

Editorial

Biman Nath, Associate Editor

‘The Einstein of our profession’: this was how Alan Sandage, a noted cosmologist, once described Yakov Borisovich Zeldovich (8th March 1914–2nd December 1987). The group of physicists around Zeldovich in Moscow had played a significant role in the development of modern cosmology, the science of the universe as a whole. Working behind the Iron Curtain, the output of his group often surpassed that of the rival groups in the Western world. Kip Thorne of Caltech had once commented, ‘Half the seminal ideas in relativistic astrophysics in the sixties and seventies came from that group.’ Yet, Zeldovich could never travel beyond the Eastern Bloc as he was initially associated with the hydrogen bomb project in Soviet Russia.



Email: biman@rri.res.in

Zeldovich’s working style was legendary. Once while pondering on the web-like pattern of galaxies in the sky, he happened to stare at the bottom of a swimming pool during a conference. He realized that the pattern of light was similar to that of galaxies, and immediately understood the reason because the mathematics of the two situations was analogous (as explained in an article in this issue). Here was a man completely immersed in physics (all his children and their spouses were physicists, by the way). After suggesting a problem to a student, he would call him up early next morning, expecting an answer. If the student replied that he hadn’t done it yet, Zeldovich would put the phone down and call a few minutes later. And the boundary between his zest for science and life was thin. He is also remembered as Zorba the cosmologist, for the way he enjoyed his life beyond science.

We bring out a few articles in this issue to feature the achievements of this genius. In the Dawn of Science series, there is an article explaining the emergence of the idea of logarithm in mathematics. There is also a delectable article on the geometry of circles, including a theorem (called the fifth pizza theorem in the article) which is sure to charm the taste buds of *Resonance* readers. In Face to Face, we have an interview with another interesting personality whose work straddles everything from radio astronomy to nanotechnology. Trying to explain the origin of carbon chains in the interstellar dust, he discovered a new form of carbon, the buckminsterfullerene (C_{60} , the carbon ball), besides the two well-known forms graphite and diamond. This not only proved that carbon stars could produce the chains but revealed the existence of the C_{60} species.

