Prof. Bassam Shakhashiri's Remarks March for Science – Madison Saturday, May 5, 2018 Library Mall UW-Madison Campus

I want to start by thanking all the speakers ...and all of you ... for your enlightenment ad for your commitment.

I want to especially thank Natalie Asmus for her efforts in pulling off all of today's events. Please give her a big, big hand for what she's done. It's amazing. A graduating senior from Middleton High School doing all this. Congratulations Natalie. And you know what? This is only the beginning of what you're going to be doing.

I want to call your attention to three stations, the Nature Conservancy, Geology Museum, and Science is Fun, where you can do hands-on, minds-on activities, right after I finish, which will be very soon.

Today we gather in Madison to support, to defend, and to celebrate science.

We march and assemble peacefully... and we affirm our commitment both to advocate for the advancement of science through free and open exploration... AND to assure serving society through innovation and public engagement.

We march as scientists, and as citizens—to express our unwavering beliefs in the democratic institutions and the noble principles upon which our country must continue to function. Freedom, equality, civility, welcoming borders, respect, dignity, pursuit of happiness, and treating each other and everyone else well.

This celebration of science is an event to inspire and motivate. It is part of a process...a process in which each one of us commits to carry forward doing our research with integrity and engaging in respectful and dignified conversations about science and its role in society.

Science and society have a social contract that enables great intellectual achievements but comes with mutual expectations of benefiting the human condition and protecting our planet.

Today the BIG question for science, for society, for you and for me, the big question is: how to help sustain Earth and its people in the face of: population

growth, finite resources, malnutrition, spreading disease, deadly violence, war, climate change, and the

denial of basic human rights, especially the right to benefit from scientific and technological progress.

When I mention limited resources, I am not taking about the rare earths metals in our electronic devices. I am talking about WATER. Today around the globe there are 1.3 billion people who cannot do what I am about to do.

## [drinks water]

Take a drink of clean water. Access to water is a basic human right. We always think about human rights in the political sense. But I suggest, as I have already mentioned, that human rights include benefitting from advances in science and in technology.

Climate change. Climate change is happening. Since the industrial revolution much more carbon dioxide has been put into the atmosphere by us. Greenhouse gases are of great concern to all of us. Greenhouse gases are good for us. If it weren't for Greenhouse gases the temperature on the surface of the planet would be as cold as it is on Mar. But too much of anything is not good. And it's the carbon dioxide, the result of human activity, that's causing this increase. Global warming is unequivocal. And that's why we must commit to successfully mitigating the changes that are happening.

We must put our technical skills and our discoveries and technological advances to serve society everywhere...in Madison, across the country, and around the globe. We must celebrate the Wisconsin Idea. Not only by celebrating the advances that occurred in the last 100+ years. We must live the Wisconsin Idea in the 21<sup>st</sup> century! Meeting the needs of the 21<sup>st</sup> century.

In science we do what we do because it interests us, it satisfies our curiosity, as Dr. Heisler said. We enjoy it. However, we have a responsibility to humanity as a whole.

It is not enough for us to be just scientists; we have a responsibility as citizens as well.

As scientist-citizens we have an obligation to use our skills for the benefit of all. This requires us to have and adhere to high

values and virtues as scientists and citizens to advance and to serve society.

We must strive to achieve science literacy among the public at large.

Science literacy enables us and enables the public to make informed choices, to reject unproven conjecture and to avoid being bamboozled into making foolish decisions where matters of science and technology are concerned. Where all matters of life are concerned.

As we enter into conversations among ourselves and with the general public let us recognize that the nature of the discourse is

very different than what we say and do when we converse with science colleagues. We must develop and learn the importance of speaking with people and not speaking at them.

We must listen. Yes, we must listen carefully.

We must be purposeful.

And exactly what is our purpose?

I say the first purpose of any conversation is to have another conversation.

What is our big purpose? I say our big purpose is to influence public sentiment.

President Lincoln said it best. He said, and I quote:

"Public sentiment is everything. With public sentiment, nothing can fail; without it nothing can succeed."

And so I ask each one of you to join in engaging in purposeful conversations, not only with each other, but with others who are not here, to sustain the momentum of today's events.

I ask that you be responsible, I ask that you be thoughtful, I ask that you be effective. I ask you to make stops at the three stations that are here.

Thank you very much.