

General Scientific Societies in British India*

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(Received 14 June 2014)

Abstract

British India gave birth to hundreds of scientific societies devoted to various sub-disciplines of science such as physics, chemistry and mathematics. However, some of them were devoted to science in general and played a significant role in science, society and scientific researches in India. Thirty three such societies are streamlined here with nature of foundation, objectives, publications and other details. The oldest of course is the Asiatic Society (1874) established in Kolkata and the latest being the Association of Scientific Workers of India (1947) inaugurated by Pt. Jawaharlal Nehru. They were established for popularization of science, promotion of science education, research, development of scientific terms in regional languages, translation of foreign scientific texts in Indic languages, and so on. Many of the societies perished for varied reasons. Some of them are existing till to date.

Key words: Scientific societies - British India; Scientific societies – India; Scientific societies – 18th century - India; Scientific societies – 19th century - India; Scientific societies – 20th century - India.

1. INTRODUCTION

The history of scientific societies in India can be traced back to 1760s when a society-like organization called United Brothers was founded by the Madras botanists comprising mostly the Danish missionaries. It was not considered as a society, possibly because it did not have a written constitution, an executive committee, etc. Asiatic Society formed in 1784 through the initiative of Sir William Jones was a learned society in the truest sense of the term. Its objective was to ‘inquire within the bounds of Asia about MAN and NATURE; whatever is performed by the one, or produced by the other’. Thus, the members of the Society researched practically in all areas of knowledge with a heavy bias on scientific subjects.

Between 1784 and 1831, a number of societies were formed which were not exclusively devoted to science but involved in various scientific activities. They have also been included here.

The societies are recorded below in chronological order. Attempts have been made to provide information as to history, membership (including founder members, wherever available), objectives, functions, facilities, publications, references, etc. Information about the societies is given till 1947. In the case of societies surviving beyond 1947 some information of post-1947 period whenever readily available has also been provided.

*The material for the article has been drawn from the Project Report entitled *Growth of Scientific Societies in India (1784-1947)*. The Project was accomplished during 2009-2012 with the financial support of Indian National Commission for History of Science.

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2. SOCIETIES IN CHRONOLOGICAL ORDER

1. Asiatick Society (1784)

History – The Society was founded in Calcutta on 15 January 1784 by Sir William Jones. When the journal *Asiatick Researches* was started in 1788, the name of the Society appeared on the title page of the journal as Society, instituted in Bengal, for Inquiring into the History and Antiquities, the Arts, Sciences, and Literature, of Asia. It is not clear why this name of the Society was used in the journal. Possibly the name was used to express explicitly the scope of the journal. In early 1820s, the name of the Society was changed to Asiatic Society replacing the archaic spelling Asiatick. In 1823, the Royal Asiatic Society of England and Ireland (RAS) was formed and thereafter Asiatic Society [of Calcutta] received a letter from RAS requesting Asiatic Society to be a branch of RAS. The executives of the Asiatic Society did not accede to the request. To resolve the confusion in the name of the two societies the Asiatic Society [of Calcutta] was rechristened as Asiatic Society of Bengal. In 1936, the Society was renamed as Royal Asiatic Society of Bengal when His Majesty, the King-Emperor, was graciously pleased to grant permission to the Asiatic Society of Bengal to use the title “Royal” before its name. After independence, there was no need to retain the word ‘Royal’ in the name of the Society. Hence in July 1951 the name was again changed to only Asiatic Society dropping ‘Bengal’ from its name.

A Medical Section of the Society was started in 1906 in which papers on medical subjects were read and discussed in its monthly meetings. These papers were usually published in the Indian Medical Gazette and short abstracts in its Proceedings.

Membership

Founder Members - John Hyde, Thomas Law, William Jones, Charles Wilkins, John Carnac, John David Paterson, David Anderson,

Charles Chapman, William Chambers, Charles Hamilton, Francis Gladwin, George Hilario Barlow, Jonathan Duncan

Members in General - Till 1828 only the Europeans were elected members of the Society. In 1829, the trend changed at the initiative of H.H. Wilson, and a number of Indians were elected members, such as Dwarakanath Tagore, Sivchandra Das, Maharaja Baidyanath Roy, Maharaja Bunwari Govind Roy, Raja Kalikrishna Bahadur, Rajchunder Das, Ram Comul Sen and PrasannaCoomar Tagore. On December 12, 1832 Ram Comul Sen was elected ‘Native Secretary’. Later, Rajendralal Mitra became the first Indian President of the Society in 1885. In 2001, the Society had 1292 members and 64 research fellows on its roll. Since quite sometime past new members are not being enrolled.

Objectives – In very broad term the objective was ‘To inquire within the bounds of Asia about MAN and NATURE; whatever is performed by the one, or produced by the other’.

Functions – During the long period of its existence the Society had conducted research covering practically every area of human interest; brought out periodicals and various other publications; developed a library unparalleled in its variety of collection; built upon a museum of unique collection; organized lectures, seminars, etc. At present it is working on a number of projects. The Society played a big role in the formation of the Indian Science Congress.

Facilities

Library - Maintains a well-equipped library enriched with the priceless collections donated by its members. At present the collection comprises around 1,17,000 books; 79,000 bound volumes of journals printed in almost all the major languages of the world; 293 maps; microfiche of 48,000 works; microfilm of 387,003 pages; 182 paintings, 2500 pamphlets; 2150 photographs; 47,000 manuscripts in 27 scripts; etc.

Museum – The Society started building up the museum from the very beginning of its foundation. When Indian Museum was established in 1814, most of the valuable collection of the museum of the Society was donated to the Indian Museum. The Society still has a museum containing a ‘significant collection of copper plate inscriptions, coins, sculptures, manuscripts and archival records’

Publications

- i) *Asiatick Researches: or, Transactions of the Society, instituted in Bengal, for Inquiring into the History and Antiquities, the Arts, Sciences, and Literature, of Asia* 1 (1788) – 14 (1822). **Contd. as** *Asiatic Researches*. 15 (1825) – 20 (1839).
- ii) *Journal of the Asiatic Society of Bengal. 1st Series* 1(1832) – 73(1904). **Contd. as** *Journal and Proceedings, Asiatic Society of Bengal. 2nd Series*. 1(1905) – 30 (1934). *Split into:*
 - (a) *Journal of the Asiatic Society of Bengal – Letters*. 1(1935). **Contd. as** *Journal of the Royal Asiatic Society of Bengal – Letters*. 2(1936)- 16(1950). **Contd. as** *Journal of the Asiatic Society – Letters*. 17(1951) – 24(1958).
 - (b) *Journal of the Asiatic Society of Bengal – Science*. 1(1935). **Contd. as** *Journal of the Royal Asiatic Society of Bengal – Science*. 2(1936)-16(1950). **Contd. as** *Journal of the Asiatic Society– Science*. 17(1951) – 24(1958).
 - (c) *Yearbook of the Asiatic Society of Bengal*. 1(1935). **Contd. as** *Yearbook of the Royal Asiatic Society of Bengal*. 2(1936)-16(1950). **Contd. as** *Yearbook of the Asiatic Society*. 17(1951) – 24(1958).
- iii) *Proceedings, Asiatic Society of Bengal*. 1(1865) - 40 (1904).

References

1. Asiatic Society. *Wikipedia*. <http://en.wikipedia.org>; Web - www.asiaticsocietycal.com
2. *Bicentenary Souvenir of the Asiatic Society*. Calcutta: Asiatic Society, 1984. p. v
3. Chatterjee, Mitali. Personal communication.
4. *Current Science* 4(1935/36): 902
5. Kejriwal, O.P. *The Asiatic Society of Bengal and the Discovery of India's past*. Delhi: Oxford University press, 1988. 312p.
6. Medical Section of the Asiatic Society of Bengal. *Indian Medical Gazette* 44(1909): 304
7. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 30.
8. Royal Asiatic Society of Bengal. *Science & Culture* 3(1937/38) Suppl – Government Scientific Department.
9. Sen B K. *Growth of Scientific Periodicals in India (1788- 1900)*. p. S12, 111-113.
10. Shukla, Shabnum. Towards promoting scientific researches in Colonial India with reference to INSA. *Journal of the Asiatic Society*. 50.3(2008): 99-100.
11. *World of Learning 2002*. London:Europa
Address: 1 Park Street, Kolkata – 700016.

2. Literary Society of Bombay (1804)

History – The Society was founded by Sir James Mackintosh on 26 November 1804 in Bombay and continued functioning till 1835 when it became Bombay Branch of the Royal Asiatic Society of Great Britain in Ireland. The Bombay Geographical Society merged with it in 1873, and the Anthropological Society of Bombay in 1896. In 1954, the Society was separated from the Royal Asiatic Society of Great Britain in Ireland and renamed as the Asiatic Society of

Bombay. The change in the name of Bombay to Mumbai necessitated another change in the name of the Society thus making it Asiatic Society of Mumbai.

Membership – In 2001 there were 2,811 members on its roll.

Objectives -To investigate and encourage oriental arts, sciences and literature in relation to Asia, and India in particular.

Functions - Preservation, conservation, cataloguing and documentation of the holdings; supporting research in its chosen fields, and dissemination of research results; and providing a forum for debate and discussions on topics of public interest.

Facilities

Library – The Library has about 100,000 books of which 15,000 are rare. It has over 3,000 ancient manuscripts in Persian, Sanskrit and Prakrit, mostly on paper but some on palm leaves; 1300 maps; and 11,829 coins.

Publications

- i) *Transactions of the Literary Society of Bombay. Contd. as Journal of the Bombay Branch of the Royal Asiatic Society. 1841-1854. Contd. as Journal of the Asiatic Society of Bombay. 1855 – 2001. Contd. as Journal of the Asiatic Society of Mumbai. 2002-.*

References

1. Asiatic Society of Mumbai. *Wikipedia*. <http://en.wikipedia.org>;
2. *Indian Year Book* 1916. p.502.

Address: Asiatic Society of Mumbai. Fort, Mumbai.

3. Madras Literary Society (1812)

History-The Society was founded in 1812

at Madras and continued with this name till 1829 when it was merged with Madras Auxiliary of the Royal Asiatic Society and thereafter it continued as Madras Literary Society and Auxiliary of the Royal Asiatic Society. Later on it was known only as Madras Literary Society.

Objectives

- To establish and maintain a complete public library,
- To collect and record, and occasionally publish information relating to the physical, political and religious history of South India.

Publications

- Journal of Literature and Science*. 1(1833/34). **Contd. as Madras Journal of Literature and Science**. 2(1835) – 17 No. 39((Jan./June 1851); 17No.40 – V.23 [= New Series 1 (Oct./Dec. 1856) – 6(Dec. 1861)]; Series III No.1(July 1864) –2 (Oct.1866); 1878 –94. [No issue published during 1866-77, and 1881-85. Volume numbering suspended with 1878 volume. During 1878 –94 only 4 vols. were issued.]
- Transactions of the Literary Society of Madras*. 1827.

Facilities

Library –The library of the Society has a collection of 150,000 books including 30,000 19th century editions.

References

1. *Asylum Press Almanac. Madras*, 1869. 559
2. *Indian Year Book* 1916.
3. *Indian Year Book* 1938-39. 429
4. Neelameghan, A. *Development of Medical Societies and Medical Periodicals in India, 1780 to 1920*. Calcutta: IASLIC, 1963. 13-14.

5. *World of Learning* 2011. London: Routledge, 2010. 948.
6. www.india9.com

Address – College Road, Chennai – 600006.

4. Society for Translating European Sciences (1832)

History -The Society was established in Calcutta around 1832. It appears that H. H. Wilson took the initiative to publish the journal *Vijnān Sebadhi*. Two of the translators were Amal Chandra Ganguli and Kaliprasad Ghosh.

Objectives

- i) To translate scientific books published in Europe into Bengali.
- ii) To publish a scientific periodical.

Publications

- i) *Vijnān Sebadhi*. No. 1(April 1832) – No. 12 (1834?). [Issue no. 10 came out in 1834].

References

1. Bandyopadhyay, Brajendranath. *Bānglā Sāmayikpatra*. Calcutta: Bangiya Sahitya Parishat, 1952. 45
2. Sen B K. *Growth of Scientific Periodicals in India (1788-1900)*. New Delhi: Indian National Science Academy, 2002. Entry no. 13

5. Students Literary and Scientific Society (1848)

History - The Society was established in Bombay in June 1848.

Members

Founder Members –Richard T. Reid, Dadabhai Naurozji, Behramji Kharsedji, Vinayak

Harichand, Rau Sahib Pranla Mathuradas, Palanji Framji, Edalji Nasarwanji, Dhondev Trimbak, Mohanlal Ranchoddas, Jerhargir Barjorji, Kawasji Edalji, Rau Saheb Mahadeb Govind Shastri, Vishnu Amritrau, Barjorji Rustamji, Ardeshir Framji, Framji Edalji, Hormazji Behramji, and Sundar Raghunath. Among the members, there were a barrister, a professor, an interpreter, an educational visitor, teachers, clerks, etc.

Members in General- In 1856, there were about 200 members.

Functions - The Society opened boys' and girls' schools. When the Society first opened their girls' schools Jagannath Shankarshet contributed much of the funds . It used to distribute prizes to girls and boys,

Publications

- i) *Proceedings of the Students' Literary and Scientific Society*. 1854/55 – 1855/56.

References

1. Shunkerseth, Jaganath. Wikipedia <<http://en.wikipedia.org/...24 April 2012>.
2. www.archive.org/stream/proceedings... Web. 24 March 2012.
3. www.bing.com/search?...Web. 24 April 2012.

6. Scientific Society (1864)

History – The Society was established by Principal Sudder Ameen, Syud Ahmad Khan (also spelt as Syed Ahmad Khan) and its first meeting was held at Ghazeepore(now called Ghazipur) on the 9th January 1864. Originally, it was located at the residence of its founder and it was decided that the permanent location of the Society will be at Allahabad. However, in 1867, it was changed in favour of Allygurh (now called Aligarh). When Sir Syed Ahmad Khan was transferred to Benares in 1867, Raja Jaikishan Das was elected the Secretary

of the Society. He worked with great sincerity and played a key role in the development of the Society. In 1874 he was transferred to Allahabad and resigned from the post of the secretary. Hereafter, Maulvi Samiullah Khan became the Secretary. Around this time Mohammadan Anglo Oriental College was established, and efforts of the enthusiasts got diverted to the college leading to the closure of the Society in 1887.

Objectives

- i) To translate into such languages as may be in common use among the people those works on arts and sciences, which being in English and other European languages are not intelligible to the Natives; and
- ii) To search for and publish rare and valuable oriental works. No religious book will come under the notice of the Society.

In 1867, two more clauses were added :

- iii) To publish, whenever the Society think it desirable, any Newspaper, Gazette, Journal, Periodical or Magazine, which may be calculated [sic] to improve the native mind; and
- iv) To have delivered in their meetings from time to time, lectures on scientific and other useful subjects, illustrated when possible by scientific instruments.

Membership – The Society had three types of members- Assistant members, Associate members, and Honorary members. The Society started with 109 members (28 members were British, 34 Hindus and 47 were Muslims). The membership grew rapidly and by 1869, the membership touched 375.

Founder Members

B Sapte Esqr, Chairman	Pundit Munphool Sahub
William Muir Esqr	M Kempson Esqr MA
M Broadhurst Esqr	Capt S R Fuller RA

F D Macleod Esqr	Lt G F I Graham
Lt Col G W Hamilton	Hon'ble Moulvi Abdool Lateef Khan Bahadoor
A Colvin Esqr	Moulvi Zeaooddeen Ahmud Khan Bahadoor
C H Ricketts Esqr	Moulvi Kareem Bux Sahub
C A Elliot Esqr	Syud Ahmud Khan

Functions – The Society undertook the task of translating books and journals on subjects like history, agriculture, political economy, Sanskrit, geology, etc. By 1875 it had translated 27 standard works, in which figured the following books pertaining to scientific subjects – *Agricultural Practice of England* by Scott Burn, Liezbig's *Agricultural Chemistry*, and Millers's *Testimony of the Rocks*, etc.

An "Institute" whose foundation stone was laid in 20th November 1864 worked closely with the Society and started a journal called *Aligarh Institute Gazette* on 30th March 1866. Sir Syed Ahmad Khan was the honorary editor of the journal. The *Gazette* played a key role to convey the message of the Society to the people.

References

1. A History of the Scientific Society. <http://twocircles.net/2009aug25/history_scientific_society.html>.
2. Yusuf Husain. Ed. *Selected Documents from the Aligarh Archives*. Bombay: Asia Publishing House, 1967.

7. Indian Association for the Cultivation of Science (1876)

History– The Association, existing to date has been one of the foremost scientific associations in the country, with which were attached such famous scientific luminaries of the country as C. V. Raman, Meghnad Saha, K. S. Krishnan, and S.N. Bose.

The idea of establishing a research institution with library and laboratory facilities was first mooted by Dr Mahendra Lal Sircar, an eminent physician of Calcutta in a memorable article published in 1869. In that article Dr Sircar wrote:

“We want an Institution which will combine the character, the scope and objects of the Royal Institution of London and of the British Association for the Advancement of Science. We want an Institution which shall be for the instruction of the masses, where lectures on scientific subjects will be systematically delivered and not only illustrative experiments performed by the lecturers, but the audience should be invited and taught to perform them themselves. And we wish that the Institution be entirely under native management and control....”

Dr Sircar’s aforesaid article aroused considerable interest among the enlightened public about the Institution, and he published the following prospectus for the Institution in the *Hindoo Patriot* of 3rd January, 1870.

1. The cultivation of Sciences by the Natives of India being deemed particularly desirable, it is proposed to establish in Calcutta an Institution for the purpose, to be called the Indian Association for the Cultivation of Science. This is to be the parent Institution branches will be established in different parts of India according as time, necessity, and other circumstances will suggest.
2. The object of the Association will be, as its name indicates, to invite, encourage and enable the Natives of India to cultivate science in all its departments. A correlative object will be to rescue from oblivion whatever is connected with India, ancient or modern. Thus the Association will aim at editing and publishing the ancient records, so replete with interest and wisdom.
3. The chief requisites to the formation of the Association being a local habitation, scientific works and instruments, and men

able and willing to work, it is proposed to purchase a piece of land in Calcutta and to build a suitable house thereon; to purchase scientific instruments and standard works on the various branches of science; and to invite to join the Association men who are either already prosecuting their studies in especial departments, or who are just out from our educational institutions ambitious, but unable from want of means, to prosecute scientific studies.

“For such and all these purposes money is the one thing needful. All well wishers of Progress and of India are therefore solicited to contribute their quota in furtherance of the project which has been so feebly and imperfectly set forth”.

“Sir Richard Temple, Lieutenant – Governor of Bengal very actively supported the efforts. Through six years of continuous hard work, Dr Sircar overcame the opposition, collected a few lac of rupees from prominent citizens of Calcutta and also others like Maharaja of Vizianagram, who alone contributed Rs 50,000/ , and finally occasioned the birth of the Association in July 1876”. The Association was registered in 1909.

Membership – Through election and payment of fee.

Objectives – Included in History.

Functions – It was devoted to the cultivation of science in all its departments to achieve advancement of science by original research and application to the arts and comforts of life.

Facilities – It possesses scientific research equipment and instruments of historical value.

Library – Has a well-equipped library with rich collection of books and periodicals.

Publications

- i. *Report of the Indian Association for the Cultivation of Science. 1876 – 1916. Contd. as Report and Proceedings of Science Convention, Indian Association for the Cultivation of Science. 1917 –1921. Contd. as Proceedings of the Indian Association for the Cultivation of Science. 1922-1924. Contd. in Indian Journal of Physics and Proceedings of the Indian Association for the Cultivation of Science. 1925–1934. Contd. as Report of the Indian Association for the Cultivation of Science. 1934 –*
- ii. *Bulletin, Indian Association for the Cultivation of Science. No. 1 (1909)- 15(1918).*
- iii. *Proceedings of the Indian Association for the Cultivation of Science. 1(1915)-9(1925). Contd. as Indian Journal of Physics and Proceedings of the Indian Association for the Cultivation of Science. 1 (Aug. 1926/1927) -.*
- iv. *Special Publications, Indian Association for the Cultivation of Science. 1(1918) –*

References

1. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 30
2. Rajagopalan, T. S. et al. *The Directory of Scientific Research Institutions in India* 1969. Delhi: INSDOC, 1969. 508
3. Sen B K. *Growth of Scientific Periodicals in India (1788-1900)*. New Delhi: Indian National Science Academy, 2002. Entry no. 281.
4. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry nos. 256, 474, 542.

Address – 2A & 2B Raja S C Mullick Road. Jadavpur. Kolkata - 700032

8. Indian Institute of Science (1909)

History –The Institute owes its origin to the munificence of Jamshetjee Nusserwanji Tata who set apart a considerable portion of his assets as early as 1898 for the establishment of a research institution in science wherein the best intellectuals of the country should come into close touch with western science and find new careers in industry and the development of the resources in India. After the death of J N Tata, the generosity of his two sons Sir Dorabji Tata and Sir Ratanji Tata, support of the Government of India and the Government of H. H. the Maharaja of Mysore led to the establishment of the Institute in 1909 at Bangalore. The Institute started working from July 1911 with Dr Morris Travers as its first Director and its laboratories started providing facilities for postgraduate work in five main branches of science, namely, physics, general chemistry, organic chemistry, biochemistry and electrical technology.

The functioning of the Institute was not found to be satisfactory and Dr Travers resigned in 1914. In 1921, the Government of India appointed a Special Committee under the Chairmanship of Sir W J Pope to make enquiries and recommendations regarding the working of the Institute. The Pope Committee submitted a very detailed scheme of expansion which could not be implemented. Dr (afterwards Sir) M O Forster was appointed Director in 1922 and continued till 1933 when Sir C V Raman took over the charge. Raman's failure as an administrator led to the appointment of Irvine Committee in 1936 to enquire into the affairs of the Institute and divestment of all powers of Raman. The Registrar was delegated all administrative powers. The Irvine Committee recommended certain changes both in the administrative and academic spheres and suggested ways and means as to how the Institute can best serve the purpose for which it stands. Till 1937, the Institute failed to fulfil the objects of the founder whose cherished dream was to make it a link between the industry and pure science.

Functions –The Institute awarded a limited number of research studentship, research scholarship and research stipends. The Associateship was awarded by the Governing Council on the recommendation of the Senate after five terms devoted entirely to research.

Facilities

Library – In mid-1940s, the Library had a good collection of scientific books and periodicals numbering 32,000.

Publications

- i. *Annual Report of the Council of the Indian Institute of Science. 1(1909/10)-*
- ii. *Journal of the Indian Institute of Science. 1(Feb 1914)-7(1924). Contd. as Journal of the Indian Institute of Science Pt A, Pt B, and later on Pt C. 8(1925) - 41 (1959. Contd. as Journal of the Indian Institute of Science. 42(1960)-*
- iii. *Memoirs of the Indian Institute of Science. 1(1934) - 6 (1937). Some volumes were published after 1947.*
- iv. *Quarterly Journal of the Indian Institute of Science. 1 (1938)- 14No.3 (1951).*

References

1. Ghosh J C. Indian Institute of Science. *Current Science* 9N9 Suppl.(1940):xxiv-xxvi.
2. Indian Institute of Science, The. *Science & Culture* 3(1937/38) Suppl – Government Scientific Departments and Learned Societies; *Science & Culture* 1944: 10(2), 81-83. Web. www.iisc.ernet.in
3. *Indian Year Book, The.* 1942-43. 400.
4. Sen B K. *Growth of Scientific Periodicals in India(1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry nos. 249, 444, 1149, 1352.

9. Society for the Promotion of Scientific Knowledge (1912)

History – The Society started publication of the scientific periodical called *Raushni* in Urdu from the year 1912. This fact indicates that the Society came into existence in 1912 or before. In his Presidential address in the Indian Science Congress held at Lucknow in 1923, M. Visvesvaraya made a brief mention about this Society existing in Lahore.

Publications

Raushni.1(1912) - 15(1919).

References

1. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 369
2. Visvesvaraya, M. Scientific institutions and scientists. Presidential address, Indian Science Congress (Lucknow: 1923). In *The Shaping of Indian Science 1914 -1947*. Universities Press, 2003. Web. <books.google.co.in>. 10 June 2013.

10. Vijnāna Parishad (1913)

History – The Parishad was founded at Allahabad in 1913 and was registered in 1920.

Membership- Obtainable on the payment of fees. In 1963, the total number of Fellows was 250.

Objectives

- i. To propagate scientific literature in the Indian language
- ii. To encourage scientific study and original work generally.
- iii. To do all such other things as are incidental to other matters which the Parishad may think conducive to the attainment of the above or any of them.

Functions

Publishes popular and research periodicals and books in Hindi.

Publications

- i) *Vijnāna* (Hindi). 1(1913)-
- ii) *Vijnāna Parishad Anusandhān Patrikā*. (Hindi). 1(1958) –

[This is a research periodical in Hindi devoted to science].

Apart from the two journals, the Parishad has published more than 60 books on different subjects in Hindi.

References

1. *Directory of Periodicals in SAARC Countries*. New Delhi: SAARC Documentation Centre, 2006? 86.
2. Kothari, H., ed. *Professional and Trade Organisations in India*. Calcutta: Kothari Pub, 1963. 122.
3. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 31.
4. Sen B K. *Growth of Scientific Periodicals in India(1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 429.

Address –Maharshi Dayanand Marg, Allahabad – 211002. Web.<vigyanparishadprayag.org>

11. Indian Science Congress Association (1914)

History – The Indian Science Congress Association (ISCA) came into existence with the foresight and initiative of two British chemists - Professor J. L. Simonsen and Professor P.S. MacMahon. They felt that scientific research in India might be stimulated if an annual meeting of research workers somewhat on the lines of the British Association for the Advancement of Science could be arranged.

The first meeting of the Association was held from 15 -17 January 1914 at the Asiatic Society, Calcutta, with the Honorable Justice Sir Asutosh Mukherjee, the then Vice-Chancellor of the Calcutta University, as President. One hundred and five scientists from different parts of India and abroad attended and the papers numbering 35 were divided into six sections - Botany, Chemistry, Ethnography, Geology, Physics, and Zoology under six Sectional Presidents. From this modest beginning the Association has grown into a strong scientific organization. At present it has more than 12,000 members and the number of papers communicated for reading in the Congress each year at times touch 1,000. Up to 2000 there used to be 16 sections, two committees and six forums. Now, the number of sections has been reduced to 14 and there is one Committee devoted to Science and Society. The Sections are: Agriculture and Forestry Sciences; Animal, Veterinary and Fishery Sciences; Anthropological and Behavioural Sciences (including Archaeology and Psychology & Educational Sciences); Chemical Sciences; Earth System Sciences; Engineering Sciences; Environmental Sciences; Information and Communication Science & Technology (including Computer Sciences); Material Sciences; Mathematical Sciences (including Statistics); Medical Sciences (including Physiology); New Biology (including Biochemistry, Biophysics & Molecular Biology and Biotechnology); Physical Sciences; and Plant Sciences.

The Association has already celebrated Silver Jubilee, Golden Jubilee, Diamond Jubilee, and Platinum Jubilee. The Centenary celebration is just two years away. The Silver Jubilee Session was held at Calcutta in 1938 under the Presidentship of Lord Rutherford of Nelson but due to his sudden death, Sir James Jeans took the chair. The Golden Jubilee Session was celebrated in October, 1963 at Delhi with Prof.D.S. Kothari as General President. On this occasion two special publications were brought out The Diamond Jubilee Session of the

Congress was held at Chandigarh during 3-9 1973, under the Presidentship of Dr. S. Bhagavantam. On this occasion two special publications were brought out. The Association celebrated its Platinum Jubilee, in 1988, with Prof. C.N.R. Rao as General President. On this occasion also a special brochure, entitled *Indian Science Congress Association - Growth & Activities* was brought out highlighting the programmes of the Association over the years.

Membership— Anybody interested in science can enroll himself as a member of the Association. No educational qualification is generally insisted upon at the time of enrolment. There are four classes of members – Members, Benefactors, Sessional Members, and Student Members. In 1963, the Association was having 3500 members on its roll. Now [1912] the membership has shot up to more than 12,000.

Objectives

- i. To advance and promote the cause of science in India
- ii. To hold an annual congress at a suitable place in India
- iii. To publish such proceedings, journals, transactions, list of members, and other publications as may be considered desirable.
- iv. To secure and manage funds and endowments for the promotion of Science including the rights of disposing of or selling all or any portion of the properties of the Association
- v. To do and perform any or all other acts, matters and things as are conducive to, or incidental to, or necessary for, the above objects.

Functions – Holds annual conferences; arranges discussions; brings out journals and various other publications.

Publications

- i. *An Outline of the Field Sciences of India. 1938.*

- ii. *Notes, List of Officers, Sectional Committees, and Members, Indian Science Congress Association. 1923-.*
- iii. *Proceedings of the Indian Science Congress. 1(1914)-*
- iv. *Progress of Science in India during the past Twenty-five years. 1938.*
 - It has published a large number of books after 1947.

References

1. *Indian Year Book, The 1944-45.* 405.
2. Indian Science Congress Association, 1934-38. *Science and Culture* 3 (1937/38): 307-309.
3. Kothari, H., ed. *Professional and Trade Organisations in India.* Calcutta: Kothari Publications, 1963.
4. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India.* New Delhi: Council of Scientific and Industrial Research, 1964. 30-31.
5. Ray, Mihir Lal, *Shatabarshe Bharatiya Bijnan Kangres Esosiyesan* [= Indian Science Congress Association in 100th year]. *Jnan Bichitra* 37.2 (2012): 13-24.
6. *Science & Culture* 3(1937/38): 102
7. Sen B K. *Growth of Scientific Periodicals in India (1901-1947).* New Delhi: Indian National Science Academy, 2005. Entry nos. 447, 696.
8. Web. www.sciencecongress.nic.in 5 April 2011.
9. *World of Learning 2011.* London: Routledge, 2010. 949.

Address – 14 Biresw Guha Street, Kolkata - 700017. Email-iscacal@vsnl.net

12. Tamil Scientific Terms Society (1916)

History – The Society was established at Salem in Madras in 1916 by C Rajagopalachari. It coined new words in Tamil for terms connected to botany, chemistry, physics, astronomy and mathematics. The Society most probably was short-lived.

Publications

- i) *Journal, Tamil Scientific Terms Society*. 1N1 (Oct 1916)-1N2 (Nov 1916).

References

1. C Rajagopalachari. Wikipedia. Web <en.wikipedia.org>. 14 June 2013.
2. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 489

13. Karnāṭaka Vijnāna Pracārini Samiti (1918)

History – The Samiti was formed for the popularization of science in regional languages. It brought out a short-lived periodical in Kannada. From the date of starting of the periodical it appears that the Samiti was founded in 1918 or before.

Publications

- i) *Vijnāna*. 1(1918) - 2(1919).

References

1. Sen B K. *Growth of Scientific Periodicals in India(1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 546.

14. South Indian Science Association(1920)

History - From the following sentence “...the Raman Effect was first announced to the scientific world fifty years ago this week at a

lecture entitled “A New Radiation” delivered by Raman at the South Indian Science Association, Bangalore, on Friday, the 16th of March 1928’ it is clear that the Association was in existence in 1928. The Association was located in Bangalore. In the same letter it was mentioned that the lecture was at the 8th Annual Session of the Association. Basing this fact it is assumed that the Association was established in 1920.

Functions -Used to hold meetings for the discussion of matters of scientific, technical and general importance.

Reference

1. *Current Science* 3 (1934/35): 576; 7(1938): 304; 9 (1940): 44
2. Ramaseshan, S. Fifty years ago – some thoughts on C.V.Raman and *Current Science*. *Current Science* 47.6(1978): 181-191.
3. *The shaping of Indian science: 1914-1947*. Web. <books.google.co.in>. 14 August 2013.

15. Academy of Aryan Science (1921)

History – The Academy started publishing its journal *Akademi* from September 1921. This suggests that the *Academy* was established in 1921 or before. It was located at Madras.

Publications

- i) *Akademi: a Monthly Journal of Art, Science and Literature*. 1(Sep 1921) – 3 (Jan/Aug 1924).

References

1. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no 620.

16. Science Association, Maharaja’s College, Vizianagram, Madras (1923)

History – From the journal of the

Association, it becomes clear that the Association was established at Maharaja's College, Vizianagram, Madras and functioning during 1923 to 1927. Maybe it was established in 1923 or before. According to the website [2] the Association was functioning in full swing in 1925.

Publications

Journal of the Science Association. 1(1923/24)–3N1(1927).

References

1. Sen B K. *Growth of Scientific Periodicals in India(1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 693
2. Web. <http://maharajasoldstudents.com/content/about-maharajas-college>. 19 August 2013.

17. Federation International of Scientific Research Societies – (Asia, Africa, Europe and America) (1925)

History– The Federation was established in 1925 in Iran under the presidentship of the well-known scientist Dr. (h. c.) Paul V Serebriakov-Elboursky. The headquarters of the Federation was located at Calcutta from 1940. It is a recognized international scientific institution and has participated in the International Congress held at Cairo in 1925; Cracow in 1927; Paris in 1931; Geneva in 1933; Warsaw in 1934; Brussels in 1935; Calcutta in 1937; and Amsterdam in 1938. Many national and international scientific institutions and eminent scholars from all over the world collaborated and cooperated with the Federation. It had 18 scientific research institutions and University Livre whose aim is not educational but research in any field of science or art. The main purpose of the University is to examine thesis submitted by scholars for doctorate degrees.

Objectives – To encourage research work in the field of different sciences and arts.

Functions– Conducted many remarkable

researches in geology, biology, paleobiology [sic], paleophytology [sic], chemistry, kinology, etc. Corrected the geological map of the world as a result of an exploration of the Iranian Plateau. Presented a new science called kinology. Predicted 234 chemical elements of which two have been already approved.

Membership- Graduates of any recognized university and those who have rendered either some important public service or done research work in any field of science or art.

References

1. *Indian Year Book, The*1941-42. 444-5.

18. Anjumane Tarrqui Society (1928)

History - It is known that the Society started publishing its journal *Science in Urdu* from 1928. Basing this information it is conjectured that the Society was formed in 1928 or sometime before.

Publications

Science. 1(1928)–19??.[Text in Urdu]

References

1. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 887

19. Academy of Sciences of the United Provinces of Agra and Oudh (1930)

History – ‘...the idea of establishing a forum of scientists which would help them in publishing their researches and bring them together to discuss and find scientific solutions to the problems of the country, was mooted by Prof. Meghnad Saha, a great scientist, patriot and then Professor of Physics at Allahabad University in 1929. His views were published in the article entitled ‘A Plea for an Academy of Sciences’ in

December 1929 issue of the Allahabad University magazine'. The Academy was founded in 1930 at Allahabad. 'The Rules and Regulations of the Academy were based on those of the Royal Society of England and Asiatic Society of Bengal. These have since been revised and updated to meet the emerging challenges. Prof. Meghnad Saha was elected its first President. In a monthly meeting of the Academy held on 20 April 1935, 'it was decided to increase the number of fellowships to one hundred and change the name to **National Academy of Sciences, India**'.

Branches - The Academy has 15 Chapters located at Allahabad, Bangalore, Chandigarh, Chennai, Delhi, Hyderabad, Jammu, Kharagpur, Kolkata, Lucknow, Mumbai, Patna, Shillong (N.E. Chapter), Uttaranchal and Varanasi. These Chapters organize scientific activities in and around their respective regions, and each one maintains a library of the publications of the Academy.

Membership - The Academy was started with 57 members and 19 Fellows. The membership is usually through election and payment of fees. In 1937, the Academy had patrons, benefactors, honorary fellows, fellows and ordinary members. In the same year, the Academy had on its roll 217 members including 100 fellows. In 2010, it had on its roll 2,580 members excluding 732 fellows, 48 honorary fellows, and 23 foreign fellows.

Founder Members: Prof. A.C. Banerji (General Secretary); Dr. Luxmi Narayan; Prof. Andre Weil; Prof. Meghnad Saha; Prof. Ch. Wali Mohammad; Mr. G. Chatterjee; Prof. N.R. Dhar; Prof. P.S. MacMohan (General Secretary); Prof. D.R. Bhattacharya; Prof. K.N. Bahl; Prof. J.H. Mitter; Prof. B. Sahni; Prof. K.C. Mehta; Prof. K.K. Mathur; Mr. C. Clarke; Mr. P.B. Richards; Mr. R.L. Sethi; Prof. H.D.H. Drane; and Prof. C.A. King.

Objectives

- i. To provide a national forum for the publication of research work carried out by Indian scientists and to provide opportunities for exchange of views among them.
- ii. To create an adequate impact of the Academy all over the country by opening Chapters of the Academy in other cities in the country, where reasonable number of scientists are interested.

Functions : Holds annual sessions, symposia, workshops; publishes proceedings, journals, memoirs, transactions and other works as may be considered desirable; awards fellowships and confers lecture awards; organizes science extension lectures, state level science contests, teachers' workshop, various meetings; hold discussions on scientific and technological problems; promotes scientific and technological research for societal welfare; undertakes such scientific works of technological or public importance as it may be called upon to perform; cooperates with other organizations in India and abroad, having similar objects; appoints representatives of the Academy to act on national and international bodies; celebrates National Technology Day, National Science Day; secures and manages funds and endowments for the promotion of science and technology; performs all other acts, matters and things that may assist in, conduce to, or be necessary for the fulfilment of the aims and objects of the Academy.

Facilities - The Academy has a well-organized library named after Dr. Sir Padampat Singhania in which there are two sections, one for the research students and teachers, and the other for the school students.

Publications

- i) *Bulletin of the Academy of Sciences of the United Provinces of Agra and Oudh. 1(1931/32) - 3N4(1934). Contd. as Proceedings of the Academy of Sciences of the United Provinces of Agra and Oudh. 4(1934/35) - 5(1935). Contd.*

as *Proceedings of the National Academy of Sciences of India*. 6(1936) – 11(1941). Split into:

- (a) *Proceedings of the National Academy of Sciences of India – Section A Physical Sciences*. 12(1942) -;
- (b) *Proceedings of the National Academy of Sciences of India – Section B Biological Sciences*. 12(1942) -.
- ii) *National Academy of Sciences Letters*. 1(1978) –

Also publishes Annual Report, and Yearbook.

References

1. *Current Science* 4 (1935/36): 119-20
2. *Directory of Periodicals in SAARC Countries*. New Delhi: SAARC Documentation Centre, 2006? 77.
3. *Journal of the Indian Medical Association* 5(1935): 84
4. Kothari, H., ed. *Professionals & Trade Organisations in India*. Calcutta: Kothari Publications, 1963. 109-110.
5. National Academy of Sciences, The, India. *Science & Culture* 3(1937/38) Suppl – Government Scientific Departments and Learned Societies: 12-13.
6. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 31.
7. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 1003.
8. Web. www.nasi.nic.in

Address: 5 Lajpatrai Road, Allahabad – 211002, Uttar Pradesh. Email: allahabad.nasi@gmail.com

20. Muslim Association for the Advancement of Science (1931)

History- It was inaugurated in Aligarh in 1931

Members

Founder Members – President - Nawab Masud Jung Bahadur, Vice-Chancellor, Muslim University. Vice Presidents - Prof. R.F. Hunter, and Prof. H. W. Blood Ryan. Secretary – Dr. M. Baber Mirza. Council Members – Dr. Syed Hussain, Dr. A. A. Hyder, Dr. Rafique Ahmed, Dr. S. D. Mujaffar, Dr. S. Siddiqui, Prof. Abdul Rahman Khan, Prof. R. Samuel, and Mr. M. Hyder Khan.

Objectives

- i) To stimulate the spirit of original investigation amongst Mussalmans
- ii) To provide closer cooperation between Moslem scientists

Publications

- i) *Proceedings - Muslim Association for the Advancement of Science*. 1(Dec 1931)-??

[Included a long memoir by Prof. R. F. Hunter on the work of his collaborators in the Thiazol Group during the last six or seven years.]

References

1. *Current Science* 1932, 1(1), 82

21. Patna Science College Philosophical Society

History – The Society was established in or before 1931.

Publications

- i. *Bulletin of the Patna Science College Philosophical Society*. No. 1(1931) – 16 (1946)?.

References

1. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 1005

22. Current Science Association (1932)

History – The Association was established in Bangalore in 1932.

Publications

- i) *Current Science*. 1(1932)-

Address – C V Raman Avenue, Post Box No. 80001, Bangalore 560080. Email: currsci@ias.ernet.in

References

1. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 32
2. Sen B K. *Growth of Scientific Periodicals in India(1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 1043.

23. Indian Academy of Sciences (1934)

History – The Indian Academy of Sciences, Bangalore was founded by Sir C. V. Raman, and was registered as a Society on 24 April 1934. Inaugurated on 31 July 1934, it began with 65 founding fellows. The first general meeting of Fellows, held on the same day, elected Professor Raman as President, and adopted the constitution of the Academy. It is one of the three cooperating academies with the National Institute of Sciences of India (now Indian National Science Academy).

Membership

Founder Members – Sir C. V. Raman – President; Prof. Narayan Rao – Secretary, Rao Bahadur Prof. B. Venkatesachar – Secretary.

It has several grades of members – Fellows; Honorary fellows; and Associate Members.

Objectives

- i) To promote the progress and uphold the cause of science both in pure and applied branches.
- ii) To represent internationally the scientific work of India.

Functions – Brings out a dozen scientific journals; awards fellowships; organizes discussions on scientific topics; makes efforts towards improvement of science education; supports issues of concern to the scientific community.

Facilities – Maintains a library.

Publications

- i. *Proceedings of the Indian Academy of Sciences – Sec A Physical Sciences*. 1(1934/35) –
- ii. *Proceedings of the Indian Academy of Sciences – Sec B Biological Sciences*. 1(1934/35)-

After 1947, these two journals split into several parts and new journals were started.

Address– C. V. Raman Avenue, POB – 8005, Sadashivanagar, Bangalore – 560080. Email –office@ias.ernet.in

References

1. Indian Academy of Sciences, The, Bangalore. *Science & Culture* 3(1937/38) Suppl – Government Scientific Departments and Learned Societies. . 12
2. Kothari, H.,ed. *Professionals & Trade Organisations in India*. Calcutta: Kothari Publications, 1963. 70.
3. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry nos. 1157-8.

4. Web. www.ias.ac.in. 5 April 2011.
5. *World of Learning 2011*. London: Routledge, 2010. 949.

24. Indian Science News Association (1935)

History – The Indian Science News Association was established in 1935 with the initiative of Professor Meghnad Saha and Acharya P.C. Ray.

Membership (1937) – Sir P. C. Ray – President; Sir U. N. Brahmachari – Vice President; Mr. S. P. Mookerjee - Vice President; Dr. Baini Prasad - Vice President; Dr. S. C. Law - Vice President; Prof. M. N. Saha – Hony. Secretary; Prof. S. K. Mitra – Hony. Secretary.

Objectives

- i. To popularize and disseminate the knowledge and progress of natural and cultural sciences; and
- ii. To publish journals and books and organize lectures both in English and Vernacular in furtherance of the object given above.

Functions – Publishes a journal and organizes seminars, symposia, memorial and endowment lectures, etc.

Publications

- i. *Science and Culture: a Monthly Journal devoted to Natural and Cultural Sciences*. 1(1935/36) –
 - Apart from the journal, it publishes books, reports, etc.

References

1. Indian Science News Association. *Science & Culture* 3(1937/38) Suppl – Government Scientific Departments and Learned Societies. : 13
2. Kothari, H.,ed. *Professionals & Trade*

Organisations in India. Calcutta: Kothari Publications, 1963. 87

3. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 31..
4. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi:. Indian National Science Academy, 2005. Entry no. 1224.
5. Web. www.scienceandculture-isna.org/

Address –92 Acharya Prafulla Chandra Road, Kolkata – 700009. Email: scie2224@dataone.in

25. Madras Science Club (1935)

History – The Club started at Madras in 1935 with the initiative of Mr. K. S. Varadachar, who was actively associated with the foundation of *Current Science*.

Objectives- To promote social amenities among the scientific workers of Madras.

References

1. Madras Science Club, The. *Current Science* 4 (1935/36): 776

26. National Institute of Sciences of India (1935)

History–Towards the end of 1930, the then Government of India wrote to various provincial governments, scientific departments, learned societies, universities and the Indian Science Congress Association (ISCA) seeking their opinion on the desirability of forming a National Research Council (NRC) which would adhere to and cooperate with the International Research Council and its affiliated Unions. At this time Sir Richard Gregor, the editor of *Nature* had discussions with the editor of *Current Science* for the promotion of an Indian Academy of Sciences. The proposal was considered by various eminent

scientists whose views regarding the composition and functioning of the proposed NRC were put up in the form of a resolution to the ISCA during its Pune Session. A special meeting of ISCA was held in Mumbai in January 1934 to consider the scheme. In response to the plea made by the President of the ISCA, Professor M N Saha in support of an Indian Academy of Sciences on the model of the Royal Society, London, the General Committee of the ISCA unanimously accepted the proposal for the formation of a national scientific society. The Committee formed an 'Academy Committee', which was requested to submit a detailed report for consideration at the next session of the ISCA.

The Committee submitted the report in January 1935 incorporating (i) the aims and objects of the national scientific society to be formed; (ii) draft constitution; (iii) names of 125 Foundation Fellows selected by a special committee of specialists; and (iv) names of 25 scientists as members of the provisional Council of Academy. The report of the Academy Committee was placed by Dr LLFermor (President, 22nd Session, ISCA) before the special meeting of the Joint Committee on January 3, 1935. The recommendation of the Academy Committee was accepted by unanimous resolution by the ISCA and the foundation of the National Institute of Sciences of India as an all India body of scientists was thus laid. An inaugural meeting of the National Institute of Sciences of India (NISI) was held on January 7, 1935 under the Chairmanship of Dr J H Hutton (President, 23rd Session, ISCA) in Calcutta, and the inaugural address was delivered by the first President of NISI, Dr L LFermor. The Institute thus, started functioning with its headquarters at the Asiatic Society of Bengal, 1 Park Street, Calcutta, from that day.

The issue of the Government recognizing the NISI as the representative body of the scientists was taken up after ten years of its foundation. After due deliberations and discussions, it decided

to recognize the national institute as the premier scientific society representing all branches of science in India in October 1945. The Headquarters of the National Institute moved to Delhi in May 1946 and the Government commenced providing increased grants to meet expenses on travel, publications, research fellowships, and for allocating grants-in-aid to other scientific societies for bringing out their publications. A capital grant for the Headquarters building was also sanctioned in 1948 by the Government. The foundation stone of the building was laid by Pt. Jawaharlal Nehru, the then Prime Minister of India, on April 19, 1948. The office of the NISI moved to its present premises on Bahadur Shah Zafar Marg, New Delhi in 1951. It was designated as the adhering organization in India to the International Council for Science (ICSU) on behalf of the Government of India in January 1968. The name of the National Institute of Sciences of India was changed to the **Indian National Science Academy (INSA)** in February 1970.

Membership

There are two grades of members – Fellows, and Honorary Fellows. The Fellowship is open to eminent scientists of India who have done valuable research work and has contributed to the new knowledge. The number of ordinary fellows elected every year is limited to 15 till the total number reaches 400. Honorary Fellows are elected from among persons domiciled outside the territorial limits of India for their eminence in and contributions to science or the welfare thereof. The maximum number of honorary fellows is restricted to 50. In 1963, The Institute had about 330 Ordinary Fellows and about 40 Honorary Fellows on its roll. Now it has 676 Fellows, and 104 Foreign Fellows.

Objectives

- i. To promote scientific knowledge in India including its practical application to problems

- of national welfare.
- ii. To carry out coordination among scientific academies, societies, institutions, government scientific departments and services.
 - iii. To act as a body of scientists of eminence for the promotion and safeguarding of the interests of scientists in India and to present internationally the scientific work done in the country.
 - iv. To act through properly constituted national committees, in which other learned academies and societies may be associated, for undertaking scientific work of national and international importance which the Academy may be called upon to perform by the public and by the Government.
 - v. To publish such proceedings, journals, memoirs and other publications as may be found desirable.
 - vi. To promote and maintain liaison between science and humanities.
 - vii. To secure and manage funds and endowments for the promotion of science.
 - viii. To perform all other acts that may assist in, or be necessary for the fulfillment of the above mentioned objectives of the Academy.

Functions – Organizes meetings, lectures, etc; awards fellowships; conducts research on history of science; publishes journals, books, etc.

Facilities – Maintains an excellent library.

Publications

- i) *Indian Journal of History of Science*. 1 (1966) –
- ii) *Indian Journal of Pure and Applied Mathematics*. 1(1970)-
- iii) *Indian Science Abstracts: being an Annotated*

Bibliography of Science in India. 1935/36 –1937/38

- iv) *Proceedings of the National Institute of Sciences of India*. 1(Apr 1935) – 20(1954).
Split into

- (a) *Proceedings of the National Institute of Sciences of India – Part A Physical Sciences*. 21(1955)–35(1969). **Contd. as** *Proceedings of the Indian National Science Academy – Part A Physical Sciences*. 36(1970) -.
- (b) *Proceedings of the National Institute of Sciences of India – Part B Biological Sciences*. 21(1955)–35(1969). **Contd. as** *Proceedings of the Indian National Science Academy – Part B Biological Sciences*. 36(1970) - .
- v) *Report, National Institute of Sciences of India*. 1935 – 1958/59. **Contd. as** *Yearbook of the National Institute of Sciences of India*. 1960 – 1970. **Contd. as** *Yearbook of the Indian National Science Academy*. 1971 –
- vi) *Transactions of the National Institute of Sciences of India*. 1(Mar 1935/38) – 4N1(1958).

This apart the Academy has published after 1947, *Progress of Science* in India in several volumes, Biographical Memoirs of the Fellows, and so on. The full list of publications is available in the catalogue brought out by the Academy.

Address – Bahadur Shah Zafar Marg, New Delhi – 110002. Email: esoffice@insa.nic.in

References

1. Fermor L L. The National Institute of Sciences of India. *Current Science* 3(1934/35): 507.
2. Web. <http://www.insa.as.in/>
3. Kothari, H., ed. *Professionals & Trade Organisations in India*. Calcutta: Kothari Publications, 1963. 110-111.

4. National Institute of Sciences. *Journal of the Indian Medical Association* 5(1935): 80.
5. National Institute of Sciences of India. *Current Science* 12(1943):32
6. National Institute of Sciences of India. *Science & Culture* 3 (1937/38) Suppl – Government Scientific Departments and Learned Societies. 11-12
7. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 31.
8. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry nos. 1194, 1220, 1225.

27. Scientific Society, Harcourt Butler Technological Institute (1935)

History – The Society was probably formed at Cawnpore in 1935.

Publications

- i) *Journal of Science and Technology, India*. 1(Mar 1935) – 9(1949). **Contd. as** *Journal, Scientific Society, Harcourt Butler Technological Institute and Indian Institute of Sugar Technology* → *National Sugar Institute.1(1952)* -

References

1. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 1198.

28. Sridhapur Vijnān Mandir (1938)

History - It was founded at Sirajganj (now in Bangladesh) in 1938 or earlier.

Publications

- i). *Vijnān Dīp*. 1938–19?? [A Bengali

monthly devoted to science]. Ed.Makhanlal Chakraborty.

References

1. Sen B K. *Growth of Scientific Periodicals in India(1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 1366.

29. Board of Scientific and Industrial Research (1940)

History - With the onset of the World War I, the Government of India realized the need for building up in a systematic manner the base of scientific research in India, especially applied research. In 1918, the Indian Industrial Commission also urged the Government to promote applied research. After a long gap of 16 years the Government set up Central Industrial Intelligence and Research Bureau. In 1940 it was superseded by the Board of Scientific and Industrial Research. In 1942, the name of the Board changed to Council of Scientific and Industrial Research (CSIR). and it was registered under the Societies Act XXI of 1860. At a later date the Research Planning Committee under the Chairmanship of Sir R K Shanmukham Chetty was formed. The Committee made a comprehensive survey of the research facilities in the country and recommended establishment of five national laboratories devoted to chemistry, physics, fuel, glass and ceramics, and metallurgy. Thus came up the National Chemical Laboratory, the National Physical Laboratory, the National Metallurgical Laboratory, the Fuel Research Station, and the Central Glass and Ceramics Research Institute. The foundation for the Central Glass and Ceramic Research Institute at Calcutta was laid first in December 1945 and that for the National Chemical Laboratory at Poona was laid last, on 6 April 1947. All the five establishments were completed by 1950.

Objectives

- i) Promotion, guidance and coordination of scientific and industrial research in India including the institution and the financing of specific researches;
- ii) Establishment or development and assistance to special institutions or departments of existing institutions for specific studies of problems affecting particular industries and trades;
- iii) Establishment and award of research studentships and fellowships;
- iv) Utilization of the results of researches conducted under the auspices of the Council towards the development of industries in the country;
- v) Establishment, maintenance and management of laboratories, workshop, institutes and organizations to further scientific and industrial research and to utilize and exploit any discovery or invention likely to be of use to Indian industries;
- vi) Collection and dissemination of information in regard not only to research but also to industrial matters generally;
- vii) Publication of scientific papers and journals; and
- viii) Any other activity or activities to promote generally the objects of the Society.

Functions—The Council functions as per the aforementioned objectives. Around 40 laboratories at various places of India are functioning under the Council.

Publications

- i) *Proceedings of the Meeting of the Board of Scientific and Industrial Research*. 1940 - 1942. **Contd. as** *Proceedings of the Meeting of the Council of Scientific and Industrial Research*. 1942 -

- ii) *Report on Technical Work, Board of Scientific and Industrial Research in India*. 1940/41 - 1941/42.

- The institutions functioning under the Council bring out a large number of journals, monographs from time to time, reference books, and so on.

References

1. Council of Scientific and Industrial Research. Wikipedia. Web. <en.wikipedia.org>
2. Rajagopalan, T. S. et al. *The Directory of Scientific Research Institutions in India* 1969. Delhi: INSDOC, 1969. 5-7.
3. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian National Science Academy, 2005. Entry no. 1445, 1448.

Address - Council of Scientific and Industrial Research. Anusandhan Bhavan, 2 Rafi Marg, New Delhi - 110001.

30. Science Association, Lucknow University (1944)

History—The Association was inaugurated by Sir C. V. Raman on 9th November 1944. No other information about the Association could be traced.

References

1. *Current Science* 13 (1944):292.

31. Maharashtra Association for the Cultivation of Science (1946)

History—The Association was founded in 1946 by some leading scientists and educationists at Poona. It is affiliated to the Poona University and recognized as a centre of postgraduate research. It was registered in Poona in 1946.

References

1. Rajagopalan, T. S. et al. *The Directory of Scientific Research Institutions in India* 1969. Delhi: INSDOC, 1969. 518
2. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 24-25

32. Science Club (1946)

History– The Club was founded in Calcutta and registered in 1946/47. In the 7th Annual General Meeting Dr P C Ghosh, Chief Minister, West Bengal delivered a lecture in Bengali.

Objectives

- i. To promote the cause of science and encourage the spirit of active pursuit of knowledge and original scientific research.
- ii. To establish close contacts among persons following different branches of pure and applied science with a view to developing a wider outlook and stimulating an intellectual and possibly a practical integration of available scientific knowledge in society.

Membership– Through election and payment of fee.

Publications

- i. *Journal of the Science Club*. 1 (Aug 1947) –

References

1. Rahman A, Sen N, Rajagopal N R. *Scientific Societies in India*. New Delhi: Council of Scientific and Industrial Research, 1964. 32
2. Science Club. *Science and Culture* 13(1947/48): 199
3. Sen B K. *Growth of Scientific Periodicals in India (1901-1947)*. New Delhi: Indian

National Science Academy, 2005. Entry no. 1687.

33. Association of Scientific Workers of India (1947)

History – Prof P. M. S. Blackett, FRS, while addressing the scientific workers of the Indian Institute of Science, Bangalore stressed the importance and the need for an Association of Scientific Workers in India for the purpose of safeguarding and promoting their interests. He expressed the hope that the members in the audience would join the association in large numbers and thereby help the cause both of humanity and science. Following this scientific workers of the country founded the Association during the session of Indian Science Congress, 1947. The Association was inaugurated on 7th January 1947 by Pandit Jawaharlal Nehru, General President of the Indian Science Congress.

Membership

Pt Jawaharlal Nehru – President

Dr B C Guha –General Secretary

Dr Bashir Ahmed – General Secretary.

Members – Prof. M N Saha, Dr N Mukerji, Dr B Banerji, Prof Afzal Hossain, Dr P K Kichlu, Mr C R Mitra, Prof H J Bhabha, Dr K Venkataraman, Prof K S Krishnan, Dr S Gupta, Prof J C Ghosh, Dr. M Quteshi, Mr M Sreenivasaya.

Objectives

- i. To work for the most effective use of science and the scientific method for the welfare of society as a whole;
- ii. To improve and safeguard the economic interests and social status of all scientific workers of India;
- iii. To participate in all fields of activities in furtherance of and relevant to the above objects.

Publications

- i. *Vijnan Karmee* (1949) -.

References

1. Association of Scientific Workers of India. *Journal of Scientific and Industrial Research* **6.12**: 477-9.
2. *Current Science* **17** (1948): 283-84.
3. *Professional and Trade Organisations in India*. Ed. by H. Kothari. Calcutta: Kothari Publications, 1963. 60-61.

CONCLUSION

An attempt has been made in this essay to record the general scientific societies formed in India during the British period. In the process a large number of sources available in various libraries of the country have been scanned to trace the existence of scientific societies. In spite of my best efforts I can not say that the list is completely exhaustive which is simply impossible. It is also possible that information about some societies was never recorded in documentary sources. If anyone is aware of a general scientific society not recorded here may inform me to complete my database.

APPENDIX**Alphabetical list of the Societies**

Academy of Aryan Science (1921) 15
 Academy of Sciences of the United Provinces of Agra and Oudh (1930) 19
 Anjumane Tarrqui Society (1928) 18
 Asiatic Society 1
 Asiatic Society of Bengal 1
 Asiatic Society of Bombay 2
 Asiatic Society of Mumbai 2
 Asiatic Society (1784) 1
 Association of Scientific Workers of India (1947) 33
 Board of Scientific and Industrial Research (1940) 29
 Bombay Branch of the Royal Asiatic Society of Great Britain

in Ireland 2

Council of Scientific and Industrial Research (1942) 29
 Current Science Association (1932) 22
 Federation International of Scientific Research Societies – (Asia, Africa, Europe and America)(1925) 17
 Indian Academy of Sciences, The (1934) 23
 Indian Association for the Cultivation of Science (1876) 7
 Indian Institute of Science (1909) 8
 Indian Science Congress Association (1914) 11
 Indian Science News Association (1935) 24
 Karnāṭaka Vijnāna Pracārini Samiti (1918) 13
 Literary Society of Bombay (1804) 2
 Madras Auxiliary of the Royal Asiatic Society (1829) 3
 Madras Literary Society and Auxiliary of the Royal Asiatic Society 3
 Madras Literary Society (1812) 3
 Madras Science Club (1935) 25
 Maharashtra Association for the Cultivation of Science (1946) 31
 Muslim Association for the Advancement of Science 20
 National Academy of Sciences, India 19
 National Institute of Sciences of India (1935) 26
 Patna Science College Philosophical Society (1931) 21
 Royal Asiatic Society of Bengal (1936) 1
 Science Association, Lucknow University (1944) 30
 Science Association, Maharaja's College, Vizianagram, Madras (1923) 16
 Science Club (1946) 32
 Scientific Society (1864) 6
 Scientific Society, Harcourt Butler Technological Institute (1935) 27
 Society for Translating European Sciences (1832) 4
 Society for the Promotion of Scientific Knowledge (1912) 9
 Society, instituted in Bengal, for Inquiring into the History and Antiquities, the Arts, Sciences, and Literature, of Asia. 1
 South Indian Science Association (1920) 14
 Sridhapur Vijnān Mandir (1938) 28
 Students Literary and Scientific Society 5
 Tamil Scientific Terms Society (1916) 12
 Vijnāna Parishad (1913) 10