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Dear Sir A. P. Patro,

Referring to the correspondence ending with
your D.O. dated 19. 3. 25. and my letter of the 24th March
1925, I am ^{looking} ~~looking~~ forward to have your cordial support
in furthering the activities of the Society.

I enclose herewith an Annual report for your
perusal.

Yours sincerely,

P. Bray
President.

P.B.

The Hon'ble Sir A. P. Patro, Kt.

ANNUAL REPORT
OF
The Indian Chemical Society
for 1924

u

Chemical Knowledge of the Hindus of Old.¹

By

SIR PRAFULLA CHANDRA RÂY, C.I.E., D.Sc., PH.D.,
President, Indian Chemical Society.

An eminent Belgian Indologist, Goblet d'Alviella, has very justly observed that India is a land of paradoxes, that whatever is of ancient origin excites our admiration—her literature including her unrivalled dramas, her transcendental philosophy of the *Upanishads* and the *Geeta* attracted the attention of the West long ago. India was once the cradle of mathematical sciences including arithmetic and algebra; the system of notation, popularly ascribed to the Arabs, is really the product of the Hindu brain.

Max Müller says somewhere that if India had presented no other gift to Europe than that of the numerals, the debt of the latter to the former would have been unrequitable.² Ancient Assyria, Babylon and

¹ Inaugural address delivered by the President, Indian Chemical Society, at its first annual General Meeting held at the chemistry lecture theatre, Hindu University, Benares.

² The learned Professor of Sanskrit of Oxford University says "In science too, the debt of Europe to India has been considerable. There is, in the first place, the great fact that the Indians invented the numerical figures, used all over the world. The influence which the decimal system of reckoning dependent on those figures has had not only on mathematics, but on the progress of civilisation in general, can hardly be overestimated. During the 8th and 9th centuries the Indians became the teachers in arithmetic and algebra of the Arabs and through them of the nations of the West. Thus, though we call the latter science by an Arabic name, it is a gift we owe to India."—Macdonnell's *History of Sanskrit Literature*, p. 424.

Egypt exist only in their monuments, cuneiform inscriptions or hieroglyphs, inscribed on slabs of stone or baked clay. The recent discoveries in Tutankhamen mausoleum have yielded many new specimens of Egyptian art of all kinds. Rome and Greece live in their literature and philosophy, but the Hindu nation persists to-day as she did 2,500 years ago, when Gautama Buddha preached at Benares, the sacred city where we are holding our meeting to-day. Sakya Muni knew that if he could make a breach in the citadel of Hindu religion and culture, the whole of India would readily embrace his new doctrine. For a time Brahminical supremacy must have been shaken to its foundation as is proved by the archaeological findings of Sarnath now some five miles from this city. But the tenacious vitality of the Hindu religion is something marvellous and it struck sagacious tourists and observers like Pierre Loti. Even to-day European visitors who find the pious Hindu performing his daily religious practices and ablutions at the bathing ghats of the Ganges can have but little difficulty in coming to the conclusion that impact with the West has scarcely produced any effect on the Hindu. He pursues his daily even tenor of life as his ancestors did twenty-five centuries ago. No wonder that the poet should exclaim :—

“The East bowed low before the blast

In patient, deep disdain,

She let the legions thunder past

And plunged in thought again.”

No doubt the Hindus have been meditating—ever lost in abstruse metaphysical subtleties, but, all the same, in ancient India physical science found her votaries. I have barely time to allude to the atomic theory as propounded

in the Vaiseshika System of Kanāda, which anticipates the doctrine of Anaxagoras, Empedocles, etc. I shall limit myself this afternoon to the keen powers of observation as also the necessity of experimental methods enjoined by the Hindus of old, so far as chemical processes are concerned. Indeed, Dhundukanātha, the author of the standard iatro-chemical treatise *Rasendra Chintamani*, (lit. gems of mineral preparations), says—“They are alone to be regarded as real teachers who can show by experiment what they teach. They are the deserving pupils, who, having learnt the experiments from their teachers can actually perform them. The rest, both the teachers and the pupils, are merely stage-actors.”¹

This author, again, acknowledges his indebtedness to the standard work on the subject, *Rasārṇava*, in which occurs an elaborate account of the processes of sublimation, distillation, etc., as also of the apparatus required for the process. Indian alchemists are also eloquent in their veneration for and indebtedness to the great adept, Nagārjuna, to whom is ascribed the invention of the above processes. One instance will suffice to give you an idea of the methods adopted for the purification of mercury.

मिश्रितौ चेद्रेसे नागवङ्गौ विक्रयहेतुना ।

ताभ्यां स्यात् कृत्रिमो दोषः तच्चुक्तिः पातनद्वयात् ।

¹ अथौषं बहुविदूषां सुखादपश्यं

शास्त्रेषु स्थितमङ्गलं न तस्मिन्निह ।

यत् कर्म व्यरचयमयतो गुरुनां

प्रौढानां तदिह वदन्ति वीतशङ्कः ॥

अध्यापयन्ति यदि दर्शयितुं क्षमन्ते

सूतेन्द्र कर्मगुरवो गुरुवत् एव ।

शिष्यास्तु एव वचयन्ति गुरोः पुरो ये

शेषाः पुनस्तदभ्याभिनयं भजन्ते ॥

The above, literally rendered, runs as follows:—
“Fraudulent dealers adulterate (alloy) mercury with lead and tin, hence these impurities are to be removed by subjecting the mercury to triple distillation.”

The identification of metals by the colouration of their flames is referred to in *Rāsarnava*—

“Copper yields a blue flame, that of the tin is pigeon-coloured, that of the lead is pale tinted¹.....”
We are not aware of similar tests being applied anywhere at such an early period as a qualitative test for metals.² As regards the high degree of skill in metallurgy attained by the Hindus, it is enough to mention the iron pillar near Delhi.³ In the ancient Hindu literature only six metals are mentioned, viz., gold, silver, iron, lead, tin and copper. The name of a seventh metal—zinc—occurs in European history for the first time in the works of Paracelsus, who leaves us in the dark as to the nature of his “zincken,” which he designates as “semi” or bastard metal.

Libavius was the first to mention the properties of zinc more exactly although he was not aware that the

¹ Cf. “Lead compounds impart a pale tint to the non-luminous gas flame.”—Roscoe and Schorlemmer's Chemistry, Ed. 1879.

² Cardan (1501-1576) is perhaps the earliest to notice that the colour of the flame varies with different metals—Hoefer's *Hist. d. Chim.* Vol. II, p. 95. Ed. 1869.

³ Taking A.D. 400 as a mean date—and it certainly is not far from the truth—it opens our eyes to an unsuspected state of affairs to find the Hindus at the age capable of forging a bar of iron larger than any that had been forged even in Europe up to a very late date. As we find them, however, a few centuries afterwards using bars as long as this *lat* in roofing the porch of the temple at Kanaruc, we must now believe that they were much more familiar with the use of this metal than they afterwards became. It is almost equally startling to find that, after exposure to wind and rain for fourteen centuries, it is unruined, and the capital and inscription are as clear and as sharp now as when put up fourteen centuries ago.”

“There is no mistake about the pillar being of pure iron. General Cunningham had a bit analysed in India by Dr. Murray and another portion was analysed in the School of Mines here by Dr. Percy. Both found it pure malleable iron without any alloy.”—Fergusson's “*History of Indian and Eastern Architecture*, Ed. 1899, p. 508.

Even now forged masses of such size are exceptional.

metal was derived from the ore known as ‘calamine.’ He states that “a peculiar kind of tin is found in the East Indies, called ‘calaëm.’ Some of this was brought to Holland, evidently by the Dutch East India Company, and came into his hands.” The extraction of zinc from the ore (calamine) can be followed in every detail from the account left to us in *Rāsarnava* and specially *Rasaratnasamuchchaya*. The process as given in the latter work is reproduced below. The literal rendering of it runs thus:

“Rub calamine with turmeric, the chebulic myrabolans, resin, the salts, soot, borax¹..... Fill the inside of a crucible with the above mixture and dry it in the sun. Close its mouth with a perforated saucer. A vessel filled with water is embedded in the ground, over which the above vessel charged with the mixture is inverted, which is again heated as shown in the figure, by means of a charcoal fire. The operation is stopped when the flame issuing from the mass changes from blue to white. The essence of the metal, which drops into the water and has the lustre of tin, is to be collected.” Indeed, the process, so elaborately given above, might be quoted almost *verbatim* in any treatise on modern chemistry.² It is practically the same as *distillatio per descensum*—the flame of a bluish tint issuing from the mouth of the crucible indicates the combustion of carbon monoxide so often observed in metallurgical operations.

¹ It is scarcely necessary to point out that highly carbonaceous substances like resin, turmeric, etc., being heated in the absence of air yield carbon in a fine state of division.

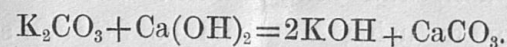
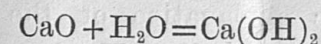
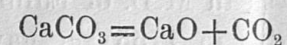
² Cf. “A mixture of two parts of ground roasted ore and one part of coal-dust is brought into the retorts, each holding about 40 pounds of the mixture. As soon as the temperature has high enough, the reduction begins and carbon monoxide is evolved and burns from the end of the clay adapter with a blue flame.” (The italics are ours)—Roscoe and Schorlemmer's Chemistry, Ed. 1879, Vol. II, Part I, p. 225.

It is not, of course, claimed that the ancient Hindus knew that the blue colour was due to the combustion of carbon monoxide, but what I should like to lay particular stress upon is the power of keen observation underlying the description.

The ancient Hindus knew the distinction between potassium carbonate and sodium carbonate—the former is called *yavakshāra* (*lit.* ash from the spikes of barley), and the latter *sarjikakshāra*, (equivalent to *natron* from Egypt). The earliest record of this is to be found in the old Hindu work, the *Susruta*. The *Charaka* and the *Susruta* are the two standard and authoritative treatises on *Ayurveda* (*lit.* science of life). The *Charaka* is more concerned with medicine, while the *Susruta* relates more or less to surgery. Here we have a drop of 2,000 years from the *Susruta* to the remarkable discoveries of Joseph Black. In the *Susruta* the two modifications of alkali are referred to as *tikshnakshāra* (*tikshna*, *i.e.*, sharp or caustic; *kshāra*, *i.e.*, alkali), and *mridukshāra* (*i.e.*, mild alkali). The distinction between the two is quite clear. In the days of my boyhood the ashes of the plantain tree (*Musa sapientum*) were used by washermen for cleaning clothes. The reason is that it is very rich in potassium carbonate. In the *Susruta* we have many land plants mentioned which have been botanically classified in Uday Chand Dutt's *Materia Medica of the Hindus*. The *Susruta* says "on an auspicious day cut the plant down, burn it and boil the ashes with water in an iron pan and then filter through cloth folded several times." This, says the *Susruta*, is *mridukshāra*. You know what actually takes place in this process. The clean solution that is obtained is rich in potassium carbonate and is termed mild alkali.

Next comes the description of the preparation of caustic alkali, and this is the most scientific portion.

"Collect several kinds of limestone and shells and burn them strongly and add water to the resulting product. Next mix this slaked lime with the lixiviated liquid obtained above and boil and stir with an iron ladle." The reactions that take place here can be represented in the modern way by the following equations:



This method, you will look for in vain in any European treatise before the 16th or the 17th century. The process as given in the *Susruta* is so scientific that it can be bodily transferred to any modern text-book on chemistry. Besides recommending the use of an iron vessel for boiling the liquid, the book further says that the *kshāra* so obtained, must be stored in an iron vessel with its mouth closed:

आयसे कुम्भे संवत्सुखे निदध्यात् ।

The *Susruta* cannot, of course, be credited with having known that carbon dioxide was to be excluded from the vessel to prevent the caustic solution from being acted upon. But the physicians of those days must have certainly realised by empirical methods that the causticity would be diminished if these precautions are not taken. Even to-day we keep caustic potash, either in iron or silver vessels. The points to be noted here are that the *Susruta* gives not only a very accurate method of preparation and preservation of the two kinds of alkali but also the distinction between the two varieties, *tikshnakshāra* and *mridukshāra*, is clearly

recognised. Davy isolated potassium and he says, "The ancients did not know how to distinguish between potassium carbonate and sodium carbonate." But in our *Ayurveda* this sharp distinction has been clearly stated.

Between the *Susruta* and Joseph Black lies a gap of some 2,000 years. Black was an M.D. of Edinburgh. In his Doctorate thesis (presented in 1755) he gave for the first time the scientific explanation of the difference between caustic and mild alkalis. He heated magnesium carbonate using the balance at each stage of the experiment, and pointed out that on strong heating there was a loss in weight. He also pointed out that a gas was given out which was called "fixed air." Ramsay in his *Life of Black* says "Quicklime is formed by heating lime-stone in the fire; it thereby acquires its burning properties or causticity." Black's essay was an epoch-making one.

M. Berthelot, under whose inspiration I took to writing my *History of Hindu Chemistry*, in reviewing my book says of this portion "that the Hindus possibly got their knowledge of this method from the Portuguese." (*Journal des Savants*, Jan. 1903, p. 34.) But against that I may point out that Chakrapāni, who was the court physician of Nayapāla (1050 A.D.), King of Gour, in the treatise which goes by his name, quotes this mode of preparation verbatim from the *Susruta*. A much older treatise, the *Vagbhata* also does the same. In the course of my studies, I came across a remarkable passage in a Buddhist work which dates as far back as 140 B.C.,—I mean the *Milinda Panho*. Professor Rhys Davids translates the portion as follows: "And when the inflammation had gone down and the wound had become sweet, suppose he were then to cut into it with a lancet, and burn it with caustic. And when he had

cauterized it, suppose he were to prescribe an alkaline wash..... Now tell me, O King! would it be out of cruelty that the surgeon..... thus cut with the lancet and cauterized with the stick of caustic."¹

It must be admitted on the other hand that the discovery of Black was quite independent and he showed that the difference between the mild and the caustic alkalis was due to the presence of carbon dioxide in the former. The *Susruta*, of course, does not say anything of this kind.

The use of metallic preparations mentioned in the *Hindu Pharmacopœia* also dates from a very early period. In Europe Paracelsus was, as we have said, the first to introduce metallic preparations into medicine. But in India, Vrindā who preceded Chakrapāni by at least a century and therefore must have flourished about the 9th Century A.D., or even earlier, was the first to prescribe 'Kajjvali' (black sulphide of mercury) as a medicine. Chakrapāni gives an elaborate description of the process of making 'Kajjvali'. In Europe this preparation was not known before the 17th century.²

I need not proceed further. The knowledge of pharmacy which the Arabs brought to Europe was derived from the Hindus. *Ex oriente lux*. I shall conclude with the apposite words of that illustrious French Chemist, Jean Baptiste André Dumas: "What an awakening for Europe! After two thousand years she found herself again in the position to which she had been raised by the profound intellect of India and the

¹ *Sacred Books of the East*—Vol. XXXV, p. 168.

² Das Schwarze Schwefelquecksilber lehrte zuerst Turquet de Mayerne, im Anfange des 17 Jahrhunderts, durch Zusammenreiben von warmen Quecksilber mit geschmolzenem Schwefel darstellen"—Kopp: *Gesch. d. Chem.* Vol. IV, 186.

acute genius of Greece." (The first *Faraday Lecture* delivered before the Chemical Society, June 17, 1869).¹

BIBLIOGRAPHY:

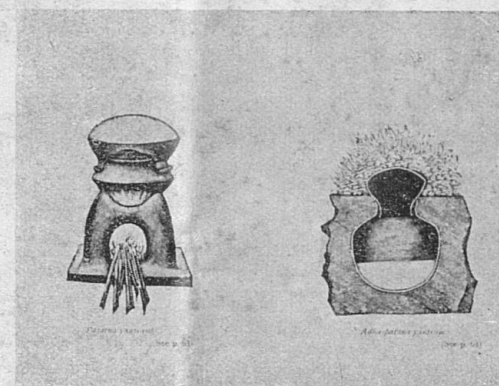
P. C. Ray's *History of Hindu Chemistry*.

Calcutta, Chuckerberty Chatterjee & Co.

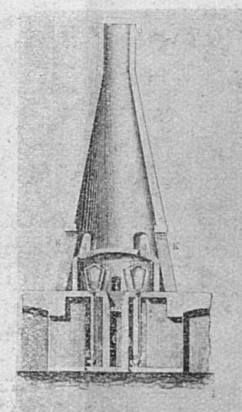
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¹ Hoefer in his admirable *Histoire de la Chimie* also expresses the same view "L'Inde est le berceau de la filiation des peuples qui marchent à la tête de la civilisation."—Vol., I, Ed. 1866.

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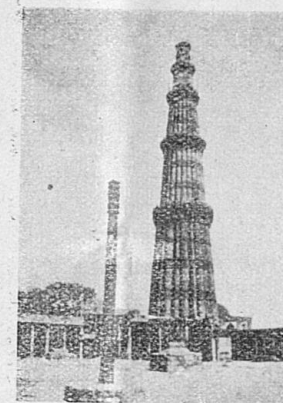
Apparatus for sublimation and
distillatio per descensum.



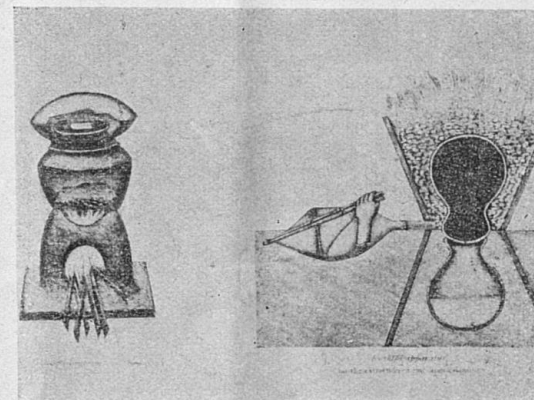
A modern method of
extraction of zinc.

P. C. RAY

10



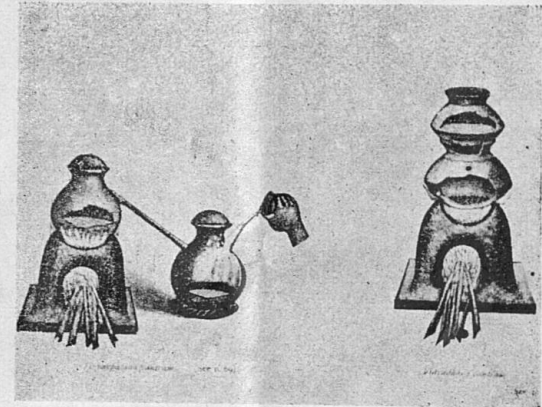
The iron pillar and the
Kutab minar near Delhi.



Fumigating
apparatus

Extraction of zinc
from calamine.

P. C. RAY



Apparatus for
distillation

Apparatus for extraction
of mercury from cinnabar

Annual Report

The Secretary read the following report at the first annual general meeting of the Indian Chemical Society held at the Chemistry Lecture Theatre, The Hindu University, Benares, on Monday, the 12th January, 1925.

"The proposal of forming an Indian Chemical Society was first mooted at a meeting of the Chemical Section of the Indian Science Congress at Madras (in 1922). A committee was appointed to consider the desirability of taking such a step and to consider ways and means if the committee approved of the proposal. The committee reported to the delegates of the Chemistry Section of the Congress that they approved of the proposal which was formally accepted by the Chemistry Section of the Indian Science Congress at Madras (1922). The committee was also requested to take steps with a view to form the Indian Chemical Society. In response to a circular letter addressed to a large number of chemists and to the editors of the daily papers by Dr. E. R. Watson, President of the committee, replies were received from 173 persons who agreed to join the society when formed. The majority of these replies were in favour of an annual subscription of Rs. 15. Dr. E. R. Watson also received replies from the Government departments expressing their willingness to subscribe for a number of copies of the journal when it was published. The University of Calcutta agreed to publish the journal from the University Press at a cost to the University not exceeding Rs. 1,500. The Universities of Dacca and Allahabad promised to contribute Rs. 200 each and that of the Punjab Rs. 100 per annum towards the funds of the society if a journal was published. The committee met again at Lucknow in 1923 during the session of the Indian Science Congress

and went into the details of the cost of publication of a quarterly journal and it was of opinion that it was possible to run such a journal controlled by a committee of publication. A sub-committee with Dr. E. R. Watson as President and Dr. J. N. Mukherjee as Secretary was formed to draft the rules and regulations and to further investigate into the matter. The rules drafted by the Secretary were circulated to the members of the committee and were considered at a meeting of the committee at Bangalore in January, 1924. The financial aspects of the venture were reconsidered. The committee also discussed whether it will be possible to maintain a uniform and a high standard of the journal. The committee resolved to take steps to form an Indian Chemical Society with a quarterly journal of its own and the rules and regulations were finally drawn up at Bangalore. A provisional council was appointed to administer the affairs of the society in conformity to the rules and regulations. A committee of publication and honorary auditors were also appointed. The members of the provisional council next got the society registered on the 9th May, 1924. A circular letter was sent to those gentlemen on whose promise of support the society was formed and on the 31st December, 1924, we had 101 fellows. The council at its meeting on the 30th September, 1924, resolved to publish the names of the fellows in a list of Foundation Fellows and at the next meeting held on the 24th November, 1924, extended the date of enrolment of Foundation Fellows to the 31st December, 1924.

In July, 1924, publications for the journal were invited from members of the council and other workers and the first issue of the journal was published in November, 1924. The University Press are trying their utmost to secure a punctual publication of the journal and we shall be able to publish the journal on the specified dates from the

3rd issue. The second issue will be published next week. Our thanks are due to Messrs. J. C. Chakravarty, M.A., and A. C. Ghatak, M.A., Press Superintendent, for their personal interest in the matter. The delay in the publication of the first issue is partly unavoidable and now that a steady and increasing stream of desirable communications are being received, we shall be able to supply the press with approved publications in time for a regular publication of the journal.

Up to the 31st December, 1924, we have received 33 papers for publication of which 15 have been accepted for publication subject to editorial revision, 17 papers have been accepted after alterations by the author and one paper has been rejected or withdrawn. The council is very keen regarding the form of and the matter appearing in the journal, and all suggestions regarding its defects are being carefully recorded and we hope that the defects will be removed with successive issues. The council has undertaken to publish in the journal, as soon as possible, abstracts of all papers bearing on chemistry published in Indian journals. The thanks of the society are due to the editors and the referees and to those who have expressed their willingness to make abstracts for their labour which is admittedly of a strenuous nature.

The cost of publication is considerable and blocks in the first issue alone will cost us not less than Rs. 300 but the cost of publication of the four issues of the journal for one year in its present form is not likely to exceed Rs. 4,000 for the present and as we shall see from the audited statement of accounts there is no cause for alarm. The council is taking every step to economise without sacrificing the standard of the journal. We hope to recoup a substantial portion of our expenses regarding publication of the journal from advertisements,

The second issue will fetch from this source alone Rs. 103 and it is expected that this amount will soon rise to a quite appreciable figure. As the advertisements form one of our best resources and in view of the exclusive circulation of the journal amongst chemists and institutions teaching chemistry, the council hopes that all dealers in chemicals, apparatus and publishers of scientific books relating to chemistry will soon realise the necessity of advertising in our journal. The council counts on the active support of the fellows in this respect and the fellows are requested to bring home to advertisers the advantages of advertising in our journal. The Government institutions and departments may also assist us by advertising for vacancies in technical and scientific services in our journal and here also fellows can help the society a good deal.

A society such as ours cannot be said to discharge its functions properly unless it be in our power to make substantial research grants in sufficient numbers on approved topics. The council has considered the matter and has taken steps to build up a fund for research grant and also a reserve fund. We have reasons to hope that before we meet next year at another general meeting it will be possible for the council to announce substantial donations from the public for these purposes and I mention this subject specially in the hope that fellows will remember the urgent need for such funds and will help to raise the money in all possible ways."

The Secretary then read the following correspondence which has passed between the Indian Chemical Society and other similar learned societies :—

Copy of a cable from Prof. W. P. Wynne, D. Sc., F. R. S., President, the Chemical Society, London, to Sir P. C. Ray, C.I.E., D. Sc., President, Indian Chemical Society.

"The President and Council of the Chemical Society send hearty congratulations and warm wishes to the newly formed Indian Chemical Society."

The following letter has been sent by the President of the Indian Chemical Society, Sir Prafullachandra Ray, in reply to the above.

92, UPPER CIRCULAR ROAD,
CALCUTTA (INDIA);
October 23, 1924.

Dear Prof. Wynne,

I thank you very much for your telegram dated the 17th October, 1924. I need scarcely assure you how highly we value the congratulations and warm wishes of yourself and the Council of the Chemical Society, which we shall always look upon as the parent Society. The J. C. S. has hitherto been the only organ of chemists throughout the British Empire, and the Publication Committee have been hard put to it to find space for the ever-increasing number of communications and have often been under the necessity of appealing to authors of papers to abridge them as far as possible. This will explain the necessity of founding the Indian Chemical Society with an organ of its own.

More than 40 years ago, while a student at Edinburgh, I almost dreamt a dream that, God willing, a time would come when modern India would also be in a position to contribute her quota to the world's stock of scientific knowledge, and it has been my good fortune to see my dream materialised. I have shown in my "History of Hindu Chemistry" that this branch of science was zealously pursued in ancient India and I have now the satisfaction of finding chairs of chemistry in most

Universities of India filled by my own pupils, who have also been regular contributors to the J. C. S.

It will always be our endeavour to maintain cordial, nay "filial" relationship with the parent society, whose inspiration we shall always highly prize. I can scarcely suppress my feelings which arise in me as I am penning these lines. My mind naturally travels back to the memorable February 23, 1841, when the original members met for the purpose of taking into consideration the formation of the London Chemical Society. I have further the gratification to remember that of the original members of the London Chemical Society, I had the good fortune of knowing Lord Playfair (who represented Edinburgh University for some time) to whom I was introduced by my revered teacher, Crum Brown.

Thanking you once more for your good wishes.

Yours, etc.,
P. C. RAY.

From the American Electrochemical Society, Columbia University, New York City, dated the 9th December, 1924.

We were very pleased to receive the first issue of the Quarterly Journal of the Indian Chemical Society. We shall be very glad to put your name upon our exchange list to receive our publications as issued. * *

* * * From time to time we shall be glad to list articles published by your society under this title.

Wishing your Society the best of success.

From Arthur B. Lamb, Esq., Editor, Journal of the American Chemical Society, Cambridge, 38, Massachusetts, dated December 17, 1924.

* * * Dr. Crane will surely arrange to have the articles in it abstracted, and will doubtless wish to secure by exchange, or otherwise, all forthcoming numbers of this Journal. * * * I shall also review this issue very briefly in a forthcoming issue of our journal.

From Charles L. Parsons, Esq., Secretary, American Chemical Society, Washington, D.C. 1709 G Street, N. W., dated December 12, 1924.

I beg to acknowledge with appreciation the first number of the Journal of the Indian Chemical Society, which I am forwarding to E. J. Crane, Editor of Chemical Abstracts, Ohio State University, Columbus, Ohio. I am confident he will abstract it in Chemical Abstracts when it is received. * * * I wish you every success for your new effort for the development of chemistry in India.

TABLES ANNUELLES DE CONSTANTES ET DONNEES
NUMERIQUES.

Paris, le 2 Decembre, 1924.

Secrétaire General
M. Charles Marie
Dr es Sciences

Cher Monsieur,

Je vous envoie, par ce meme courrier, une collection des fascicules separees que nous avons extraits du Volume IV, publie en 1921-1922. Je vous prie de bien vouloir.

offrir ces ouvrages a "The INDIAN CHEMICAL SOCIETY", en hommage, de la part de notre Comite.

Paris, le 2 Decembre, 1924.
9, Rue de Bagneux (VI^e)

Journal de Chimie-Physique.
Redacteur En Chef-C. Marie—
D'es Sciences.

Je recois le No. 1 de JOURNAL OF THE INDIAN CHEMICAL SOCIETY ainsi que vos lettres du 13 Novembre.

Je tiens tout d'abord a vous feliciter, au nom de notre Societe de Chimie-Physique, de la fondation de THE INDIAN CHEMICAL SOCIETY. La publication de votre Journal et les importants travaux qu'il contient montrent la haute valeur des recherches scientifiques effectuees par vos compatriotes.

Nous serons tres heureux de faire l'echange de notre Journal avec le votre. J'espere recevoir votre publication d'une maniere reguliers et je donne a notre editeur: Les PRESSES UNIVERSITAIRES DE FRANCE, 49 Boulevard Saint Michel, a Paris, l'ordre de vous envoyer immediatement les trois premiers numeros du JOURNAL DE CHIMIE-PHYSIQUE, parus en 1924, et de vous adresser egalement le No 4 des qu'il sera paru.

Nous sommes certains que les bonnes relations qui s'etablissent aujourd'hui entre nos deux Societes se developperont dans l'avenir. Je vous renouvelle toutes nos felicitations pour le succes de votre effort et vous envoie nos meilleurs voeux pour l'avenir de votre Societe.

Veuillez agreer, cher Monsieur, je vous prie, l'expression des mes sentiments tres distingues.

(Sd.) CH. MARIE,

EXTRACT FROM THE "NATURE," DATED JANUARY 31, 1925.

Chemistry in India.

The success which has attended the inauguration of the Indian Science Congress, and the great increase in the amount of new work in chemistry which has occurred in the Indian Empire during the past ten years, has led to the establishment of an Indian Chemical Society, under the presidency of Sir P. C. Ray, with offices at 92, Upper Circular Road, Calcutta; the first number of the Quarterly Journal of the Society has now appeared.

Hitherto, chemical papers emanating from India have been published either in the Journals of the Chemical Societies of London or America, or in one or other of the larger continental publications. The disadvantages attaching to this procedure became more and more obvious as the volume of new work increased, because the older Journals are becoming over-burdened, and the need for economy of space necessitated frequent correspondence between authors and editors, entailing grave loss of time in the cases of countries so far distant as India.

Apart, therefore, from the pleasure with which all British chemists will welcome this national effect on the part of India, there will be general agreement among them that the scheme of decentralisation of publications within the British Empire which it implies is the only one which can lead to the rapid and adequate publication of new knowledge and tend ultimately to the real advancement of chemistry. Optimists may dream of the time when there will be one Chemical Society and one Chemical Journal for all the English-speaking race, but until the transportation of matter can be accomplished with a velocity approaching that of light, distance must

always act as an obstacle to any such plan, however desirable it may be.

The new Journal is a welcome illustration of the development which has taken place in Indian chemistry during recent years. There are thirteen papers, and only one of these is published under English names. The remaining papers are published by Indians and come from all parts of the Indian Empire. Four of them emanate from the College of Science, Calcutta, and this is as it should be, because, for many years past, this institution has been the backbone of chemical research in India. The other communications come from Allahabad, Baroda, Dacca, Cuttack, Benares and Madras, and constitute a series of which the organising committee and editor have every reason to be proud.

The Journal is well printed, and doubtless the structural formulae, which seem, at times, to have given the Printer some trouble, will improve with experience. Older chemists with impaired eyesight will probably quarrel with the colour of the cover, the printing of which is most difficult to read, but these are minor points and do not detract from the value of what is essentially a most creditable and important production.

Treasurer's Report.

INDIAN CHEMICAL SOCIETY.

*Receipts and Payments Account for the year ending
31st December, 1924.*

RECEIPTS.		PAYMENTS.	
	Rs. A. P.		Rs. A. P.
<i>Subscriptions</i>		<i>Equipment—</i>	
3 Life Members @ 180	540 0 0	Typewriter and Table	422 10 0
106 Fellows for 1924.	1,590.8 0	Stationery	60 11 6
37 Fellows for 1925	555 0 0	Printing, etc. of above	92 13 6
		<i>Printing—</i>	
<i>Donations</i>		Block making charges	179 8 0
Allahabad Univer. sity.	200 0 0	† Printing, etc. charges	167 4 0
Punjab University	100 0 0	Establishment charges	313 4 0
* Calcutta „	1,500 0 0	Miscellaneous	66 4 0
		Balance	1,818 5 0
<i>Advertisement—</i>		Cash in hand	91 12 3
Receipts on account of	50 0 0	Cash in Bank	1,726 8 9
<i>Sale proceeds—</i>			
of Journal	48 0 0		
of reprints			
of journal	30 0 0		
<i>Interest—</i>			
On Bank Balance	7 4 0		
Total	3,120 12 0	Total	3,120 12 0

* This grant is expressly reserved for the printing of the journal at the University Press and has not been made in cash.

† The charges for printing journal have been met by the Calcutta University out of their grant.

INCOME AND EXPENDITURE FOR 1924.

	Rs. A. P.
* Total Income for 1924	2,070 12 0
„ Expenditure	1,302 7 0
Net income for 1924	768 5 0

* The subscription of Life Members for 1924 has been taken to be Rs. 15.

(Certified as correct.)

K. C. SRINIVASAN, M.A., F.C.S.,

M. SENGUPTA, M.A.,

Hony. Auditors.

(Sd.) J. N. MUKHERJEE,

Hony. Secretary.

(Sd.) P. C. MITTER,

Hony. Treasurer.

PRINTED BY BHUPENDRALAL BANERJEE
AT THE CALCUTTA UNIVERSITY PRESS, SENATE HOUSE, CALCUTTA.

II Draft

Law (Education) Dept.

Letter No. 2988 C/25-3 dated 17.11.25

To

The President,
Indian Chemical Society,
92, Upper Circular Road,
Calcutta.

DESPATCHED
18 NOV 1925

Sir,

With reference to your letter, page 1 of dated the 31st August 1925, addressed to the Hon'ble Sir A. P. Patro, asking for support ~~±~~ in furthering the activities of your Society, I am directed to request you to be so good as to furnish for the information of this Government particulars of the nature and extent of the financial assistance rendered to the Society by the Government of other Provinces.

I have etc.

18/11
CR
13.11.25
Memo No. 2988 C/25-4 dated 17.11.25

The President, Indian Chemical Society, has approached the Government for ~~±~~ financial support in furtherance of the activities of the Society. The Registrar, University of Madras, is requested to report whether the Society ~~has~~ made a similar application to the University and if, so, how the application was disposed of.

DESPATCHED
18 NOV 1925

To
The Registrar, University of
Madras.

Reminder : Two weeks after issue.

18/11
CR
13.11.25
17.11

It is requested that all communications should be addressed to The Registrar, University of Madras, Senate House, Triplicane P.O., Madras, and not to any person by name.



UNIVERSITY OF MADRAS.

No. 12495

SENATE HOUSE,

27 NOV. 1925



Enclosures.

FROM

THE REGISTRAR,

University of Madras.

To

The Secretary to Government,

Law (Education) Department,

Madras.

Sir,

With reference to your Memorandum No. 2988 C/25-4 dated the 17th November 1925 enquiring whether an application for financial support has been received by the University from the President, Indian Chemical Society, I have the honour to inform you that such an application was received in this office, but it has been deferred by the Syndicate for consideration along with allotments to be made in the Annual Budget of the University.

I have the honour to be,

Sir,

Your most obedient servant,

W. K. M. Lee

Law (Education) Department,

REGISTRAR.

May lie over till the University disposes of the application received by it and a reply is received from the President of the ^{Indian} Chemical Society. *vide p 2 anti*

ms
28/11/25
23.11.25

Ca
24.11
5

V. T.
25/11

(Remind after 6 weeks)

INDIAN CHEMICAL SOCIETY

92, UPPER CIRCULAR ROAD,
CALCUTTA (INDIA)

Post Box: 10827
November 26, 1925.

M. R. Ry, Rao Bahadur V. T. Krishnama Achariyer Avl Esq,
Secretary to the Government of Madras,
Fort St. George.

Dear Sir,

I thank you for your letter No. 2988C/25-3 dated the 17th November 1925 addressed to the President of the Indian Chemical Society. I enclose herewith ^a the statement of the help that we have received from other provincial governments. Most of the Provincial governments have subscribed for one copy for each of its technical departments, e.g. Director of Agriculture, Director of Fisheries, Director of Industries and have also arranged for a copy of the journal to be subscribed by ^{each} College under its direction.

The Universities with the exception of Madras, Patna and Burma contribute from Rs1500/- to Rs 100/- per year.

Yours faithfully,

J. N. Mukherjee
Secretary.

*Law (Eas) Dept
die over with
reference letter note
on page 3 ante.*

P.B.

*10/11/25
8/12/25*

Ag/11



Governments of ~~Bengal~~
Governments of ~~Bengal~~

Number of copies subscribed.

✓ - Bengal ✓	12
✓ - Bombay ✓	5
✓ - Burma ✓	3
✓ - Central Provinces. ✓	4
✓ - United Provinces ✓	2
✓ - Madras ✓	2
✓ - Punjab ✓	6
✓ - Assam ✓	2
✓ - India ✓	3

States of

✓ - Baroda ✓	6
✓ - Mysore (Contribution from University) Rs. 200	
✓ - Hyderabad ✓	1
✓ - Gwalior ✓	5
✓ - Travancore ✓	2

Contribution received during 1925.

Government of India - Rs 500 - 0 - 0 ✓		
1. University of Dacca	-Rs 200 - 0 - 0 ✓	
2. " Bombay	Rs 300 - 0 - 0 ✓	
3. " Mysore *	Rs 200 - 0 - 0 ✓	
4. " Nagpur	Rs 100 - 0 - 0 ✓	
5. " Lucknow	Rs 100 - 0 - 0 ✓	
6. " Calcutta	Rs 1,500-0 - 0 ✓	
7. " Punjab	Rs 100 - 0 - 0 ✓	

done and
the new
reference
on page 3 only.
1/11/25
1/11/25

b

Law (Edu) Deptt

Memo no. 2988C/25-5d/11.126

Refce: Letter from the
Registrar, University of
Madras, No. 12495, dated
21.11.1925-

Indian Chemical
Society - Application
for financial support.

The Registrar,
University of Madras,
is requested to report
whether the Syndicate
has ^{since} considered the
application of the
President, Indian
Chemical Society, for
financial support to
the society and if so, how the
application has been disposed of.

Is **DESPATCHED** 5^{PM} 27/11/26
12 JAN 1926
The Registrar,
University of Madras.

Reminder: Two weeks
after issue.
CA

BM
9/1/26.
Is
9/1/26.
9.1.26.

It is requested that all communications should be addressed to The Registrar, University of Madras, Senate House, Triplicane P.O., Madras, and not to any person by name.



UNIVERSITY OF MADRAS.

No. 2988 C/25-5

SENATE HOUSE,

18 JAN. 1926

Enclosures

FROM

THE REGISTRAR,

University of Madras.

To

The Secretary to Government,

Law (Education) Department,

Fort St. George, Madras.

Sir,

p. 6 ante
With reference to your Memorandum No. 2988 C/25-5 dated the 11th instant, I have the honour to inform you that the application of the Honorary Secretary, Indian Chemical Society, Calcutta for financial support to the Society will be considered by the Syndicate at its meeting to be held on the 30th instant.

I have the honour to be,

Sir,

Your most obedient servant,

Law (Edu) Dept.

The Registrar
may be reminded if

memorandum 8. 2. 1926.

19/1/26.

Le

20/1

K. K. S. S. S.
REGISTRAR.

It is requested that all communications should be addressed to The Registrar, University of Madras, Senate House, Triplicane, P.O., Madras, and not to any person by name.

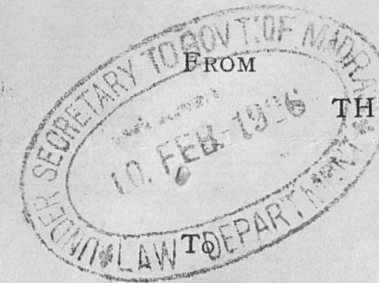


UNIVERSITY OF MADRAS.

No. 1352

SENATE HOUSE, 9 FEB. 1926

Enclosures.



THE REGISTRAR,

University of Madras.

The Honorary Secretary,

Indian Chemical Society,

92 Upper Circular Road, Calcutta.

S i r,

With reference to your letter dated the 22nd July 1925 requesting that the question of making a substantial contribution to the publication and Research Funds of the Society may kindly be considered by the Syndicate, I have the honour, by direction, to inform you that the Syndicate has been pleased to sanction a contribution of Rs 150/- per annum for a period of three years.

I have the honour to be,

Sir,

Your most obedient servant,

WILLIAM McLEAN,

REGISTRAR.

Copy communicated to the Secretary to Government, Law (Education) Department, Madras, for information in continuation of this office communication No. 470 dated the 18th January 1926.

REGISTRAR.

Memo No. 1944/8

dated 25-2-26

Indian Chemical Society - Grant -

The Government propose to sanction the payment in 1926-27 of a grant of Rs.250 to the Indian Chemical Society. Since the expenditure is has to be debited to the head "30 C Scientific Departments - Donations to ~~Six~~ Scientific Societies' the S. G. M. is requested to state whether ~~the expenditure can be~~ it will be possible to re-appropriate the amount from the provision of Rs.50,200 for Provincial Museums in the budget estimate for 1926-27 and if so, to submit a reappropriation statement therefor.

DESPATCHED

26 MAR 1926

To

The S. G. M.

Reminder: Two weeks after ~~issue~~ issue.

23/3

24/3

V.F.

25-3

DEPARTMENT.

Received



192

Registered

192

Subject.

L. Sec. 1077C
1-4-26

ENCLOSURES.

No.

No. 409-1/26

Spare copies

Station Madras Dated the 1st April 1926

From (Name) F.H. Gravely Esqr., D.Sc.,

(Designation) Superintendent, Government Museum,

To The Secretary to the Government of Madras

Law (Education) Department.

Sir,

Reference Government Memorandum No. 2988 C-8 dated 25th March 1926, regarding grant to the Indian Chemical Society. I have the honour to state that it will be impossible to re-appropriate the amount from the provision in the budget estimate for 1926-27, as the allotments provide for the bare necessities of the year under the various heads, and as we have to find funds for the temporary staff of an Attendant, and an attender in the Library for the work connected with the cataloguing of serials.

I have the honour to be,
Sir,
Your most obedient servant,

F. H. Gravely
Superintendent.

11
Law (Education) Dept.

Telephonic message

From

The Secretary to Government,
Law (Education) Department

To

The Superintendent,
Government Museum.

Refce:-Your letter No.409-1/26
dated 1-4-26 in which you say that
it will not be possible to re --
appropriate from the Museum Budget
for 1926-27 the sum of Rs.250 -
required for a grant to the --
Chemical Society.

You have since reported that
the chemical treatment of the -
bronze images in the museum might
be held over--vide your letter
No.431-2/26-M, dated 8-4-26. Will
you please say whether the sum
of Rs.250 may not be found from
the provision for chemical treat-
ment.

4.4.26

CR
15/4

P. W, C. J.

(C. J. vi linked tel)
Since distributed

Nonelst
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16/4/26

Nonelst
2
16/4/26

P. C. to go

Nonelst
2
16/4/26

CF. 30

General diary

DG 34

12

DEPARTMENT.

No.

File or 6239

Disposal

Received

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Registered

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Initials of

the Supt

with 192

Subject.

AA



ENCLOSURES.

No.

No. 409-2/26.

Spare copies

Station MADRAS

Dated the

8th

April

1926

From (Name) F.H.Gravely Esqr., D.Sc.,

(Designation) Superintendent, Government Museum,

(thro' the Accountant-General, Madras),

To The Secretary to the Government of Madras

Law (Education) Department.

Sir,

p 10 and

In continuation of my letter No. 409-1 dated 1st April 1926, regarding grant to the Indian Chemical Society, I have the honour to state that if Government approve of the decision to postpone the work on the preservation of bronzes, in the circumstances reported in my letter of this date, it will be possible to re-appropriate the sum of Rs. 250 required, out of the provision made in this year's budget. Re-appropriation statement in duplicate is enclosed.

use linked
file - 1.0
all July.
bush

p 13 in fa

I have the honour to be,
Sir,
Your most obedient servant,

F.H. Gravely

Superintendent.

Temporary
Part of Estimate - 1926
Transferred

Provincial Museums

30 b. Scientific & Department

1926-27 - Nil - 320/- 320/-
Nil 328 C-8 328 328
(Expenditure) Memorandum
Receipts directed in form
of Grant to the Government
"Donations to Scientific Societies"
30 C. Scientific Departments

9200 320 9000 320

Grant of Rs 250
to the Indian
Chemical Society as
required by the Govt.

Rs 30 30 30 30

Government Museum

Duplicate.

R.F. XXXIII 62.

T. & A. 62.

RE-APPROPRIATION STATEMENT to accompany all applications for sanction to expenditure not provided for in the budget,
or for additional allotments.

Government Museum DEPARTMENT OR OFFICE.

Major, minor, sub and detailed heads of budget (a).	HEADS OF ESTIMATE PROPOSED TO BE INCREASED.				HEADS OF ESTIMATE PROPOSED TO BE REDUCED.				REMARKS
	Amounts as in the sanctioned estimate.	Actual expenditure up to date.	Probable expenditure during remainder of the year.	Amount of additional allotment required.	Amounts as in the sanctioned estimate.	Actual expenditure up to date.	Probable expenditure during remainder of the year.	Amount available for re-appropriation.	
1	2	3	4	5	6	7	8	9	10
30 C. Scientific Departments									
"Donations to Scientific Societies"									
"Grant to the Indian Chemical Society" directed in Law (Education) Memorandum No. 2988 C-8 dated 25 th March 1926.	Nil -	- Nil -	250/-	250/-	Rs.	Rs.	Rs.	Rs.	To provide for the grant of Rs 250 to the Indian Chemical Society as required by the Govt.
30 b. Scientific & Departments.									
Provincial Museums									
Transferred.									
Pay of Establishment - Voted.									
Temporary									
					6500	250	6000	250	

29

15.2049

(a) The same detail must be given as in the printed Civil Budget Estimate.

NOTE.- If no re-appropriation is possible, the urgency and necessity for the expenditure must be fully explained.

J. H. Gravel
Superintendent

Dated 13. 4. 1926.

Office of the Accountant General, Madras,
Fort Saint George, 19- 4 - 1926.

pl 3 ant

3. The item has not been provided for in the Budget for 1926-27.

(please see last part in 97 in: note
in p. UNF)

Rhincidera

To
The Secretary to the Government of Madras,
Law Education. Department.

$$\frac{1}{17/4}$$

7-5-88

[illegible]

C.No.2988 C - Letter from the President, Indian Chemical Society, dated 31-8-1925.

Subject - Financial support to the Indian Chemical Society.

Can anything be done for the Society.

A. P. P. 19-9-1925.

In pursuance of a suggestion made at the meeting of the Chemical section of the Indian Science Congress held at Madras in 1922, steps were taken to organise an Indian Chemical Society. The society was registered on the 9th May 1924 and it had 101 fellows on its rolls on the 31st December 1924. Among the activities of the society is the publication of a quarterly journal devoted to Chemical science. The publication of the journal has been undertaken by the University of Calcutta which has agreed to find from University funds an amount not exceeding Rs.1,500 towards the cost of the publication of the journal. The Universities of Dacca and Allahabad are said to have promised a contribution of Rs.200 each a year and that of the Punjab a contribution of Rs.100. No information is available as to whether any of the Local Governments have agreed to extend financial support to the society.. It is however said in the annual report of the society for 1924 that some Government departments have expressed their willingness to subscribe for a number of copies of the journal.

2. The question for consideration is whether the Madras Government should accord financial assistance to the society and if so, what shape it should take. The usual practice in cases of this kind is to purchase copies of the publications for distribution to Government institutions. In 1921 the Government made an exception to the general rule in favour of the Bhandarkar Oriental Research Institute by sanctioning

p. 11 of the report

p. 12 ibid.

p. 11 ibid.

p. 11 of the report

16
sanctioning an annual grant of Rs.1,000 to it for a period of 15 years in connection with the publication of a scientific and critical edition of the Mahabharata.

3. An application for financial assistance for the chemical journal in question was received in 1922. The D. P.I. to whom the application was referred for remarks observed as follows:-

"The time has come when an attempt should be made to establish such a journal. Its stability should depend on the merit of the contributions as judged by the number of private individuals who are willing to pay their Rs.15 or Rs.16 per annum for such a quarterly. I would suggest therefore that Government support do not take shape of supplying the journal free to colleges or offices of industrial or scientific departments, that being the surest way to reduce the total circulation while giving no criterion of the merits of the new venture.

"On the other hand it will take some time to enlist the support of the private individual and I would therefore recommend a grant by the Government of Madras of Rs.1,000 per annum towards the cost of publication."

Dewan Bahadur Ramachandra Rao noted as follows:-

"The applicant does not appear to be keen. I think the file may be recorded.

"Personally I do not see why a chemical journal should be so expensive. The journal will contain the results of researches. Research is costly but the journal is not going to pay for the research. A quarterly journal, if it embodies useful results, must pay its own way in Chemistry. It is different in Mathematics where the printing is special and the demand is small."

The papers were recorded under the orders of the Hon. R. Minnick

4. For orders whether the question of a recurring annual grant in aid of the journal will be considered now.



p-9 of G. No.

16582.

(L) 23.11.23

10/10/25

21158-3-52

G.O. 16582.

(L) 23.11.23

Law (G.O.) 2988C-1

6.11.25

5.10.25

3.10.25

What does D.P.I think?

V.T.K.

6.10

D.P.I. u.o



21158-3-52

10/10/25

17
U.O.Reply No. 1174/25-9-10-25
A copy of the journal has been supplied to the Presidency College from 1-4-1925. It is observed from the Secretariat note that the Universities of Dacca, Allahabad and the Punjab have promised contributions to the journal but that no information is available as to whether any of the Local Governments have agreed to extend financial support to the Society. It appears to me that on this analogy financial support, if any, from Madras should emanate from the University of Madras and not from the Local Government.

RAA
9.10.25

Law (G.O.) 2988C-1

May be submitted to M₂ with ref. to law
has query at page 1 C.F.

15/10

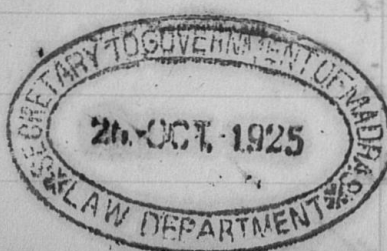
18.10.25

15.10.25

V.T.K.
17.10

M₂

It is not in the end, then
law finance - so not my
title the slip & aid



25/10/25

M₂ apparently means that even if the grant of help were undertaken by the Madras university, the Govt. will have to

make a corresponding contribution to the university and so the Govt. may consider the question of direct help. We have no idea of the extent of help, if any, rendered by other local Govts: nor has the Society indicated what it expects of the Madras Govt.: The amount of aid to be given and the period for which it should ensure have to be determined. May the Govts: of Bombay, Benagal, the united Provinces & the central Provinces be consulted?

27.10.25 From page 21 of the Report for 1924 which gives the financial stat. of the Society for the year, it would seem that donations from the Calcutta, Allahabad & Punjab Universities alone are credited. Obviously no contribution was received in that year from any local govt. If any had been received, the President of the Society would have referred to it in his present communication. If the contribution for Madras is to be made, it would seem better to make it on behalf of the University, or through the University. Allahabad

V.T.K.

Punjab University contribute Rs. 200 each per year. Calcutta Rs. 1500. We may fix Rs. 500 for Madras. If agreed to we may send a memo. to the University.

Law (Edn), No 2988c/25.2
29.10.25
Jct 38510
30.10.25



29/10/25
V.T.K.
29.10
Fin U.O.

Finance (Exp)

The Law (Edn) Dept. propose that Govt. may give a grant of Rs. 500 a year to the Indian Chemical Society, the contribution to be made on behalf of the University or through the University.

The period for which the grant is to be given has not been specified.

It is not clear whether the grant is to be in aid of the general resources of the Society, or for the publication of the Society's journal.

There is also no information as to the extent of help required by the Society. The President of the Society has not indicated any specific amount.

It does not appear that other Govts. have promised money grants. It is stated that ^{some} Govt. Dept. has expressed their willingness to subscribe for a number of

vide letter in C.F.

P.L. of the Report of the Society for 1924 (C.F. 1924)

6. 20

copies of the journal. It seems desirable to know what other Govts. have done in the matter.

It is not known whether the society approached the Madras University for a contribution and if so ~~on what~~ with what result. Some other universities have promised contributions to the journal.

In the absence of information on the above points it is not possible for Finance to offer any useful remarks on the proposal of Law (Edn).

7.11.25. *[Signature]*

[Signature]

Law (Edn) Dept.

The information required by Finance is not available in office. A draft letter to the President of the Society and a Memo to the Registrar, University of Madras, are subd.

[Signatures]
13.11.25
17.11



7.21 34

(Issued as Letter No. 2988 C/25-3, dated 17-11-1925)

page 2 c.f. " Memo. No. 2988 C/25-4, dated 17-11-1925.)

pages 4-5 c.f.

page 8 c.f.

- C.No. 3899 C - From the Secretary, Indian Chemical Society, dated 26-11-1925.
- C.No. 395 C - From the Registrar, University of Madras, No. 1352, dated 9-2-1925.

page 5 c.f.

From the statement appended to the letter from the Secretary of the Indian Chemical Society it will appear that the Government of India and the Universities alone have made money contributions in 1925, while the Provincial Governments have not made any such contributions but subscribed only for copies of the journal of the Society. As regards Madras, it is observed that the Government have subscribed for a smaller number of copies of the journal than most other Provincial Governments and that the money contribution to be paid by the Madras University (viz, Rs. 150 a year for three years) is also smaller than those paid by some other Universities in 1925. The Society therefore seems to deserve some further help from the Madras Presidency. When the Society applied to this Government in 1922 for help for the publication of the journal, the Director of Public Instruction recommended the payment of an annual grant of Rs.1,000. As the Society did not press its request, the papers were recorded in G.O.No. 1658 Law (Education) dated 23rd November 1923. In view of the above facts, it is for consideration whether a contribution of Rs. 500 may be sanctioned as proposed at page 5 ante. It may be noted that the Government of Bengal have subscribed for 12 copies of the journal, while the Calcutta University has at the same time made a contribution of Rs. 1,500.

p.8 c.f.

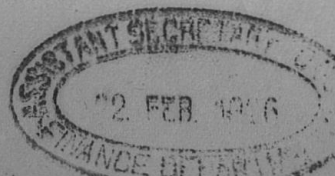
page 9 q. 1658 L. 2 23.11.23

(L)

Madras Subscribes for 2 copies

This file maybe sent to Finance also.

Law & Edn. 2988 C-6 22.2.26



I think a grant of Rs 500 a year may be given.

6032 sep 23.2.26

File 11.0

2.22

Finance (Exp).

(Previous Finance note on pp.5-6 ante).

The following statement shows the help received by the Indian Chemical Society from the various Governments and Universities:--

Money contribution.

Subscription to the Society's Journal.

* The annual subscription for one copy is Rs. 15 or Rs. 16
Rs. 15 at (2)

Rs.

p. 50 F.

No. of copies.

at Rs. 15 per copy

Cost p.a. Rs.

1. Government of India	500
2. University of Dacca	200
3. " " Bombay	300
4. " " Mysore	200
5. " " Nagpore	100
6. " " Lucknow	100
7. " " Calcutta.	1500
8. " " Punjab	100
9. " " Madras	150

1. Government of India.	3	45
2. " " Bengal.	12	180
3. " " Bombay.	5	75
4. " " Burma.	3	45
5. " " Central Provinces.	4	60
6. " " United "	2	30
7. " " Punjab.	6	90
8. " " Assam	2	30
9. " " Madras.	2	30
10. State of Baroda.	6	90
11. " " Hyderabad.	1	15
12. " " Gwalior.	5	75
13. " " Travancore.	2	30

p. 80 F.

2. From the above statement, it will be seen that, excepting the Government of India, no ~~other~~ Provincial Govt. is giving a money contribution to the Society. The Provincial Governments' help is confined to the subscription for copies of the Society's journal. The money contribution of Rs. 150 a year by the Madras University is not liberal as compared with the contributions made by some other Universities (Dacca, Mysore, Lucknow & Punjab).

It does not seem necessary for the Madras Government to give a recurring money contribution of Rs. 500 a year as proposed by law (Edn). Perhaps, two more copies of the journal may be subscribed for by this Government.

3. If the Law (Edn) Department should press for a money grant, the proposal will have to be treated as a Part II Scheme for 1927-28, as it is a scheme of new expenditure not contemplated in the current year's budget which involves also a recurring expenditure.

24
2.3.26

2.3.26

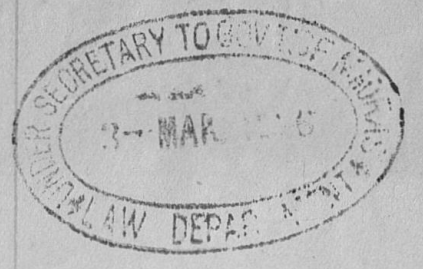
I do not see that the Madras Govt. is called upon to pay any contribution to

239

the Society. The next that we might
offer is to subscribe for 5 copies of the
Journal instead of 2.

8
3/3/26

Law



Ju.o. 6032/Ep-1
3. 3. 26.

1. En 618 C
3/3/26

Law (cons) septt.

For orders as to circulation

Law
4/3

CR
5/3

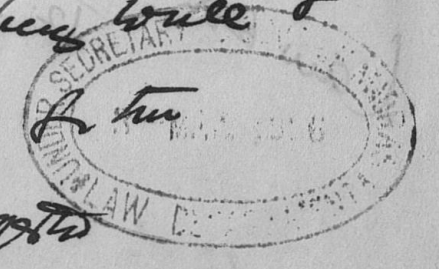
VTK
6-3

M2

C4

The Indian Chemical Society is under
able expert management by P.C. Ray, well known
authority in Chemistry. The Society deserves
financial support. Govt of India is contributing
is contributing a paltry sum of Rs 500-
The activities of the Society are very wide &
are international. I would suggest a sum
of Rs 250/- if Rs 500/- as suggested
by the Society is found to be excessive.

8/3/26



Exh

10 24

36

I will not object to Rs. 250.

Law
9/3/26

M-2 and C-4 agree to the payment of a grant
of Rs. 250 a year to the Indian Chemical Society. The
period for which the grant should endure has not, how-
ever, been specified. For orders whether it may be
for three years, in the first instance.

For one year in the
first instance, I think
- as it has to be
voted every year

VTK A

The grant may be made with effect from 1926-27.
The expenditure involved is small and it may be possible
to meet it by reappropriation from the sanctioned allot-
ment under 31 Education for 1926- 1927. It is presumed
that it is unnecessary to place the proposal before the
Finance Committee as suggested by Finance on page 8
ante.

Subject to orders as to the period for which
the grant is to be sanctioned, a draft order is submitted.
It may be issued after the budget is passed by the
Council. Meanwhile the file may be sent u.o. to Finance
for perusal.

Law
11/3/26

CR
11.3.26

VTK
12.3.

Law Exh. 2988C-7
12.3.26

Fin U.O

Finance (Exp.)



Fin: C No 8455 Exp
13-3-26.

The Law (Edn.) Deptt. have stated that the
expenditure in 1926-27 (Rs.250) may be met by
reappropriation from the appropriation under
"31.Education--Demand No.XIX". The expenditure
is, however, debitable to the head "30.C.-Scientific
departments--Donations to Scientific Societies"
--Demand No.XVII. Provision for similar grants
(Fine Arts ~~Societies~~ and Bhandarkar Oriental Research
Institute)

H-25

has been made under "30. Scientific Deptts". Govt. cannot sanction a reappropriation between two grants (Grants XIX and XVII). If the expenditure is to be met by reappropriation, it must be within grant XVII--"Scientific Departments" which comprises two items, viz., (1) Provincial Museums = Rs. 50,200 and (2) Donations to Scientific Societies = Rs. 2,000. The latter provision is for fixed grants to the Fine Arts Society and the Bhandarkar Oriental Research Institute. Reappropriation should, therefore be effected from "Provincial Museums" to "Donations to Scientific Societies". Law (Edn.) may be requested to ascertain definitely whether it will be possible to reappropriate Rs. 250 from the provision of Rs. 50,200 for Provincial Museums.

vide p. 205 of C.B.E. (1926-27) of Budgetary Development Rule p. 125 of C.B.E. Manual

p. 205 of C.B.E. (26-27)

p. 205 of C.B.E. (26-27)

It is submitted that, if the expenditure can be met by reappropriation, the proposal need not be placed before the Finance Committee, the amount involved being comparatively small, viz. Rs. 250.

Y. 17.3.26. bsh 17.3.26

Law

Law (Edn.) Dept.

The bill may be over till the budget is passed by the Council when the S.G.M. may be requested to say whether Rs. 250 may be re-appropriated from the Museum budget.

12/1/26 19/3/26

No. 8495/ep-1 18.3.26



p.q.e.f.

p. 10, e. f.

Details	Rs.
Pay of Exhibitors - Vol. 1200	
Pay of Temporary	200
Travelling allow.	400
Chemicals	1800.

(limited) his will

12-26

The demand under '30. e. scientific deptts - Provincial Museums' has been voted by the Council. With refer. to the note at page 11 and a draft Memo to the S.G.M. is submitted for approval.

12/1/26 19/3/26

[Issued as Memo No. 2988 E-8 / d. 25.3.26]

C. No. 1077 E. From the S.G.M.,

No. 409.1/26, d. 1-4-1926. The S.G.M. reports that it is impossible to re-appropriate Rs. 250 from the provision for Museums in the budget. A provision of Rs. 1,800 has been made in the Museum budget for 1926-27 for work connected with the chemical treatment of bronze images in the Museum. In his letter dated 8.4.1926, the S.G.M. has suggested that the work may be kept in abeyance during the current year. If his suggestion is approved it will be possible

Thos.

-15- 27

This may be pointed out to the Superintendent and he be asked if it will not be possible to find the amount required from his budget.

2.A drat t.m. is submitted.

14.4.26 15/4

[Issued as J.M. dated 14-4-26] p11 c'f.
C.N. 1259C- From the S.G.M., No 409-2 p12 c'f.
-26, dated 8.4.26.

A draft order is subd.
It may be sent to Finance
for acceptance.

21/4 21.4.26 22.4

Fin U.O

Finance (Exp.)

Submitted that the draft
order may be accepted subject to
the following remarks:

27.4.26.

Finance (Pond. Genl.)

From the Law dept. note on page 12
ante., it is found that the whole of the
provision of Rs 1,800 made in the B.E. for

Law (Gen), 2988C- 8
26.4.26



Fin. C.N. 13420 Exp-
27-4-26.

Thro' Budget (Exp.)

⊕ Made up of
Rs 1200 under Pay of Exhs
200 under T.A.
400 under Chemicals
1800. (Page 2042
CAE 26-27)



Fin. W.O. 13420 Exp-1.
30-4-26.

1351C
30/4/26

p 69 G.O.N.
581 LB x 11
9-4-26

p 1-3 n. b.
linked file

1926-27 on account of the chemical
treatment of bronze images will not be
utilised. Deducting the sum of Rs 250
now proposed for reappropriation,
a balance of Rs 1,550 will remain
and Law may be requested to
surrender the amount to this dept as
early as possible.

CM 28.4.26
Law (Gen) info

Law (Gen) sept.

Provision for the appoint-
ment of Mr. Ahuja has been
made only for 5 months from
October 1926 to February 1927.

As it is, the question ^{of} the
chemical treatment of the bronze idols
~~re-employment~~ has been

deferred only till July 1926.

When Mr. Smith ~~is expected~~

to join only ~~his~~ his principal

may ~~be~~ ^(become) available on the

subject. ^{and action will have to be taken} Till then ~~the~~ ^{the} question

is decided it is not possible

to surrender the provision.

The draft order may

be issued and the file may

be sent to Finance for

perusal of the above note.

Issue & then send file
to Finance

ISSUED TO
A.O. NO. 759 LE
1-5-28

Finance (Budget)

[Previous Finance note on
pages 13-14 ante]

The Law Dept. point out that the Surrender of funds suggested by this Dept. cannot be made ~~immediately~~ ~~now~~ until a definite decision on the question of the chemical treatment of bronze ~~the~~ images is arrived at - which, it is stated, will not be till July 1926. In the circumstances, this Dept need not, it is sub^d, press for the Surrender ~~immediately~~ at present.

$\frac{CML}{7.5.26}$
 $\frac{Bzli}{7.5.26}$
 Law of Gravity.

W.S. → Law (Ed. II)

Submitted to W.S. for
perusal. No further action
is necessary now.

8.5.2.26

L. Co 1436C
85726
in no 14242Ry-1
8.5.26

6 MAY 1978
U.S. AIR FORCE
HONOLULU, HAWAII

Sectt. II-5 (b)-25,000-25-11-25. (6)

	Date.	Initials
When received for Fair-copying.		
When copied ..	21/5	
When examined ..	22/5	
When signed ..		
When despatched ..	23/5	

READ AGAIN G.O. No. _____, dated _____, 192_____

" " " " ----- "

192

READ ALSO:—

C. No. 2988c From the _____, No. 21, dated _____ 192

192

” ” ” ” ” ” 192

ORDER.

No. 759, dated 1. 5. 1926

Miss

The Government
are pleased to sanction
the payment, for 1926-27, of
a grant of Rs. 250 to the
Indian Chemical
Society, ~~S. K. Chatterjee~~!

The A. G. is requested to place the amount at the disposal of the President, Indian Chemical Society, Calcutta.

2. The re-appropriation statement submitted by the S. G. O. with his

letter, No. 409-2/26, dated
the 8th April 1926, is ~~not~~
sanctioned.

21/4. 3
21.4.26

21/4

1/11
a2. 4

pp 12-13, c
DESPATCHED
24 MAY 1926

I

The S. P. D. ✓

" S. G. M. ✓

" A. G. M. ✓

(with refer. to this sub.
A XVII-V-701d. 19.4.26)

" Finance Dept ✓

Copy to the President,
Indian Chemical
Society, Post Box 1085, Calcutta.
(with a covering letter)
(para 1 only)

Copy to the Registrar,
University of Madras
(para 1 only)

with
copy
to
re-
affor-
ma-
tion
ment.
disc.



No. 378

INDIAN CHEMICAL SOCIETY.

92, UPPER CIRCULAR ROAD,
POST BOX NO. 10857.
CALCUTTA (INDIA).

May 29, 1926.

The Secretary to the Government of Madras,
Law (Education) Department,
Madras.

Dear Sir,

I have much pleasure in acknowledging with thanks
receipt of a copy of the G.O. No. 759 dated 1st May, 1926,
addressed to the President, Indian Chemical Society.

Yours faithfully,

J. N. Mukherjee
Secretary.

P.B.



Law (Educ) Dept.

Dodged ✓
[stitched with
G.O. No. 759 dt. d.
1-5-26]

26.4

5/6

No. Try.P.A.6-154.

Office of the Accountant-General, Madras.

Fort St. George, 19th May

1926

Enclosures

FROM

THE ACCOUNTANT-GENERAL,

MADRAS.

To

The Accountant General,
Bengal, Calcutta.

SIR,

Please pay to the President, Indian Chemical Society, Calcutta, on proper voucher, the sum of Rs250/- (Rupees two hundred and fifty only) being the grant sanctioned for the year 1926-27 in the Madras G.O. No. 759 Law(Education) department dated 1-5-1926. The debit for the amount, when paid, may be passed on to this office through your exchange account, this letter being quoted as authority for the charge, and the voucher sent in support of the debit.

TSV.

Sd/- S. Anantakrishnan.
ASSTT. ACCOUNTS OFFICER.

-2-

Try. P.A.6-156.

Copy forwarded to the Secretary to Government,
Law (Education) Department.

J. L. ...
ASST. ACCOUNTS OFFICER.

When given for copying

When copied

When examined

When signed

192

READ AGAIN G.O. No.

192

, DATED

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT

A A A A A A A

LETTER OF GOVERNMENT

STATEMENT WITH DITTO

PAPERS NOT FILED OF, BEING (REMARK) FOR DESPATCH
IN ORIGINAL.

N.B.—

A = Copy in full.

B = Not to be copied.

P = Copy abstract only.

Q = Copy heading only.