

Acceptance Speech of

Prof. Sameer Zaki

Winner of the 2004

King Faisal International Prize for Science

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I accept the great honour that you have bestowed on me with joy, pride and satisfaction.

With joy, because it is always gratifying to be rewarded so magnificently for one's achievements.

With pride, because the source of the award is the great and rich Islamic and Arabic culture, a culture that has traditionally emphasized the importance of the search for knowledge through scholarship and learning. [In Arabic] As the Prophet, peace be upon Him, said: "seek for knowledge from the cradle to the grave"

With satisfaction, because of the very high esteem in which the Prize is held in the world of science, and because it is such a privilege to join the company of the many distinguished women and men who have been honoured by this Prize.

The primary motivation of scientists is to learn something new about nature and about our world, something that was not known before. Scientific work is often frustrating and time consuming; it requires great devotion and much sacrifice. But there are also rich rewards, because few experiences in life are more beautiful than the sudden insight and illumination that is reached after long periods of work and thinking.

The route to solving scientific problems has changed so much over the centuries. In older times, scientists relied mainly on thought and on

relatively simple equipment, often designed and built by themselves. Today, we must still rely primarily on thought, but our efforts have been tremendously aided by an increasingly more sophisticated technology that allows us to ask increasingly more complex questions. The addition and improvement of new and ever more sophisticated techniques has made of science a highly specialized area requiring years of training and dedication. But, whether based on new and sophisticated technologies, or on older and much simpler ones, all discoveries in science - be they in physics or mathematics, in chemistry or biology - have shown one common feature, that nature has devised essentially simple and beautiful solutions to apparently complex problems. Knowledge of the basic simplicity of these apparently complex phenomena is itself beautiful. But even more beautiful than what we have learned and therefore know is what we do not know, because it sets us in a search for knowledge, and the journey in acquiring that knowledge is often as exciting and perhaps even more so than the final discovery itself.

What we, collectively, have succeeded in learning through these years and centuries of endeavour is infinitesimally small compared to all that there that is left to learn and to know. And, faced with that vast unknown, it is only right that one should mingle the great sense of joy in accepting this great honour with an equal measure of humility.

Isaac Newton, whose genius allowed him to describe with mathematical precision the laws of gravitation that dictate the movement and relations of the heavenly bodies and who taught us about the nature of light, once wrote: "I do not know what future generations will make of me, but I feel like a schoolboy on a beach, throwing mere pebbles into the vast unknown ocean beyond".

If that is true of one of Newton, how much truer is it of the rest of us.

I thank you, therefore, with both joy and humility for honouring me.