

Raghunath Anant Mashelkar

Padma Bhushan (2000), Padma Vibhushan (2014)



Born on January 1, 1943

Have you ever tried to make something useful using simple, low-cost materials? That's exactly the kind of thinking Dr. Raghunath Anant Mashelkar has promoted throughout his scientific journey, making science work for everyone. This is what we want you to do in the Avishkar Awards too!

Career and Achievements

Dr. Mashelkar was born in a small town in Goa and faced many difficulties growing up. But he never gave up on learning. He studied chemical engineering and became one of India's most respected scientists. His field of research, polymer science, deals with materials like plastic, rubber and fibers that we use in everyday life.

One of Dr. Mashelkar's major contributions was in studying how thick liquids (like glue or paint) flow and react under different conditions.

This helped industries improve how things like paints, shampoos and medicines are made. For example, thanks to such research, toothpaste can now come out smoothly from the tube but also stay firm on your brush!

Dr. Mashelkar also improved chemical reactor designs, such as bubble column reactors, which are important for making everyday products from plastics to medicines.

One of his big breakthroughs was in water purification. His research helped advance reverse osmosis membrane technology, making clean drinking water more accessible and affordable in India.

Contributions beyond Science

He led India's efforts to protect its traditional knowledge, like turmeric's healing power or neem's use as a pesticide. He helped stop foreign companies from patenting what India has known for centuries!

As the head of the Council of Scientific and Industrial Research (CSIR), he encouraged to create real solutions, like affordable medicines and simple tools for rural areas.

Dr. Mashelkar is also known for promoting **"Gandhian Engineering"**-finding ways to make *"More from less, for more people."* His legacy continues to inspire innovators to tackle challenges with cleverness and a deep commitment to societal benefit.