

# Centre for Climate Change Research

## Publications (Last five years)

### Journals

- 1) K. Suganthi, Sarojini Devi B, Suganthi P, **Govindaraju M** (2017). Evaluation of potential storage of organic carbon in soil and trees: A case study. *International Journal of Ecology and Development*. Vol 32, No.4, 29-38.
- 2) Rajiv Das Kangabam and **Munisamy Govindaraju** (2017). “Anthropogenic activity-induced water quality degradation in the Loktak lake, a Ramsar site in the Indo-Burma biodiversity hotspot”. *Environmental Technology*.
- 3) T. Selvankumar, C. Sudhakar, **M. Govindaraju**, K. Selvam, V. Aroulmoji, N. Sivakumar, M. Govarthanan (2017). “Process optimization of biogas energy production from cow dung with alkali pre-treated coffee pulp”. *3 Biotech*, 3-8.
- 4) Rajiv Das Kangabam, Sarojini Devi Boominathan, Suganthi Kanagaraj, **Govindaraju Munisamy** (2017). “Development of a Water Quality Index (WQI) for the Loktak Lake in India”. *Applied Water Science*.
- 5) Suganthi Kanagaraj, Muthu Selvaraj, Rajiv Das Kangabam, **Govindaraju Munisamy** (2017). “Assessment of Tree Species Diversity and its Distribution Pattern in Pachamalai Reserve Forest, Tamil Nadu”. *Journal of Sustainable Forestry*. Vol. 36, No. 1, 32-46.
- 6) Rajiv Das Kangabam, Suganthi Kanagaraj, **Govindaraju Munisamy** (2016). “Assessment of carbon sequestration potential of Loktak lake in Manipur - A Biodiversity Hotspot”. *International Journal of Conservation Science*. Vol. 7, Issue 4, 1145-1152.
- 7) Rajagopal Appavu, Deepa Mohan, Ramu Kakumanu and **Govindaraju Munisamy** (2016) “Fundamental of Secondary Structures in Peptide Based Synthetic Nanovaccine Development”. *Transcriptomics*. Vol. 4, Issue 1.
- 8) C. Sudhakar, T. Selvankumar, K. Selvam and **M. Govindaraju** (2016) “*Bauhinia purpurea* L. flower mediated dye used as sensitizers for TiO<sub>2</sub> based dye sensitized solar cells”. *Int. J. Adv. Sci. Eng.* Vol. 2 No. 4, 209-213.
- 9) P. Viswanathan and **M. Govindaraju** (2015) “Genetic diversity assessment of green mussel, *perna viridis* in south indian coastal region using microsatellite markers”. *International journal-Asian Jr. of Microbiology, Biotechnology and Environmental Science*. Vol. 17, No. (4), ISSN-0972-3005.
- 10) Rajiv D Kangabam, Sarojini D Boominathan, **Munisamy Govindaraju** (2015) “Ecology, disturbance and restoration of Loktak Lake in Indo-Burma Biodiversity Hotspot- An overview”. *NeBIO*, Vol 6, ISSN: 0976-3597.
- 11) P. Suganthi, **M. Govindaraju**, B. Sarojini Devi, Rajiv Das Kangabam, K. Suganthi, V. Thenmozhi and B.K. Tyagi (2015) “Mapping of Spatio-Temporal Distribution of Mosquito Vector Density in Sitheri Hills Using GIS Technology”. *International Journal of Advanced Remote Sensing and GIS*. Vol 4, Issue 1, ISSN: 2320 – 0243.

- 12) B. Sarojini Devi, P. Suganthi, K. Suganthi and **M. Govindaraju** (2015) "Mapping of Ground water quality for Ramanathapuram Taluk of Tamil Nadu using Remote Sensing and Geographic Information System". *International Journal of Advanced Remote Sensing and GIS*. Vol 4, Issue 1, ISSN: 2320 – 0243.
- 13) P. R. Abhilash and **M. Govindaraju** (2015) "Assessment of Land Use/ Land Cover change detection and its impact on Environment for Tiruppur Area using Remote Sensing and GIS". *Indian Journal of Natural Science*. Vol. 5, Issue 28, ISSN: 0976-0997.
- 14) P.R. Abilash and **M. Govindaraju** (2015) "Performance Assessment of CETPs Post Zero Liquid Discharge Implementation in Tiruppur, Tamilnadu". *International Journal of Current Research*. Vol. 7 (2), 12332-12336.
- 15) P. Suganthi, **M. Govindaraju**, V. Thenmozhi, and B. K. Tyagi. (2014) "Survey of mosquito vector abundance in and around tribal residential areas". *Journal of Entomology and Zoology Studies*. Vol. 2 (6), 233-239
- 16) P. Viswanathan, V. R. Muthukumar, **M. Govindaraju**. (2014) "RAPD analysis for genetic diversity of Green Mussel (*Perna viridis*) in South Indian of Coastal Region". *Biotechnology International* Vol. 7(2), 47-57.
- 17) P. Kumar, S. Senthamilselvi, **M. Govindaraju**. (2014) "Phloroglucinol encapsulated starch biopolymer: Preparation, antioxidant and cytotoxic effect on HepG2 liver cancer cell lines". *RSC advances*, Vol. 4, pp. 26787–26795.
- 18) P. Kumar, S. Senthamilselvi, **M. Govindaraju** and Renu Sankar. (2014) "Unravelling the caspase-mediated mechanism for phloroglucinol-encapsulated starch biopolymer against the breast cancer cell line MDA-MB-231". *RSC Advances*, Vol.4, pp.46157- 46163.
- 19) S. Veeralakshmi, S. Nehru, S. Arunachalam, P. Kumar, **M. Govindaraju**. (2014) "Effect of the Single and Double Chain Surfactant-Cobalt (III) Complexes on their Hydrophobicity, Micelle Formation, Interaction with Serum Albumins and Antibacterial activities". *Inorganic Chemistry Frontiers*, Vol. 1, pp. 393-404.
- 20) Macklin Rani L., Jeevanram R. K., Kannan V., **Govindaraju M.** (2014) "Estimation of Polonium -210 activity in marine and terrestrial samples and computation of ingestion dose to the public in and around Kanyakumari Coast, India". *Journal of Radiation Research and Applied Sciences*. Vol. 7(2) 336-341.
- 21) [M. Govarthanan](#), [K. Selvam](#), [S. Kamala-Kannan](#), [M. Govindaraju](#), [B. Senthilkumar](#), [T. Selvankumar](#). (2014) "Process optimization of cellulase production from alkali-treated coffee pulp and pineapple waste using *Acinetobacter* sp. TSK-MASC". *RSC Advances*, vol.4, 13045-13051).
- 22) M. Selvaraj, Rajiv Das Kangabam, P. Kumar, P. Suganthi, **M. Govindaraju**. (2013) "Assessment of forest cover dynamics through Remote Sensing and GIS for Pachamalai Reserve Forest of Tamil Nadu, India". *International Journal of Remote Sensing and Geoscience*, Vol. 2(5), 46-52.
- 23) P. Suganthi, R.S. Ganeshkumar, **M. Govindaraju**, M. Selvaraj, P. Kumar. (2013) "Estimation of Biochemical characters of plants in response to vehicular air pollution stress in Tiruchirappalli city corporation, Tamil Nadu, India". *International Journal of Recent Scientific Research*, Vol.4(8), 1282-1289.

- 24) B. Sarojini Devi, D. Vijayasekaran, Rajiv Das Kangabam, M. Selvaraj, **M. Govindaraju**. (2013) "Dynamics of Land-use and Land-Cover changes on Wetlands of Ramanathapuram district, Tamil Nadu – Remote sensing and GIS perspective" *International Journal of Current Research*, Vol. 5 (09), 2515-2519.
- 25) M. Selvaraj, Rajiv Das Kangabam, P. Kumar, **M. Govindaraju**. (2013) "Assessment of Land Use / Land Cover Class Conversions within the Forest Ecosystem through Remote Sensing and GIS Technology" *International Journal of Recent Scientific Research*, Vol. 4(5), 560-562.
- 26) S. Senthamilselvi, P. Kumar, A. Lakshmi Prabha, **M. Govindaraju** (2013) "Green simplistic biosynthesis of anti-bacterial silver nanoparticles using *Annona squamosa* leaf extract" *Nano Biomedicine and Engineering*, Vol. 5(2), 102-106.
- 27) Rajiv D. Kangabam, K. Medhabati and **M. Govindaraju**. (2013) "Importance of Geographical Indication for Conservation of Traditional Products" *NeBIO*, Vol 4(2), 55-58.
- 28) P. Kumar, S. Senthamilselvi, **M. Govindaraju**. (2013) "Seaweed-mediated biosynthesis of silver nanoparticles using *Gracilaria corticata* for its antifungal activity against *Candida* spp". *Applied nanoscience*, Vol. 3, 495-500.
- 29) P. Kumar, **M. Govindaraju**, S. Senthamilselvi, K. Premkumar. (2013) "Photocatalytic degradation of methyl orange dye using silver (Ag) nanoparticles synthesized from *Ulva lactuca*". *Colloids and Surfaces B: Biointerfaces*, Vol. 103,658-661.
- 30) L. Macklin Rani, M.R. Muthukumaran, **M. Govindaraju**. (2013) "Isolation and Functional Characterization of Lead-Resistant Enterobacter Aerogenes (BDUP1) from paint industry effluent contaminated site". *Fresenius Environmental Bulletin*, Vol. 22 (2), 336-341.
- 31) P. Kumar, S. Senthamilselvi, **M. Govindaraju**. (2013) "GC-MS Profiling and Antibacterial activity of *Sargassum tenerrimum*". *Journal of Pharmacy Research*, Vol. 6(1), 88-92.
- 32) P. Kumar, S. Senthamilselvi, **M. Govindaraju**. (2012) "In vitro anti-biofilm and anti-bacterial activity of *Juncella juncea* for its biomedical application" *Asian Pacific Journal of Tropical Biomedicine*, Vol. 2(12), 930-935.
- 33) P. Kumar, S. Senthamilselvi, A. Lakshmi Prabha, M. Selvaraj, L. Macklin Rani, P. Suganthi, B. Sarojini Devi, **M. Govindaraju**. (2012) "Anti-bacterial activity and In-vitro cytotoxicity assay against brine shrimp using silver nanoparticles synthesized from *Sargassum ilicifolium*". *Digest Journal of Nanobiomaterials and Biostructures*, Vol. 7(4), 1447-1455.
- 34) P. Kumar, S. Senthamilselvi, A. Lakshmi Prabha, K. Prem Kumar, V.R. Muthukumaran, P. Visvanathan, R.S. Ganeshkumar and **M. Govindaraju**. (2012) "Efficacy of Biosynthesized silver nanoparticles from *Acanthophora spicifera* to encumber biofilm formation". *Digest Journal of Nanomaterials and Biostructures*, Vol. 7(2), 511-522.

- 35) P. Kumar, S. Senthamilselvi, A. Lakshmi Prabha, K. Prem Kumar, R. S. Ganeshkumar and **M. Govindaraju**. (2012) "Synthesis of silver nanoparticles from *Sargassum tenerrimum* and screening phytochemicals for its antibacterial activity". *Nano Biomedicine and Engineering*, Vol. 4(1),12–16.
- 36) **M. Govindaraju**, R. S. Ganeshkumar, V. R. Muthukumaran, P. Viswanathan. (2012) "Identification and evaluation of air pollution tolerant plants around lignite based thermal power station for greenbelt development". *Environmental Science and Pollution Research*, Vol. 19, 1210-1223.