THE ASIATIC SOCIETY AND THE INDIAN SCIENCE NEWS ASSOCIATION, KOLKATA: AN OVERVIEW IN RETROSPECT

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The Asiatic Society and the Indian Science News Association, the two premier institutions were founded in Calcutta (now Kolkata) in 1784 and 1935 respectively. As the centres of cultivation of science and dissemination of the acquired knowledge through their own journals, they attained acclaimed academic eminence during the pre-independence period. This rich intellectual tradition was continued in both these organizations even after independence till the present. Both have performed a great historical role in the development of specialized knowledge in various branches of academic disciplines under a broad coverage of science and culture. This paper has attempted to present a brief overview on their contributions in course of their long journey since inception.

I

The Asiatic Society was established on 15.01.1784 in Calcutta (now Kolkata) by Sir William Jones (20.09.1746 – 27.04.1794), who came here as a British professional and a scholar with an assignment of Puisne Judge of the Supreme Court in 1783. Apart from his legal engagement he had also earned significant renown for his huge academic interest and excellence as the President of the Society from 1784-1794. His main objective, as elaborated in his first Anniversary Discourse in 1784, was to carry out in the Asiatic Society studies on the Society and Culture of the East, Asia in general and India in particular. The entire ambit of the academic agenda primarily based on Man-Nature interface and included multiple areas of introspection, shortlisted broadly under the domain of history, science and art. In his own words, “If it be asked, what are the intended objects of our inquiries within these spacious limits, we answer MAN and NATURE; whatever is performed by the one, or produced by the other. Human knowledge has been elegantly analyzed according to the three great faculties of the mind, memory, reason, and imagination, which we constantly find employed in arranging and retaining, comparing and distinguishing, combining and diversifying, the ideas, which we receive through our senses, or acquire by reflection; hence the three main branches of learning are history, science, and art: the first comprehends either an account of natural productions, or the genuine records of empires and states; the second embraces the whole circle of pure and mixed mathematics, together with ethics and law, as far as they depend on the reasoning faculty; and the third includes all the beauties of imagery, and the charms of invention, displayed in modulated language, or represented by colour, figure, or sound” (delivered on 15th February, 1784, pp3-4, Man and Nature: the Discourses by Sir William Jones, The Asiatic Society, Kolkata, 2010)1. During his tenure he delivered eleven Anniversary Discourses, the last being on 20th February, 1794 (ibid).

The acclaimed scholarship of Sir William Jones as well as his valuable contributions were very succinctly summarized by Professor Suniti Kumar Chatterji (who became the President of the Asiatic Society during 1953, 1954 and 1970) in his address delivered on the occasion of William Jones’s bicentenary (1746-1946) which was observed at the Asiatic Society on 07.01.1946 and later published in the Bicentenary Commemoration Volume in

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1948. He mentioned, “Among those rare spirits in Europe during the second half of the eighteenth century who, nurtured as they were in the humanism of ancient Greece and Rome, felt irresistibly drawn towards the culture and religion and the languages and literatures of the East, was Sir William Jones …. William Jones opened up for civilized Europe a new chapter in the Science of Man – that of Orientalism …. Thus in the extension of horizon of Europe from the purely material to the intellectual, in matters concerning the East, Sir William Jones took a leading part” (p-84).

This was an important phase of Indian history for the development of intellectual spread centering around the Asiatic Society during its glorious journey. Incidentally it may be mentioned here that the Society has passed through some changes so far the nomenclature of the organization was concerned. It was initially the Asiatic Society since 1784, then The Asiatic Society of Bengal (1832-1935), followed through the Royal Asiatic Society of Bengal (1936-1951), finally ended up as The Asiatic Society in 1952. The Asiatic Society was declared as an Institution of National Importance by an Act of Parliament during the Society’s bicentennial year in 1984. At present the Society belongs to the Ministry of Culture, Government of India as an Autonomus Body, which is a member based society registered under the West Bengal Societies Registration Act, 1961. The Government of India provides the fund as Grant-in-Aid. This will be relevant to mention here that the Asiatic Society is governed by an elected Council with a President, a General Secretary, a Treasurer, four Vice-Presidents, nine Sectional Secretaries (Physical, Biological, Medical Sciences, Anthropology, History and Archaeology, Philology including a Jt. Secretary, Library and Publication Secretaries, four Council Members, four Central Government Nominees, one State Government Nominee and a representative of the employees.

During its formative years and until the middle of the twentieth century the Asiatic Society was perhaps the pioneer centre of learning and research for all branches of knowledge – not only the classical antiquities on art, history, archaeology, language and linguistics, folklore etc. but also on modern aspects of science belonging to multiple disciplines, such as physics, chemistry, biology, mathematics, astronomy, trigonometry, meteorology, medicine, anthropology and so on. The history of science was a major concern of research. All the major institutes in the field of science had its origin at the Asiatic Society. For example, The Geological Survey of India (1851) - the first Director of GSI, Thomas Oldham was the President of the Asiatic Society (1864-69). The Archaeological Survey of India (1861) - the pioneer of which, Alexander Cunningham was a member of the Asiatic Society. The Calcutta Medical College (1835) - its first Principal Dr. M.J. Bramley was a member of the Asiatic Society. The School of Tropical Medicine (1920) - its first Director, Dr. Leonard Rogers was the President of the Asiatic Society (1915). The Zoological Survey of India (1916) and the Botanical Survey of India (1890) had their root and origin at the Asiatic Society. The Anthropological Survey of India (1945) - its first Director, Dr. B.S. Guha was the General Secretary of the Asiatic Society (1939-42). The seed of the formal Indian Museum (1875) was nurtured at the Asiatic Society since 1814. Subsequently, the collections of the Society were handed over to the Trustee of Indian Museum in 1868, except books, journals, lithographs, coins, busts etc. The first Superintendent of the Museum of the Society Dr. Nathaniel Wallich and the first Superintendent of the Indian Museum Dr. John Alexander were connected with the Asiatic Society. Dr. Wallich contributed impetus to the formation of Zoological Survey of India. Later on its Director Dr. N. Annandale, who was President of the Society (1923) contributed to the formation of Anthropological Survey of India (1945). The Indian Meteorological Department’s (1875) head was H.F. Blanford, who was the General Secretary (1863-68) and the President (1884) of the Asiatic Society. The Trigonometrical Survey came into being in 1802 and its head William Lambton was a member of the Asiatic Society.
At the initiative of P.S. MacMohan of Canning College, Lucknow and J.K. Simonson of Presidency College, Madras (both were Professors of Chemistry) a move was afoot to start an Indian Association for the Advancement of Science, in the line of the same as was in Britain. On persuasion of Dr. N. Annandale the Council of the Asiatic Society decided to provide space for the first Indian Science Congress on 22.11.1913. Accordingly, the said Congress was held at the Asiatic Society of Bengal on January (15-17, 1914) with the Hon’ble Justice Asutosh Mukhopadhyay as its General President. The Society continued to extend this support for about twenty years till the alternative arrangement was made. The Asiatic Society also nurtured the formative years of the foundation of the National Institute of Sciences (1934) which was headed by Sir Lewis L. Fermor and who happened to be the President of the Asiatic Society (1934-35). Later on this institute was shifted to New Delhi and subsequently renamed as the Indian National Science Academy. This part will end up with a mention that Sir James William Colville who was the President of the Asiatic Society (1848-58) and was also the Chief Justice of Calcutta Supreme Court was instrumental in the establishment of Calcutta University in 1857 and was nominated as the first Vice-Chancellor.

To sum up, the part played by the Asiatic Society in establishing a tradition and foundation of science studies and research in India, may be studied by refering to the Centenary Review of the Asiatic Society (1784-1884), first published in 1885 and reprinted in 1986 by the Society. In Part III of the said volume a detailed review entitled Natural Science was made by P.N. Bose. He covered in this part of review a total of eight chapters which included among others (i) Mathematical and Physical Science (Astronomical observations and Trigonometrical Survey, Meteorology, Tidal observations, Law of Storms, Electrical Researches, Photography, Process of Coining etc. and Mathematical Sciences of the Hindus; (ii) Geology (Stratigraphical Geology, Dynamical Geology including Volcanoes, Earthquakes, Glacial Action); (iii) Zoology (Vertebrata, Fishes); (iv) Botany (Indian Flora, Burmese Flora, Palaeobotany); (v) Geography (The Himalayas, Assam and North Eastern Frontier, Burma, Islands in the Bay of Bengal, China etc., Southern India, Western India, the North Western Frontier, Afghanistan and Central Asia); (vi) Chemistry (Preliminary, Calcutta Water Supply). The review also included classified index to scientific papers at the end. Initially, the Asiatick Researches and then the Journal of the Asiatic Society of Bengal included these articles on sciences mentioned above. The interested scholars may refer to another Index to the publications of the Asiatic Society, prepared by Sibdas Chaudhuri from 1788-1953 and Bicentennial index to the publications of the Asiatic Society (1788-1987), where mention is made about the scientific papers. Among the pioneer scientists of India one would get the references of P.C. Ray, J.C. Bose, Asutosh Mookerji, P.C. Mahalanabis, C.V. Raman, Meghnad Saha and a host of others who figured in the arena of publication of oriental science articles through the Asiatic Society. Up to the years of say 1895 the European contributors dominated the scene. The scenario changed gradually with the entry of the eminent Indian scientists. For example, P.C. Ray’s paper ‘On the chemical Examination of certain Indian food stuffs – Part I Fats and Oils’, was published in the Journal of the Asiatic Society of Bengal, 1894, followed by ‘On Mercurous Nitrite, in 1896 and many others later on. Notable among them, The Rasarnavam (with Haris Chandra Kabiratna) by the Asiatic Society of Bengal, 1910 (reprinted 1983, and The Life and Experience of a Bengali Chemist (2 vol.) by the Asiatic Society, 1996 (first published in 1932 and 1935). J.C. Bose presented a paper at the Asiatic Society of Bengal in 1895 entitled ‘The Polarization of Electric Ray by a Double Refracting Crystals’. Likewise C.V. Raman, Meghnad Saha, Asutosh Mookerjee, P.C. Mahalanabis, U.N. Brahmachari and others published a
number of scientific articles in the Journal of the Asiatic Society (see Sibdas Chaudhuri, Bicentennial Index to the publications of the Asiatic Society, 1788-1987).

II

The Indian Science News Association (ISNA) was founded in 1935, the Council of which was headed by Sir Prafulla Chandra Ray (1861-1944) as its President, and Dr. Meghnad Saha (1893-1956) and Dr. Bidhu Bhushan Ray (1894-1944) as the Secretaries, three Vice-Presidents, one Treasurer and twelve other members. The Science and Culture, the organ of ISNA first appeared in 1935, one month earlier than the formal establishment of the Association. Like the Asiatic Society, the ISNA is also a member based Registered Society, the governance of which lies with the elected Council. But unlike the Asiatic Society, the ISNA is dependent on donations by the members/well wishers and occasional grants from various local institutions and the agencies of the Government of India. B.B. Baliga in the Golden Jubilee volume of Science and Culture (ISNA, July, 1985) observed, “By the end of the second decade of this century research in science was taking root in many university departments and government laboratories in India ….. (These) scientists felt the need for an association where they could meet and exchange ideas on the dissemination of scientific knowledge to others …. During this period Meghnad Saha, the then Professor at the Allahabad University with the patronage of a large number of the eminent men of science in the country launched the Journal Science and Culture” (p.14). It is known that the first issue of the Journal was published in June 1935 under the editorship of M.N. Saha and Bidhu Bhushan Ray. Baliga’s quick survey of fifty years also revealed that being a journal of Natural and Cultural sciences multiple academic disciplines were accommodated in terms of the coverage of articles. Apart from the physical and natural sciences, the subjects covered were anthropology, archaeology, history, geography, economics, education etc. Even the issues like social impact of scientific researches, the planning and development, the biographical background of scientists were also reflected through these articles and so on and so forth. Contributions in this journal came from eminent scholars of the days – both in India and abroad including Nobel Laureates. The Booklet of ISNA published on the occasion of 75 years contain many such references from 1937-2009. Notable among them are S.K. Mitra, B.C. Guha, Ramaprasad Chanda, M.N. Saha, J.B.S. Haldane, Otto Hahn, P.C. Mahalanabis, J.D. Bernal, P.M.S. Blackett, Homi Jahangir Bhabha, S.N. Bose, D.S. Kothari, C.N.R. Rao, A.K. Sharma, Yash Pal, A.P. Mitra, M.S. Swaminathan, R.A. Mashelkar, Amartya Sen, Jayant V. Narlikar, Geoffrey A. Cordell, Partha P. Mazumdar and many others.
Over the years since its inception this premiere institution of scientists, technologists, litterateurs and men of eminence from different walks of life, have steadily made a progress in the academic attainments mainly through the regular publications of its Journal, and other occasional volumes, as well as through its other engagements, such as organization of seminars, workshops, endowment and special lectures etc. Of late the introduction of an unique programme, namely science communication course has caught the attention of people of diverse background including the Department of Science and Technology, Government of India. A lot of interest has been generated through this programme specially among a section of youth who have preferred to build up their career in this special field of cultivation of knowledge and its practical application in the field of dissemination for a meaningful communication with the general public at large. For the last few years Vijan Prasar under the DST provided a generous fund to carry out the Training Programme on Science Communication and Media Practice of ISNA.

Looking back, one feels a little nostalgic reminiscing the first editorial of Science and Culture, when it loudly announced as its objective to “examine the cultural foundations of Indian civilization” (p2, Golden Jubilee Volume, 1985). In the same vein it was further mentioned, “Its (Science and Culture) object is dissemination of scientific knowledge amongst the public and advocacy of its application to all walks of life as far as practicable” (p4, ibid). In the concluding statement of the said editorial it is mentioned, “Science is important only as long as it conduces to the development of culture and serves the cause of human progress” (p5).

As far as the important historical connectivity is concerned the Science and Culture of ISNA enjoyed the privilege of having in the list of its contributors a number of high profile scientists/academics as well as public figures mentioned earlier. Netaji Subhas Chandra Bose had sent his communication from Germany which was published entitled “Some Problems of Nation-Building (vol. 1, 1935, pp 258-59). He had advanced his arguments in the following lines, being younger as nation-builders we “approach the task of nation-building in a thoroughly scientific spirit and we desire to be armed with all the knowledge which modern science and culture can afford us”. Even in the pre-independent age, well ahead of achieving independence, he pointed out a few problems to be probed into by the scientists in order to pave the direction of building an independent nation specially in its formative years to come. Among others he hinted at some sociological problems as to the reasons of our stagnation and the possible ways for its revival; simultaneously he felt to have a scientific population policy, a language policy, an overall nutritional
policy and so on. Jawaharlal Nehru mentioned in his message to the Journal in 1942, “Science and Culture are the essence of life today, in war and peace, and any periodical which serves the cause of science and culture performs a service to India and humanity”.

The lineage of this academic heritage has been upheld by the successors of the ISNA and its publications eloquently reflect that tradition. To cite just one instance to drive the point home, Dr. Meghnad Saha’s contributions, specially in *Science and Culture* from 1935 to 1953 before he died in 1956. His range of subjects, their topical importance, the depth of analytical interpretation with a popular perspective are a matter of wonder to many readers and thinkers. He could find time for these articles inspite of his other academic and administrative responsibilities. Even as a member of Lok Sabha (Indian Parliament), where he was elected in 1952, he made his presence felt by delivering very important speeches and contributing to his given assignment with full engagement in very many ways. A cursory glance at the M.N. Saha Birth Centenary Number of *Science and Culture*, July-October, Nos. 7-10, 1993, which was published on the occasion of his birth centenary, would reveal the variety of subjects from ‘Ultimate constituents of Matter’ (1935) to ‘Age of Mahabharata’ (1939), via ‘Planning for the Damodar Valley’ (1944) and ‘Future of Atomic Energy in India’ (1954) to ‘The World Calender Plan’ (1954). Again, if one looks at further, the range of subjects vary from the ‘Archaeological Excavations in India’ (1936) to Physics in Aid of Medicine’ (1940) and from ‘Post War Educational Development in India’ (1944) to ‘Rethinking our Future’ (1953) and so on and so forth. B.B. Baliga noted that this Founder Editor “wrote over 115 articles, editorials and notes in the pages of *Science and Culture*” (p cv-1, Centenary Number, ibid)

III

This part of the present article will now make an effort to show the academic affinities of the two great institutions – the Asiatic Society and the Indian Science News Associations and their respective Journals – which were founded in the city of Calcutta (now Kolkata). While the former is pretty old and unique of its kind in the whole continent of Asia (which has stepped into its 238th years of glorious existence), the latter though of only 87 years old, yet is fully recognized as the premiere science organism of the country. Both have substantially contributed to the academic domain of science culture in the country in their own ways. Sir William Jones, the Founder of the Asiatic Society, was the protagonist of the British tradition of learning who came here during the colonial rule to act as the Judge of the then Supreme Court in Calcutta. He had already developed an interest in the civilization and cultures of the orient at an early age. Himself a polyglot, he announced through his first Annual Discourse in 1784 that the bound of research in Asiatic society would be the geographical limit of Asia and within the given universe, according to his own phrase, “whatever is produced in the nature and performed by man”. Therefore, in a sense it was an academic agenda on MAN-NATURE interface primarily based in the context of history, science and art. Sir William Jones and his later associates namely James Prinsep, H.T. Colebrooke, Charles Wilkins, John Herbert, W. Hunter, and a host of others were extremely fascinated to search for the roots of cultural excellence in all branches of human knowledge including the history of science in India. It has already been mentioned once in the beginning of this essay. The ISNA on the other hand, from the very beginning put a primacy as its objective to enquire into the basic tenets of Indian civilization embedded in an approach of understanding – both scientific and cultural – as its broad based method. Acharya Prafulla Chandra Ray and Dr. Meghnad Saha reasonably pushed such ideological inputs through this institution as well as its organ Science and Culture to bring forth a climate of independent thinking which was supposed to help the nation when it would be free from the clutches of colonial rule. This joint academic leadership
ultimately brought a formidable intellectual tradition with a rich and sustained dividend. The review in the Golden Jubilee Volume mentioned that 2800 articles were published under fifteen broad heads covering multi-disciplinary contributions.

Since the beginning and up to about 1930, Asiatick Researches, and then the Journal of the Asiatic Society of Bengal, were the main outlets for publishing scientific articles, initially by the Europeans and later joined by the leading Indian scientists of the day. The first original and later other articles by P.C. Ray, J.C. Bose, M.N. Saha, U.N. Brahmachari, P.C. Mahalanabis and a number of others were published in Asiatic Society’s journal. With the publication of *Science and Culture* gradually the scenario changed. The scientists named above belonged to both these institutions in various capacities. This trend descended further and continued later with other eminent scholars of subsequent decades. It is found from the indexed documents available at ISNA that, apart from the references made above, Dr. B.S. Guha, Professor N.K.. Bose, Professor M.M. Chakraborty (1987, 1992-96), were President of the Asiatic Society and also closely connected with the ISNA and contributed number of articles in *Science and Culture*.

Before concluding this brief write-up it may be mentioned that the first General President of the Indian Science Congress, Sir Asutosh Mookerjee and later Dr. Shyamaprasad Mookerjee (both President of the Asiatic Society as well as Vice-Chancellors of Calcutta University) were in some way or the other connected with the academic programmes in both of these leading institutions of those days.

(A) Select References

1. Sir William Jones – (2010), Man and Nature, Discourses – 1784-1794, The Asiatic Society, Kolkata.
2. Suniti Kumar Chatterji, (2002) (1st pub. 1948 – ‘Sir William Jones’ in Sir William Jones Commemoration Volume 1746-1946, pp81-96, The Asiatic Society, Kolkata.
3. P. N. Bose, (1986) (1st pub 1885) – Centenary Review of the Asiatic Society (1784-1884), Part III, ‘Natural Science’, The Asiatic Society, Calcutta.
4. B. B. Baliga, (1985) – *Science and Culture*, Golden Jubilee Volume, Indian Science News Association, Calcutta.
5. B. B. Baliga, – *Science and Culture*, M.N. Saha Birth Centenary Number, Indian Science News Association, Vol. 59 Nos. 7-10, (1993).
6. Uttara Chakraborty et al., ‘Time Past and Time Present : Two Hundred and Twentyfive years of the Asiatic Society’ (2008).

(B) Notes:

1. Dr. Meghnad Saha (1945), Professor N.K.. Bose (1972), Professor M.M. Chakraborty (1987, 1992-96), were President of the Asiatic Society and also closely connected with the ISNA and contributed number of articles in *Science and Culture*.
2. Original Science Articles of P.C. Ray, J.C. Bose, M.N. Saha etc. were published in the Journal of the Asiatic Society. They were closely connected with the ISNA and *Science and Culture*.
3. Dr. B.S. Guha (General Secretary, The Asiatic Society 1939-43), Dr. Basudeb Barman (Treasurer, 2010-13, Vice-President 2020 – ), Professor K.P. Chattopadhyay, Professor R.K. Mukherjee, Professor Santimoy Chatterjee and the present author Dr. S.B. Cahkrabarti (General Secretary, 2016 - ) of the Society Prof. Syamal Chakrabarti were/are also connected with the ISNA and *Science and Culture*.

(C) Citations:

Fascimile of some letters of P.C. Ray and M.N. Saha received through the courtesy of the Museum, the Asiatic Society, Kolkata.