Professor Sir John Ball 2018 King Faisal Prize Laureate Science-Chemistry Acceptance Speech

King Salman Bin Abdul Aziz, Your Highness, Excellencies, Dear Audience,

I am extremely honoured to receive the 2018 King Faisal Prize for Science. However, it is hard to recognize it as a prize for me alone, since if I have achieved anything in science, it is largely because of the inspiration and support of others throughout my career. In particular I have greatly benefitted, and continue to do so, from brilliant collaborators, students and postdocs. I could also have done little without the support of my wife Sedhar and family.

One of the most important things in science is how to choose good problems. This is particularly so in mathematics, where it is all too easy to think that because something is technically difficult it must be important. I have always found that nature chooses good problems for you, and especially enjoy interacting with those doing experiments. The rewards of learning the language of a different branch of science are well worth the effort, and the mathematical problems you find are every bit as fundamental as those arising from within mathematics itself, and often more interesting.

I am very conscious of having had the good fortune to be educated at top-class universities, and that the obstacles to a successful scientific career faced by those in less scientifically developed countries are immense. It is not just a lack of facilities, but of scientific leaders to learn from, and of a scientific tradition. Talented young people can nowadays find most scientific information on the internet, but to know how to use it, and what to work on, in general requires nurturing by someone who knows from personal experience how science is done. Those who have benefitted from a good scientific education have a responsibility to do what they can to help mentor talented young people wherever they may be. This brings its own rewards, and also contributes to understanding between nations in a world with too much conflict and distrust.

I once again express my deep appreciation for this award, which also gives me the opportunity to visit Saudi Arabia for the first time and learn more about its society and science.