

Editorial

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Celestial bodies appear to have fascinated humans since the dawn of civilization. Metaphors about stars and planets abound in poetry and folklore around the world. Over time, as we have progressed from propitiating stars to understanding them, this fascination for celestial bodies has spurred the development of mathematics and the physical sciences. Today, we are contemplating the possibility of manned missions to Mars. Somewhat presciently, Allama Iqbal wrote in the year 1936:



*“uroj-e-aadam-e-khaki sey anjum sahmey jatey hain
ki yeh toota hua tara mah-e-kamil na ban jaaye”*

(constellations tremble at the rapid rise of earthly man
fearing that this fallen speck of cosmic dust will outshine them)

This issue of *Resonance* is focussed on astronomy. We remember M K Vainu Bappu, an eminent Indian astronomer, who did much to establish astronomy as an important science in India in the crucial first few decades after 1947. Articles-in-a-Box by Smith and Bhattacharya give us a flavour of Bappu the person, as well as a sketch of his contributions to astronomy, and to the establishment of the infrastructure to ensure its further growth in India. Kochhar traces the development of astronomy in India during the British period, while Chitre introduces us to current understanding of the structure of our sun. Bappu’s own writing on total solar eclipses, reproduced in our Classics section, is not only informative but also conveys his total emotional involvement in his field of work; the same is true of Chandrasekhar’s piece on the same topic. In the final analysis, this emotional involvement and joy in one’s work is what science is all about.

Our series on glial cells continues, looking this time at Schwann cells, an important component of the peripheral nervous system. Sumodan introduces us to the fascinating, if somewhat macabre, science of forensic entomology in which a knowledge of the biology of corpse-feeding insects can augment traditional forms of evidence in homicide investigations. We also carry the second part of Roy, Basu and Eswaran’s article on photoresists in microlithography, and a very delightful article by Raghunathan on mathematics. Mathematics, to most non-mathematicians, is strange, confusing, and often mildly amusing. Yet, talk to a real mathematician and he will speak of mathematics as a poet will speak of Ghalib, or a musician of Thyagaraja. Raghunathan manages to convey this aesthetic aspect of mathematics, while taking us through a series of vignettes in the history of the subject. So, read on and enjoy....