

TRANSLATION

Acceptance Speech
Professor George Whitesides

Co-Winner of the 2011
King Faisal International Prize for Science

33rd Awards Ceremony
Sunday 13 March 2011 (8.4.1432H)

HRH Prince Nayef Ibn Abd Al-Aziz Al-Saud
Second Deputy Premier and
Minister of Interior
Your Highnesses
Your Excellencies Distinguished Guests

On behalf of my colleagues and students, I accept the honor and recognition of this award. I am very pleased to join the most distinguished group that has been similarly recognized in the past, and delighted to be sharing it with a long-time (very long-time) friend and colleague, Dick Zare, with whom I took sophomore organic chemistry laboratory approximately 50 years ago.

I emphasize that I speak for a group of scientists and engineers, mostly graduate students and postdoctoral fellows. As a group—a research group; a group dedicated both to solving problems and to education—we straddle the lines between invention, science, and engineering, and between fundamental, basic, and applied science. Working across a range of different activities requires a range of human skills and inclinations, self-assembled somehow into effective working teams. I am proud to be a member of these teams; I emphasize that I work for them, not they for me.

We, collectively, take the view that the most important objective of science and technology is to solve problems in a way that improves the human

condition. Knowledge is good; knowledge applied successfully to the solution of problems is better, also more difficult to do.

There is certainly no shortage of problems to be solved now: improving health, increasing levels of education, global stewardship, raising the standard of living of the poor, providing jobs and food and water, managing megacities, reducing conflicts: all are important, and all will still be with us in some years when, everyone in this room has died (we hope peacefully, in old age).

There is also no shortage of problems in basic, curiosity-based inquiry: What is life? How did it originate? How does the mind think? These are three that are grand challenges to the human intellect.

And I would like to understand, more modestly, why water is what it is: that problem is hard enough.

The young people -- young scientists and engineers in the groups with which I work, but young people everywhere-- are the ones who will inherit these problems, and the new problems that will certainly emerge. Educating young people, helping them to understand the importance of what they are to do, and encouraging them to take on large tasks is as important as--and perhaps more important than-- the science and engineering that they do as students..

So, this award focuses on the science we have accomplished. We are honored, and most grateful. I remind us all that this science--all of which has been interesting, and some of which has been (or will become) practically important is a reflection of another product of the research group, which is the young scientists and engineers and doctors and lawyers (and even Washington bureaucrats) who have emerged from it, and who have imagined the solutions and done the work. I salute them, and I thank you.