Remembering S. Ramaseshan

S. Ramaseshan is no more and for many of us, the world of science will never be the same without him. Although my association with him has been brief and I work in a field far removed from his area of research, his keen interest in my work has been a major source of inspiration for me. In a largely cynical world, where success is not always measured by sheer excellence, the kind of excitement and moral support that he could give can be highly motivating, even for those at remote locations.

Ramaseshan, I thought, liked people who pursued science for its own sake and he liked to listen to them, endlessly. He did not care about the disciplines of the interlocutors as long as it provoked his boundless curiosity. I still remember my excitement when I received an e-mail message from Ramaseshan, some years ago, in a congratulatory tone. He did not know me at that time and the provocation for his message was a book review on '*Fieldwork – A Geologist's Memoir of the Kalahari*' that I wrote for *Current Science*. He wanted to let me know how much he enjoyed my commentary. This book is a delightful account of a three month-long scientific expedition in some inhospitable parts of Africa, most importantly the fascinating Kalahari Desert and the Wildlife Sanctuary of Okavango Swamps in Botswana, written by a veteran seismologist. I myself, a field geologists, liked that book enormously and may be my passion for outdoors had reflected mildly in my review. Ramaseshan was quick to catch that exuberance. Moreover, he had also visited this part of Africa with his family, a few years earlier. His wry comment at the end of the message was that he could not see a single animal in his entire tour of the delta. When I met him, later, he repeated this comment and he was looking incredulous, as if he did not believe himself for not having sighted a single wild animal in Okavango – this is like saying that you are not able to spot a single car on the New Jersey turnpike. He thought of this as a big joke and laughed heartily at that possibility.

During our brief association we corresponded occasionally and he was keen to know about my work. He wanted to know more about the Rann of Kachchh, where I was conducting some work at that time. He had a broad range of interests like his illustrious uncle C. V. Raman, and his awareness about geology was quite deep. In one of his letters, he quizzed me on the missing river Saraswati and showed me a letter that he had written to B. P. Radhakrishna (President, Geological Society of India), expressing his interest in the subject. Later, he suggested that we (Kusala and myself) be the guest editors for a special section on seismology in *Current Science*, which turned out to be quite successful in terms of its coverage and participation from many eminent researchers. Probably, it was a blind date for him because he had not known us close enough to entrust such responsibility. During a later conversation, he told us that he could judge a person's commitment to work by reading his work, not necessarily having to meet him.

It was after nearly two years of communication that we finally got to meet him, at his residence in Bangalore. Those days he had just recovered from a prolonged illness, but was his usual cheerful self. There was a steady stream of scholarly visitors, and I remember he mentioned the name of physicist E. C. G. Sudarshan from the University of Texas, who had just been there before us, to present him a copy of his recent book. Ramaseshan welcomed us most kindly with his charming life partner Kausalya, who herself is an accomplished social worker. We talked for a long time, and the warmth and the excitement he exuded were infectious. I remember that he talked about some of his pet projects, in particular about the heart valve project with the Sree Chitra group in Thiruvananthapuram. He also talked about *Current Science* and what its role should be. He shared with us how his uncle, in his deathbed, had asked him not to break a single issue of the journal. Why? Because he thought this was the only forum available in the country where Indian scientists could publish their findings. Ramaseshan was happy to have kept his word to his uncle, and reminded us of the responsibility that each of us has, to ensure its standard and regularity. Perhaps, *Current Science* is and will remain a truly majestic monument to this uncle–nephew duo.

As we parted, he accompanied us till the doorway, saying that he really felt like jumping up and coming with us, but that had to wait until he got better. 'I will soon be well enough, because I have to come to Thiruvananthapuram' he said, leaning on his walking stick and waving us goodbye with a beautiful smile, until we disappeared around the curb. I turned around for the last time to get a glimpse. He was still there, smiling and waving his hand. . . an image that I would cherish forever. Ramaseshan represented all good things in life and he was a quintessential scientist. We rarely come across such persons. We will miss him – a lot.

C. P. RAJENDRAN

Centre for Earth Science Studies, Thiruvananthapuram 695 031, India
e-mail: cp_r@vsnl.com

Errors in communication

I wish to bring to your notice a few errors in the meeting report by Anil Kumar[1]. In the first and second columns of p. 1399 are described the oral presentations that were made by Caitlin O'Connell-Rodwell on seismic communication in elephants and of Andrea (not Andrew) M. Simmons on acoustic methods for studying frog choruses, two women scientists who have mysteriously undergone a gender transformation in Anil Kumar's report! Not only in the interest of accuracy in scientific reporting but also as a woman scientist, I take strong exception to these 'errors'.

I would also like to point out that, in referring to the poster presentation of Natasha Mhatre and myself at the Acoustic Communication Meeting, the first (and presenting) author's name has been dropped! Since I did not make an oral presentation, there is simply no justification for this and the relevant sentence (end of-second column, p. 1399) should read 'Natasha Mhatre and Rohini Balakrishnan (IISc, Bangalore) presented a research paper… .'

The above (possibly inadvertent) errors may seem minor to some but to me they reflect the distressingly hierarchical, 'alpha-male' culture of the Indian scientific community and I have thought it fit to point them out.

1. Anil Kumar, *Curr. Sci.*, 2003, **85**, 1398–1400.

ROHINI BALAKRISHNAN

Centre for Ecological Sciences,
Indian Institute of Science,
Bangalore 560 012, India
e-mail: rohini@ces.iisc.ernet.in

Need for right attitude

I was disappointed to read in the editorial of *Current Science*[1], reference to 'the Sepoy Mutiny of 1857'. I was under the impression that this term was used mostly by persons who followed history books written by the British and not by post-midnight children. In this connection I wish to quote from R. R. Diwakar's book *Mahayogi*[2], where he describes the years 1858–1893, 'which immediately precede the birth of Aurobindo (1872) but follow the most ruthless suppression by the government of the heroes of the war of independence waged by the patriotic elements that were still left in India after decades of British rule. It has often been dinned into the ears of students of Indian history, by official and pro-British writers, that this war was a "mutiny" and that great atrocities were committed by the Indian soldiery. It was reserved for the Indian patriots and historians who came later to assert that it was not a mutiny but a war of liberation, as sacred as was ever fought between foreign usurpers and the sons of the soil'. I believe we should have the right attitude towards our past.

Further on in the same book he discusses the then existing economic field. He writes: 'The British, who came to India as traders, fought like adventurers, intrigued like consummate politicians and ultimately stumbled upon an empire vaster than that of Asoka and richer than that of Moghuls. But the shrewdest of them were never enamoured of the "empire" aspect. Although sometimes they indulged in shows incidental to all empires, they did so because it was necessary, and not because they loved or liked it. The trader in them never died, nay, that attitude was fostered and they flourished on it. They thought constantly in terms of rupees, annas and pies. Napoleon, always busy building empires, contemptuously called English a nation of shopkeepers. He lost his empire in no time but the British kept their shopkeeping and remained safe and prosperous'.

'Thus economic exploitation was the dominating motive throughout the period of British occupation. The industrial revolution in England helped and accelerated the process. The British began to look upon India as a supplier of raw material and upon her vast population as consumer of goods manufactured in England. In the fulfilment of this objective, they were ruthless and remorseless… . No political power in the world has operated with such deadly economic effect on so vast a scale as in India.'

Does this all not sound very familiar now in the era of globalization and liberalization? This again reflects the mental attitude of the British then and of powers that be, now.

1. Balaram, P., *Curr. Sci.*, 2003, **85**, 1389–1390.
2. Diwakar, R. R., *Mahayogi*, Bharatiya Vidya Bhawan, Mumbai, 1953, pp 2 & 7.

B. A. DASANNACHARYA

4, Beach Resort Society,
Sector 10A, Vashi,
Navi Mumbai 400 703, India
e-mail: dasannacharya@vsnl.com

Quantitative estimation of crystalline phases in coal

Sudip Maity and his co-authors deserve congratulations for reporting quantitative estimation of crystalline phases (inorganic) in Indian coals by X-ray diffraction (XRD) technique[1]. The authors claim that the mineral analyses are consistent when compared with chemical analyses. But relationship between the calculated oxide composition from the minerals determined (table 2) and chemical composition of inorganic matter in coals (table 3) does not say so. Correlation coefficients (R^2) derived from linear regression graphs for SiO_2, Al_2O_3 and FeO of the two analyses are reported to be 0.971, 0.448 and 0.258 respectively and these are not appreciably high. It may be that the inherent characteristics of the examined matrix (coal) are not highly suitable for the SIROQUANT technique adopted by the authors.

Consequently attempts may be made to estimate the minerals in the inorganic material fraction separated from the coal by adopting QXRD method wherein standard (reference) sample is prepared with known quantity of the respective mineral. Alternately, if separation is not possible, known quantity of each mineral may be incorporated in the coal sample containing the mineral phases. Based on the XRD intensity of the added amount of the mineral, quantity of the inherent mineral can be determined. Both the