detailed paper (1930) on this subject. Since then these authors have been credited with this discovery even though they cited Nishikawa's earlier work!.

2. This remarkable suggestion of using multi-isomorphous crystals for unique phase determination was missed out by many crystallographers till it was pointed out by Dorothy Hodgkin and Max Perutz who then proceeded to use it to solve the haemoglobin structure.
3. In those days the dispersion corrections were designated as $\Delta f'$ and $\Delta f''$. In 1974 at the Madrid conference[7] it was decided to drop the deltas to call them just f' and f''.
4. Wyckoff was one of the examiners for my D Sc thesis, the other was C.G. Darwin!.
5. This was in early 1953 when extremely few non-centric crystals had been solved – three years before the apprearance of the Ramachandran–Raman paper[6], which provoked a spate of activity on noncentric structures. It was also very unfortunate that we could not get hold of crystals of strychnine selerate – the structure Bijvoet and his collaborators solved[5].

PERSONAL NEWS

Dear Anna,

Today is your 75th Birthday (23 August 1993), and since this is the conference season, you are not in India but travelling in Europe and the United States; and as a distinguished meteorologist said of you – 'to be one of the much loved invited speakers at international meetings'. I feel rather odd writing a formal letter to congratulate you on this occasion. For we have known each other for more than five decades; we have worked under the same preceptor; we have shared the same laboratory at the Indian Institute of Science; we have laughed and quarrelled, joked and argued ever since I was 19 years of age.

In 1945 after a stint of about 5 years with Prof. C. V. Raman, you changed your field of activity and went to England 'to train' in meteorological instrumentation. I remember you saying that you enjoyed every moment of your stay in England but you learnt little about meteorological instrumentation as applicable to India; the relevant knowledge on this subject you gathered only after you came back to India. You joined, in 1948, S. P. Venkiteshwaran, who was heroically attempting to build a group on meteorological instrumentation in the India Meteorological Department (IMD), Poona. When he left as Director, Agricultural Meteorology, you led the instrumentation group. You were then a woman in fury because we were importing almost all our instruments. A dilapidated shed and a handful of workers became a magnificent centre for designing, fabricating, testing and calibrating meteorological instruments, manufacturing at least 100 types of instruments, from the simplest to the most sophisticated ones, like radiometer, radiosondes, etc. With great insight you put these instruments to use by installing them in a network of stations, which you helped to set up all over India, to measure the parameters necessary for meteorology.

Your researches on atmospheric ozone are well known. You inspired your students to design and fabricate India's first ozonesondes and to set up many ozone-sounding stations. Little did anyone realize at that time that in a matter of two decades these activities would assume major importance in a global sense. You must have felt truly proud when your student and colleague C. R. Sreedharan set up India's first ozone-sounding station in Antarctica and obtained many exciting results. The International Ozone Commission recognized your important contributions to this field and you were also awarded the K. R. Ramanathan Memorial Medal, which you treasured as Prof. Ramanathan was your other mentor who inspired you into doing ozone research. It was also no surprise to me that because of your respect and affection for him you agreed to edit the selected papers of K. R. Ramanathan. About your instrumentation activities Oliver Ashford said:

> My only regret is that with her expertise in such a wide range of measuring devices, radiosondes, ozone, radiation instruments and anemometers – to name only a few – we do not yet have an epynomous instrument; how I would love to make observations on an ANNAMANIOMETER.

When you formally retired from IMD, you as a Visiting Professor at the Raman Research Institute used a newly designed infrared spectrometer to assess the precipitatable water over several stations, a knowledge essential for setting up millimeter wave radio telescopes. Then started one of the most dynamic phases of your career. With the moral backing of the Raman Research Institute Trust, with funding from DST and DNES and support from IITM, you set up scores of stations all over India in farflung and inaccessible places and studied the wind climatology in many states of India. Your studies, extending over 15 years, resulted in five monumental volumes which have received rave reviews: 'This set will constitute a bible for engineers and scientists for setting up solar and wind power stations'.

I am one of the many scientists you have influenced. You had set up meteorological facilities for the International Rocket Launching Station at Thumba in Kerala at the request of Vikram Sarabhai. Probably you learnt from him that my group was involved in making Fibre-Reinforced Plastic (FRP) rocket nose cones for his space activity. You then suggested (twisted my arm) that my group get involved in making FRP radomes to protect from fierce cyclonic storms the weather radars you were installing at many places. It was thus that the country got studded with these beautiful radomes. These are the tributes I paid to you and your vision. You literally dragged me to Delhi when a Japanese Airliner crashed, to show me the antiquated imported visibility measuring instruments our airports had. This forced me to initiate activities on better airport instruments. As President of the Current Science Association, much of the improvement that people say has taken place in the journal in recent years is due to the silent encouragement you gave me.

Perhaps the greatest surprise to me was when I recognized you as a character in a Sahitya Academy Award-winning Malayalam/English novel entitled *I Thank You Seismograph* by C. Radhakrishnan. This novel is about science, scientists, research and scientific administration in India and each of these

Text of the letter that was written by Prof S. Rameseshan, Editor to Ms. Anna Mani, President, Current Science Association on her 75th Birthday.

come under severe treatment in the hands of the author. Obviously, the author had worked with you in IMD for sometime. In the novel he always refers to 'you' (some say, aptly) as the 'tigress'. His dedication however touched me:

To Anna Mani who proved that science can be efficiently administered with an iron hand and with a heart of gold.

I am sure that you would be unhappy if I do not refer to the influence Prof. C V. Raman had on you over the years. He rated high your experimental investigation on the fluorescence and absorption in ruby and diamond. After you left him while studying your spectroscopic plates, he wondered whether such studies might not lead to the experimental verification of the revolutionary concept which Einstein proposed in 1917 – a problem that had nagged him since 1928 when he published with K. S. Krishnan a paper entitled 'The negative absorption of radiation' (*Nature*, 1928, **122**, 12–13). Raman considered your contributions to meteorological instruments very important for the country and got you elected to the Fellowship of the Academy. I can write about your super human efforts to attend every meeting of the Academy since then. I can also relate many anecdotes about Raman and Lady Raman in which you were involved, but I shall refrain.

You will agree that you learnt many things from Raman: his sense of humour; his capacity to laugh at himself; even his explosive laughter (which many feel you copied; some opine that you bettered him for your laughter, continues to ring in our ears long after you have left a room); the joyous attitude he had towards the pursuit of science; and last but not the least his zest for life.

Yes you truly changed the face of meteorological instruments in India. It has been a privilege for me and my family to consider you as one of us – one who is so full of fun and laughter, one who can see humour in everyday occurrences and who can relate each of them with great gusto.

May I wish you many more years of active and enjoyable life.

Sivaraj
(S. Ramaseshan)

Correction

Transit of Mercury across the Sun's disc on 6 November 1993. *Curr. Sci.*, 1993, 65, 471.

On page 471, in line 3 of paragraph 'R. K. Kochhar (Indian Institute of Astrophysics)', read '1999' for '1993'.