

Dear Rector of Utrecht University,
Dear President, Dear Vice-chair,
Dear Dean of the Faculty of Geosciences, Professor Wilco Hazelegger,
Dear Honorary supervisors, Professor Marc Bierkens and Professor Thomas Röckmann,
Dear Nominators,
Dear Members of Utrecht University,
Dear Colleagues,

I am very honored to receive this recognition from Utrecht University, a world-class university with a vibrant history, and internationally leading researchers in the fields of climate and hydrological sciences

This is an honor I share with my colleagues who contributed to the latest report of the Intergovernmental Panel on Climate Change, in particular the authors of chapter 11 of working group 1 dedicated to changes in weather and climate extremes

I would also like to share this honor with my group members from the last 15 years at ETH Zurich, as I was extremely fortunate to work with many talented young researchers, many of whom are now leading research groups of their own, also in the Netherlands

Finally, I would also like to dedicate this honor to my family, and in particular to my husband and children for their love and support, and for giving me a sense of purpose.

The theme of today's Dies Academicus speaks directly to my heart: "The climate crisis – Between reflection and action"

We are indeed in a climate crisis, and we should reflect about it – but we should also act about it

Indeed, why would scientists provide the best possible information to society if we are not ready to act on it?

The latest report of the Intergovernmental Panel on Climate Change provides all the necessary facts:

- We know that the global mean temperature we have reached now is without precedent in more than 100'000 years
- We know that our society is responsible for these changes for the most part due to the burning of fossil fuels in the form of petrol, gas and coal
- We also know that there is no going back: The CO₂ emitted through the burning of petrol, gas and coal stays in the atmosphere several hundreds to thousands of years
- We know that any additional burning of fossil fuel, be it through the use of a petrol car, a plane, or heating with gas or petrol, leads to more global warming
- We know that with increasing global warming, the intensity and frequency of many extreme events increase across the world
- We know that in the Netherlands, as well as in the rest of Central and Western Europe, we see an increase in heatwaves, heavy precipitation events and droughts
- We know that the heavy rainfall that led to flooding in 2021 in Germany, and part of Belgium and the Netherlands, as well as the extended summer drought in 2022 across all of Europe were both made more probable due to human-induced climate change
- We know that the extreme events we are seeing right now are much less impactful than those that we will experience in 10 years from now
- We know that we could stop this ever-increasing destabilization of the climate system and the resulting increase in extreme events and associated impacts

- We know that for this, we need to halve CO2 emissions until 2030 and bring them to zero at the latest in 2050
- And we know that this means that we, the adults in the room, need to do something about this ... if we want to be able to look ourselves in the mirror at the end of our lives

So, we should reflect on this knowledge

- And we should act
- Act to make sure that science facts are known
- Act to make universities examples that the rest of society can follow
- Act to make sure that we don't leave the young generations alone with problems we contributed to creating

Greta Thunberg famously said: "No one is too small to make a difference", this is true for each one of us – Every scientist, every professor, every student, and every citizen can make a difference –

Because:

every ton of CO2 matters

every bit of warming matters

every year matters

and

every choice matters

Sincere thanks for this great honor and the attention.