

Unique opportunities at the interface of art and science: how art-science partnerships can bring geochemistry to broader communities

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The collaboration between artists and earth scientists opens up opportunities to communicate scientific research to the public, innovate novel solutions to environmental problems, and build new networks of inquiry around environmental issues. In recent years, the power of such partnerships has been increasingly recognized in various venues: from classrooms to professional conferences to peer-reviewed publications [1]. Here, we engage with the specific thesis that, through the mechanisms discussed above, art-science collaborations can illuminate ways to make geochemistry (and related earth science fields) more accessible to and inclusive of broad communities.

In support of this thesis, this presentation focuses on local examples from the School of the Art Institute of Chicago, where undergraduate art students have experimented with merging aesthetics and scientific design as an approach to broaden public access to science. One example is “Gregory the Goose” (or just “Gregory”), a goose-shaped sculptural object and microplastics collector for the Chicago River. As a “friendly” and low-cost scientific device that melds into the ecosystem, Gregory tackles the challenges of plastic debris in water, while making the science of plastics pollution more visible and accessible. The story of Gregory as art-science collaboration has served as a launching point for broader communities around the Chicago River to participate in science as a creative endeavor. Through workshops with local non-profit organizations, including K-12 and youth refugee groups, sharing the concept behind Gregory has encouraged a variety of Chicago community members to build their own devices for exploring and stewarding the water around them.

Accessibility challenges in science have persisted across geochemistry and related fields for decades, and are ultimately entangled with our ability to address climate change and pollution in our communities. We hope that this presentation exemplifies how the partnership between artists and scientists can contribute unique solutions to this problem.

[1] Blaeser, K., Owens, D., Rosengard, S.Z., Semmens, K. and Tosca, M.: Why – and how to – engage artists in science, Eos, 2023.