

# PROFESSOR VENKATARAMAN RAMAKRISHNAN

## - NOBEL PRIZE IN CHEMISTRY 2009



Prof. Venkataraman Ramakrishnan was awarded this years Nobel Prize in Chemistry along with Dr. Thomas Steitz (Yale University, Connecticut, USA) and Dr. Ada Yonath (Weizmann Institute of Science, Israel) for their pioneering work on ribosomes, the builders of proteins in cells. Antibiotics based on this work will help save lives and decrease humanity's suffering.

57 year old Prof. Ramakrishnan was born in the temple town of childambaram in Tamil Nadu and graduated in Physics in 1971 from M. S. University of Baroda. He earned his Ph. D. in Physics from Ohio University, USA and later worked as graduate student at the University of California during 1976-78. As a post-doctoral fellow at Yale University he worked on neutron scattering of ribosomal units of *E. Coli*. At Brookhaven National Laboratory in collaboration with Dr. Stephen white, he studied the cloning of genes for several ribosomal proteins and determination of their three dimensional structures.

At present, Prof. Ramakrishnan is a senior scientist at the Medical Reserach Council Laboratory of molecular Biology (LMB) in Cambridge and a visiting professor at the Indian Institute of Science, Bangalore. He has published serveral pathbreaking papers in the most prestigious research journals notably Nature.

A knowledge of the working of ribosomes helps in the understanding of the key processes of life. This knowledge can be used to disable the ribosomes of hostile bacteria that cause diseases in humans. Already some antibiotics in use target the ribosomes in the invading bacteria and stop their functioning as a result of which the bacteria die. Thus, Ramakrishnan's work has great implications for human health and synthesis of newer antibiotics.

Underlining the importance and need of basic research Prof. Ramakrishnan has remarked “The idea of supporting long term basic research like that at LMB, does lead to breakthroughs, the ribosome is already showing its medical importance.”

Dr. Ramakrishnan is indeed a role model for all Indian researchers and a source of inspiration and motivation to all of us.

**The Galaxy of Nobel Indians.**

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|-----------------------------|---|-------------------|
| Rabindranath Tagore         | - | Literature (1913) |
| Chandrasekhara Venkat Raman | - | Physics (1930)    |
| Hargobind Khorana           | - | Medicine (1968)   |
| Mother Teresa               | - | Peace (1979)      |
| Subramanian Chandrasekhar   | - | Physics (1983)    |
| Amartya Sen                 | - | Economics (1998)  |
| Venkatraman Ramakrishnan    | - | Chemistry (2009)  |

In 2007, the UN’s Inter-governmental Panel on Climate Change headed by Rajendra K. Panchuri shared the Nobel Prize in Peace with Al Gore of USA.

**- Dr. D. V. Prabhu**

