Current Project Overview

- Background: There is concern about the impact of microplastics (MicP) on organisms and ecosystems. There is a need for quantitative data that sheds light on hazards and risk as much as possible.
- Objective: After collecting scientific knowledge on the MicP exposure and environmental fate, hazards to aquatic organisms, among others, the project aims to establish a preliminary risk assessment method to quantitatively assess the impact on organisms and ecosystems and thereby estimate the risk so as to inform government decision-making in the future.
  (Although there are concerns regarding the impact of MicP particles and chemicals on organisms and ecosystems, this study focused on the effects of particles on aquatic organisms.*

Trial risk assessment

[Risk Assessment Committee]

- Trial and study of the risk assessment methodology for MicP using exposure and hazard results

Cross-sectional study for trial risk assessment

[Expanded Subcommittee (2024) / Joint Subcommittee (2023)]

- Improvement of the risk assessment methodology for MicP using exposure and hazard results
- Summary of the respective tasks towards improving exposure and hazards

Exposure | Physicochemical properties

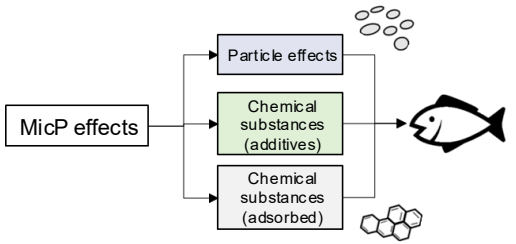
[Exposure Subcommittee]

- Summary of the estimation method for fine MicP (particle size <330 μm) and compilation of issues
- Study towards the refinement of conversion with parameters comparable to hazards (particle number, mass, volume, surface area, etc.) and compilation of issues

Hazards

[Hazard Assessment Subcommittee]

- Examination of key considerations for literature review and compilation of issues pertaining to review
- Examination of effect concentrations of MicP in aquatic organisms [fish, crustacea, other (bivalves)]



*Primarily anticipate the impact of particles on aquatic organisms (e.g., fish)