

## GRG TRUST RESEARCH PROJECT

### Microplastic and Heavy Metal pollution in the Wetlands of Coimbatore

PI: Dr. Sarah Jaison

Co PI: Nil

Amount Sanctioned: Rs. 200000

Year: 2018-2020

#### Project outcomes:

Microplastics (MPs) and heavy metals (HMs) are the major contaminants leading to the destruction of wetlands in Coimbatore. Therefore, the work aimed to examine the abundance of microplastics and heavy metal load of in the wetlands Sulur, Singanallur, Sengulam and Sundakkamuthur.

- Among the HMs analyzed the concentration of Pb was highest, whereas Ni and Cu was found to be the lowest in both contaminated and non-contaminated hydric soils of the study sites.
- Significant relationship was observed among the heavy metal concentration of Cd, Cr, Pb, Cu, Ni and Zn in both the contaminated and non-contaminated hydric soils.
- Microplastics were most abundant in Sundakkamuthur followed by Singanallur and Sulur.
- The MPs were least abundance at Sengulam.
- The size of MPs varied relatively from each other in all the four study sites.
- Fragment and pellet shaped MPs were dominant in the present study.
- No significant relationship occurred between microplastics and heavy metals in the study sites.

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- ❖ Conference/ Seminar/ Workshop:1
  - ❖ Any other achievements: TNSCST Students Project 2018
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