

**Project title:** Plastic from the river Rhine: what does it weigh?

**Level:** Bachelor or Master

**Start:** Anytime

**Project duration:** 12 weeks to 6 months

**Project form:** Laboratory work, Field surveys, Literature review, Data analysis

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**Description of the project:**

Rivers are major transport corridors for plastics into the marine systems. Though, there is increasing evidence that shows that rivers can also act as (temporary) sinks of plastics. Vital for understanding the role that rivers play in plastic movement is monitoring. Hence in recent years riverine monitoring of plastic (macro- meso- and microplastic) has increased. The technique used for monitoring often focusses on plastic items on the shore or floating items but information regarding plastics present in the water column are lacking.

Fortunately, for the last couple of years together with Rijkswaterstaat Oost-Nederland monitoring of macro- and mesoplastics present in the water column has been performed using a variety of techniques (e.g. using a stow net, larvae net). The used techniques do give insight in the concentration of plastics but so far no analyses have been performed of the actual weight of the plastic collected from the water column.

Therefore the goal of this project is to 1) weigh recently collected macro- and mesoplastics from the water column of the river Rhine, 2) participate during actual macro- and mesoplastic monitoring (if internship is started before april 2023) and 3) develop a method to calculate the total weight of plastics present in the water column of the river Rhine during low river discharges.