

# Editorial

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***N Mukunda, Chief Editor***

Everybody and her brother knows that over the decades and centuries Hungary has produced remarkable intellectual leaders in many fields. For the mathematically inclined there was Janos Bolyai in the 19th century, one of three independent discoverers of non-euclidean geometry; and for the musically minded there was Franz Liszt, one devil of a pianist. In the early years of this century there appeared the quartet of Leo Szilard, Edward Teller, Eugene Wigner and John von Neumann (and of course somewhat ahead of them had been the experimental physicists Josef Stefan and Roland Eötvös, the mathematicians Frigyes Riesz and Bela Nagy). All of them migrated to the USA and became leaders of intellectual life there.

And then there was this mathematician Paul Erdős.

Tales of Erdős life and work are liberally sprinkled all over this issue – Yogananda’s ‘article-in-a-box’ gives a biographical sketch. Shailesh Shirali’s ‘Classroom’ and ‘Think-it-over’ contributions recall some teasing ‘Erdős problems’; and in ‘Reflections’ we have the text of the address Erdős gave, titled ‘Ramanujan and I’, at a Ramanujan Centenary Conference in Madras in December 1987. Here is an important remark he made about his work with Mark Kac:

*“This collaboration is a good example to show that two brains can be better than one, since neither of us could have done the work alone”.*

It staggers the imagination that such a tiny land-locked country of just over ten million should bring forth talent in such abundance! (Remember also Dennis and Zsa Zsa Gabor!). Our consolation lies in the remark, if I recall right, of the outstanding Hungarian film producer and director Sir Alexander Korda: “to be successful, it is not enough to be Hungarian, you must also have talent.”

Sukumaran in ‘Cretaceous – Tertiary Mass Extinction’ reviews



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*Paul Erdős*

the evidence for and against the hypothesis that an asteroid impact led to the disappearance of dinosaurs 65 million years ago. It is interesting that an important proponent of this theory was Luis Alvarez, the 1968 Physics Nobel Prize winner for his development of the hydrogen bubble chamber and associated discoveries. Ambastha describes the goings-on in the sun's interior, and the GONG project – a world wide network including the Udaipur observatory to 'listen' carefully to the sun's rumblings. Truly, our sun – it doth shiver as it shines.

Finally, we have reviews of two good quality texts on chemistry and on thermodynamics. And from Gangan Prathap's review, we remind ourselves that in the history of human evolution technology preceded science. We also learn – how apt – that the first use of the word 'engineer' in English was in Shakespeare's phrase – "engineer hoist on his own petard".

#### Paul Erdős, the Western Ramanujan

That is how his close friend from school days and long time collaborator, Paul Turán refers to Paul Erdős in an article written on the occasion of the 50th birthday of Erdős, (see *Collected Papers of Paul Turán* for an English version of the article which appeared originally in Hungarian).

Paul Erdős was born to Anna and Lajos Erdős on 26th March, 1913 in Budapest, Hungary under tragic circumstances. His two elder sisters, aged 3 and 5 years, contracted scarlet fever and died while his mother was admitted to the hospital during his birth. This resulted in his parents becoming over-protective towards Polko (as Paul Erdős was fondly called by his parents). When World War I broke out in 1914 his father was drafted into the Austro-Hungarian army, and served on the Eastern front. He was taken prisoner by the Russians and sent to Siberia. He returned home in November 1920, surviving malnutrition, extreme cold and a civil war to be greeted by his little son: "*Apuka* (Hungarian for Daddy), you are really old".

Both his parents were mathematics teachers and they taught him mostly at home as they feared for his health. He was a precocious child and could multiply 4 digit numbers in his head when he was hardly four. He would ask people their age and on being told, would immediately tell them how many seconds they had lived till then!

During his school years he was a regular contributor of solutions to the problems appearing in *KoMaL*, a very successful high school (mathematics and physics) journal; Erdős's photo appeared in *KoMaL* all

