

**Title:** Science communication in environmental governance: a new paradigm for addressing plastic reduction

**Name of supervisor:** Prof. Małgorzata Grodzińska-Jurczak (Environmental Education Research Team, Institute of Environmental Sciences, Jagiellonian University, Kraków, Poland)

**Background information:** Despite the fact that single-use plastic (SUP) products are by far the most harmful to the natural environment and public health, its' generation has been constantly growing. Previous initiatives and policies have failed to halt the plastic production increase and there is a need for new environmental governance instruments to address this problem. Consequently, the EU Parliament has undertaken the Plastics Strategy aiming at SUP items prevention and reduction over the European Member States.

Recently, science communication (SC) paradigm has been promoted as a way to improve public understanding, awareness and action as well as decision making regarding harmful materials, especially maintaining reduction of SUP. Despite growing interest SC tools, SC remains relatively poorly integrated in education channels and environmental decision-making. A knowledge gap persists in how to improve implementation and foster sharing responsibility for the environment by means of science communication.

**The main questions to be addressed in the project:** This PhD research project will investigate public opinion and attitudes towards the harm of plastic to the environment and health, using concept of science communication, including general public and various stakeholders (plastic producers, users, recyclers, utilizers, etc.) at local and regional governance levels in Poland. Particularly, the concept's integration into existing education, communication and policies, public, stakeholders' understanding and acceptance of it, good practices and challenges of SC implementation, as well as the potential effect of SC on public awareness, attitudes and behavior towards plastic as a harm to the environment will be examined. Project objectives can be altered/broadened towards comparative study (Poland & a home country of a potential candidate) as well as public and stakeholders understanding of a need of plastic governance improvement (e.g. circular economy).

**Information on the methods/description of work:** The project will utilize a mixed-mode approach with qualitative (desk research, interviews) and quantitative (surveys, omni-calculator, statistical analysis) methods. Specifically innovative is omnicalculator, a number based tool, aiming to translate scientific research (especially environmental issues) into simpler concepts that everyone can understand and relate to. The outputs of the PhD project will be used to comparisons with equivalent research in other countries to validate their relevance and strengthen their practical universality.

**Special requirements from the student:** A potential candidate should possess knowledge and experience in designing and conducting interdisciplinary research and working in interdisciplinary research teams. Written and oral skills in English and Polish language are required. A job experience in practical nature conservation (also non-research sector) would be of advantage.

**How to apply:** A direct contact with supervisor recommended ([m.grodzinska-jurczak@uj.edu.pl](mailto:m.grodzinska-jurczak@uj.edu.pl) or Skype: margaretgrodzinskajurczak). Registration under: [https://erk.uj.edu.pl/studia/karta/studia\\_id/5055/tryb\\_ubiegania/s/nr\\_naboru/1](https://erk.uj.edu.pl/studia/karta/studia_id/5055/tryb_ubiegania/s/nr_naboru/1)