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To  
*The US GEOTRACES office*  
*Scientific Steering Committee*

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Dear Scientific Steering Committee

I am writing to kindly express my interest in attending the upcoming meeting for the GP17 transect. I am planning to participate in both legs of this survey, most likely in collaboration with one or two of my colleagues, by determining the concentrations and physical speciation of dissolved iron (Fe), copper (Cu), zinc (Zn), manganese (Mn), and cadmium (Cd). These metals are known as the first-order objectives of the international GEOTRACES program ([www.geotraces.org](http://www.geotraces.org)), since they are either important nutrients (e.g., Fe is widely known to limit productivity in the present-day Southern Ocean, one of the target regions to be covered by this survey) or tracers that can be linked to biogeochemical processes in the present and past states of the ocean (e.g., Cd). We are also planning to measure dissolved titanium (Ti) concentration. I and my colleagues have shown that dissolved Ti can be linked to dust deposition to the surface ocean and will, hence, allow us to confirm whether dust deposition is insignificant and, consequently, a driver of Fe limitation in the planned regions. We have already developed many data-ready pipelines to exploit observations and this new iteration of data will allow us to test and refine our current models. Moreover, we have found that colloidal data (i.e., physical speciation) can be of great help in modeling dissolved Fe data in the ocean. Therefore, determining physical speciation of Fe and, possibly, other metals will render a major objective of our upcoming proposal on this transect.

Sincerely

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