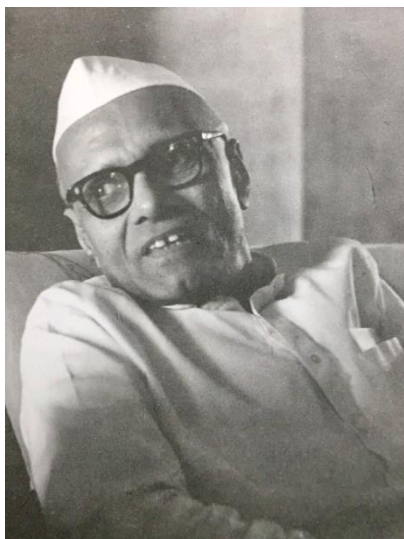


## Dr. Atma Ram-A Personal Tribute

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[Dr. Atma Ram](#) former Director General (D.G.) of Council of Scientific and Industrial Research (CSIR), Government of India (GOI) from 1966-71 was one of the leading scientists of India. Very little biographical information or material is available on him and so I thought of writing it based upon my interactions with him.

He was my uncle from my father's side. Though he was brother-in-law of my father Shri. Jagdish Rajvanshi, but he and my father were very close so it is possible that this tribute may be biased but necessary for a good and remarkable man. Dr. Atma Ram was born on 12 October 1908 in a small village of Pilana, Dist. Bijnor, U.P. and died on 6 February 1983 in Delhi. He was 74 years of age at the time of his death.

Coming from a very poor family, Dr. Atma Ram had to struggle continuously to get educated. He would give tuitions and do all sorts of odd jobs to pay for his fees but his formidable intellectual ability and will power made him get a Doctor of Science (D.Sc.) degree from Allahabad University in 1936 under a prominent chemist Dr.N.R.Dhar – a great achievement in those days. Dr. Atma Ram was also a protégé of [Dr. Meghnad Saha](#) another professor at Allahabad University.

Atma Ram was the [founder Director of Central Glass and Ceramic Research Institute \(CGCRI\), Kolkata](#) – one of the first CSIR labs whose foundation stone was laid in 1945 and inaugurated in 1950. He pioneered the innovations in glass and ceramic technologies and was the inventor of

optical glass (used for defense purposes) in India. He not only developed the technology of optical glass but also set up its production in CGCRI. He had 23 patents in glass, ceramic and mica industries. Together with [Dr. Shanti Swaroop Bhatnagar](#) and Meghnad Saha (Dr. Atma Ram was protégé of both of them) he was instrumental in laying the foundation of CSIR labs in India.

For his pioneering work in glass technology he was the recipient of first Shanti Swarup Bhatnagar Medal (1959); Padma Shri (1959); Hon Fellow of Society of Glass Technology, Sheffield (1966), Hon-Doctorate from Lenin Soviet Technological Institute, Leningrad (1967), among others. He was the President of Indian Science Congress (1968) and Indian National Science Academy (1969-70). A brief biographical sketch of his together with his [major achievements is available here](#).

My earliest recollection of Dr. Atma Ram was when we all visited Kolkata in 1954 and stayed with him in his flat in Park Street (or lane I forgot). The one thing I remember was the lift in his building (this was the first time I had seen it and was totally fascinated by it) and so would go up and down in it 3-4 times a day. The lift man was kind enough to indulge a young boy of four years ! Incidentally, I also remember the cigarette smoking chimpanzee in the Kolkata zoo. Other than that I do not remember anything else of that visit.

My father who was a freedom fighter and an important member of Congress Working Committee was attending the congress session held in Kolkata in that year and thus we all stayed with Dr. Atma Ram.

My father had gone to jail during the Quit India movement in the 1940s. He was politically very well-connected and had introduced Dr. Atma Ram to Shri. C. B. Gupta (CBG) during early 1950s. CBG became later on Chief Minister of UP three times. Dr. Atma Ram's political affiliation started with his friendship with Shri. C. B. Gupta.

The next memory I have of Dr. Atma Ram is from sometimes in late 1950s. He used to come to Lucknow enroute either to Delhi or Kolkata and always stayed with us in our house in Hazratganj. He would also use his Lucknow visit to meet Shri. C. B. Gupta.

An American Impala car from the Central Drug Research Institute (CDRI) was always sent to the airport to receive him. I and my father would go in that car to the airport to bring him to our house. The journey in the American Car and seeing the plane (Dakota) land in a non-descript Lucknow airport was a heady affair for a young boy of 8-10 years old so I used to look forward to his visits which were few and far between.

Very often the CSIR directors of Lucknow labs would ask him why he preferred to stay in a small and old house of ours. He would always reply that he would rather stay in his brother's house than in a CSIR Guest House. He also told them that he liked the simple homemade food that my mother cooked and preferred it any day to the Guest House food. He was a very humble and simple man.

He was a tee totaller and a pure vegetarian. In fact he told me of an amusing incident. He was invited by the French Government in late 1960s to visit the [world's largest solar furnace in Odeillo, France](#). During the reception in his honor he was offered hard liquor in a hollowed water melon! He thought it was some kind of fruit juice and then realized that it was hard liquor and so refused to have it. In all official functions abroad he used to toast his hosts with water.

I also remember another of his visit to our house in Lucknow after he was awarded Padma Shri by GOI in 1959 for his work on development of optical glass at CGCRI. He came to our house and I saw his medal. At that age I had no idea about the importance of that award.

Another early memory is that during his visits to our house he used to do his Yoga exercises. I was very impressed with his mastery of Sheershasan (head stand); mayur asan (peacock pose) and nauli (stomach churning). He was quite adept in Yoga.

All his life he suffered from asthma attacks. He got this ailment after his car accident in Germany in late 1940s in which he also lost his one eye. Thus he always carried the bronchodilator which he used many times in a day. As a young child I was very fascinated by that and was curious as to why he would be pumping air in his mouth !

My first really meaningful discussion with him happened in 1972 in Delhi when I had gone to attend the marriage of one of his nephews. I had finished [my B.Tech from IIT Kanpur](#) in that year and was feeling dejected since I could not get any scholarship to any U.S. University for my higher studies.

He sat down with me and told me that providence had planned better things for me in future and whatever has happened is probably for the good. And then he narrated his own experience of how he had gone to give an interview for a Chemist in a Sugar Institute in Kanpur and waited in hot June sun under a tree for his number to be called. But the call never came and after waiting for 3-4 hours he was told to go home since the Institute had already selected somebody. He said that he felt extremely dejected but had he gotten that job he would still be a Chemist in that Institute. Providence had planned better things for him.

That was a remarkable and a powerful lesson for me because my whole life also changed when I went to USA after doing my M.Tech. Not only [did I work under a pioneer solar energy expert but also met my wife in the University of Florida](#). Since then I have also believed in that philosophy.

Dr. Atma Ram narrated to me many such events where he felt that providence played a part in guiding his destiny. He was not a religious man who believed in rituals but always believed in higher powers who guided the destiny of men and nations.

Apparently his tenure as [DG CSIR was marked with controversies](#). I was a [student in IIT Kanpur](#) during the time when he was D.G. of CSIR (1966-1971) and so never knew about them but became aware of this aspect only when I started writing this tribute.

There were pros and cons to this controversy depending on whom one believed. However I will try to speculate on some possible causes. Because of his deep friendship with C. B. Gupta I think he got closely associated with Cong (O) during the time of Congress split by Indira Gandhi in 1969. Cong (O) camp had C.B. Gupta, Najlingappa, [Morarji Desai](#) among others. That could have been one of the causes of friction between Dr. Atma Ram and some of Mrs. Gandhi's followers who were inimical to him.

Another reason could be that Dr. Atma Ram, being a Gandhian and an honest person, was very particular about misuse of Government funds by scientists. An example of this was when he took over as DG CSIR in Delhi he was aghast to find the office of DG decorated as a palace by his predecessor; with very expensive carpets, paintings and other decorations. He promptly sent all of them to the [Rashtrapati Bhawan](#) since they were the property of Government of India!

It is quite possible that the controversies that erupted during his tenure as DG of CSIR term might have originated from this outlook of his. The vested interests whom he attacked then grouped together and might have raised the temperature. Besides, he could not somehow associate himself with pipe smoking, high society type atomic scientists like [Vikram Sarabhai](#), Homi Bhabha, [Raja Ramanna](#) who came to exert tremendous influence on the political establishment and probably wanted total control of CSIR.

He rightly suggested at that time (and he was far ahead of his times) to import technologies from abroad and then Indianize them. India was going through extreme socialist phase during those years and some members of the scientific ruling elite (Sarabhai and Ramanna being the most prominent among them) might not have liked this line of thinking.

Thus the combination of forces outlined above might be the reason for the controversies during his CSIR tenure as DG.

And so when Morarji Desai became the Prime Minister in 1977 he immediately made Dr. Atma Ram the Chairman of National Council on Science and Technology (NCST) and gave him a Cabinet rank post. In that position he was principal scientific advisor to the Prime Minister and the Science and Technology czar of India.

In 1974 I was selected as one of Government of India national scholar to pursue my Ph.D. in solar energy in U.S.A. under the solar energy pioneer [Dr. Erich Farber](#). Dr. Atma Ram was very happy with this development and took tremendous interest in my career.

From U.S.A. I used to regularly send him letters telling him about the solar energy work being carried out in U.S. Solar energy was a hot topic in those days and because of my association with Dr. Farber I was exposed to lots of interesting developments in solar thermal technologies and thus would report on them to him regularly. He appreciated those letters and information.

Unknown to me he had gotten a cabinet note passed to set up a Solar Energy Research Institute of India and I was supposed to play an important role in it. Unfortunately Morarji Desai government fell in 1979 and Dr. Atma Ram immediately resigned and that was the end of Solar Energy Research Institute of India. Only in 2013 a National Solar Energy Institute was

established in India. I believe Dr. Atma Ram's note played a major role in its setting up.

Dr. Atma Ram was very much influenced by Mahatma Gandhi. I guess most people of that generation were. Also because he came from a very poor family he understood the power of simple living and high thinking principle of Gandhiji.

Thus he always wanted the science and technology to be used for Indian masses in rural areas and was more rooted to the earth than the scientific establishment he encountered later in life.

His simple living is also reflected in this example. In January 1978 I had come to Delhi from USA to attend the International Solar Energy Conference which was held in [Vigyan Bhawan](#) – a venue close to his house. He was the patron of the conference. So everyday during lunch time I would come with him to his house for lunch. After lunch he would sleep on a barren wooden cot (charpai) which was put in the sun in the court yard of his house with only a pillow under his head. For a cabinet member of Morarji Desai this was Gandhian living at its best. He told me that he did not want to forget his roots of village living. He would also jokingly tell me that he is absorbing my solar energy!

He was never perturbed by any controversy and always had a detached outlook towards life and believed in Gita's philosophy of Karma Yoga. Quite a number of people I talked to later on also noticed this aspect of his personality. He was a very approachable person and many a times science reporters or others would meet him either at his office or at his house without any prior appointments.

Though Nehru was impressed with the optical glass work of Dr. Atma Ram but he did not like Nehru very much. He always felt that Nehru gave too much importance to Atomic Energy establishment. In fact he told me of an

episode ([I have written about it in another article](#)) where Atma Ram and [Meghnad Saha](#) spent quite a lot of time in developing S&T policy for India and Nehru saw it for 15 minutes and left. Atma Ram told me that he and Saha felt tremendously let down since they felt Nehru did not appreciate the efforts that they had put in making the plan.

There was also no love lost between the Atomic Energy establishment and Atma Ram. In late 1970s Morarji Desai had sent Dr. Atma Ram as Chairman of fact finding committee to look in the affairs of Atomic Energy. Dr. Atma Ram told me that he had a meeting with Dr. Ramanna and [Dr. Homi Sethna](#) together with all big honchos of BARC. In the meeting he asked Dr. Sethna how much heavy water did India have. He quoted a figure which was immediately disputed by Dr. Ramanna who quoted a figure 10 times bigger. A heated argument ensued between Sethna and Ramanna and even after 1 hour when it was not resolved Dr. Atma Ram closed the meeting requesting Sethna and Ramanna to resolve the issue and inform him accordingly.

Dr. Atma Ram told me that he came back to Delhi and tendered his resignation as the head of fact-finding committee and told the Prime Minister that when Atomic Energy people cannot even decide about this simple issue then how do we trust them with bigger things?

Anytime I went to Delhi I would go and see him in his Maharani Bagh house. We used to discuss various issues about how S&T should be utilized for rural India and so he was very happy to know that in [my small rural NGO](#) I would try to solve them with the best tools of Science and Technology.

He was a very practical man and used to tell me that anytime I come to Delhi to meet government officials I should tell them that in Delhi I stay with Dr. Atma Ram. He told me that in Delhi culture it is important whom you know and not who you are !



Unfortunately he did not live long enough after my return to India in late 1981. He died in early 1983 in his sleep. My last meeting with him was in November 1982. After dinner with him in his house in Maharani Bagh his driver dropped me at my aunt's place in Green Park. But before that he got down at the residence of Director of All Indian Institute of Medical Sciences (AIIMS). When I asked him why he was meeting the Director he replied that friendship with such people comes handy during medical emergency!

[HOME](#)

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