater resources in Vattamalaikarai Basin, South India. Environ Earth Sci 79, 102. https://doi.org/10.1007/s12665-020-8832-9 (**Springer; Impact Factor: 2.784**)
- **34.** Satheeskumar, V., Subramani, T., Lakshumanan, C., Roy, P. D., & **Karunanidhi**, **D**. **2020**. Groundwater chemistry and demarcation of seawater intrusion zones in the Thamirabarani delta of south India based on geochemical signatures. Environ Geochem Healthhttps://doi.org/10.1007/s10653-020-00536-z (**Springer**; **Impact Factor**: **4.609**)
- 35. D. Karunanidhi., P. Aravinthasamy., M. Deepali., T. Subramani & Priyadarsi D. Roy. 2020. "The effects of geochemical processes on groundwater chemistry and the health risks associated with fluoride intake in a semi-arid region of South India" RSC Advances vol (10) pp 4840–4859., DOI:10.1039/c9ra10332e (Royal Society of Chemistry (United Kingdom); Impact Factor: 3.06)
- **36. D. Karunanidhi.,** P. Aravinthasamy., Priyadarsi D. Roy., R. M. Praveenkumar., K. Prasanth., S. Selvapraveen., A. Thowbeekrahman., T. Subramani & K. Srinivasamoorthy **2020.** "Evaluation of non-carcinogenic risks due to fluoride and nitrate contaminations in a groundwater of an urban part (Coimbatore region) of south India". Environmental Monitoring and Assessment, 192 (2). doi:10.1007/s10661-019-8059-y (**Springer**; **Impact Factor**: **2.513**)
- 37. B. Anand &D. Karunanidhi. 2020. Long term spatial and temporal rainfall trend analysis using GIS and statistical methods in Lower Bhavani basin, Tamil Nadu, India. Indian Journal of Geo-Marine Sciences Vol. 49 (03), March 2020, pp. 419-427 (CSIR; Impact Factor:0.56)
- **38.** Rajesh Kanna R, Srinivasamoorthy K, Ponnumani G, Gopinath S, Prakash R. **Karunanidhi. D**. Vinnarasi. F. **2020.** Assessment of Radon in groundwater and associated human risk from Sankarabarani River Sub Basin, Southern India. International Journal of Civil, Environmental and Agricultural Engineering. Volume 1, Issue 1.
- **39.** Aravinthasamy, P., **Karunanidhi, D.,** Subramani, T., Anand, B., Roy, P. D., & Srinivasamoorthy, K. **2019.** "Fluoride contamination in groundwater of the Shanmuganadhi

- River Basin (south India) and its association with other chemical constituents using geographical information system and multivariate statistics". Geochemistry: doi:10.1016/j.chemer.2019.125555 (Elsevier; Impact Factor: 2.292)
- **40. Karunanidhi, D.,** Aravinthasamy, P., Subramani, T., Roy, P. D., & Srinivasamoorthy, K. **2019.** "Risk of Fluoride-Rich Groundwater on Human Health: Remediation Through Managed Aquifer Recharge in a Hard Rock Terrain, South India". Natural Resources Research.doi:10.1007/s11053-019-09592-4 (**Springer; Impact Factor: 5.146**)
- **41.** Arya, S., Subramani, T., Vennila, G., & **Karunanidhi, D. 2019.** "Health risks associated with fluoride intake from rural drinking water supply and inverse mass balance modeling to decipher hydrogeochemical processes in Vattamalaikarai River basin, South India". Environmental Geochemistry and Health.doi:10.1007/s10653-019-00489-y (**Springer**; **Impact Factor: 4.609**)
- **42.** Aravinthasamy, P., **Karunanidhi, D.,** Subramani, T., Srinivasamoorthy, K., & Anand, B. **2019.** "Geochemical evaluation of fluoride contamination in groundwater from Shanmuganadhi River basin, South India: implication on human health". Environmental Geochemistry and Health.doi:10.1007/s10653-019-00452-x (**Springer**; **Impact Factor**: **4.609**)
- **43.** Gopinath. S., Srinivasamoorthy. K., Prakash., Saravanan. K and **Karunanidhi. D. 2019**. "Characterizing groundwater quality and seawater intrusion in coastal aquifers of Nagapattinam and Karaikal, South India using hydrogeochemistry and modeling techniques". Human and Ecological Risk Assessment: An International Journal doi.org/10.1080/10807039.2019.1578947. (**Taylor &Francis; Impact Factor:3.01**)
- 44. Karunanidhi. D., Aravinthasamy. P., Subramani. T, JianhuaWu, and Srinivasamoorthy. K. 2019. "Potential health risk assessment for fluoride and nitrate contamination in hard rock aquifers of Shanmuganadhi River basin, South India". Human and Ecological Risk Assessment: An International Journal doi.org/10.1080/10807039.2019.1568859. (Taylor &Francis; Impact Factor:3.01)
- **45.** Anand B., **Karunanidhi. D.,** Subramani. T., Srinivasamoorth. K.and Suresh. M. **2019**. "Long-term trend detection and spatiotemporal analysis of groundwater levels using GIS techniques in Lower Bhavani River basin, Tamil Nadu, India". Environment Development and Sustainability doi.org/10.1007/s10668-019-00318-3. (**Springer; Impact Factor: 3.219**)
- **46.** Sakthivel D, Vennila. G, **Karunanidhi. D, 2018.** "Hydrogeochemical characterization and evaluation of groundwater quality in Kangayam Taluk, Tirupur District, Tamil Nadu, India

- using GIS techniques". Journal of Environmental Geochemistry and Health.doi.org/10.1007/s10653-018-0183-z. (**Springer; Impact Factor: 4.609**)
- **47.** Anand. B. **Karunanidhi**, **D**, Srinivasamoorthy. K, Subramani. T, Ranesh. K.Y **2017**"Prioritization of sub-watersheds based on quantitative morphometric analysis in lower Bhavani basin, Tamil Nadu, India using DEM and GIS techniques" Arabian Journal of Geosciences Vol. (10)552, pp1-18. (**Springer**; **Impact Factor**: **1.827**)
- **48.** Subramani, T. Kasiviswanathan, S.P. Nesna, C. **Karunanidhi, D.2017.**Demarcation of landslide vulnerable zones in and around Achanakal, South India using remote sensing and GIS techniques. Indian Journal of Geo-Marine Sciences Vol.46(02) (**CSIR**; **Impact Factor:0.56**)
- **49.** Bari, J. Abdul, Vennila, G., Subramani, T.Suresh, M., **Karunanidhi, D.**, Raja, T.M.Shanmuga., **2016**, "Hydrogeochemical investigation of groundwater in Bhavani taluk, Erode district, Tamil Nadu, India using GIS". Indian Journal of Geo-marine Sciences, Vol. (45) 09, pp1154-1161. (CSIR) Impact Factor 0.74. (**CSIR**; **Impact Factor: 0.56**)
- **50.** Thilagavathi, N., Subramani, T., Suresh, M., & Karunanidhi, D.2015. Mapping of groundwater potential zones in Salem Chalk Hills, Tamil Nadu, India, using remote sensing and GIS techniques. Environmental Monitoring and Assessment, 187(4). doi:10.1007/s10661-015-4376-y (Springer; Impact Factor: 2.513)
- **51.** Subramani, T. Prabaharan, S **Karunanidhi**, **D.2015**. Groundwater prospecting in a part of Tamirabarani River basin, South India using Remote Sensing and GIS. Indian Journal of Geo-Marine Sciences Vol.44(09) (**CSIR**; **Impact Factor:0.56**)
- **52. Karunanidhi, D.**Vennila, G. Suresh, M. Rangarajan, R. **2014.** Groundwater investigation and possible zones identification through schlumberger resistivity data using GIS tools in Omalur Taluk, Salem District, Tamil Nadu, India. Indian Journal of Geo-Marine Sciences Vol.43(04). (**CSIR**; **Impact Factor:0.56**)
- 53. Karunanidhi. D, Vennila. G, Suresh. M, Karthikeyan. P, 2014 "Geoelectrical Schlumberger investigation for characterizing the hydrogeological conditions using GIS in Omalur Taluk, Salem District, Tamilnadu, India", Arabian Journals of Geosciences (AJGS) Vol. (7) 05, pp 1791-1798(Springer; Impact Factor: 1.827)
- **54.** Kasiviswanathan S. P. Subramani T. Suresh M. **Karunanidhi D. 2014**. Morphometric investigations in Kattery Watershed, South India using Remote Sensing and GIS techniques. Disaster Advances. Vol. 7 (11)

- **55. Karunanidhi. D,**Vennila. G, Suresh. M, Subramanian. S.K, **2013**"Evaluation of the groundwater quality feasibility zones for irrigational purposes through GIS Omalur Taluk, Salem District, South India", Environmental Science and Pollution Research, Vol.(20) 10, pp 7320-7333. (Springer) Impact Factor 2.74. (**Springer**; **Impact Factor**: **4.223**)
- **56. D. Karunanidhi,** G.Vennila and M. Suresh. **2012**. GIS Approach for rainfall fluctuation study in Omalur taluk, Salem district, Tamil Nadu, India. Poll res. 31 (3): 493-497.

#### **Book/Editorial Volume Published:**

- **1. Karunanidhi, D.,** Subramani, T., Srinivasamoorthy. K., Quinjan Yang. **2023.** Coastal groundwater dynamics, environmental issues and sustainability: A synthesis. Marine Pollution Bulletin. (**Elsevier Publication**).
- **2 Karunanidhi, D.,** Subramani, T., Srinivasamoorthy. K., Quinjan Yang. **2022.** Environmental chemistry, toxicity and health risk assessment of groundwater: Environmental persistence and management strategies. Environmental Research. (**Elsevier Publication**)
- **3 D. Karunanidhi, 2021,** Proceedings of International e-Conference on Recent Advances in Water Science and Technology. ISBN No.978-93-8905-36-70
- **4 D. Karunanidhi,** Peiyue Li, T. Subramani, K. Srinivasamoorthy, **2021** Fate and Consequences of groundwater contamination, Archives of Environmental Contamination and Toxicology (**Springer Publication**)
- **5. D. Karunanidhi, 2020,** Proceedings of International e-Conference on Recent Advances in Conservation and Utilization of Water. ISBN No.978-93-8963-16-16
- **6. D. Karunanidhi.**, 2015. Engineering Geology, Kongunadu Publications, Erode., ISBN No.978-93-85517-10-5
- D. Karunanidhi., 2015. Proceedings of National Workshop on Geoinformatics Applications in Disaster Management (GADM2015), A.E. Publications, Coimbatore., ISBN No.978-93-81972-72-4

#### **Country visited**

First Bilateral workshop of the Alliance of Mexican Indian Geoscientific Opportunities (AMIGOs -2019) "Water, Climate Change and Disaster and Post-Workshop Field Work" held on from 29<sup>th</sup> May, 2019 to 07<sup>th</sup> June, 2019 organized by Institute of Geology, UNAM University, Mexico, Mexico City.

#### National/International Conference / Symposium Papers

Anand. B., **Karunanidhi. D.**, 2018. Identification of artificial recharge structure based on field expert method using hand held GPS in Lower Bhavani basin, Erode district, Tamil Nadu, 3<sup>ed</sup>International

Conference on Environmental Science and Climate Change.

### Seminars / Workshop Attended

Sl.No	Nature of Seminar/Workshop	Topic of the Seminar/ Workshop/Training  Institute /University		
1	National Level Seminar	HYDROCARE-2007 Date: 22 & 23.03.2007	Annamalai University, Tamil Nadu	
2	Workshop	RANGIS Date : 28.08.2007	Annamalai University, Tamil Nadu	
3	National Level Seminar	WATER-2008 Date :22.02.2008	Periyar University, Salem-11 Tamil Nadu	
4	FDP	Disaster Management and GIS Date 29 & 30.08.2009	SASTRA University, Thanjavur, Tamil Nadu	
5	Training Programme	Geographic Information System Date: 29 & 30.08.2008.	P.S.G. College of Technology, Coimbatore, Tamil Nadu	
6	National Level Seminar	TTQI-2009 Date:30&31.05.2009	Satyabhama University, Chennai, Tamil Nadu,	
7	National Training Programmer	Computer Application in Modern Electronic Surveying (RS&GIS) Date:05 to 09.10.2009  Govt. College of En Salem, Tamil I		
8	National Training Programmer	Hyper spectral Remote Sensing and Spectral Signature Applications Date:16 to 25.12.2009	Annamalai University, Tamil Nadu	
9	National Level Seminar	Research Methods in Information Communication Engineering Date: 08 & 09.01.2010	Dr. Mahalingam College of Engineering & Technology, Pollachi, Coimbatore,	
10	National Level Seminar	Trends in Technology for Information Storage Management for Libraries Advanced Date: 11&12.06.2010	Jayam College of Engineering & Technology, Dharmapuri, Tamil Nadu	
11	Regional Level Workshop (Paper Presented)	Artificial Recharge and Watershed Management Date: 06.08.2010	Periyar University, Salem-11 Tamil Nadu.	
12	Workshop	Advanced Geo-Spatial Technology Date: 30.09.2010 & 01.10.2010	VIT University, Vellore, Tamil Nadu	
13	National Level Training Programme	HYPERSPECTRA -2011 Date: 11-18 - Nov, 2011	IIT – Bombay, Mumbai	
14	DST- NRDMS National Level Workshop	Geospatial Technology for Higher Education Date: 7-8 Nov, 2013		

## **Computer Skills**

> Operating System: WINDOWS, DOS

- > Arc GIS
- ➢ Bio render

#### **Professional Activities**

#### Reviewer in

- > Elsevier
- > Springer
- Wiley-Interscience
- > ACS

#### **Subject Teaching and Practical**

- Engineering Geology
- Remote Sensing and GIS
- Disaster Management
- \* Remote Sensing and GIS Laboratory
- Engineering Geology Laboratory
- Water Analysis (Geohydrology) Laboratory

#### **Editorial Board**

	Environmental Research Journal (Elsevier)	- Guest Editor
>	Marine Pollution Bulletin Journal (Elsevier)	- Guest Editor
>	Archives Environmental Contamination and Toxicology (Springer)	- Guest Editor
>	Environmental Geochemistry and Health (Springer)	- Guest Editor
>	Environmental Monitoring and Assessment (Springer)	- Guest Editor
>	Groundwater for sustainable Development (Elsevier)	- Guest Editor
>	Urban Climate Journal (Elsevier)	- Guest Editor
>	Environmental Science and Pollution Research (Springer)	- Guest Editor
>	International Journal of Civil, Environmental Agri. Engg.	- Editor

#### **Doctoral Committee member**

- > Anna University, Chennai
- PSG College of Technology, Coimbatore

#### **Life Member in Professional Bodies**

- 1. Indian Society of Remote Sensing (L-3725)
- 2. Indian Society of Geomatis (L-1310)
- 3. Association of Hydrologists of India. (LM-482-779)
- 4. Association of Global Groundwater Scientists (LM-103)
- 5. Indian Association of Hydrologists (LM-1956)
- 6. International Association of Hydrogeologist

#### **Personal Information**

Date of Birth : 01-06-1981

Sex & Marital status : Male & Married

Nationality : Indian Religion : Hindu

Community : Kongu Vellalar (BC)

Language Known : Tamil & English (Read, Write & Speak)

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#### **DECLARATION**

I declare that the information's made in this curriculum vitae are true to the best of my knowledge and belief.

Date: 08.05.2023

Place: Coimbatore (Dr. D. Karunanidhi)

## **References**

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