Ph.D. Position in Ethics of Technology, TU Delft
As part of the Ethics of Socially Disruptive Technologies Research Program

PhD Project 2: Governance of geoengineering in the face of normative uncertainties

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<tr>
<th>Faculty/department</th>
<th>Technology, Policy and Management</th>
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<tr>
<td>Level</td>
<td>MA Degree</td>
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<tr>
<td>Maximum employment</td>
<td>38 hours per week (1 FTE)</td>
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<tr>
<td>Duration of contract</td>
<td>Four Years (Fixed Term)</td>
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<tr>
<td>Salary scale</td>
<td>2325 - 2972 euros monthly (full-time basis)</td>
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Intended starting date: September 1st 2020 (if desired, an earlier starting date can be considered)

Technology, Policy and Management
The Faculty of Technology, Policy and Management contributes to sustainable solutions for technical challenges in society by combining the insights from engineering with the humanities and the social sciences.

The Department of Values, Technology and Innovation (VTI) focuses on the value dimension of comprehensive engineering, the overarching research theme of the Faculty of Technology, Policy and Management (TPM). It uniquely comprises philosophers, economists and risk scholars. It studies how to develop and diffuse responsible technological innovations that reflect deeply held social and moral values. The department is one of the largest groups in the world studying value aspects, economics and risks for a wide range of sociotechnical systems. The department plays a leading role nationally and internationally in research in responsible innovation and design for values.

The Ethics and Philosophy of Technology section is one of three sections within the VTI Department. The section plays a central role worldwide in research on ethics and philosophy of technology. The section participates in the 4TU.Centre for Ethics and Technology, a world-leading centre in the ethics of technology. The research of the section covers a broad spectrum, ranging from applied research in collaboration with engineering scholars, experimental and empirical ethics in collaboration with social scientists, and foundational research in meta-ethics, risk theory, methodology, ontology and philosophy of science, technology and design. The ethics research program focuses specifically on design for values, risk ethics, and responsible innovation.

The Ethics and Philosophy of Technology section provides for service teaching at all engineering programs of TU Delft, primarily in ethics but also in philosophy of engineering methodology and philosophy of science. For more information on our unique teaching approach, see: https://www.tudelft.nl/ethics/

Job description
The Ethics and Philosophy of Technology section is looking for a Ph.D. candidate who will be working on a project on ‘Governance of geoengineering in the face of normative uncertainties’ (see project description below). The project is part of the Ethics of Socially Disruptive Technologies Gravitation program, a new ten year long international research program of seven universities in the Netherlands that has
started in January 2020. This program has a combined budget of € 27 million, and is funded by the Dutch Research Council NWO, in the Gravitation funding scheme for excellent research, and by matching funds from the participating institutions. The duration is from January 2020 to December 2029. The program has the aim of achieving breakthrough research in at the intersection of ethics, philosophy, technology / engineering and social sciences, and to position its consortium at the top of its field internationally. A key objective is to investigate how new technologies challenge moral values and ontological concepts (like “nature”, “human being” and “community”), and how these challenges necessitate a revision of these concepts. The program includes four research lines, “Nature, life and human intervention”, “The future of a free and fair society”, “The human condition” and “Synthesis: Ethics of Technology, Practical Philosophy, and Modern Technology-Driven Societies” (candidates selected for an interview can request more information on the program and its four research lines). See for more information for the Ethics of Socially Disruptive Technologies project: www.esdt.nl.

The project on ‘Governance of Geoengineering in the face of normative uncertainties’ will be embedded in the “Nature, life and human intervention” line but is also linked with the other research lines. Please note that our partner universities will be advertising other Ph.D. positions in this program and that you can apply for several at once.

Project Description
Geo-engineering, more specifically Solar Radiation Management (SRM), is the deliberate manipulation of sunlight that could alleviate some of climate change concerns. This gives rise to profound and irreversible risks and engenders many uncertainties, including uncertainties in how to deal with normative quandaries when there are different partially morally defensible but incompatible options. Current concepts of risk and risk governance are insufficient in capturing the necessary ethical intricacy. We need a richer account to address the subtle yet extensive normative issues associated with risk decisions regarding SRM.

The objective of the PhD project is to develop a fine-grained conceptualization of normative uncertainties, while identifying and developing risk governance approaches that are most suitable for dealing with these uncertainties.

The PhD candidate will look at normative uncertainties as having an evolutionary (regarding the evolution of technology and moral evolutions of societies in the future), theoretical (pertaining to different ethical theories), conceptual (regarding normative disagreement about what a concept entails or its moral relevance) or epistemic character. This initial categorization will need to be elaborated, systematized and qualified, facilitating the development of risk governance methods that are rooted in ethical theories.

The PhD candidate will focus on (philosophically) identifying the normative uncertainties using the literature on the subject. They will also conduct interview with key stakeholders, including scientists involved in these experiments.

Requirements
We are looking for a candidate with proven affinity with discussions on climate ethics. Given the philosophy-heavy emphasis of the project our preference goes
to a candidate with an MA in applied philosophy. We will, however, consider candidates with a different MA-degree relevant to the topic (e.g. sociology, STS as well as relevant engineering field) as long as the candidate also has a proven background in philosophy (for instance in the form of a BA degree). Additional requirements are:

- Strong English writing skills
- Flexibility and readiness to work in teams
- Openness to spend a semester abroad (a generous budget for conference travel and research abroad is available for this position).

We aim to increase the diversity in our Section and field, so we especially encourage candidates from underrepresented groups to apply.

**Conditions of employment**

TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. An International Children’s Centre offers childcare and an international primary school. Dual Career Services offers support to accompanying partners. Salary and benefits are in accordance with the Collective Labor Agreement for Dutch Universities.

As a PhD candidate you will be enrolled in the TU Delft Graduate School. TU Delft Graduate School provides an inspiring research environment; an excellent team of supervisors, academic staff and a mentor; and a Doctoral Education Programme aimed at developing your transferable, discipline-related and research skills. Please visit www.tudelft.nl/phd for more information.

**Information and application**

For more information about this position, please contact Dr. ir. Behnam Taebi (B.Taebi@tudelft.nl).

To apply, please e-mail a letter of application detailing how your prior (research) experience aligns with the project, a curriculum vitae, and contact information of three references and an abstract of your MA-thesis by March 31st 2020 to ms. Anita van Vianen (HR), Vacature-TBM@tudelft.nl. When applying for this position, please refer to vacancy number 20.013. Interviews with selected candidates will take place early or mid-April.