

## K. K. G. Menon (1927–2002)

K. K. G. Menon, Govind to his numerous friends, passed away in Chennai on 5 April 2002. His passing away is yet another disappearance from the Indian scientific terrain of a vanishing species, carrying traits characteristic of the pre- and neo-independence period of science in India as regards idealism, marks of travails as well as excitement born out of achievement, success with satisfaction, and setbacks with stoicism. Born on 19 September 1927, in Chittur of Palghat to a Nair family of traditional teachers and scholars in the classical rural mould of the period, he had developed an everlasting ethos of identity with the best in the true traditional mores in a true cultural sense, while integrating it with the best underpinning of rational principles of scientific enquiry throughout his life.

After graduation in science, with chemistry as major, from Maharaja's College in Ernakulam, he moved to Mumbai to join the Haffkine Institute in 1947. Fired with the idealism of the youth of the times, he is believed to have delivered to the then Director of Haffkine Institute, P. M. Wagle, a short lecture on the need for national integration of free India, upon being asked why he was seeking a job in far away Mumbai! He managed to get it, however, and benefited greatly from the presence at the institute of the legendary Sahib Singh Sokhey, P. M. Wagle, Radhakrishna Rao and other luminaries of the times. He worked on *Pasteurella pestis* 195/p used in the manufacture of plague vaccine, in relation to its nutritional requirement and determined the correct redox potential of the medium for the growth of the bacilli. The early phase at Haffkine Institute bestowed on the young man invaluable insights into pathophysiology of human diseases, nutritional biochemistry, infectious diseases and immunology – insights he continued to draw from throughout his later career.

Joining the Best Institute in 1953 (the Best of the Best and Banting duo) at the University of Toronto, Department of Medical Research – one of the foremost in the world at that time – was a high point in his graduate education. A Ph D in biochemistry, with pathological chemistry as major and experimental biology as minor, was conferred on him after a little over three years (a record for the

centre at that time). The subject of his research related to biosynthesis of lecithin. The originality of the finding that cephalin upon methylation gave rise to choline moiety of lecithin and not free choline and phosphatidic acid, with vitamin B<sub>12</sub> and methionine promoting lecithin biosynthesis was recognized by well-accepted publications at that time.

Stints of postdoctoral work at centres such as University of Pittsburgh and Western Reserve University at Cleveland between 1956 and 1959 were eventful. For Govind, this period was full of the excitement of being exposed to the icons of the golden age of biochemistry. Earl Sutherland, Robert Olson, Klaus Hoffman and a galaxy of visiting luminaries to these centres, a virtual gallery of con-



temporary Nobelists and their likes, was to him an inspiration to last a lifetime.

Govind Menon's return to India and a brief stay in 1959, as was the pattern with several of his generation, was tentative and uncertain with few options. Returning to the United States, this time to St. Louis at the Washington University gave him yet another chance to savour the thrills of the period in biochemical advances in the laboratories of Cori, Doisy Elijah Adams and their kind. Upon his return to India in 1962 for a very brief time at Leprosy Research at Chinglepet, he joined the Research Centre at Hindustan Lever in Mumbai, being put together by the then young and highly accomplished visionary S. Varadarajan. Varadarajan, with a brilliant academic background and exposure to the best in chemical research had cast his lot to

building corporate research on an uncharted, uncertain and unfamiliar path. In retrospect, what was accomplished by these pioneers turned out to be an institution without parallel in India, earning global recognition, a centre which produced leaders to head operations in India and the parent company in UK and Holland. Varadarajan, Govind Menon and Ashok Ganguly are shining examples of science in industry, and navigators of industrial research of the highest calibre.

Govind rose to head the unit as Director after Varadarajan's departure in 1974. His leadership until 1988 was marked by achievements in product development, newer concepts in product forms and composition of foods and personal care products, human and animal nutrition, toxicology, pharmacology and agricultural sciences – too numerous to elaborate. The festschrift brought out in his honour has documented over 50 of his scientific publications, monographs and reports comprehensively. Everything he did and led acquired a hallmark of dispassionate enquiry, passionate pursuit of experimentation and focus on the end result in providing answers to questions or solutions to problems. In the performance of his functions as leader he had a ruthless style of objectivity and critique, but was soft on other matters affecting the concerned colleagues. Somewhere he seems to have remarked that his then boss Varadarajan, had a special knack of making people comfortable or uncomfortable, as he deemed fit. For some of us who knew both the men, it is difficult to decide who was better in the art!

Over the next decade and a half, Govind Menon led the Research Centre at Hindustan Lever with distinction, panache and a style all his own. During this period Govind put together teams in chemistry, biology, toxicology, agriculture and importantly, engineering sciences, comprising superlative talent and potential. He was most generous in acknowledging and showering his affection and patronage on talent and excellence. On the other hand, quite often, he made no attempts to hide his feelings when he saw or encountered anything pseudo or substandard being camouflaged with hierarchical immunity or academic holiness (?) and ill-deserved

adulation. This trait in him often created difficulties, but they were trivial in the context of his honesty of responses to the 'real thing' and 'the not-so-real'. He was always respected, though sometimes feared or looked at with apprehension for what he may say in his acerbic style with no holds barred, as he was unfailingly honest. He was dear to some friends, precisely for this rare trait.

After retirement from Hindustan Lever in 1988, he served as Principal Scientific Advisor to the National Dairy Development Board and as Chairman of the Scientific Advisory Committee of Tea Research Association and Director of Research, Assam Tea Company until 2001. As a member of the Governing Council of Hindustan Lever Scientific Research Foundation, he spearheaded the organization of several symposia on topics of national importance and provided support to projects of value to the nation.

Though we did not meet often for the past several years unlike when I lived in Mumbai, we kept track of each other and shared several mutual interests. One of

them was the appreciation of the place of chemistry and physiology in all life forms, including the human. We had both grown as young scientists in an era during the century past when we had witnessed, read, sometimes heard from the horse's mouth the most spectacular discoveries ever made in the history of man shaping what is 'new biology' or 'molecular biology'. To both of us the most romantic view of living things was when chemical knowledge and information operated at the level of processes – in cells, tissues, and organs and in the whole being, with control, regulation and feedback. I cannot forget my weekend visits to his flat in 'Metropolitan' in Pali Hill during my initial days at Mumbai (1968–1970). With stacks of *Nature*, *Science*, etc. on the coffee table in front of him, he would get into soft eloquence and let his imagination run with fervour on a topic or finding in biochemistry/physiology, just read. For me, then somewhat prejudiced that those who moved from pure science to industry were lost souls, Govind's articulations were a revelation. To me, eventually, as one who too strayed from

basic enzymology and amino acids to areas in laboratory medicine to make a living and be not too distant from science Govind provided a good and exceptional model.

Govind was a scientist with a rare combination of qualities. His frequent quotes from Malayalam and Sanskrit classics appropriate to situations on the one hand, and irreverence for dogmatism and authority without substance in endeavours of the mind on the other, were a curious blend in him lending both colour and substance to his words and deeds.

He leaves behind Tara, his wife, a former scientist colleague of his, a steadfast and understanding spouse from whom he derived every support he deserved, daughter Mala and son Anil. A very large circle of friends and colleagues in India and elsewhere will miss him.

P. R. KRISHNASWAMY

*Manipal Hospital  
Bangalore 560 017, India*