

## Dr. RAGHUNATH ANANT MASHELKAR, *President of Global Research Alliance, India*



Prof. Dr. Raghunath Anant Mashelkar is presently the President of Global Research Alliance, a network of publicly funded research and development institutes from Asia-Pacific, South Africa, Europe and USA with over 60,000 scientists. He is the Chairperson of India's National Innovation Foundation, and has been appointed as the first Chairperson of the Academy of Scientific and Innovative Research (AcSIR). He is also the chairman of the Reliance Innovation Council formed by Reliance Industries Limited, India.

Professor Mashelkar studied at the University of Bombay's Department of Chemical Technology where he obtained a Bachelor's degree in Chemical engineering in 1966, followed by a PhD degree in 1969. With his achievements and unique experience, he is considered one of the leading international authorities on innovation processes. His most direct area of specialisation is behaviour of polymers, their

thermodynamics, modelling of polymer reactors and the engineering analysis of non-Newton currents.

He is the current or past president of numerous international scientific and professional associations or academies. Professor Mashelkar is the former President of the Indian National Science Academy and the UK Institution of Chemical Engineers (2007–08). He served for over eleven years as the director general of the Council of Scientific and Industrial Research, world's largest chain of publicly funded industrial R&D institutions, with thirty-eight laboratories and about 20,000 employees. He is the third Indian engineer to have been elected as a Fellow of the Royal Society (FRS), London in the twentieth century. He is also Vice Chair of the International Advisory Board of the global Knowledge Economy Network, KEN, as well as a member or chair of the Boards of 13 major international companies, including TATA Motors Group, Reliance Gen Medix.

For his academic achievements he has received over 30 honorary doctorates from universities in India, US, Europe, and Australia.

### **Mind the Market Place: On Building World Class Innovation Ecosystem**

Similar to the conventional dichotomy: basic science - applied research (which is simply not sufficient for distinguishing modern innovation processes) nowadays, we have to consider the diversified landscape of present-day innovation. It is going well beyond technological and non-technological, the old linear logic has vanished, through ever more sophisticated and complex market mechanism (decisively influenced by public policies), all kinds of actors are involved in various stages of the innovation processes. Both entrepreneurs and policy makers need to be fully aware of the differences among incremental, disruptive, and frugal innovation. How different are innovation processes of the 21st century compared to the ones being presented at most universities and being perceived by politicians, as well as by most of the general public? Perhaps the most important one is the absolute necessity to mind market. In other words, it is necessary to consider from the start more explicitly than before which specific challenges and needs of the society a certain innovation will address (in a different way, or at least more efficiently – which already implies lower cost).

And here we come to the **»frugal innovation«** which is motivated by accessibility of the innovation for more people than the exclusive, newly introduced elite products/services. It is the responsibility of the entrepreneur to keep the business profitable, but the **»frugal entrepreneur«** is not interested primarily in maximising the profit, but **maximising the number of satisfied customers** – which could in total bring even more profit. In this scenario, profit is the reward for the entrepreneur to satisfy many customers.

But why should doing good be considered important? The answer is simple – because rising inequality is one of the greatest challenges of our time. Income inequalities, for instance, create access inequalities, which leads to social disharmony. It also reduces the total volume of demand, which affects negatively the scope of business. We have to make a change in the way we do business, a change in which the policy makers think, the way in which science, and research is conducted, etc. I will talk about the why, what and how enterprises can **'do well by doing good'**.