

Building Meghnad Saha Archives at the SINP

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1. Introduction

I shall begin by making two confessions. One is that I am not an archivist myself. I am drawn into it by circumstances that will be clear as I recount the history of the Meghnad Saha (MNS) Archives. The other one, the reason for which also will be apparent thereby, is that most of the documents that we have in our Archives *had* to be copies rather than the originals. With this difference, the MNS Archives purport to meet the same objectives as that of the others, namely providing source materials. This, in our case, relates to the life and work of Professor Meghnad Saha and the history of the institute that he founded. While the first has an importance on its own, - for Saha was one of the greatest astrophysicists of the world, - the second illustrates in general, how scientific institutions are built in our country around one eminent person or the other, motivated by their commitments to science and society. The question on the authenticity of our documents is easily settled by the fact that these are *copies made by us* before despatching the originals elsewhere for preservation.

2. History of the MNS Archives

A massive volume mainly comprising the Meghnad Saha correspondence and photographs was inherited by Professor Ajit Kumar Saha, Professor Meghnad Saha's eldest son and a senior Professor of the Saha Institute of Nuclear Physics (SINP, hereafter referred to as the Institute). It was further enriched by him from various sources like the Nehru Memorial Museum and Library (NMML), New Delhi (pre-1952 Nehru papers) and the Princeton Collection, USA (Saha-Russell correspondence). In the early seventies, these passed on to Dr Prasenjit Saha, Meghnad's youngest son and one of the Deputy Directors of the Central Glass & Ceramic Research Institute (CGCRI) in Kolkata. In the late seventies, when the Institute did not have much of infrastructural facilities, it was decided to deposit most of the originals of Meghnad's correspondence and diaries with the NNML for preservation. With the help of Dr Santimay Chatterjee, one of Professor MN Saha's students and later on the Editor of Meghnad Saha's Collected Works, these were sorted out and sent there in five instalments, retaining only the copies and a list of the documents so transferred. As far as I gather, several copies were made and the custodians of these were Professor AK Saha himself and Dr Chatterjee, for no copies existed in the Institute Library, the most natural place for them to be. One reason could be that the Library was already short of space, and the other, that the people then at the Institute were not much interested in the past. The Institute stirred in the wake of the year of Professor Saha's Birth Centenary (1993-94) when it was decided to build up an archive with the Meghnad Saha Papers. A committee was hastily set up for the purpose, the immediate task of which was to recall the copies from the custodians, classify, catalogue and digitise the matter. It was also to retrieve other things like the articles Prof Saha used, audio-tapes etc. A two-module office space was allocated for the purpose, some machinery bought and the work ensued. It went on for years at a snail's pace, for everybody had his own academic activities to attend to. However, by the end of the year 1999, this Committee, headed first by Prof Manoranjan Bhattacharya, and later by Prof Kamalesh Bhaumik, in close collaboration with Dr Santimay Chatterjee and Dr Prasenjit Saha, did a commendable job in retrieving many of Professor Saha's photographs and testimonials, improve upon their faded images and finally store them digitally in a number of CDs. This entailed much of hard work for, as is our wont, none of the photographs were marked by occasion or date, let alone identification of the persons appearing in them. However, a selection of these was later posted on our Website and they are still there. Some were also displayed on various occasions in and around the Institute. However, the Meghnad Saha Correspondence, which formed the bulk of the matter,

was a different story. It involved a massive work, like descriptive cataloguing, various cross-checkings, getting translations done from Bengali, German and French into English, and preparing brief summaries, in which, again, the initiative and much assistance came from Dr P Saha, who by then had superannuated from the CGCRI and retired to the States. Much ahead of it, he had procured new materials from the Materials Research Laboratory, Pennsylvania (Takamine-Saha correspondence). After the MNS Birth Centenary, however, there came a lull in the Committee's activities, and its contact with Dr Saha broke. An extensive damage was brought to the collection during this period for want of proper care and effective cooperation among the workers in the field.

In 2000 the Institute was to complete 50 years and preparations were made to observe the Golden Jubilee Celebration. It was then decided to bring out a Commemoration Volume, and the task of editing it fell on the present author. While working on it, he had to dig into many files, and finally, when the nearly 350 page-Volume (SINP Turns Fifty) came out, the authority thought it worth while to build up a repository in the Institute, where the materials related to the Institute may also be preserved. As a result, the Publication and Documentation (P&D) Cell was created towards the end of 2003 and the MNS Archives made a part of it. The Editor of the Golden Jubilee Volume was appointed the Chairman of the P&D Committee to oversee the Cell's work. With 5 staff members taken from the Library, the Cell started functioning from January 2004.

By this time all the CDs containing the photographs and an appreciable part of the correspondence were misplaced. The remainder of the stock was not even indexed except by the NMML accession numbers assigned to them during the transfer.

The P&D Committee immediately reinstated contact with Dr Prasenjit Saha urging him to resume the programme of compilation (which included cataloguing and making summaries) and started systematically retrieving copies of the lost materials from Dr Saha himself, the NMML, Princeton Collection (courtesy Dr D DeVorkin, for the Russell papers) and Niels Bohr Archives of Copenhagen (for the Niels Bohr papers). Happily, the endeavour made good for the loss as also helped editing them and gain new material (like the letters that passed between HN Russell and many of the astrophysics celebrities of the day commenting on Prof MN Saha's work). It earned back the confidence of Dr Prasenjit Saha who very kindly deposited with us the originals of the photographs, and still later, a large volume of letters that were found at a later time, as also some unpublished manuscripts of Professor Meghnad Saha and other valuable documents. After Dr Chatterjee passed away in early 2003, much of his own collection on Meghnad Saha was donated by his wife, Sm Enakshi Chatterjee. Happily, the repository is now as rich as it can be. For further acquisition, an appeal has been made to all concerned to deposit with us their articles or documents that have any bearing on Professor Meghnad Saha or the Institute.

3. What we have in the MNS Archives

Documents in the MNS Archives today broadly divide under Meghnad Saha Papers and the Institution Papers.

3.A. The Meghnad Saha Papers (3.A.1 - 3.A.8)

This part is organised under several categories like Correspondence, Photographs and testimonials, Diaries, Manuscripts, Reprints of Scientific Works, Reports, Books, Paper clippings etc.

3.A.1. Correspondences: (About 3000 pages, with 360 persons).

3.A.1.1. Listing

Three kinds of list have been prepared, namely Alphabetical, Yearwise and Subjectwise. The yearwise list brings out the ebb and flow of correspondence in Saha's life and serves to indicate omissions, if any, in certain years. Subjectwise list highlights the spectrum of activities

of the person, which for Meghnad Saha comprises the following variety:

- (i) Scientific
- (ii) National Planning
- (iii) Refugee Problem
- (iv) State Reorganisation
- (v) Common Language
- (vi) Atomic Energy
- (vii) River Policy
- (viii) Damodar Valley Corporation
- (ix) University Grants Committee
- (x) Autobiographical
- (xi) Family Correspondence with:
 - (a) Wife, Radha Rani Saha
 - (b) Eldest son, Ajit Kumar Saha
 - (c) Second son, Ranajit Kumar Saha
 - (d) First Son-in-law, Kshudiram Saha
 - (e) Others.

A Folder, assigned to each correspondent, is preserved in the strong room to which no users are allowed. Each Folder is organized in three parts. The first is the descriptive catalogue of the letters contained therein, the second the summaries of the letters, and the third constituting the main body, the Master copy of the letters.

3.A.1.2. Catalogue

All pages of the main body are indexed as follows

Bhabh/HJ-46-1(E)-1

-2

Bhabh/HJ-55-31A(Ecp)

The first two-digit number gives the year [we propose to replace it at a later time by an alphabet, indicating to or from, followed by a six-digit number DDMMYY]. The next number is the letter number, the label 31A(Ecp) specifies that a typed copy of the contents on the page number 31 in English has been appended (A) to help easy reading.

If in a catalogue one of the serial numbers is missing, it indicates that no copy of the letter of that particular number has been preserved in our Archives for one reason or another. These letters are to be found in original at the NMML.

3.A.1.3. Summary

We provide two things under this part, namely the place of work and designation(s) of the correspondent during the period of correspondence, whether the letter is to or from Saha, and a summary of the letter *including bionotes on the persons referred to* in the letters. This part also gives summary/subject of the letter a copy of which we have not preserved (marked ** at the end) in our Archives.

3.A.1.4. E-access

We are presently taking steps so that the catalogue and summary parts may be accessed through our website.

3.A.1.5. Physical access

However, for the benefit of the users, we keep on rack bound volumes containing copies of one or more of the complete folders. Already 18 such volumes are ready.

- 1 A,B.
- 2 C, D, E

- 3 F, G
- 4 H, I, J, K, L
- 5 N Bohr, JC Ghosh, PK Kichlu
- 6 HJ Bhabha, SS Bhatnagar
- 7 M
- 8 Nehru
- 9 N, O, P, Q
- 10 R
- 11 S
- 12 SN Sen, BN Srivastava, GR Toshniwal
- 13 HN Russell plus his correspondence with others on Saha.
- 14 T-Z
- 15 Takamine & Others
- 16 AK Saha I
- 17 AK Saha II
- 18 Radharani Saha

90% of the matter embodied in these volumes is already digitized. Two/three supplementary volumes, containing assorted letters procured at a later time are in preparation.

3.A.2. *Reports*

We have the following Reports

- (i) Report of the Calendar Reform Committee, Govt of India, CSIR, 1955.
- (ii) National Planning Committee Series, Ed by KT Shah (Vora & Co Publ, 1947)
 - a. River Training and Irrigation
 - b. Power and Fuel
- (iii) Indian Scientific Mission (1944-45): Report of Their Visit to UK, USA & Canada (draft with corrections)

3.A.3. *Scientific Papers and other Articles*

We keep under it copies/originals of reprints. These are strong room articles.

3.A.4. *Books & Treatises*

Some of the books and treatises written by Prof Saha are preserved under this Section.

3.A.5. *Photographs & Testimonials*

A large collection of family and group photos in which Meghnad appears are preserved here (strong room articles, not physically accessible to users). These may be accessed through Website.

3.A.6. *Diaries (copies, original with the NMML)*

These are strong room articles, not physically accessible to users.

- Note-book 1927
- Pocket Diary 1928-29, 1931
- Pocket Diary 1933
- Pocket Diary 1936 (1), (2)
- Pocket Diary 1940 (1), (2), (3)
- Pocket Diary 1941
- Pocket Diary 1942 (1), (2)
- Pocket Diary 1943 (1), (2), (3)
- Pocket Diary 1944
- Table Diary 1944-47
- Pocket Diary 1945 (1), (3)
- Pocket Notebook 1945
- Table Address Book 1946

Pocket Diary 1946
Engagement book 1946
Pocket Diary 1949, 1949, 1950, 1951, 1952
Table Diary 1953, 1954
Table Engagement book 1954
Pocket Engagement Book 1954
Table Diary 1955, 1956
2 Address Books, Undated
3 Notebooks containing scientific notes.

Most of these, except for the first few years, are sparsely written.

Physical access

A Volume containing writings in the diaries from the first few years is to appear on rack.

3.A.7. Manuscripts

Strong room articles. Not physically accessible.

- (i)Published articles (some of these have now disappeared from the current editions of the books they first appeared in);
- (ii)Unpublished manuscripts (travelogues, speeches, originals of self-prepared bio-data etc.)

3.A.8. Saha's Associates

Friends:

SN Bose (Dhaka papers, copies of a few letters); JC Ghosh (testimonials, speeches).

Colleagues (brief bionotes), HJ Bhabha (Pencil sketches by Bhabha).

Contemporaries (brief bionotes).

Students (brief bionotes).

3.B Institution Papers

In this Section we preserve papers related to

1. The University College of Science, Calcutta and the Palit Laboratory of Physics.
- 2.The INP Foundation & Expansion.

3.C. On Meghnad Saha

- A. Articles in Dailies & Journals.
- B. Paper Clippings.
- B. Books.

4. Other Activities of the MNS Archives

Occasionally we conduct case studies made by the P&D Unit Staff. This is a part of the internal awareness programme intended to encourage the staff to go through the material stored in the Archives. Three such cases were taken up:

- A. A Tale of Two Giants: Russell and Saha, Feb 28, 2007
- B. The National Movement and Saha, October, 2007
- C. Jagadis Chandra Bose and Marconi, November 30, 2007

These customarily resulted in Posters and preserved as brochures/pamphlets.

4.2. We also organise from time to time Symposia on relevant issues. This is to arouse curiosity in others and let them know what we have. The one already done is

National Symposium on History of Science & Technology in Pre- & Post-independence India,

SINP. Kolkata, October 6, 2007.

5. Difficulties Facing the Archives & Conclusions

The greatest blow to an archive is usually delivered much before its birth when we let small details slip through our fingers. Two factors contribute. Firstly, the initial uncertainty regarding survival of an establishment, be it an author or an institution. It makes everybody casual about almost anything leading to it. The people involved or the incidents occurred in the process get lost forever, if not to a few close by. When *they* are gone, these details wash out. History, when written normally by the winners speaks of the success *sans* the dynamics. An example at hand concerns the actual foundation day of the SINP. It is not January 11, 1950 as it is observed today. The Institute existed long before Mme Irene Joliot-Curie *inaugurated its new building* on that day. No body ever kept any record of actually when it began.

Secondly, when an institution starts, it does so on a modest scale, at a small place which the-then fund allowed. When it becomes somewhat big and moves out elsewhere to a spacious building, in the frenzy of shifting small things are overlooked. These are either left behind, or at the most, stowed away somewhere not to be visited too often. The first casualty of it are documents, which accumulate faster than anything. When one wakes up to their importance for one reason or another, they are worm eaten or gone for ever.

It displays two sides of the problem. One is psychological and the other, material. With time, the latter is conquered easily than the former. When the computer was a far cry, old papers *had* to give way to the new ones simply because there was not enough space. Now that computers are aplenty, that problem ought not exist. But our mindset being as old as ever, the e-space remains hugely underutilised, because the awareness that today's present is tomorrow's past is yet to come.

Consider, for example, how the documents are organised in research institutes today. Like all offices, they maintain a service file for every individual worker. It has only the details of leave taken and the salary and grades earned. No academic achievements, not even a list of papers are to be found there! On the other hand, each and every worker submits every year a report on the progress of his/her work. They go somewhere else. Once a worker leaves and the benefits are all settled, files disappear deep inside a safe, and are perhaps destroyed after a given number of years. Even if they exist, it is an uphill task locating and retrieving them. On the other hand, one could easily evolve a scheme to call back *all* the relevant files to one place (may be the Archives) when a worker leaves or superannuates (or still in service), integrate and preserve (digitally or otherwise) the essentials. The aim should be to provide, on request, at least a thumbnail portrait of any worker serving the Institute. This requires that the authority adopts a clear-cut policy about it and makes its administration stick to it. This is hardly ever done in our country.

It must be emphasized that those working in the archives must have a knack of it. Mere technical expertise is not enough, though essential. The authority should see to it that these workers do have both. Lastly, it would do good to an Archive to associate with it one or two learned people who can help all appreciate and harness the riches of the repository.

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