

Date: 23 April 2021

Letter of Collaboration

Dear Dr. Falk,

We are considering your proposed project “Ozone Damage Interference on Nutrient Allocation (ODINA)” an innovative and important research effort and are excited to collaborate with you to achieve the project goals. Ozone dry deposition is a crucial mechanism for ozone loss and thus of ultimate importance for projections of ambient air quality and public health. Furthermore, ozone uptake reduces stomatal conductance and photosynthesis and thus deteriorates plant growth affecting the carbon budget. Therefore, representing the full width of effects of ozone dry deposition in earth-system models will improve the representation of land-atmosphere interactions including feedbacks, and reduce key uncertainties in model projections.

We are pleased that you have chosen to further delve into the effects of ozone dry deposition on atmospheric composition and the biosphere for your Lise-Meitner Fellowship at the University of Natural Resources and Life Sciences, Vienna (BOKU). In particular, since a prime target of the ODINA project is to advance the process-level representation of ozone damage on vegetation by introducing an online-coupled biosphere feedback on the dry deposition scheme and thus improving both carbon sequestration and atmospheric composition in the Norwegian Earth System Model (NorESM). Your research will benefit the representation of high latitude ecosystems and their climate interactions within the NorESM. Therefore, the ODINA project is well aligned with activities and goals of the internationally recognized EMERALD project led by the section for Meteorology and Oceanography (MetOs), University of Oslo (UiO).

We look forward to continue our collaboration with you and cooperate with the your colleagues at BOKU on the planned model extensions. MetOs will provide a platform for scientific exchange and continued technical support through the CLM Norway team. We hope your project is selected for funding by the Austrian Science Fund (FWF), so we may continue our well-established research collaboration.

Sincerely yours



Terje Berntsen
Professor, Head of Section for Meteorology and Oceanography



Postal address: PO Box 1047 Blindern
0316 Oslo, Norway
E-mail: geosciences@geo.uio.no
Web: www.mn.uio.no/geo/