Current Science: Some early history

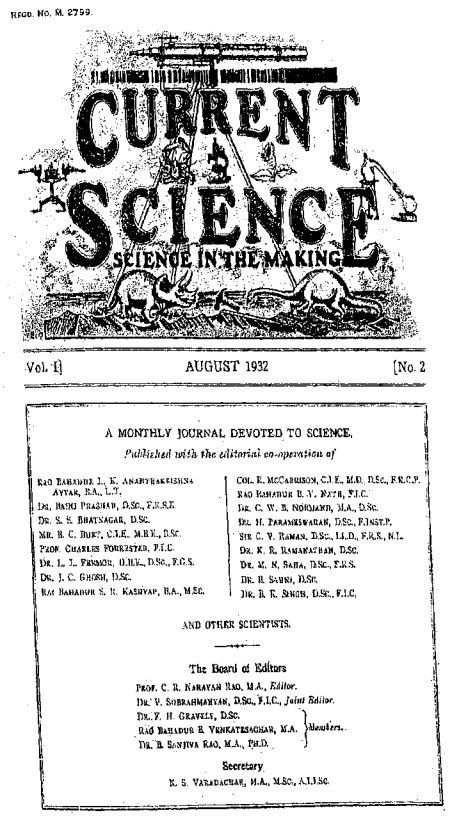
Riki Krishnan and P. Balaram

1932, the year in which *Current Science* was born, saw the world in the midst of transition. Europe, then the centre of science had the First World War well behind it and was purposefully heading towards the Second War. The demand for self-governance and independence in India was rapidly gaining ground. The major revolution in atomic physics had already reached its high point. C. V. Raman had announced the discovery of the 'Raman effect' in 1928 and had been recognized with the Nobel Prize, in a remarkably short span of time by 1930. Calcutta (now Kolkata) was the undisputed centre of the science renaissance in India. Raman, Meghnad Saha and Satyendranath Bose were already justly famous for their work. The historical tradition that descended from J. C. Bose and P. C. Ray was well established. Despite the political and economic uncertainties of the time, science was rapidly acquiring a modern dimension in India. It is in this environment that the need for an interdisciplinary science journal was first felt within the growing scientific community. Discussions at the Indian Science Congresses, held in the 1920s, crystallized into a questionnaire by Martin Forster, a chemist, who was then the Director of the Indian Institute of Science (IISc), Bangalore. The questionnaire circulated in 1931 sought to elicit views on the need for a science journal. Responses must undoubtedly have been encouraging since less than a year later *Current Science* made its first appearance, its inaugural issue dated July 1932. In commemorating seventy-five years of publication of this journal, we look back on the early years.

Beginnings

The presence of the South Indian Science Association, under whose auspices Raman first lectured on the 'Scattering of light', had already given scientists in Bangalore

M. O. Forster (1872–1945)



First two issues of the journal.

a forum for meetings and discussion. The Society of Biological Chemists had come into existence at the Department of Biochemistry at IISc. Inevitably, the core group of scientists involved in the production of the journal was drawn from two of Bangalore's most established institutions: the Central College, then part of the University of Mysore, and IISc, which had been established in 1909. By all accounts the first Editor of *Current Science*, C. R. Narayan Rao, must be credited with a major role in shaping the fledgling journal. The first Board of Editors included F. H. Gravely, Superintendent of the Madras Museum, Madras; V. Subrahmanyan, Professor of Biochemistry, IISc; and B. Venkatesachar, Professor of Physics, Central College, in addition to C. R. Narayan Rao[1].

C. R. Narayan Rao (1882–1960)

In its first issue the journal noted that a number of prominent scientists had promised assistance, listing among them S. S. Bhatnagar, L. L. Fermor, J. C. Ghosh, C. V. Raman, M. N. Saha and Birbal Sahni, all of whom are widely recognized for their contributions to science and scientific institutions in India. Science in undivided India at that time could boast of a geographical reach that extended from the universities at Lahore and Dhaka to Bangalore, the birth place of this journal. While it is almost impossible to reconstruct the difficulties that must undoubtedly have attended the production of the first issue, it is clear that Narayan Rao played the pivotal role in shaping the journal in its formative years.

Narayan Rao was born in Coimbatore on 15 August 1882. Interestingly, this day would later become India's Independence Day. He died in Bangalore on 2 January 1960. In the course of his long career, Narayan Rao made important contributions to the development of zoology, serving with great distinction as the Head, Department of Zoology at Central College until his retirement in 1937. Narayan Rao's crowning achievement was his stewardship of this journal[2,3] from its inception in July 1932 until his retirement from the editorship in November 1942. By this time the journal had become an established feature of the Indian scientific scene.

Current Science in the early years unfailingly had an Editorial column which addressed the issues of the times. In looking back at the many Editorials which appeared in the 1930s, most of which were unsigned, it is clear that Narayan Rao must have been a man of remarkable erudition. His ability to recognize critical issues of current importance and his scholarly approach in summarizing various points of view to the readership can only be admired in retrospect. The first issue carried an Editorial entitled 'Retrenchment and Education'. The early 1930s were an economically difficult period and the demands for resources by the various government departments could only be met by making difficult decisions. In his analysis, Narayan Rao summarized the position well[4]: '*We can very well understand the force of the argument of those who advocate retrenchment, that Education is a branch of administrative service and therefore must share its fortunes along with the other departments. Moreover it will be pointed out that in other countries affected by similar financial blight, the curtailment of educational grants have been accepted as inevitable in the process of readjusting the attenuated revenues to the demands of the several departments*

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Retrenchment and Education

WHETHER in the present financial circumstances of the country, the Department of Education should have been brought under the general operation of the retrenchment policy of the Government of India, is a subject on which there is bound to be an honest difference of opinion. We can very well understand the force of the argument of those who advocate retrenchment, that Education is a branch of administrative service and therefore must share its fortunes along with the other departments. Moreover it will be pointed out that in other countries affected by similar financial blight, the curtailment of educational grants has been accepted as inevitable in the process of readjusting the attenuated revenues to the demands of the several departments of administration. We are afraid that both the argument and the analogy are specious and indefensible. When we say this, we are not to be misunderstood as lacking in sympathy for the Imperial Government in the difficult situation with which they are confronted. Far from assuming a merely negative critical attitude, we are disposed to examine the somewhat difficult problem with a view to discover possible remedies.

At the annual budget session of the legislative bodies, it has become almost customary for the people's representatives to criticise the inadequacy of provision for Education and to direct the whole fire of the debate against the excessive expenditure on military and excise departments. The defence of the Government is well known. Now this chronic difference of opinion on the budget estimates between the leaders of the public and the administrators is due to a want of a clearly defined concept of the fundamental needs of the people whom they propose to serve. We quite see the necessity of spending even large sums of money on services designed for the maintenance of peace and order among the people and on others whose object is to earn more revenue for the State. But if peace, order and a prosperous finance are good, they must be good for something still nobler. At

The First Editorial

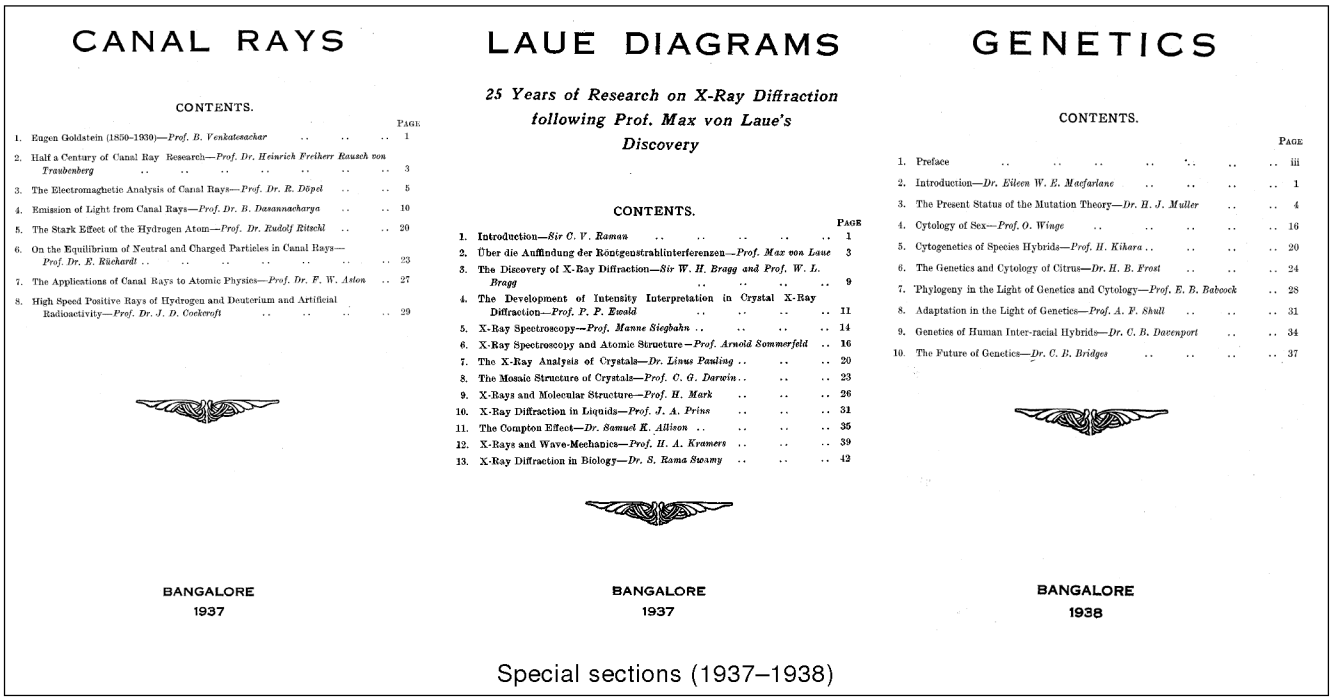
of administration. We are afraid that both the argument and the analogy are specious and indefensible. When we say this, we are not be misunderstood as lacking in sympathy for the Imperial Government in the difficult situation with which they are confronted. Far from assuming a merely negative critical attitude, we are disposed to examine this somewhat difficult problem with a view to discover possible remedies'.

In a dispassionate analysis of a contentious issue, Narayan Rao argued strongly and persuasively on the need for considerable public support for higher education and research in times of financial stringency[4]: '*It seems to us without a policy of continuous and increased support to higher education and to research departments both by the Government and by the wealthy section of the Indian public, India must inevitably lag behind. The landed aristocracy, the captains of industries, the merchant princes and other wealthy magnates should appreciate the close relationship of science, industry and human life and encourage scientific research, the results of which besides constituting a striking tribute to acts of philanthropy, will also be available for utilization in the special branches of the activities in which they are interested.*' It is hard to imagine that a more cogently argued case for the support of science and higher education by both government and private industry can be made today. Ironically, seventy-five years after this first editorial, the leaders of Indian science continue to make the same appeals for a greater public understanding of the need for support of science and higher education, under vastly changed economic and political circumstances. Narayan Rao was clear about the reasons for the apparent lack of support for science in the difficult days of the 1930s: '*The main reason why science has not received so far its due support either from the Government or from the munificent public is that neither has fully recognized the fact that the expansion of higher education and the active promotion of research directly contribute to the general efficiency and the earning capacity of the people. The economic independence of this country depends upon the impetus given to scientific research in the Universities*'[4]. His words are reminiscent of much that is being said on the pages of this journal seventy-five years later, in times when the Indian economy appears to be on an upward trend, a far cry from the years of the Great Depression.

Nurturing the journal

Even in the early discussions on the founding of *Current Science*, it became clear that three exemplary models existed at that time for interdisciplinary science journals; *Nature* published from England, *Science* appearing from the United States and *Die Naturwissenschaften* established in Germany. Narayan Rao was successful in recruiting the Editors of all the three journals, Richard Gregory, J. Mckeen Cattel and Arnold Berliner, to the task of acting as corresponding editors of *Current Science*. The connection with Berliner and the presence of Max Born at IISc, appears to have been influential in determining the contents of the first two special sections of *Current Science* produced in 1937 on Laue Diagrams and Canal Rays. The list of authors in the issue commemorating '25 Years of Research on X-ray Diffraction following Prof. Max von Laue's Discovery', is truly impressive; Laue himself, C. V. Raman, W. H. Bragg, W. L. Bragg, P. P. Ewald, Manne Siegbahn, Arnold Sommerfeld, Linus Pauling and H. A. Kramers. Two more special supplements on 'Genetics' and 'Organizers in Animal Development'[5] were produced. Once again, the list of contributing authors was impressive, including among them H. J. Muller, H. Kihara, A. Franklin Shultz, C. B. Bridges and C. H. Waddington. Narayan Rao was alive to the possibility of using the journal to direct local development policy. The production of a Special 'Mysore Supplement' drew a warmly appreciative letter from Sir Mirza Ismail, the then Dewan of Mysore.

Looking back at early issues of this journal, it is clear that the articles and



CANAL RAYS

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BANGALORE
1937

LAUE DIAGRAMS

25 Years of Research on X-Ray Diffraction following Prof. Max von Laue's Discovery

CONTENTS.

BANGALORE
1937

GENETICS

CONTENTS.

BANGALORE
1938

Special sections (1937–1938)

DEWAN OF MYSORE

LAKE VIEW,
MYSORE.
28th August 1940.

My dear Narayan Rao,

I have read the article on His Highness our late Maharaja, with which the August number of "Current Science" very appropriately opens. I am deeply touched by the fine tribute you have paid to his revered memory. His Highness's death has undoubtedly been a great loss to us. He will, however, live in the memory of his people who gratefully realise to what distinction he raised the name and fame of Mysore.

I thank you most sincerely for the kind personal references you have made to me and to my services to the State during the many years I had the privilege of working in such intimate association with our late lamented Ruler.

Yours sincerely,
Mirza M. Ismail

C. R. Narayan Rao, Esq., M.A.,
Editor, "Current Science",
H E B B A L. (P.O.)
Bangalore.

Mirza M. Ismail letter to C. R. Narayan Rao.

Editorial reflections were current and contemporary. The journal in its physical appearance bore a remarkable similarity to the issues of *Nature* and *Science* in 1932.

Current Science and *Nature*

In many ways the development of *Current Science* in its early years appears to have been shaped by Narayan Rao's close friendship with Richard Gregory, who presided over the editorial office of *Nature* during the period 1919–39. Gregory was by all accounts one of the most remarkable men in the history of science publishing. Born in 1864, he counted among his childhood friends, the incomparable H. G. Wells. In recounting 'The Life and Times of Sir Richard Gregory, BT, F.R.S., 1864–1952', Harold Hartley draws attention to Wells' recollection of Gregory: 'He emerges in my memory as a bland and sturdy figure in the debating society, a little troubled then as ever about the letter "r", friendly, hilarious, hard-up and working hard, one of the cheerful and often quite audible group which includes William Burton, the potter, and A. T. Simmons. We had no relatives to push us on, we had to do all our own pushing, and sometimes the pushing was very hard indeed. Gregory pushed his upward course by way of sunspot computation to the stars. He won the respect and confidence of Norman Lockyer[6]. Gregory

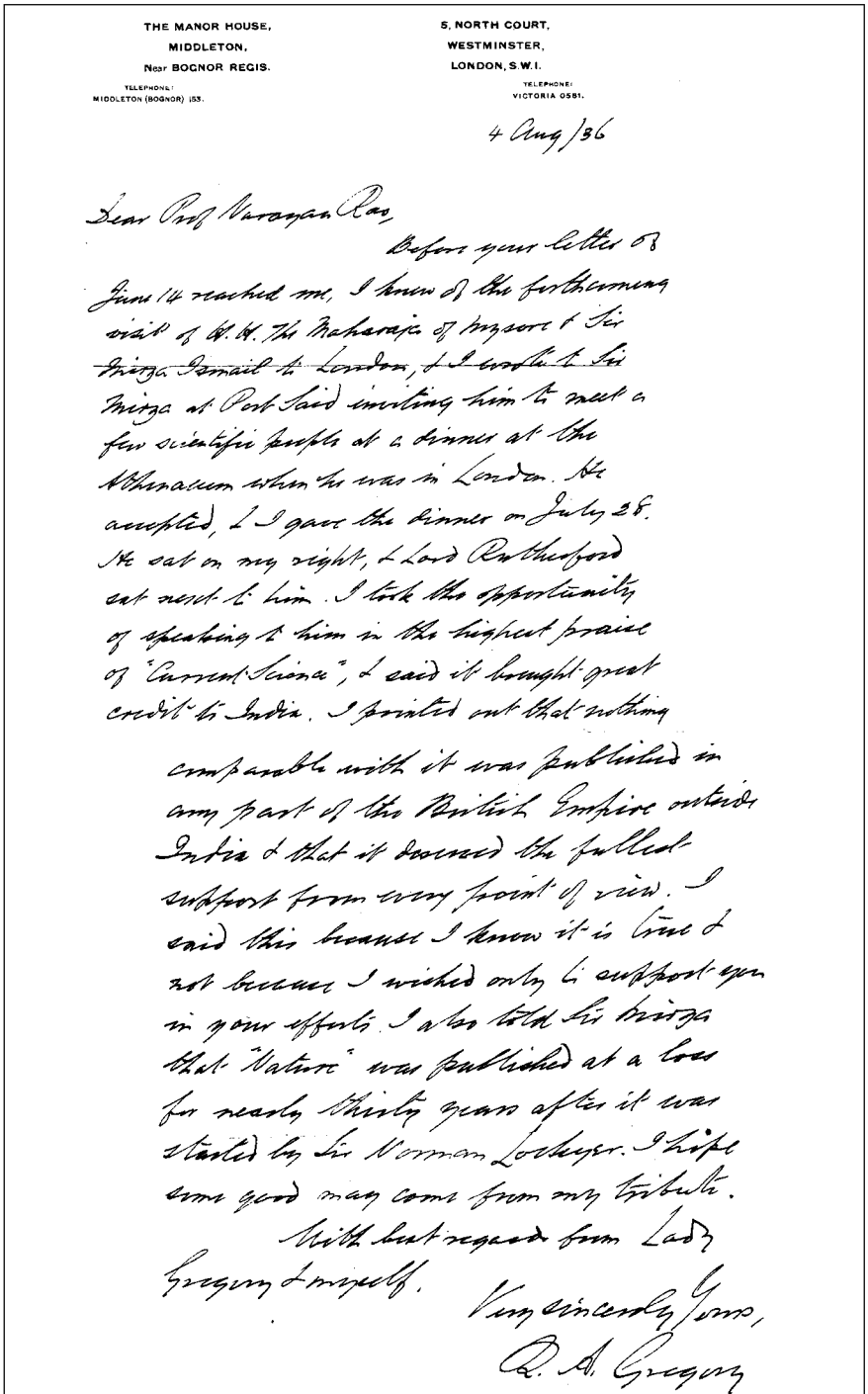
Nature, *Science* and *Current Science* in 1932.

turned to science journalism when he joined as Lockyer's assistant in 1889, almost twenty-five years after the latter had founded *Nature*. Over time, as Lockyer aged, Gregory was virtually the Editor, working on a journal, which was to publish most of the papers that were to revolutionize science in the first few decades of the twentieth century. From his vantage point in London, Gregory had a

Richard Gregory (1864–1952)

clear view of the world of science. His foresight was remarkable, and his clearly global approach drew him to India. Curiously, he built a warm, personal relationship with Narayan Rao, a man with a completely different background. In piecing together Gregory's association with *Current Science* and Narayan Rao, we had the benefit of reading only one side of the correspondence. Absence of copies of Narayan Rao's letters is a major impediment to any historical account. Nevertheless, Gregory's letters – some of which are available – display a remarkable interest in this journal and in the affairs of Indian science. Gregory came to India in February 1933. In a letter dated 29 December 1932, he writes: 'I must see the Indian Institute of Science whatever happens, and I am looking forward with the greatest pleasure to meeting you and others there. It is particularly desirable that we should meet for a talk over general policy in the regard to the publication of scientific work or results obtained by Indian men of science in *Current Science* or in *Nature*'.

Over a period of the next twenty years, there appears to have been a steady correspondence between the two men.



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Near BOGNOR REGIS.
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5, NORTH COURT,
WESTMINSTER,
LONDON, S.W.1.
TELEPHONE:
VICTORIA 0581.

4 Aug/36

Dear Prof Narayan Rao,

Before your letter of June 14 reached me, I knew of the forthcoming visit of H.H. The Maharaja of Mysore & Sir Mirza Ismail to London, & I wrote to Sir Mirza at Port Said inviting him to meet a few scientific people at a dinner at the Athenaeum when he was in London. He accepted, & I gave the dinner on July 28. He sat on my right, & Lord Rutherford sat next to him. I took the opportunity of speaking to him in the highest praise of "Current Science", & said it brought great credit to India. I pointed out that nothing comparable with it was published in any part of the British Empire outside India & that it deserved the fullest support from every point of view. I said this because I know it is true & not because I wished only to support you in your efforts. I also told Sir Mirza that "Nature" was published at a loss for nearly thirty years after it was started by Sir Norman Lockyer. I hope some good may come from my tribute.

With best regards from Lady Gregory & myself.

Very sincerely yours,
R. A. Gregory

Richard Gregory's letter to C. R. Narayan Rao dated 4 August 1936.

'Before your letter of June 14 reached me, I knew of the visits of H. H. The Maharaja of Mysore and Sir Mirza Ismail to London. I wrote to Sir Mirza at Port Said inviting him to meet a few scientific people at a dinner at the Athenaeum when he was in London. He accepted. I gave the dinner on July 28. He sat on my right. Lord Rutherford sat next to him. I took this opportunity of speaking to him of *Current Science*. I said, it brought great credit to India. I pointed out that nothing comparable with it was published in any part of the British Empire outside India and that it deserved the fullest support from every point of view. I said this because I know it is true and not because I wished to support you in your effort. I also told him that *Nature* was published at a loss for nearly 30 years after it was started by Sir Norman Lockyer. I hope some good may come from my tribute'.

The Academy of Sciences

The years immediately after the founding of *Current Science* were turbulent. The issue of establishing an Academy of Science quickly became a contentious and hotly disputed topic in scientific circles. The need for 'An Indian Academy of Science' was articulated with characteristic thoughtfulness and clarity by Narayan Rao, in an Editorial in the May 1933 issue of this journal. Re-reading the Editorial must be made mandatory for all those who run the affairs of the many Academies of Science, which have sprung up over the years in this country. His vision was clear: '*The Academy will be a company of thinkers, workers and expounders comprising members of the New Estate upon whose achievements the world must in future depend for preservation and advancement of civilization. Their professional spirit must be service, rendered with absolutely no thought of personal advantage. The amount of knowledge they place at the disposal of their country will determine its economic, social and political progress. An Academy of Science is not an ornament, but an indispensable institution for directing the destinies of the nation. We have no hesitation in thinking that its establishment ought to be the natural and legitimate ambition of a progressive government and an enlightened public, who should unstintingly provide the institution with sufficient funds for its service in their cause*'[7].

A few months before this Editorial, M. N. Saha had founded the Academy of Sciences of the United Provinces, with its office in Allahabad. Quickly thereafter, the divisive tendencies that are always inherent in our surroundings came to the fore. In September 1933, Gregory entered the fray with an Editorial in *Nature* entitled 'A National Academy of Sciences for India'. By November 1933, *Nature* noted the developments which suggested that an 'Indian Academy of Sciences' with a constitution prepared in significant part

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A National Academy of Sciences for India

ALMOST a year ago (October 8, 1932) an account was given in these columns of the foundation in India of the Academy of Sciences of the United Provinces, with its seat at Allahabad. The main objects of the Academy, of which Prof. M. N. Saha was the first president, are the encouragement of scientific work and the publication of the results of research; and the original memoirs published in the issues of the *Bulletin* of the Academy represent a high standard of achievement. To limit interest in such an organisation to the United Provinces is scarcely characteristic of the scientific spirit; and we are glad, therefore, to see a movement to extend its outlook. It is hoped to develop the body into an Indian Academy of Sciences and thus to establish a national institution in the maintenance and growth of which scientific workers throughout India would take an active part.

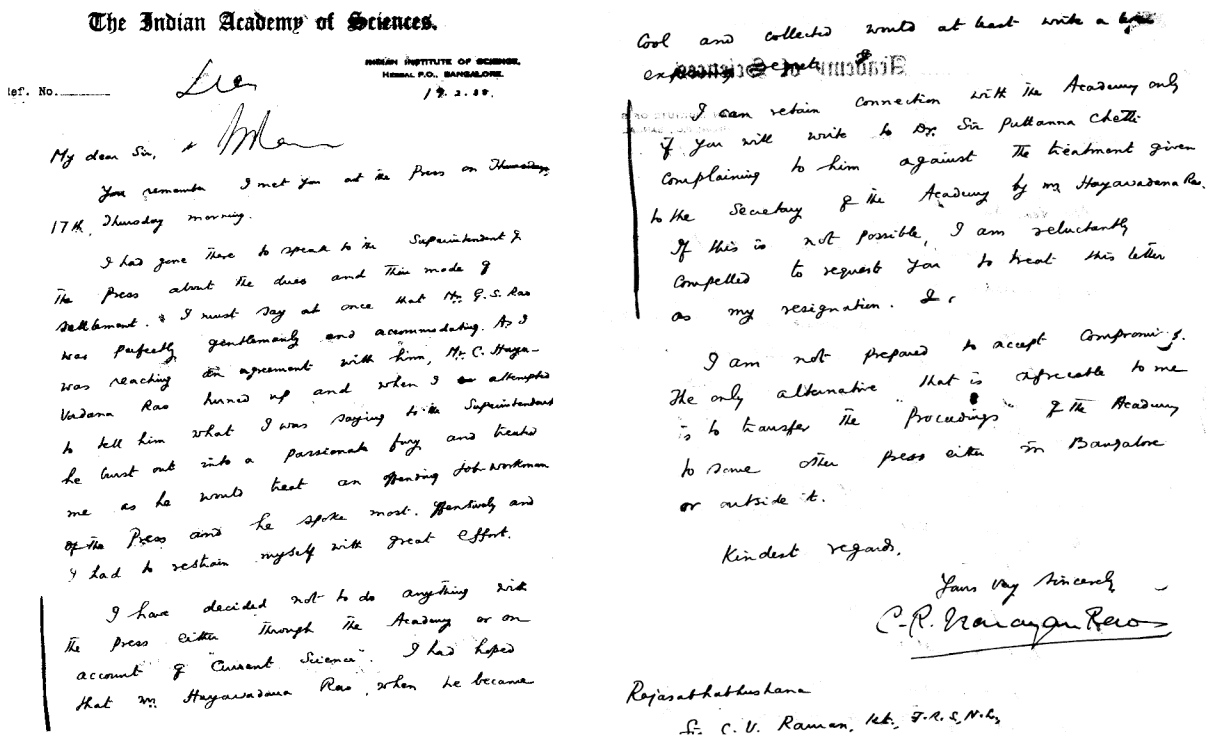
As a matter of fact, when a number of men of science from different parts of India assembled at Allahabad in January 1930, the question of the establishment of an Academy of Sciences in India was thoroughly discussed. It was then decided to start, as an experimental measure, the U.P. Academy of Sciences, which would be the official expositor of research work conducted mainly in the five universities of the United Provinces of Agra and Oudh, and it was also settled that membership would be open to men of science residing outside the territorial limits of the United Provinces. It was also suggested that if the experiment proved successful, the U.P. Academy might later on develop into an All-India organisation. The progress of the Academy for the last three years has shown that the experiment has been very successful; and members of the Academy residing in other parts of India have suggested that it should become an All-India Academy of Sciences. The U.P. Academy is the first of its kind to have been started in India, and it has, therefore, strong claim to develop into an All-India Academy. We understand that the Council of the Academy has discussed the question recently and has recommended to the general body of the Academy that its name be changed to the 'Indian Academy of Sciences'.

The formation of an Indian Academy of Sciences was advocated in a leading article in *Current Science* in May last. Cogent reasons were then advanced for the establishment of such a body, the main being the beneficial effect it would have on public opinion, and the facilities which it would afford for the publication in India of much original work which at present appears in European and American journals. The *Indian Journal of Physics* and the *Journal of the Indian Chemical Society* already afford means of publication of papers in their respective departments of science, and take a high place among periodicals of a like kind. They are, however, limited to their own particular fields, and there are other important branches of science for which no similar provision for publication of results of research exists in India. If a national Academy can be established, therefore, to represent scientific work in all departments and publish memoirs from investigators throughout the whole sub-continent, it will undoubtedly render most valuable service.

Several difficulties will have to be overcome, and much consideration will have to be given to the need for co-operation between workers in different parts of India, before an Academy of this kind can be placed upon a substantial footing. India has already the ancient Asiatic Society of Bengal, which was founded to inquire into the history, civil and natural, the antiquities, laws, arts, sciences and literature of Asia. There are few activities in the scientific life of India which have not been linked with this Society, from the early ethnological survey of Col. Dalton and the grand series of papers on the fossil mammalian fauna of the Sub-Himalayas to the foundation of the Indian Museum and its offshoot the Zoological Survey. It may, therefore, be reasonably urged that as the Asiatic Society is not merely a Bengal

which the promotion of the scientific credit of the country might safely be entrusted. It is to be hoped that pride in provincial institutions and achievements will not stand in the way of the unity of action necessary to found such a national Academy of Sciences for India, which ought to be able to secure generous financial support from private benefactors as well as from official sources.

Gregory's editorial.



The Indian Academy of Sciences.

INDIAN INSTITUTE OF SCIENCE,
HEBBAL P.O., BANGALORE.

Telf. No.

19.2.38.

My dear Sir,

You remember I met you at the Press on Thursday 17th, Thursday morning.

I had gone there to speak to the Superintendent & the Press about the dues and the mode of settlement. I must say at once that Mr. G. S. Rao was perfectly gentlemanly and accommodating. As I was reaching an agreement with him, Mr. C. Hayavadana Rao turned up and when I attempted to tell him what I was saying to the Superintendent he burst out into a passionate fury and treated me as he would treat an offending Job-workman of the Press and he spoke most offensively and I had to restrain myself with great effort.

I have decided not to do anything with the Press either through the Academy or on account of "Current Science". I had hoped that Mr. Hayavadana Rao, when he became

Cool and collected words at least write a [illegible]

I can retain connection with the Academy only if you will write to Dr. Sir Puttanna Chetti complaining to him against the treatment given to the Secretary of the Academy by Mr. Hayavadana Rao. If this is not possible, I am reluctantly compelled to request you to treat this letter as my resignation. &c

I am not prepared to accept compromise. The only alternative that is agreeable to me is to transfer the proceedings of the Academy to some other press either in Bangalore or outside it.

Kindest regards,

Yours very sincerely,
C. R. Narayan Rao

Rajasabhabhushana
Sir C. V. Raman, Kt., F.R.S., N.L.,

Narayan Rao's letter dated 19 February 1938 to Raman.

L. L. Fermor (1880–1954)

Meghnad Saha (1893–1956)

by L. L. Fermor would be founded, with Calcutta as its location. C. V. Raman, by then in transition from Calcutta to Bangalore, was clearly one of the most dominant figures of his times. Given the turbulence of human relationships, the formation of an 'Indian Academy of Sciences' quickly became embroiled in controversy. In the midst of recrimination and animosity, the *Current Science* editorial stance was clear. In a notice in April 1934, the Editor Narayan Rao distanced the journal from the action of some of the Editorial Board Members: 'The public utterances of such members or their action in the committees in which they choose to function, do not reflect the official views of the journal'[8].

In marking the publication of the fiftieth volume of *Current Science* in 1981, an Editorial Note wryly remarked, 'Some of the editorials were seminal in nature, like the one on 'An Indian Academy of Science' published in the first volume. While we referred to an Academy, probably the effect of the article was so great that the country got two, in 1934 and another in 1935!'[9].

In the early 1930s and 1940s, the journal published Editorials on many critical issues concerned with the development of science, technology and industry in India. As the war progressed, it became clear that the sun would set on the British Empire. The transition to independent India necessarily involved building many new institutions to advance science and higher education. Looking back one cannot but marvel at the remarkable foresight of Narayan Rao and his colleagues, who discussed the formation of bodies as diverse as those that are intended to promote fisheries and agriculture on the one hand and industrial research on the other. The scientific content of *Current Science* in the 1930s and 1940s was indeed comparable to much of the world's scientific literature. Most authors were drawn from the universities, many of which lie in total disarray today. Even a casual reading

Certificate of Registration of Societies.

ACT XXI OF 1860.

No. 1 of 1942-43.

I hereby certify that

has this day been registered under the Societies' Registration Act, XXI of 1860.

Given under my hand at

this day of

One thousand nine hundred and

Registrar of Joint Stock Companies.

Current Science Association – Registration Certificate.

M. Sreenivasaya (1895–1969)

C. V. Raman (1888–1970)

of the issues in the first two decades of the journal's existence provides an impression of a vibrant and growing scientific community.

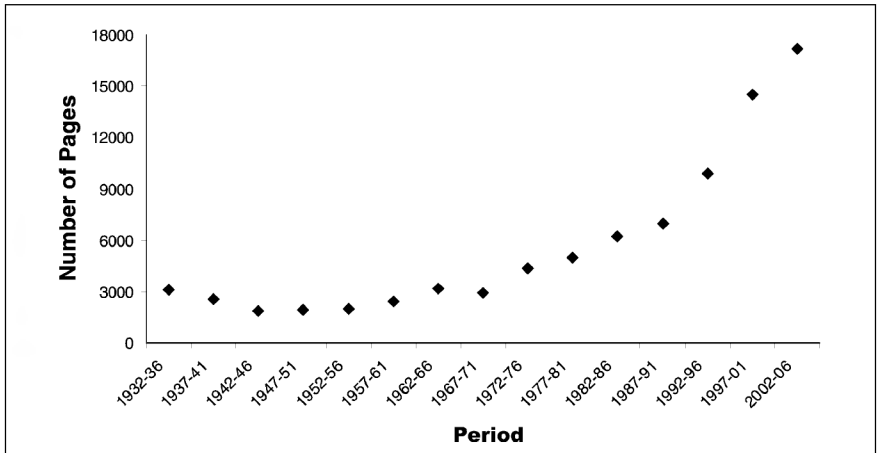
Narayan Rao's tenure ended abruptly in November 1942. The only record of the events that led to his departure is found in a letter written by him to Raman. The immediate provocation appears to have been an incident that occurred at The Bangalore Press, which was then involved in the production of the journal. He was succeeded as Editor by a longtime colleague, M. Sreenivasaya, a faculty member of IISc, where the journal was housed since its inception.

Sreenivasaya, a biochemist of considerable originality, was also a man with uncommon breadth of vision. His efforts saw that this journal was firmly established by 1950 as a fixture on the Indian scientific scene. Following his retirement from IISc in June 1953, Sreenivasaya moved to the Central Drug Research Institute, Lucknow at the invitation of its Director, B. Mukherji. Troubled by failing eyesight, Sreenivasaya returned to Bangalore in 1957. Unfortunately, he is reported to have destroyed all his papers and correspondence in the river Gomati just prior to his departure to Bangalore[10]. The absence of Sreenivasaya's papers prevents us from providing a more complete picture of his years at *Current Science*. In 1942, the Current Science Association was registered as a society, with J. C. Ghosh, the then Director of IISc, as the first President of the Association. Ghosh was succeeded in 1948 by Raman, who held the Presidentship until his death in 1970. The linkages between this journal and the Raman Research Institute founded in 1948 and the Indian Academy of Sciences founded in 1934 were in large measure forged during the Raman era and cemented after his death by the

Current Science over the years.

Current Science: Advertisements over the years.

S. Ramaseshan (1923–2003)



Pages published in *Current Science* (1932–2006).

efforts of Sivaraj Ramaseshan. Today the journal offices are located within the Indian Academy of Sciences and its publication is a cooperative effort.

Evolution of the journal

Current Science began as a monthly journal. The conversion of the journal to a fortnightly was first discussed in the Association meeting in 1946 and permission obtained from the 'Paper Controller', an achievement duly reported[11] to the Working Committee of the Association in December 1948. The financial position of the journal was precarious for a long period of time, and the appearance of the journal as a fortnightly began in 1964. Over the years, science in India has grown and science publishing in the world has grown even more dramatically. *Current Science* began to slip from its position of importance. By the 1980s, the journal was in a difficult position of not having enough manuscripts to appear as a fortnightly. Publication schedules were becoming hard to maintain. It was at this time that the new Editor, Sivaraj Ramaseshan took over in 1989. In many ways Ramaseshan carried out a remarkable job of resurrecting the journal, transforming it both in appearance and content. In keeping with the times he introduced the idea of cover illustrations in 1989.

Advertising is a source of revenue which cash-strapped journals must carefully court. While this journal carried a reasonable number of advertisements in the early years, these began to shrink in the later periods. More recent efforts have resulted in a dramatic increase. The growth of the journal can be also measured in the number of published pages.

We can look back with a considerable degree of satisfaction that the journal has appeared regularly over three quarters of a century under circumstances that have varied widely. Today the journal faces new challenges as the world of science publishing is undergoing dramatic changes. The founders of *Current Science* could hardly have anticipated the electronic age.

1. Editor's Notice: *Curr. Sci.*, 1932, **1**, 21–22.
2. Narayan Rao, C. R., Editor's Note, *Curr. Sci.*, 1942, **11**, 4.
3. Seshachar, B. R., Obituary of Prof. C. R. Narayan Rao, *Curr. Sci.*, 1960, **29**, 173.
4. Narayan Rao, C. R., Retrenchment and Education. *Curr. Sci.*, 1932, **1**, 1–3.
5. Preface in Special Supplement in Genetics. *Curr. Sci.*, March, 1938.
6. Hartley, H., *Nature*, 1953, **171**, 1040.
7. Narayan Rao, C. R., An Indian Academy of Sciences. *Curr. Sci.*, 1933, **1**, 335–337.
8. Editor's Notice: *Curr. Sci.*, 1934, **2**, 390.
9. Ourselves. *Curr. Sci.*, 1981, **50**, 1–3.
10. Ramachandra Rao, T. N., Fermentation Technology – A personal journey. KSCST IISc, 1996, pp. 1–5.
11. Current Science Association, Report of the period ending December 1948.

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