

Max-Planck-Institut für Chemie

Otto-Hahn-Institut



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Dr. Peter Bauer
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Prof. Dr. Dr. h.c. J. Lelieveld
Director

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Re: Endorsement ExtremeEarth
8 February 2018

Dear Dr. Bauer,

On behalf of the Max Planck Institute for Chemistry, I would like to express strong support for the ExtremeEarth initiative. Humankind has induced a new geological epoch, the Anthropocene, with significant impacts on the Earth's geology and environment, including climate change. The human-induced environmental changes are unprecedented in the history of our planet, and it is yet difficult to foresee to what extent the frequency and occurrence of extremes may develop, and how this may affect society. It is critical that Earth scientists in Europe team up under ExtremeEarth to monitor the state of the environment and develop predictive capability to advance societal resilience.

Given the opportunity, our institute will be glad to contribute relevant environmental datasets and provide expertise on Earth system modelling. The latter focuses on atmospheric composition and chemistry, exchange processes between the atmosphere and marine and terrestrial ecosystems, and environmental impacts of global change, including public health. The latter activity can provide support for the management of health risks from atmospheric pollution, the spreading of vector borne diseases, and of heat extremes due to climate change, being areas where we have developed new modelling approaches. An integrative strategy of assessing global environmental risks to humanity will be critical.

We strongly support the ExtremeEarth proposal towards a European Commission Future and Emerging Technology Flagship, to help predict and monitor environmental extremes and their impacts on society.

With best regards,

Jos Lelieveld

