## **Publication Details**

No. of International Journals – 24

• No. of National Journals – 2

• No. of International Conferences – 49

• No. of National Conferences – 14

• No. of Best paper awards - 10

## INTERNATIONAL JOURNAL PUBLICATIONS:

- Annadanam Subbarathinam Shashank Karrthikeyaa (Student UG), Ramakrishnan Priyadarshini (Student UG), Gunasekaran Revathi (Student UG), Santhanam Sakthivel Murugan (Faculty ECE), "Design and Implementation of Secured Cloud-Based Remote Home Access Through an Application for Smart Infrastructure", Advances in Intelligent Systems and Computing, August 2020, Vol:1163, PP. 533-546, SI: 0.429, ISSN:2194-5357, https://doi.org/10.1007/978-981-15-5029-4 44
- 2. Senthilkumar Nikhitha (Student UG), Younus Zohra Noori Mohsina (Student UG), V. Sneha (Student UG), Santhanam Sakthivel Murugan (Faculty ECE), "Development of Smart Electricity Energy Management System Using IoT", Advances in Intelligent Systems and Computing, August 2020, Vol:1163, PP. 547-566, SI: 0.429, ISSN:2194-5357, https://doi.org/10.1007/978-981-15-5029-4
- 3. M.Dhanalakshmi (Research Scholar), S.Sakthivel Murugan (Faculty ECE), 'Keypoint based Mapping analysis on transformed side scan sonar images' Multimedia tools and Applications, Springers, July 17,2020 (online), pp.1-31, Thomson Reuters indexed (IF: 2.60), Unpaid Abroad, DOI: 10.1007/s11042-020-09247-0.
- 1. Balaji K (Research Scholar), Nithya R, Ganesan S, Nishavithri N, Sakthivel Murugan S(Faculty ECE), 'Modelling of submerged optical remote correspondence with low losses', International Journal of Mechanical and Production Engineering Research and Development, ISSN(P): 2249–6890; ISSN(E): 2249–8001, Vol. 10, Issue 3, Jun 2020,pp. 3983–3998 (Scopus Indexed).

- Arunkumar Balasubramanian (PG CS Student), Sakthivel Murugan Santhanam (Faculty –ECE), "Seawater – Activated Battery: Developing prototype for Underwater Alternative Energy Source", in Sea Technology, Vol. 60, No.7, pp.13-14, July 2019.(TR-Unpaid, IF-0.05)
- **3.** Balaji K (Research Scholar), **Sakthivel Murugan S (Faculty –ECE)**, "Implementing IoT in Underwater Communication using Li-Fi", International Journal of Recent Technology and Engineering, Volume 8, Issue 2S4, July 2019. (**Scopus Indexed- Unpaid**)
- 4. Sakthivel Murugan Santhanam, (Faculty ECE) "Studies on water column nutrient distribution and sound profile variations along coastal region of India", in Journal of Acoustic. Society of America (JASA)., Vol. 144, No. 3, pt. 2, pp. 1948, September 2018 (IF 1.572).
- 5. Sakthivel Murugan Santhanam (Faculty ECE) and Somasekar K, "Segmentation of underwater acoustic images by FCM with EMD", in Journal of Acoustic. Society of America (JASA)., Vol. 144, No. 3, pt. 2, pp. 1974, September 2018 (IF 1.572).
- **6.** Janani P (PG student), **S.Sakthivel Murugan** (**Faculty ECE**), "Implementation of sea sand in microbial fuel cell for an energy harvesting system using LTC for underwater applications", Indian Journal of Geo Marine Sciences, Vol.47, No.4, April 2018, pp 884 -889. If 0.289(TR Unpaid)
- 7. Janani. P (PG Student), **Sakthivel Murugan S (Faculty ECE)**, "Design and performance analysis of boost converters in an energy harvesting system for underwater applications using sea water in microbial fuel cell", Indian journal of Geo Marine Sciences, November 2017, Vol.46, No.11, pp. 2241 -2249.If 0.289 (TR Unpaid)
- 8. Annalakshmi G (Reserach Scholar), **Sakthivel Murugan S (Faculty ECE)**, Venugopal Padmanabhan (Faculty Mathematics), Swetha Vivekananthan (UG Student), Vaishali Selvaraj (UG Student), "Coherence analysis of ambient noises in shallow water for underwater Communication" Journal of Marine Science and Technology, July 2017, Vol. 25, No.3, pp. 311- 318, IF 0.2 (TR Unpaid)
- 9. K.Harshitha (PG Student), G.Annalakshmi (Research scholar), **S.Sakthivel Murugan** (**Faculty ECE**), "Model predicting sediment transport" in Sea technology Journal, June 2017, Vol.54, pp.22-24. IF 0.064 (TR Unpaid)

- 10. Annalakshmi G (Research Scholar), **Sakthivel Murugan S (Faculty ECE)**, "Underwater acoustic Modem Challenges, Technology and Applications A review Survey" International Journal of Oceanography and fisheries, May 2017, Issue No.4, Vol No.2, pp. 001 010. (unpaid)
- 11. Swathi Sugumar (Research scholar), **Sakthivel Murugan S (Faculty ECE)**, " Performance analysis of magnetic induction technique over electromagnetic wave technique for underground wireless communication" International Journal of Emerging research in management and technology, May 2017, Vol.6, No.5, pp. 467 -471.(unpaid)
- 12. Hasthi Gowthamni (UG Student), Brintha Manivannan (UG Student), Heera Parvin Azam (UG Student), **Sakthivel Murugan S (Faculty -ECE)**, "Study and analysis of various modulation techniques for underwater communication" International Journal of Emerging research in management and technology, May 2017, Vol.6, No.5, pp. 462 -466.(unpaid)
- 13. **S.Sakthivel Murugan (Faculty ECE)**, "Design and Implementation of an Energy harvesting system using MFC with Marine sediments for underwater Applications", International Journal of Marine Science Research and Development, July 2016, Vol.6, Issue No.4, pp.53. <a href="http://dx.doi.org/10.4172/2155-9910.C1.014">http://dx.doi.org/10.4172/2155-9910.C1.014</a>
- 14. S.Sakthivel Murugan (Faculty ECE), "Performance analysis of an energy efficient cross layer protocol for underwater acoustic wireless sensor network", International Journal of Marine Science Research and Development, July 2016, Vol.6, Issue No.4, pp.35. <a href="http://dx.doi.org/10.4172/2155-9910.C1.013">http://dx.doi.org/10.4172/2155-9910.C1.013</a>
- 15. S.M.Asha Banu (PG Student), S.Sakthivel Murugan (Faculty –ECE), P.Venugopal (Faculty Mathematics), "Study of Vertical coherence in shallow water ambient noise" International Journal of advances in natural and applied sciences, October 2016, Vol.10, No.14, pp.59-64
- 16. Janani P, **Sakthivel Murugan S**, "Microbial Fuel Cell Underwater Power System Harvesting Energy from Seawater for low power applications" International Journal of Sea Technology, Vol 56, No.7, pp.10-13, July 2015.

- 17. Kalpana G, Rajendran, V, **Sakthivel Murugan S**, "Study of De-noising Techniques for SNR improvement for underwater acoustic communication" International Journal of Marine Engineering and Technology Vol. 13, No. 3, pp 29-35, Dec 2014.
- 18. **Sakthivel Murugan, S.**, Natarajan, V. and Prethivika, S., "Analysis on Extraction of modulated signal using adaptive algorithms against ambient noises in underwater Communication", International Journal of Signal Processing Systems, Vol. 3, No. 1, pp.25-29, 2014, DOI: 10.12720/ijsps.3.1.25-29.
- 19. **Sakthivel Murugan, S.** and Natarajan, V. and Maheswaran, K., "Analysis of EMD algorithm for identification and extraction of an acoustic signal in underwater channel against wind driven ambient noise", Springer's China Ocean Engineering, Vol. 28, No. 5, pp.645 -657, 2014. DOI: 10.1007/s 13344-014-0051-2.
- 20. Sakthivel Murugan, S., Natarajan, V. and Prethivika, S., "Hardware implementation of Kalman Least Mean Square based adaptive algorithm for denoising ambient noises in shallow water region", Fluctuation and Noise Letters, Vol. 13, No. 3, 2014. DOI: 10.1142/S0219477514500187.
- 21. **Sakthivel Murugan**, **S**. and Natarajan, V., "Implementation of Threshold Detection Technique for extraction of composite signals against ambient noises in underwater communication using Empirical Mode Decomposition", Fluctuation and Noise Letters, Vol. 11, No. 4, 2012. DOI: 10.1142/S0219477512500319.
- 22. **Sakthivel Murugan, S.**, Natarajan, V. and Radha, S., "Analysis of MNLMS and KLMS algorithms for underwater acoustic communications", Fluctuation and Noise Letters, Vol. 11, No. 4, 2012. DOI: 10.1142/S021947751250023X.
- 23. **Sakthivel Murugan**, **S**. and Natarajan, V., "SNR and MSE analysis of KLMS Algorithm for underwater acoustic communications", Journal of Marine Engineering and Technology, Vol. 11, No.3, pp.3-8, 2012. DOI: 10.1080/20464177.2012.11020267.
- 24. **Sakthivel Murugan, S.**, Natarajan, V. and Rajesh Kumar, "Estimation of Noise Model and denoising of wind driven ambient noise in shallow water using the LMS algorithm", Journal of Acoustics Australia, Vol. 40, No.2, pp. 111-121, 2012.

- 25. **Sakthivel Murugan, S.**, Natarajan, V. and Radha, S., "Algorithms for Underwater Acoustic Communications Adaptive Algorithm Testing to determine best adaptive filtering approaches for denoising signals affected by Wind Noise", Journal of Sea Technology, Vol. 53, No.7, pp.42-45, 2012.
- 26. Sakthivel Murugan, S., V. Natarajan and R. Rajesh Kumar, "Noise Model Analysis and Estimation of Effect due to Wind Driven Ambient Noise in Shallow Water", International Journal of Oceanography, Vol.2011, Article Id: 950838, pp.1-4, 2011. DOI:10.1155/2011/950838.
- 27. **S.Sakthivel Murugan,** V.Natarajan and JagadeeshAdapa, "Estimation and analysis of Ocean Wave Parameters Based on Buoy Motion", International Journal of Advanced Engineering Technology, Vol.1, No.3, pp.194-200, 2010. (E-ISSN 0976 3945).
- 28. **S.Sakthivel Murugan,** V.Natarajan and Lenin Joseph, "Interpretation of underwater Noise Spectra at different Rainfall and wind speed conditions based on Time series hydrophone Voltage signal Processing", International Journal of Advanced Engineering Technology, Vol.1, No.2,pp.184-194, 2010. (E-ISSN 0976 3945).

## **CONFERENCE PROCEEDINGS:**

- 1. D.Gnana Prakash (Faculty Chemical), S.Harish (UG Student Chemical), M.Rishikesh (UG Student Chemical), S.Sakthvel Murugan (Faculty ECE), M.Prasanth (UG Student Chemical), "Leak detection using Comsol Multiphysics for a laminar flow through pipes", International Conference on Green Energy for Environmental Sustainability(ICGEES 2020), held at NIT Calicut on 5&6, August 2020.
- 2. Mubeena Parveen (PG Student), Sakthivel Murugan S (Faculty ECE), Nelson I (Faculty –ECE), "Performance analysis of ocean wave based energy harvesting system using Permanente Magnet Linear Generator", 6<sup>th</sup> National Conference on Information and Communication Technology, NCICT 2020, held at SSNCE, June 12, 2020. (Received Best Paper Award)
- 3. Sukanthi Kannan (PG Student), Sakthivel Murugan S (Faculty ECE), Hanis S (Faculty ECE), "Binarization of stone inscription images", 6<sup>th</sup> National Conference on Information and Communication Technology, NCICT 2020, held at SSNCE, June 12, 2020. (Received Best Paper Award)

- **4.** Raagavi B (PG Student), Swathi S (Research Scholar), **Sakthivel Murugan S (Faculty ECE)**, Hanis S "Metamaterial Enhanced Magnetic Induction based Underground wireless communication", 6<sup>th</sup> National Conference on Information and Communication Technology, NCICT 2020, held at SSNCE, June 12, 2020.
- 5. Dhana Lakshmi M (Junior Research Fellow), **Sakthivel Murugan S (Faculty ECE)**, "Underwater Image Recognition detection using Deep ConvNet", in National Conference in Communication (NCC 2020), held at IIT Kharagpur between February 21-23, 2020, India
- 6. Dhana Lakshmi M (Junior Research Fellow), **Sakthivel Murugan S (Faculty ECE)**, Padmapriya N (Faculty Maths), "ConvNet based Object Detection in Submersible captured images", Challenges in Earth System Science for Global Sustainability (CESS-GS 2020), held at IIT Kharagpur between January 15-17, 2020, India
- 7. Balaji K (Research Scholar), Sakthivel Murugan Santhanam (Faculty ECE), "Analysis of Channel Losses for implementation of optical communication in underwater", in Challenges in Earth System Science for Global Sustainability (CESS-GS 2020), to be held at IIT Kharagpur between January 15-17, 2020, India (Received Best Presenter Award).
- 8. Vimal Raj M (Research Scholar), **Sakthivel Murugan S (Faculty ECE)**, Padmapriya N (Faculty Maths), "Underwater Image Processing using Hyperparameter algorithms", Challenges in Earth System Science for Global Sustainability (CESS-GS 2020), to be held at IIT Kharagpur between January 15-17, 2020, India (Received Best Presenter Award).
- 9. Vigneshwar Veeravagu (UG-MECH), Vishal Mohan (UG-MECH), Tejaswini P (UG-ECE), Sai Deepika (UG-ECE), Raksshitha NJ (UG-EEE), Hashmat Jeelani Banday (UG-EEE), Sakthivel Murugan S (Faculty ECE), Vimal Samsingh (Faculty MECH), Dr K Murugaesan (Faculty EEE), "Prototype of Inspection Class Remotely Operated Vehicle", presented a poster in the 2019 International Symposium on Ocean Technology (SYMPOL 2019), held at Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, between 11-13, Dec 2019.
- 10. Dhanalakshmi M (Junior Research Fellow), Sakthivel Murugan S (Faculty ECE), Padmapriya N (Faculty Maths), Somasekar M (Research Scholar), "Texture Analysis on Side Scan Sonar images using EMD, XCS-LBP and Statistical Co-Occurence" in the proceedings of 2019 International Symposium on Ocean Technology (SYMPOL 2019), held at Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, between 11-13, Dec 2019.
- 11. Mary Cecilia S (Research Scholar)), **Sakthivel Murugan S (Faculty ECE)**, Padmapriya N (Faculty Maths), "Analysis of Various De-hazing algorithms for Underwater images" in the proceedings of 2019 International Symposium on Ocean Technology (SYMPOL

- 2019), held at Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, between 11-13, Dec 2019. (Received Best paper Award).
- 12. Annalakshmi G (Research Scholar), **Sakthivel Murugan S (Faculty ECE)**, Ramasundaram K (Scientist NIOT), "Side Scan Sonar images based ocean bottom sediment classification" in the proceedings of 2019 International Symposium on Ocean Technology (SYMPOL 2019), held at Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, between 11-13, Dec 2019.
- 13. Vimal Raj M (Research Scholar), **Sakthivel Murugan S (Faculty ECE)**, "Underwater Image Classification using Machine Learning Technique" in the proceedings of 2019 International Symposium on Ocean Technology (SYMPOL 2019), held at Department of Electronics, Cochin University of Science and Technology (CUSAT), Cochin, India, between 11-13, Dec 2019.
- 14. Dhanalakshmi M (Junior Research Fellow), Vimal Raj M (Research Scholar), **Sakthivel Murugan S (Faculty ECE)**, "Feature Matching and Assessment of similarity rate on geometrically distorted side scan sonar images" in the proceedings of TEQIP III sponsored International Conference on Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW 2019), held at National Institute of Technology, Trichy, between 22 -24, May 2019.
- 15. A.S.Shashank Karrthikeyan (UG Student), R.Priyadarshni (UG Student), Revathi.G (UG Student), **S.Sakthivel Murugan (Faculty ECE)**, "Design and implementation of secured cloud based remote home access through an app for smart infrastructure" in Proceedings of the international conference on frontiers in smart system technologies" held at Vel Tech on 2-3, April 2019, pp.1-11.
- 16. S.Nikitha (UG Student), Zohra Noori Mohsina (UG Student), Sneha V (UG Student), S.Sakthivel Murugan (Faculty ECE), "Development of smart electricity energy harvesting system using IoT" in Proceedings of the international conference on frontiers in smart system technologies" held at Vel Tech on 2-3, April 2019, pp.585-600.
- 17. Thirumalini (UG student), Deepika (UG Student), K.Muhumeenakshi (Faculty ECE), S.Sakthivel Murugan (Faculty ECE) presented paper titled "Detection of galvanic cell battery for underwater applications using seawater as electrolyte" in International Conference on Emerging Trends in Science Engineering & Technology (ICETSET 2019) at Jerusalem College of Engineering, Chennai on 22 March 2019.
- 18. **Sakthivel M. Santhanam (Faculty –ECE)**, "Studies on water column nutrient distribution and sound profile variations along coastal region of India", 176th Meeting of the Acoustical Society of America, 5-9,November 2018, Victoria, Canada.
- 19. Sakthivel M. Santhanam (Faculty –ECE) and Somasekar K, "Segmentation of underwater acoustic images by FCM with EMD", 176th Meeting of the Acoustical Society of America, 5-9 November 2018, Victoria, Canada.

- 20. Arun Kumar B, Hashmat Jeelani B and **S.Sakthivel Murugan** (Faculty –ECE), "Design and development of energy harvesting system using seawater for underwater applications", Student Engineering Model Competition, India International Science festival, IISF-SEMC 2018, Lucknow.
- 21. Arun Kumar Balasubramanian and S. Sakthivel Murugan Santhanam (Faculty –ECE), "Energy harvesting system using seawater activated battery for underwater applications" in Proc. of India's 2<sup>nd</sup> Tech Surge, Technology and Innovation for Sustainable Fishing (TISF) 2018, organized by Marine Technology Society India Section, 10th August 2018, Chennai.
- 22. Nithya Sivakami (PG student AC Tech consultancy), **S.Sakthivel Murugan (Faculty ECE),** "Study on Suitable Electrode for Energy Harvesting using Galvanic Cell in Sea water", 4th International Conference on Ocean Engineering (ICOE 2018)", 19 -21 February 2018, Indian Institute of Technology (IIT) Madras, India.
- 23. Somasekar M (Research Scholar), S.Sakthivel Murugan (Faculty ECE), Padmapriya N (Faculty Mathematics), "Exploration of Fuzzy C-Means and K-Mean clustering algorithm with Empirical Mode Decomposition for Feature Extraction of Underwater Images", 4th International Conference on Ocean Engineering (ICOE 2018)", 19 -21 February 2018, Indian Institute of Technology (IIT) Madras, India.
- 24. Annalakshmi (Research Scholar), **S.Sakthivel Murugan** (Faculty ECE), " Analyzing the Physical and Chemical Properties of Water Column Nutrients and Sediments along Southeast Coast of India", 4th International Conference on Ocean Engineering (ICOE 2018)", 19 -21 February 2018, Indian Institute of Technology (IIT) Madras, India.
- 25. Annalakshmi (Research Scholar), **S.Sakthivel Murugan (Faculty ECE)**, "Investigations on the geo acoustic properties of sediment in poompuhar", International Conference on Sonar Systems and sensors (ICONS 2018), 22 24 February 2018, Naval physical and Oceanographic Laboratory (NPOL), Kochi, India.
- 26. Swathi S (Research Scholar), S.Sakthivel Murugan (Faculty ECE), "An Efficient MI waveguide based Underground wireless Communication for Smart Irrigation" 14th IEEE India Council International conference INDICON 2017" 15 -17 December 2017, Indian Institute of Technology (IIT) Roorkee, India.
- 27. G.Annalakshmi (Research Scholar), **S.Sakthivel Murugan (Faculty ECE),** "Geo Acoustic Inversion method for analyzing impact due to sediments in underwater channel" 39th Indian Geotechnical Conference 2017 GeoNEst 2017, 14 16 December 2017, IIT Guwahati, India.
- 28. S.Somasekar (Research scholar), **S.Sakthivel murugan (Faculty ECE)**, N.Pradeesha (PG Student), N.Pathmapriya (faculty Maths), "A Survey on Fuzzy C Means algotithm using Empirical mode Decomposition for Underwater Image Processing", 5th International Conference on Ship and Offshore Technology India, ICSOT 2017: Innovation in ocean structures", 7-8 December 2017, IIT Kharagpur, India.

- 29. G.Annalakshmi (Research scholar), **S.Sakthivel Murugan** (Faculty ECE), "Implementation of acoustic Propagation model for predicting ocean bottom in geo acoustic inversion", 5th International Conference on Ship and Offshore Technology India, ICSOT 2017: Innovation in ocean structures", 7-8 December 2017, IIT Kharagpur, India.
- 30. M.Somasekar (Research Scholar), S.Sakthivel Murugan (Faculty ECE), K.Pradeesh (PG student) "Empirical Mode Decomposition By Weight Optimization For Amelioration Of Underwater Images", OSICON 2017, 28- 30 Aug-17, NCESS, Thiruvananthapuram.
- 31. R.Logeshwaran (Research Scholar), S.Sakthivel Murugan (Faculty ECE), "Mac Layer Optimization For Cluster Based Auv Localization In Deep Water Surveillance" OSICON 2017, 28-30 Aug-17, NCESS, Thiruvananthapuram.
- 32. Swathi S and Sakthivel Murugan Santhanam "Performance Analysis of Magnetic Induction Technique over Electromagnetic Wave Technique for Underground Wireless Communication", International Conference on Emerging Trends in Science & Engineering (ICETSE 2107), May 11th & 12th, 2017, Coorg Institute of Technology, Ponnampet, Karnataka, Vol. 2, pp. 136-140. (Paper is selected as best paper)
- 33. Hasthi Gowthami, Brindha Manivannan, Heera Parvin Azam and Dr. Sakthivel Murugan Santhanam, "Study and Analysis of Various Modulation Techniques for Underwater Communication" International Conference on Emerging Trends in Science & Engineering (ICETSE 2107), May 11th & 12th, 2017, Coorg Institute of Technology, Ponnampet, Karnataka, Vol. 2, pp. 130-135. (Paper is selected as best paper)
- 34. Swathi S (Research Scholar), **S.Sakthivel Murugan (Faculty ECE)**, "Magnetic Induction based wireless underground sensor network system for agriculture automation", under the theme of Innovative Agriculture Practices in Young Scientist Conclave of 2<sup>nd</sup> India International Science Festival, December 7 11, 2016, National Physical laboratory, New Delhi. (Best Poster award)
- 35. Pradeesha S K (PG Students), S.Sakthivel Murugan (Faculty ECE), "Sensor based detection and modelling of submerged objects for conservation of ancient heritage", under the theme of Digital India in Young Scientist Conclave of 2<sup>nd</sup> India International Science Festival, December 7 11, 2016, National Physical laboratory, New Delhi.
- 36. Annalakshmi G (Research Scholar), **S.Sakthivel Murugan** (Faculty ECE), "Development of high frequency underwater acoustic modem", under the theme of Make in India in Young Scientist Conclave of 2<sup>™</sup> India International Science Festival, December 7 11, 2016, National Physical laboratory, New Delhi.
- 37. Harshitha D (PG Students), **S.Sakthivel Murugan (Faculty ECE)**, "Development of Geo acoustic Inversion model predicting sediment transport causing submergence", under the theme of Swach Bharat in Young Scientist Conclave of 2<sup>nd</sup> India International Science Festival, December 7 11, 2016, National Physical laboratory, New Delhi.

- **38. S.Sakthivel Muruga,** "Design and Implementation of an Energy harvesting system using MFC with Marine sediments for underwater Applications", 4<sup>th</sup> International conference on Oceanography and Marine Biology (Oceanography 2016), July 18-19, 2016, Brisbane, Australia. (Best Poster Award)
- **39. S.Sakthivel Muruga**, "Performance analysis of an energy efficient cross layer protocol for underwater acoustic wireless sensor network", 4<sup>th</sup> International conference on Oceanography and Marine Biology (Oceanography 2016), July 18-19, 2016, Brisbane, Australia.
- **40.** S.M. Ashabanu, **S.Sakthivel Murugan**, P.Venugopal, "Study of Vertical Coherence in Shallow Water Ambient Noise", International Conference on Innovative and Emerging Trends in Engineering and Technology, May 7, 2016, Panimalar Institute of Technology, Chennai.
- 41. S.Sakthivel Murugan, Ann Agneta Chandru, "Prototype Implementation of an Automatic Energy Harvesting system for Low power Devices", 12<sup>th</sup> IEEE INDICON 2015, Jamia Millia Islamia University, New Delhi, December 17<sup>th</sup> 20<sup>th</sup>, 2015. (Received Best paper Award).
- 42. P.Janani, **S.Sakthivel Murugan**, "Design and development of power management system for underwater applications", Second International Conference on Innovations in Information Embedded and Communication Systems (ICIIECS), Karpagam College of Engineering, Coimbatore, March 19-20, 2015.
- 43. N.Archanna, S.Sakthivel Murugan, "Best Fit analysis of wind speed using conventional distribution", Second International Conference on Innovations in Information Embedded and Communication Systems (ICIIECS), Karpagam College of Engineering, Coimbatore, March 19-20, 2015, Vol.1, pp.897 -901.
- 44. P.Janani, **S.Sakthivel Murugan**, N.Archanna "Development of Microbial Fuel cell based energy harvesting system using marine sediments for underwater applications", 4<sup>th</sup> National conference of ocean society of India (OSICON 2015), March 22-24, 2015, pp.118.
- 45. D.Keerthika, **S.Sakthivel Murugan**, V.Rajendran, Ann Agnetta Chandru, "Design of Energy harvesting system from rotational force for low power applications", ISTE regional Conference on the role of Technical education in Energy Conservation, February 5, 2015, Sona college of Engg, Salem. (**Received Best paper award**)
- 46. Ann Agnetta Chandru, **Sakthivel Murugan S** and Keerthika D, "Design and Implementation of an energy harvester for low power devices from vibration of automobile engine", Springer International Conference on Soft Computing Systems (ICSCS 2015), Noorul Islam University, April 20-21, 2015.

- 47. **Sakthivel Murugan S**, Natarajan V and Prethivika Srinivasan, "Analysis on Extraction of Modulated signal using Adaptive filtering algorithms against ambient noises in underwater communication", International Conference on Communication Software and Networks (ICCSN 2014), Singapore, May 24-26, 2014. (Received best paper award)
- 48. Suvasini L, Prethivika S, Sakthivel Murugan S and Natarajan V, "Extraction of Binary Sequences in a Frequency Shift Keying Modulated Signal by Empirical Mode Decomposition Algorithm against Ambient Noises in Underwater Acoustic Channel", Springer International Conference on Artificial Intelligence and Evolutionary Algorithms in Engineering Systems (ICAEES 2014), Noorul Islam University, April 22-23, 2014. (Received Best paper Award)
- 49. Suvasini L, Prethivika S, **Sakthivel Murugan S**, Natarajan V, "Extraction of frequency shift keying modulated signal by empirical mode decomposition algorithm against ambient noises in underwater acoustic channel", Proceedings of the Fifth Indian National Conference on Harbour and Ocean Engineering (INCHOE 2014), Goa, 5-7 February 2014, pp. 10-14.
- 50. Prethivika Srinivasan, Sakthivel Murugan Santhanam and V.Natarajan, "Extraction of useful Signal Buried in Ambient Noise from Underwater Acoustic Channels using Adaptive Filtering Techniques", Proceedings of National Conference of Ocean Society of India (OSICON 2015), Role of Oceans in Earth System, IITM Pune, 26-28 November 2013, pp. 280-283.
- 51. Suvasini Lakshminarayanan, **Sakthivel Murugan Santhanam** and V.Natarajan, "Extraction of Hidden Signal using FFT Implementation of Empirical Mode Decomposition Technique in an Underwater Acoustic Channel", Proceedings of National Conference of Ocean Society of India (OSICON 2013), Role of Oceans in Earth System, IITM Pune, 26-28 November 2013, pp. 276-279.
- 52. **Sakthivel Murugan.S**, Natarajan.V, Rajesh Kumar.R and Balagayathri.K "Analysis and SNR Comparison of various Adaptive Algorithms to De-noise Wind Driven Ambient Noise in Shallow Water", India Conference (INDICON 2011), Annual IEEE, Hyderabad, 16-18, December 2011, pp. 1-5.
- 53. **Sakthivel Murugan.S**, Natarajan.V, Kiruba Veni.S and Balagayathri.K, "Analysis of Adaptive Algorithms to improve SNR of the Acoustic Signal Affected due to Wind Driven Ambient Noise in Shallow Water", International Symposium on Ocean Electronics (SYMPOL 2011), Cochin, 16-18 November 2011, pp. 163-168.
- 54. Rajesh Kumar.R, **Sakthivel Murugan S**, Natarajan.V and Radha.S, "Analysis of Power Spectral Density and Development of an Adaptive Algorithm for Filtering Wind Driven Ambient Noise in Shallow Water", International Conference on Electronics Computer Technology (ICECT 2011), Kanyakumari, 2011, pp. 163-167.

- 55. Mathan Raj.K, **Sakthivel Murugan.S**, Natarajan.V and Radha.S, "Denoising Algorithm using Wavelet for Underwater Signal Affected by Wind Driven Ambient Noise", IEEE-International Conference on Recent Trends in Information Technology (ICRTIT 2011), Chennai, June 3-5, 2011, pp. 943-946.
- 56. Kiruba Veni. S, **Sakthivel Murugan.S** and Natarajan.V. "Modified LMS Adaptive Algorithm for Detection of Underwater Acoustic Signals against Ambient Noise in Shallow Water of Indian Sea", IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011), Chennai, June 3-5, 2011, pp. 901-905.
- 57. **Sakthivel Murugan.S** and Natarajan.V, "Performance Analysis of Signal to Noise Ratio and Bit Error Rate for Multiuser using Passive Time Reversal Technique in Underwater Communication", IEEE International Conference on Wireless Communication and Sensor Computing (ICWCSC 2010), Chennai, 2010.
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