Looking for C. V. Raman? Hunt for the likes of Asutosh Mookerjee first

It is sad that Asutosh Mookerjee happened to be an isolated phenomenon, now nearly forgotten when a serious debate is emerging on the issue of quality of education and research activity in our country. I wish to point out the nature of this critical factor missed by Joshi while searching Ramans of today.

We only note the final contributors or the structure of the institutions in the West; no attention is paid to the mental makeup and the sensibilities of individuals who voluntarily accept the discipline, the ethical principles and the legitimacy of harshness of the insecurity tightly linked to the quality of research. Therefore, we fail to appreciate the mechanism generating so many fine minds in those institutions.

It may be appropriate to remind ourselves of the spirit—the factor missing today—of Asutosh Mookerjee who, if he devoted entirely to the study of mathematics, according to the Senior Wrangler, R. P. Paranjpye, was "... sure to have secured a place in the front rank of world mathematicians." When paucity of funds deprived him of a research professorship, he stated sometime later, "... I drifted into Law, but I made a determination at the time that, Heaven willing, I would devote myself to the service of the University, so that in the next generation any aspiring scholar in my position might not drift into Law but have full opportunities to serve the cause of Letters of Science" (emphasis mine).

Let us also note that though he was invited by Lord Curzon to visit Europe and attend the coronation ceremony of King Edward VII, Asutosh Mookerjee refused the offer; he never visited Europe. How unreal it seems in contrast to the attitudes of most academicians or science managers of similar authority or position today who would leave no stone unturned to make an official trip abroad! Naturally, with someone like him around, Raman had to come into the open some day as, indeed, he did.

If a less enlightened Asutosh Mookerjee, or someone not earnestly involved whom he wished to promote, were to express even a veiled desire to share the credit—something considered natural in many Indian laboratories today—then, an uneasy and less enthusiastic Raman probably would have lost the race to Mandelshtam who had also discovered the same scattering phenomenon though only in gaseous phase molecules. Perhaps the modern Ramans are being stunted by the lack of this sensibility in us.

Strangely, however, he also sensed that the decline in quality was coming. Tickoo cites his alarm due to over-representation in the Senate of members uninterested in the academic activities because of defects creeping in the constitution of the University. Unfortunately, this was ignored presumably because most may have looked at his finger, not where it was pointing.

We often complain that Indian contributions are not adequately recognized by the West, though many of them did receive recognition when we were fighting for independence. For want of a better evidence, we may safely assume that the cacophony is meant to provide a shield to our poor performance and interna- nal mismanagement against external criticism.

Without a scientific community with leaders emulating Asutosh Mookerjee, no amount of infrastructure, management manipulation and funds could ensure excellence in the individual's and, therefore, in the institution's performance, stray exceptions apart. No other way, except perhaps by losing to other countries, could we possibly discover our future Ramans as the recent records would show.

3. *ibid*, p. 22.

S. K. BHATTACHARJEE

Molecular Biology and Agriculture Division, Bhabha Atomic Research Centre, Mumbai 400 085, India