

European Geosciences Union General Assembly 2016, Vienna, April 2016

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In April 2016 I attended the annual European Geosciences Union (EGU) General Assembly in Vienna, Austria, where I presented recent work in the “Ocean biogeochemistry: novel approaches and synthesis” session. The Early Career Scientist Travel Award that was provided for by The Aerosol Society was vital in enabling me to attend the conference and present this new and exciting research and has allowed me to continue developing my academic career.

The annual EGU General Assembly is the most prominent European geosciences meeting with over 13,000 scientists in attendance, and therefore an important event for presenting and discussing current research in atmospheric sciences. The conference also stimulates new and collaborative research as well as pushing and challenging the boundaries on the state-of-the-art. The large conferences, such as EGU, allow a greater opportunity for inter-disciplinary sessions and workshops to be arranged; this greatly interested me as my research bridges both ocean biogeochemistry and global aerosol modelling. My talk, entitled “Atmospheric processing of mineral dust as a source of bioavailable phosphorus to the open oceans” was presented in the “Ocean biogeochemistry: novel approaches and synthesis” session convened in order to bridge ocean biogeochemistry with a myriad of disciplines on scales ranging from the micro to the global.

My research was presented alongside the experimental findings of Dr Anthony Stockdale, who performed experiments designed to understand the process by which mineral-bound phosphorus is transformed into a form available for primary productivity in the surface water of the oceans. I helped towards building up a conceptual model of the process that I then incorporated into a global aerosol microphysics model (named GLOMAP). This was used to understand the efficacy of the process on a global scale, and to quantify, for the first time, the role of mineral dust transportation as a source of bioavailable phosphorus to the open oceans. The presentation stimulated important discussions with scientists from a number of institutes and has resulted in additions and improvements to the research, as well as the possibility for future collaborative research.

Due to constraints on the project I was unable to fund my attendance at the conference, therefore I am extremely grateful to The Aerosol Society for awarding me the Early Career Scientist Travel Award. The award has provided me with a valuable and timely opportunity to present my research at a prestigious conference and has helped me to continue building the collaborative networks and experience that will be required to continue developing my academic career.

Again, I thank The Aerosol Society for their assistance, and for providing so much support for the advancement of research in our community and especially with regards to supporting early career scientists.

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