Written Statement of Christine McEntee Executive Director and Chief Executive Officer American Geophysical Union Before the Subcommittee on Research and Technology Committee on Science, Space, and Technology U.S. House of Representatives 27 February 2018

Chairwoman Comstock, Ranking Member Lipinski, Chairman Smith, Ranking Member Johnson and members of the subcommittee, thank you for inviting me to testify on behalf of the American Geophysical Union to talk about our efforts to address sexual harassment and scientific misconduct. My name is Christine McEntee, and I am the Executive Director and CEO of the American Geophysical Union (AGU). AGU is an international scientific society with roughly 60,000 members in 137 countries. Our mission is to promote discovery in Earth and space science for the benefit of humanity.

Harassment in the sciences, and in fact, in any industry, is not a new issue. But, it is an issue that has become much more prominent as more victims have taken the brave step of coming forward. Research confirms the extent of harassment in academic environments and especially in disciplines with low diversity, where the lack of established support networks can lead to feelings of vulnerability and professional insecurity. Another problem identified by research on harassment is the scarcity of well-defined resources for reporting and responding to inappropriate behavior, including the perceived risk that the victims' careers may be jeopardized if they speak out (Clancy, et. Al, 2014).

The Earth and space science community has a lower representation of women compared to both the general U.S. population and many other science, technology, engineering and mathematics disciplines. While the demographics of AGU's members and the Earth and space science community have evolved over the years, we know more work is required to ensure diverse perspectives are represented in our sciences. In 1975, AGU's membership comprised of just 15% women; by 2016 that had grown to 27%, with women accounting for nearly 50% of our members under the age of 30.

Additional considerations specific to the Earth and space sciences are that careers typically involve remote work experiences in the field or on ships where accepted work norms may be hard to enforce. When coupled with a male-dominated environment and power structure, these isolated environments can amplify the issue and make women more vulnerable to harassment. Collectively, these factors demonstrate an urgent need for scientific institutions to address their role and obligations regarding harassment and workplace climate.

AGU leadership affirms the international principle that the free, open, and responsible practice of science is fundamental to scientific advancement and human and environmental wellbeing. As a member of the scientific community and enterprise, AGU also affirms its desire to foster and support a safe and professional environment in order to learn, conduct research, and communicate science with integrity, respect, fairness, trustworthiness, and transparency at all organizational levels and in all scientific endeavors. This includes all professional interactions within the scientific community and with members of the public. We recognize that failure to uphold these principles harms our profession, our scientific credibility, and the well-being of individuals and the broader community.

Based on the above, and after in-depth discussion on the topic of harassment impacts in our scientific community with AGU Council, AGU Board, and an AGU Member Town Hall Meeting, in June 2016, AGU leadership, under the direction of our Past President Margaret Leinen, convened a task force to review the AGU ethics policy and practices. The task force was charged specifically with addressing code of conduct expectations related to harassment, bullying, and other professional misconduct impacting our scientific work-climate. This policy update was to set clear expectations for the behavior of AGU members and those participating in AGU-sponsored activities.

In September 2017, AGU formally adopted a revised ethics policy with new language that defines harassment, bullying, and discrimination as scientific misconduct. The update expands the ethics policy's coverage to include code-of-conduct implications for all AGU programs, including Honors and Awards as well as Governance. In addition, it identifies conditions under which the policy's provisions may apply to actions that occur outside of AGU programs. It also outlines clear procedures for reporting and follow-up on ethics issues. This updated policy was a significant advancement from the previous policy for two reasons. First, by defining scientific misconduct more broadly to include professional misconduct beyond the typical research misconduct definitions of plagiarism and falsification of data, we help establish norms of what is acceptable scientific behavior. Secondly, this change acknowledges the severe impact that sexual harassment has in our scientific workplace, and we can now address it with professional sanctions – such as in our professional honors and awards programs.

We believe we are on firm ground in defining the behaviors in this way because of the damage they inflict on the entire scientific enterprise. Our members vocalized their support for stronger policies, and research has shown the profound destructive effects of harassment not only on the people directly involved, but also on the research, institutions, students, faculty and colleagues surrounding the misconduct.

I am proud of the steps that AGU, our leadership, staff, and members are taking to address this important and harmful issue. Our new policy aims to set new and strong expectations for the culture we will accept, but it is only one step towards desperately needed culture change.

AGU understands that no one organization can do it alone. We commend the other scientific societies, such as the American Astronomical Society and American Geosciences Institute, who have instituted similarly strong policies on harassment, and the other members of this panel for their work. In particular, we believe the new NSF policy will provide a strong incentive for institutions to take sexual harassment seriously.

However, we know ultimately, we will need the help of the entire scientific community to work together to protect scientists from unwanted advances and intimidation and ensure a harassment-free environment for the future. This is why AGU is establishing an ethics resource center by collaborating and partnering with other institutions on programs which will include developing new and leveraging existing resources, and providing tools, trainings and research to help address ethics and harassment in science.

We very much appreciate the Committee holding this hearing to understand and assess some of the important steps we can collectively take. Here are some of the actions that we believe will make a difference:

 Strong policies against sexual harassment with clear and transparent reporting and follow-up procedures with consequences can play a large role in changing the culture around this issue. It is important to also provide and support an environment where individuals can report and speak out against harassment without fear of retribution. 2. Training, education and building awareness are essential to combating this issue.

However, training that is simply in place for legal compliance reasons is known to be insufficient, and, in some cases, may even be counter-productive. AGU has sponsored bystander intervention training over the past one year with very positive feedback from participants.

- Consideration should also be given to positive approaches for supporting the necessary culture change – such as awards or certifications for those departments and institutions that publicly measure and track their progress towards positive work-climate and gender equity issues.
- 4. Lastly, legislation can be a powerful incentive to ensure that organizations take sexual harassment seriously and that all of us are moving forward to provide a harassment-free environment. Any legislation that is proposed should include not only robust reporting requirements and clear, strict consequences for harassers, but should also incorporate training, education, and the positive approaches I mentioned earlier. By using a combination of both positive and punitive measures, we can not only hold accountable those who are engaging in this bad behavior, but also encourage a safer, more inclusive environment for the next generation of scientists.

Again, I would like to thank the committee for convening this hearing and bringing attention to these important issues, and I appreciate the opportunity to testify here today. I am happy to answer any questions you may have and look forward to continuing to work with the committee and others to put an end to sexual harassment.