

E. & H.

(1949) Department.

Ms. SERIES.

G.O. NO.

Li. Ms. No. 825

Educational

Dated

23-3-49

Living on
p219

[Despatch Abstract.]

University Madras - bounties of
research schemes -

Back Papers.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

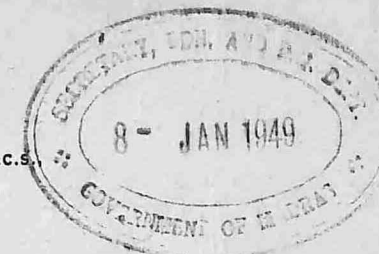
Further Papers.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.



UNIVERSITY OF MADRAS

SIR A. L. MUDALIAR,
M.D., LL.D., D.Sc., F.R.C.O.G., F.A.C.S.
VICE-CHANCELLOR.



UNIVERSITY BUILDINGS
TRIPLICANE
MADRAS

4th January 1948.

Dear Sir,

I am grateful to you for the sympathetic attention you propose to give to my letter regarding the B.Com.(Hons.) course in Cooperation.

I have been feeling for sometime past that the University should play a much greater part in the field of scientific research, and that there is scope and possibility, if sufficient help is given, for research to make good progress in this University.

So far as the subjects of Science are concerned, there are only three Departments of Scientific research, namely Biochemistry, Botany and Zoology. The College of Technology, which was recently opened will deal with technological research, but the research in this side also will be materially helped by the strengthening of the three Departments already instituted.

Unfortunately, each of these Departments is manned by a Professor, and in these days of coordinated research, I hope it will be clear that no great research could possibly be undertaken by a single member, unless he has the help of the senior fellow-workers. This has been the chief drawback in these Departments, and while I feel that some good work has been done in the past in particular in training a number of research scholars, the out-turn would and should have been very much better if there had been sufficient personnel in these Departments. One of the most important coordinating Departments, however, was not instituted in this University for lack of funds, and this is the Department of Applied Physics. Proposals were made as far back as

2
-2-
November 1927, and the University also later requested Government to help in this direction.

When the Government of India appointed the Scientific Manpower Committee, proposals were called for and the University submitted schemes for the development of these four scientific Departments in the manner in which they ought to be developed if real research work is to be developed. I may venture to place for your kind consideration suggestions in regard to the development of these four Departments and with an approximate estimate of cost, recurring and non-recurring, for each of these Departments. I realise that it may not be possible immediately to sanction all the proposals, but I would be very grateful if you would kindly consider the possibility of immediate enlargement of the Departments to the extent possible and gradual enlargement from year to year.

I feel that this University has not been in a position to contribute as much as it ought to because of the lack of personnel and finance for the University Departments of research. My connection with the Colleges and the extensive tours that I have made make me feel absolutely certain that with the amount of work that teachers in Colleges have and the meagre facilities in practically all the Colleges, not much research work could be expected from those teachers. It is only in the University where departments of research exist that one should look forward for research. In other Universities in India, the University has got Colleges of its own and large personnel who can be engaged in research work as a team in a particular subject or subjects. This is how comparatively newer Universities which have large teaching and research departments under their control have been able to turn out research work to a certain extent.

3
-2-
I shall be most grateful if you will kindly and sympathetically consider this scheme. Should you at any time desire that I should elucidate the matter further, I shall be ready to meet you and place the views of the University for your favourable consideration.

Yours sincerely,

A. L. Muthaiah

The Hon'ble Sri O.P. Ramaswamy Reddiar,
Premier of Madras,
Fort St. George,
Madras.

UNIVERSITY OF MADRAS.

MEMORANDUM.

The following schemes for improving the research facilities in the University of Madras are submitted for the favourable consideration of the Government.

I. It is proposed to open a Department of Applied Physics and to enlarge the scope of work of the Departments of Chemistry, Botany and Zoology, as also to open a Department of Geology and to improve the Department of Statistics. A proposal for a Department of Legal Studies in the University is also submitted for favourable consideration. The last proposal may not strictly be in regard to scientific research, but it has been brought out at meetings of University Bodies that one of the most important things to do would be to develop a school for the study of Constitutional Law and Inter-National Law, two of the most important subjects which will have a bearing upon the Department of External affairs in the Central Government. In view of the part that constitutions will have to play and in view also of the greater amount of contact between independent India and other countries in the world in the matter of international trade, commerce, maritime relations, patents, etc., it was felt at the meeting of the Senate that immediate steps should be taken to open a Department so that a large number of trained personnel may be made available to the Central and Provincial Governments, and research may be conducted along these lines. The scheme as passed by the Senate at its October meeting is also therefore submitted for the favourable consideration of Government.

II. (1) Department of Applied Physics.

This is one among the earliest Departments sanctioned by the Senate of the University of Madras, and for want of funds the institution of the Department has been postponed. The scheme involves a non-recurring expenditure of nearly Rs.10 lakhs and recurring expenditure. The non-recurring expenditure includes:

- | | |
|--|-------------|
| 1. Buildings, including furniture and fittings. | Rs.6 lakhs |
| 2. Workshop and equipment. | Rs.1/2 lakh |
| 3. Initial equipment - Physics apparatus and stores. | Rs.3 lakhs |
| 4. Library. | Rs.1/4 lakh |

Total nearly Rs.10 lakhs.

In view of the difficulties in undertaking building construction, it is proposed to locate for the present the Applied Physics Department in the block occupied by the Biochemistry Department, and the Biochemistry Department will be transferred to the College of Technology building, which is nearing completion. Temporary provision is thus proposed to be made for locating the Applied Physics Department, the non-recurring cost thus being reduced for the present to Rs.4 lakhs.

The recurring cost will be as follows:-

	<u>Annual cost</u>	
	<u>Minimum.</u> Rs.	<u>Maximum.</u> Rs.
1. <u>Staff:</u>		
Director Rs.1000/- to Rs.1500/-	12,000	18,000
Assistant Director 750-1000.	9,000	12,000
Readers (2) 400-600	9,600	14,400
Fellowships 200-400 (2)	4,800	9,600
Scholarships (3) 150-200	5,400	7,200
Technicians (2) 100-150.	2,400	3,600
Attender (1) 50-75	600	900
Watchman, boy attenders & Sweeper (4)x40.	1,920	1,920
Stenotypist 150-250.	1,800	3,000
Storekeeper clerk 75-150.	900	1,800
	48,420	72,420
2. Provident Fund and leave allowance.	10,000	15,000
3. Apparatus and equipment.	20,000	25,000
4. Contingencies.	5,000	5,000
5. Library.	2,500	2,500
6. Rates and taxes, etc.	5,000	5,000
Total.	90,920	1,24,920

It is therefore requested that a sum of Rs.4 lakhs be given as a non-recurring grant for initial expenditure, and ^{an annual} recurring grant of about Rs.1,10,000 towards recurring expenditure.

(average)

2. Enlarging the scope of the activities of existing Laboratories - (i) Department of Chemistry -

At present, there only a Department of Biochemistry, which is after all a part of the Department of Chemistry. In regard to Chemistry, the three main branches of Chemistry should be established, and these are (a) Organic Chemistry, (b) Physical Chemistry, and (c) Inorganic Chemistry. At present, there is only one Professor and excepting for certain research students

who come and go periodically, he has no permanent hands to help him. Coordinated research is therefore not possible. A proper research atmosphere cannot be created unless there are half a dozen people working on similar lines in this Department. Chemistry is one of the most important and urgent of the subjects, where research is necessary. It has been felt for a long time that this Department should be considerably strengthened. It is therefore proposed that besides the Professorship that is now in existence, there should be the following additions in the personnel:-

	Minimum. Rs.	Maximum. Rs.
(i) One Professor of Organic Chemistry Rs.750-1000	9,000	12,000
Two Readers - one in Physical Chemistry and one in Inorganic Chemistry Rs.400-600.	9,600	14,400
Four Fellowships Rs.200-400.	4,800	19,200
One Stenographer Rs.150-250.	1,800	3,000
One Laboratory Mechanic. 75-150.	900	1,800
Attenders (5) 50-75.	3,000	4,500
(ii) Apparatus and Chemicals	15,000	15,000
(iii) Books and periodicals.	1,500	1,500
(iv) Provident Fund and leave allowance.	6,000	10,000
(v) Contingencies, etc.	3,000	3,000
Total - recurring.	59,400	84,400

Non-recurring - Initial capital expenditure. Rs.1,00,000/-
Equipment, books, etc.

Average recurring expenditure (additional, over the provision in the University) Rs.70,000/-

(2) Department of Botany -

This Department is now doing useful work in Plant Physiology, and here again there is only one member, and it is not possible for all aspects of Botanical research to be carried out. Important researches are being done in regard to plant diseases and Plant and soil bacteriology. It has been repeatedly pointed out that Horticulture should be stressed for research purposes. It is therefore suggested that a Readership on Rs.400-600 and three Fellowships on Rs.200-400 may be created in this Department. The additional posts and the expenditure involved are as follows:-

Recurring -

	<u>Minimum.</u>	<u>Maximum.</u>
1. Staff - One Reader Rs.400-600.	4,800	7,200
One Senior Lecturer in Algae, in which the Department has specialised in the past.200-500.	2,400	6,000
Three Fellowships Rs.200-400.	7,200	14,400
One Stenographer 150-250.	1,800	3,000
Two Attenders Rs.50-75.	1,200	1,800
Two gardeners Rs.30/-	720	720
	<u>18,120</u>	<u>33,720</u>
2. Provident Fund and leave allowance.	3,000	6,000
3. Apparatus and Chemicals.	5,000	5,000
4. Contingent expenditure including T.A.to staff.	2,600	2,600
5. Garden and field expenses.	1,000	1,000
6. Books and periodicals.	1,000	1,000
	<u>30,620</u>	<u>48,620</u>

Average recurring expenditure .. About Rs.40,000/-

Non-recurring - Initial capital expenditure .. Rs.25,000
(special apparatus, library, etc.)

(3) Zoology Department -

In this Department also there is only one member, the Director of the Laboratory, with no other research workers to help him. This Department has been for sometime dealing with Marine Zoology, a very important subject for research and Madras lends itself ~~extensively~~ exceedingly well for this purpose.

The following is the additional staff and expenditure involved:-

	<u>Minimum.</u>	<u>Maximum.</u>
<u>Recurring -</u>		
1. Staff - One Reader 400-600.	4,800	7,200
Four Research Fellows 200-400.	9,600	19,200
Lab. technician 100-150 & Photographer.	1,200	1,800
Launch driver 50/- 75/-	600	900
Two Attenders 50-75.	1,200	1,800
2 Peons (Boatmen) 20-40.	480	960
One stenographer. 150-250.	1,800	3,000
	<u>19,680</u>	<u>34,860</u>
2. Provident Fund and Leave allowance.	3,500	6,000
3. Apparatus and contingencies.	7,500	7,500
4. Books and periodicals.	2,000	2,000
	<u>32,680</u>	<u>50,360</u>

Average annual expenditure (recurring) About Rs.40,000/-

Non-recurring - Initial capital expenditure.

Sea-water brine tank with pump to pump sea water for natural growth of marine fauna.	Rs.20,000/-
Motor boat and tow-boat for collection, etc.	50,000/-
Additions to existing tanks, etc., in Lab. Library, etc.	10,000/-
Total non-recurring expenditure.	<u>Rs.80,000/-</u>

9

	<u>Minimum.</u>	<u>Maximum.</u>
<u>Recurring</u> - 1. Staff - Two Readers 400-600.	9,600	14,400
2. Library, contingencies, etc.	2,500	2,500
	12,100	16,900/-
3. Provident Fund & leave allowance.	1,500	2,500
	13,600	19,400/-
Average annual cost about Rs.17,000/-.		

Non-recurring: Initial cost of books, etc. Rs.5,000/-

5. Department of Legal Studies -

This is a Department which the Senate has pressed for early organisation. It is proposed to have a Professor and a Reader for International Law and Constitutional Law and a Lecturer in History. The importance of these two subjects of Law need not be stressed/~~for~~ in the present set-up of Free India. Many problems have arisen and will continue to arise in regard to matters pertaining to international contacts, international trade and commerce, maritime policy, monetary transactions, and many other political, economic and social problems pertaining to international relationship have to be discussed from the legal ~~and~~ as well as from other points of view. The training of post-graduate students in this subject will be of the greatest importance both to the Ministry of External Affairs and the ~~Department~~ Ministry of Home Affairs, besides being of considerable value to Provincial Governments also. Although this is not to be strictly construed as a Department of Science, its importance in the present context and the possibilities of setting up of a school of legal studies are so good in this University that the proposal is submitted to Government for favourable consideration.

Estimate of non-recurring and recurring charges.

I. <u>Non-recurring</u> - Furniture, equipment and Library.	Rs.10,000/-	
II. <u>Recurring</u> - Staff - Professor Rs.750-1000	<u>Minimum.</u>	<u>Maximum.</u>
Reader 400-600.	9,000	12,000
Lecturer 200-500.	4,800	7,200
2. Provident, Fund leave allowance, etc.	2,400	6,000
3. Library.	2,500	3,500
4. Contingencies.	1,000	1,000
5. Peons (2)	100	100
	960	960
	20,760	30,760

Total.
Average annual cost about Rs.25,000/-.

III. Conclusion - The University has therefore submitted proposals for the following Departments of Science to be established, so as to effectively function and co-ordinate with each other:

	RECURRING. Rs.	NON-RECURRING. Rs.
1. Department of Applied Physics.	1,10,000	*4 lakhs.
2. Department of Chemistry (Addl.cost)	70,000	1 lakh.
3. Department of Botany "	40,000	25,000
4. Department of Zoology "	40,000	80,000
5. Department of Geology. ✓	80,000	>5 lakhs.
6. Department of Statistics.	17,000	5,000
7. Department of Legal Studies.	25,000	10,000
*Rs.10 lakhs including buildings.	2.82	11.20

I beg to suggest that the system of block grant that has been obtaining in regard to grants paid to the University may be continued. This system has great advantages in that it enables the University to so regulate its expenditure that it will not be wasteful in any particular year, and that a programme may be adopted so as to ensure a continuity of policy.

The scheme involves a number of research Fellowships. This is the only possible method of getting young men attracted to a research career, and the research fellowships may be continued for three to five years, during which period a Research Fellow would have done some substantial work in cooperation with the other members of the staff. Such of those Fellows as are promising must be retained in the University by creation of additional posts if and when necessary. Proposals for this will be submitted after experience has been gained in the scheme of working of the Research Fellowships. I submit that the Research Fellowship scheme is the most suitable method of encouraging research in all its aspects.

It will be the endeavour of the University at all times to so run the Departments as to effectively push forward schemes of research and to encourage a large number of young men to be trained in research and to be research workers. The Scientific Man-Power Committee appointed by the Government of India have recently stated that there is large scope for trained research

18

11 19

-8-

workers in many fields of science, and if Madras Presidency is to play its proper role in supplying the scientific personnel, there is no other body which can take up this undertaking as the University of Madras. The Colleges as at present constituted, affiliated and constituent, are working under severe handicaps; lack of finance and lack of adequate personnel are the two obvious defects. The teachers of all Colleges are fully engaged with the routine teaching work, and although exceptionally here and there there may be persons who are interesting themselves in research, so far it has been a disappointment, that research has not found the proper place in Colleges. The University is the only place where active steps can be taken to foster and promote research. Several of the other Universities have large University Colleges under their control, where large personnel are available for post-graduate teaching. With single-member Departments in the Science subjects, it has been a great handicap in the University of Madras to make a leeway.

Under these circumstances, it is submitted that the only way to help research at the University would be to grant adequate facilities for enlarging the personnel and for increasing the scope of work that is to be done in the different departments. It is hoped that this matter will receive the sympathetic and early consideration of the Government so that this University may be placed on a fair footing to contribute its best towards research.

University Buildings,
Chepauk, Madras,
5th Jan'y.1949.

A. L. Mudaliar
VICE-CHANCELLOR.

1625/94/49

E. & P.H. (G.2)

Letter/Ms.No. 825 Edn., dated 23.3.49

To

The Registrar, University of Madras, Madras.

Sir,-

Sub:- University - Madras - Promotion of research - Schemes -

Ref:- D.O. from the Vice-Chancellor, University of Madras, dated 4-1-1949.

I am directed to state that the Govt. have made a provision of Rs. 3.16 lakhs ^{in the next year's budget} for reorganising the Presidency College, Madras, with a view to improving facilities for research and that ^{as they therefore} ~~therefore~~ the Govt. ~~do not consider it necessary~~ ^{Consider it unnecessary} for the present to allot funds to the Madras University for the same purpose.

Yours faithfully,

Copy to the D.P.I. 2 spare copies.

19/3/49 19.3.49

21-349

W. J. M.

Copy of D.O. dated the 29th December 1948 from the Hon'ble Premier to Dr. Sir A. Lakshmanaswami Mudaliar, Vice-Chancellor, University of Madras.

Your letter of the 8th December regarding B.Com.(Hons.) course in Co-operation has been given to the Hon'ble Sri Avinashilingam Chettiar for sending a reply to you. I gather that he has written to you on the 20th inst. I hope it is receiving your attention.

I have been feeling that our Universities should take a greater part in Scientific Research than what they have been doing hitherto. I am sure there may be lot of scope for encouraging Scientific Research. Government will be glad to consider any proposal for help from the Universities in this matter. I shall be glad if you can give your attention to this matter and let me have your valuable proposals in this regard.

True copy

Sd/- Chattram
Superintendent.

UNIVERSITY OF MADRAS.

MEMORANDUM.

The following schemes for improving the research facilities in the University of Madras are submitted for the favourable consideration of the Government.

I. It is proposed to open a Department of Applied Physics and to enlarge the scope of work of the Departments of Chemistry, Botany and Zoology, as also to open a Department of Geology and to improve the Department of Statistics. A proposal for a Department of Legal Studies in the University is also submitted for favourable consideration. The last proposal may not strictly be in regard to scientific research, but it has been brought out at meetings of University Bodies that one of the most important things to do would be to develop a school for the study of Constitutional Law and Inter-National Law, two of the most important subjects which will have a bearing upon the Department of External affairs in the Central Government. In view of the part that constitutions will have to play and in view also of the greater amount of contact between independent India and other countries in the world in the matter of international trade, commerce, maritime relations, patents, etc., it was felt at the meeting of the Senate that immediate steps should be taken to open a Department so that a large number of trained personnel may be made available to the Central and Provincial Governments, and research may be conducted along these lines. The scheme as passed by the Senate at its October meeting is also therefore submitted for the favourable consideration of Government.

II. (1) Department of Applied Physics.

This is one among the earliest Departments sanctioned by the Senate of the University of Madras, and for want of funds the institution of the Department has been postponed. The scheme involves a non-recurring expenditure of nearly Rs.10 lakhs and recurring expenditure. The non-recurring expenditure includes:

1. Buildings, including furniture and fittings.	Rs.6 lakhs
2. Workshop and equipment.	Rs.4 lakh
3. Initial equipment - Physics apparatus and stores.	Rs.3 lakhs
4. Library.	Rs.4 lakh

Total nearly Rs.10 lakhs.

In view of the difficulties in undertaking building construction, it is proposed to locate for the present Applied Physics Department in the block occupied by the Biochemistry Department, and the Biochemistry Department will be transferred to the College of Technology building which is nearing completion. Temporary provision is thus proposed to be made for locating the Applied Physics Department, the non-recurring cost thus being reduced for the present to Rs.4 lakhs.

The recurring cost will be as follows:-

	Annual cost	
	Minimum. Rs.	Maximum. Rs.
1. Staff:		
Director Rs.1000/- to Rs.1500/-	12,000	18,000
Assistant Director 750-1000.	9,000	12,000
Readers (2) 400-600	9,600	14,400
Fellowships 200-400 (2)	4,800	7,200
Scholarships (3) 150-200	5,400	7,200
Technicians (2) 100-150.	2,400	3,600
Attender (1) 50-75	600	900
Watchman, boy attenders & Sweeper (4)x40.	1,920	1,920
Stenotypist 150-250.	1,800	3,000
Storekeeper clerk 75-150.	900	1,800
	48,420	72,420
2. Provident Fund and leave allowance.	10,000	15,000
3. Apparatus and equipment.	20,000	25,000
4. Contingencies.	5,000	5,000
5. Library.	2,500	2,500
6. Rates and taxes, etc.	5,000	5,000
Total.	90,920	1,24,420

It is therefore requested that a sum of Rs.4 lakhs be given as a non-recurring grant for initial expenditure, and a recurring grant of about Rs.1,10,000 towards recurring expenditure.

2. Enlarging the scope of the activities of existing

Laboratories - (1) Department of Chemistry -

At present, there is only a Department of Biochemistry. After all a part of the Department of Chemistry is transferred to Chemistry, the three main branches of Chemistry should be established, and these are (a) Organic Chemistry, (b) Physical Chemistry, and (c) Inorganic Chemistry. At present only one Professor and excepting for cer

who come and go periodically, he has no permanent hands to help him. Coordinated research is therefore not possible. proper research atmosphere cannot be created unless there half a dozen people working on similar lines in this Department. Chemistry is one of the most important and urgent of the subjects where research is necessary. It has been felt for a long time that this Department should be considerably strengthened. It is therefore proposed that besides the Professorship that is now in existence, there should be the following additions in the personnel:-

	Minimum. Rs.	Maximum. Rs.
(i) One Professor of Organic Chemistry Rs.750-1000	9,000	12,000
Two Readers - one in Physical Chemistry and one in Inorganic Chemistry Rs.400-600.	9,600 9,600	14,400
Four Fellowships Rs.200-400.	19,200	19,200
One Stenographer Rs.150-250.	1,800	3,000
One Laboratory Mechanic. 75-150.	900	1,800
Attenders (5) 50-75.	3,000	4,500
(ii) Apparatus and Chemicals	15,000	15,000
(iii) Books and periodicals.	1,500	1,500
(iv) Provident Fund and leave allowance.	6,000	10,000
(v) Contingencies, etc.	3,000	3,000
Total - recurring.	59,400	84,400
<u>Non-recurring</u> - Initial capital expenditure. Rs.1,00,000/- Equipment, books, etc.		
<u>Average recurring expenditure</u> (additional, over the provision in the University) Rs.70,000/-		

(2) Department of Botany -

This Department is now doing useful work in Plant Physiology and here again there is only one member, and it is not possible for all aspects of Botanical research to be carried out. Important researches are being done in regard to plant diseases and Plant and soil bacteriology. It has been repeatedly pointed out that Horticulture should be stressed for research purposes. It is therefore suggested that a Readership on Rs.400-600 and three Fellowships on Rs.200-400 may be created in this Department. The additional posts and the expenditure involved are as follows:-

<u>Recurring -</u>	<u>Minimum.</u>	<u>Maximum.</u>
1. Staff - One Reader Rs.400-600.	4,800	7,200
One Senior Lecturer in Algae, in which the Department has specialised in the past.200-500.	2,400	6,000
Three Fellowships Rs.200-400.	7,200	14,400
One Stenographer 150-250.	1,800	3,000
Two Attenders Rs.50-75.	1,200	1,800
Two gardeners Rs.30/-	720	720
	18,120	33,120
2. Provident Fund and leave allowance.	3,000	6,000
3. Apparatus and Chemicals.	5,000	5,000
4. Contingent expenditure including T.A.to staff.	2,600	2,600
5. Garden and field expenses.	1,000	1,000
6. Books and periodicals.	1,000	1,000
	30,620	48,620

Average recurring expenditure .. About Rs.40,000/-

Non-recurring - Initial capital expenditure .. Rs.25,000
(special apparatus, library, etc.)

(3) Zoology Department -

In this Department also there is only one member, the Director of the Laboratory, with no other research workers to help him. This Department has been for sometime dealing with Marine Zoology, a very important subject for research and Madras lends itself ~~extensively~~ exceedingly well for this purpose.

The following is the additional staff and expenditure involved:-

<u>Recurring -</u>	<u>Minimum.</u>	<u>Maximum.</u>
1. Staff - One Reader 400-600.	4,800	7,200
Four Research Fellows 200-400.	9,600	19,200
Lab. technician 100-150 & Photographer.	1,200	1,800
Launch driver 50/- 75/-	600	900
Two Attenders 50-75.	1,200	1,800
2 Peons (Boatmen) 20-40.	480	960
One stenographer. 150-250.	1,800	3,000
	19,680	34,860
2. Provident Fund and Leave allowance.	3,500	6,000
3. Apparatus and contingencies.	7,500	7,500
4. Books and periodicals.	2,000	2,000
	32,680	50,360

Average annual expenditure (recurring) About Rs.40,000/-

Non-recurring - Initial capital expenditure.

Sea-water brine tank with pump to pump sea
water for natural growth of marine fauna.
Motor boat and tow-boat for collection, etc.
Additions to existing tanks, etc., in Lab.
Library, etc.
Total non-recurring expenditure.

Rs.20,000/-
50,000/-
10,000/-

Rs.80,000

3. Department of Geology -

This is very necessary Both for purposes of research work for the creation of a Department of Geophysics, in collaboration with the Physics Department. The following scheme is submitted for consideration:

Non-recurring -

1. Buildings.	Rs. 3 lakhs.
2. Furniture.	Rs. 1 lakh
3. Equipment.	Rs. 1 lakh
4. Library.	Rs. 20,000
5. Museum collections.	Rs. 30,000

Total. Rs. 5 lakhs.

Recurring -

	Minimum.	Maximum.
1. Staff - Professor 750-1000.	9,000	12,000
One Reader 400-600.	4,800	7,200
Six Research Assistants 150-250.	18,000	30,000
Four analysts.		
One Museum assistant and Librarian. 50-125.	600	1,500
4 Lab. assistants. 75-100.	3,600	4,800
One section cutter 40-60.		
Three Attenders 40-60.		
Three Peons.	3,600	4,800
Two sweepers.		
Total.	39,800	69,300
2. Laboratory equipment for first 5 years.	20,000	20,000
3. Library including journals.	3,500	3,500
4. Provident Fund, leave allowance etc.	6,000	10,000
5. Contingencies.	2,000	2,000
	70,600	95,800

Average annual recurring cost Rs. 80,000/-

4. Statistics - Statistics plays such a valuable part in all branches of administration and research that it is felt that the Department needs considerable strengthening both because a large number of research workers have to be trained and because statistical research has to be conducted on a large scale. At present there is one lecturer in the Department. The different problems presenting themselves are Actuarial Statistics, Economic Statistics, Mathematical Economics and Econometrics, Vital Statistics and Population problems and Agricultural Statistics. The work of this Department will be just as useful to the Government and for the furtherance of research. It is therefore proposed that the Department should be strengthened and there should be Two Readers and Two Research Fellowships.

	Minimum.	Maximum.
<u>Recurring</u> - 1. Staff - Two Readers 400-600.	9,600	14,400
2. Library, contingencies, etc.	2,500	2,500
	12,100	16,900/-
3. Provident Fund & leave allowance.	1,500	2,500
	13,600	19,400/-
Average annual cost about Rs. 17,000/-.		

Non-recurring: Initial cost of books, etc. Rs. 5,000/-

5. Department of Legal Studies -

This is a Department which the Senate has pressed for early organisation. It is proposed to have a Professor and a Reader for International Law and Constitutional Law and a Lecturer in History. The importance of these two subjects of Law need not be stressed/for the present set-up of Free India. Many problems have arisen and will continue to arise in regard to matters pertaining to international contacts, international trade and commerce, maritime policy, monetary transactions, and many other political, economic and social problems pertaining to international relationship have to be discussed from the legal and as well as from other points of view. The training of post-graduate students in this subject will be of the greatest importance both to the Ministry of External Affairs and the Ministry of Home Affairs, besides being of considerable value to Provincial Governments also. Although this is not to be strictly construed as a Department of Science, its importance in the present context and the possibilities of setting up of a school of legal studies are so good in this University that the proposal is submitted to Government for favourable consideration.

Estimate of non-recurring and recurring charges.

I. <u>Non-recurring</u> - Furniture, equipment and Library.	Rs. 10,000/-	
II. <u>Recurring</u> - Staff - Professor Rs. 750-1000	Minimum.	Maximum.
Reader 400-600.	9,000	12,000
Lecturer 200-500.	4,800	7,200
2. Provident, Fund leave allowance, etc.	2,400	6,000
3. Library.	2,500	3,500
4. Contingencies.	1,000	1,000
5. Peons (2)	100	100
	960	960
Total.	20,760	30,760

Average annual cost about Rs. 25,000/-.

19 3715

III. Conclusion - The University has therefore submitted proposals for the following Departments of Science to be established, so as to effectively function and co-ordinate with each other:

	RECURRING. Rs.	NON-RECURRING. Rs.
1. Department of Applied Physics. ✓	1,10,000	*4 lakhs.
2. Department of Chemistry (Addl.cost)	70,000	1 lakh.
3. Department of Botany "	40,000	25,000
4. Department of Zoology "	40,000	80,000
5. Department of Geology. ✓	80,000	5 lakhs.
6. Department of Statistics.	17,000	5,000
7. Department of Legal Studies. ✓	25,000	10,000

*Rs.10 lakhs including buildings.

I beg to suggest that the system of block grant that has been obtaining in regard to grants paid to the University may be continued. This system has great advantages in that it enables the University to so regulate its expenditure that it will not be wasteful in any particular year, and that a programme may be adopted so as to ensure a continuity of policy.

The scheme involves a number of research Fellowships. This is the only possible method of getting young men attracted to a research career, and the research fellowships may be continued for three to five years, during which period a Research Fellow would have done some substantial work in cooperation with the other members of the staff. Such of those Fellows as are promising must be retained in the University by creation of additional posts if and when necessary. Proposals for this will be submitted after experience has been gained in the scheme of working of the Research Fellowships. I submit that the Research Fellowship scheme is the most suitable method of encouraging research in all its aspects.

It will be the endeavour of the University at all times to so run the Departments as to effectively push forward schemes of research and to encourage a large number of young men to be trained in research and to be research workers. The Scientific Man-Power Committee appointed by the Government of India have recently stated that there is large scope for trained research

workers in many fields of science, and if Madras Presidency is to play its proper role in supplying the scientific personnel, there is no other body which can take up this undertaking as the University of Madras. The Colleges as at present constituted, affiliated and constituent, are working under severe handicaps; lack of finance and lack of adequate personnel are the two obvious defects. The teachers of all Colleges are fully engaged with the routine teaching work, and although exceptionally here and there there may be persons who are interesting themselves in research, so far it has been a disappointment, that research has not found the proper place in Colleges. The University is the only place where active steps can be taken to foster and promote research. Several of the other Universities have large University Colleges under their control, where large personnel are available for post-graduate teaching. With single-member Departments in the Science subjects, it has been a great handicap in the University of Madras to make a leeway.

Under these circumstances, it is submitted that the only way to help research at the University would be to grant adequate facilities for enlarging the personnel and for increasing the scope of work that is to be done in the different departments. It is hoped that this matter will receive the sympathetic and early consideration of the Government so that this University may be placed on a fair footing to contribute its best towards research.

University Buildings,
Chepauk, Madras,
5th Jan'y. 1949.

A. J. Musahai
VICE-CHANCELLOR.

UNIVERSITY OF MADRAS



SIR A. L. MUDALIAR,
M.D., LL.D., D.SC., F.R.C.O.G., F.A.C.S.,
VICE-CHANCELLOR.

UNIVERSITY BUILDINGS
TRIPPLICANE
MADRAS

6th January 1949.

The Secretary to Government,
Education Department,
Fort St. George,
Madras.

Sir,

I have the honour to forward herewith for the favourable consideration of Government a request from the University for funds to be given for the development of scientific research in the several departments and for opening up of new Science Departments. As has been stated in the memorandum, submitted, it will not be possible for effective work to be turned out unless the existing Departments are strengthened. I lay emphasis on the departments of Physical Science and Biological Sciences, which at present are the most important for development. I have for reasons stated also requested that a Department of Geology be created as well as a Department of Legal Studies and the strengthening of the Department of Statistics.

I request that Government may be pleased to give their very earnest consideration to these proposals and pass favourable orders.

Yours faithfully,

A. L. Mudaliar
VICE-CHANCELLOR.

P.S. -
A copy of the memorandum
has been submitted to the
Premier.

works in many fields of science, and in Madras University
to play the proper role in supplying the scientific personnel,
there is no other body which can take up this undertaking
the University of Madras. The Colleges as at present consti-
tuted, affiliated and constituent, are working under severe
handicaps; lack of finance and lack of adequate personnel
are the two obvious handicaps. The teachers of all Colleges are
fully engaged with the routine teaching work, and although
exceptionally here and there there may be persons who are in-
teresting themselves in research, so far it has been a dis-
appointment, that research has not found the proper place in
Colleges. The University is the only place where active
steps can be taken to foster and promote research. Several
of the other Universities have large University Colleges
under their control, where large personnel are available for
post-graduate teaching. With single-member Departments in
the science subjects, it has been a great handicap in the Uni-
versity of Madras to make a steady progress.
Under these circumstances, it is submitted that the only
way to help research at the University would be to grant adequate
facilities for entering the personnel and for increasing the
scope of work that is to be done in the different departments.
It is hoped that this matter will receive the sympathetic and
early consideration of the Government so that this University
may be placed on a firm footing to contribute its part to
research.

A. L. Mudaliar

Tr. Secy. (Mudaliar)
Chennai, Madras.
6th Jan. 1949.

PP-1-194

Please see the representation herewith which was sent by the Vice Chancellor of the Madras University to the Hon'ble the Premier in response to an enquiry made by the Premier.

01625

The Premier handed this over to me and had a discussion with me about this at which Mr. Bhadriah, the Deputy Director was also present. I said that prima facie the schemes looked ^{all} right, but we will have to examine the schemes in detail individually and apart from that, examine them with reference to the point that we have set up a committee for looking into the provisions of post-graduate and research studies in the Presidency college; we will have to see whether there would be any duplication or overlapping with reference to the schemes that may be the outcome of the deliberations of that committee.

A

I have pointed out also that with reference to the scheme relating to Geology, we have had a scheme for geo-physics set up by the Andhra University which is down for a discussion at an Informal Meeting of the Ministers, and we will have to examine the question whether if the Andhra University scheme were to be taken up, the scheme for the University of Madras would nevertheless be still necessary.

PP 9081

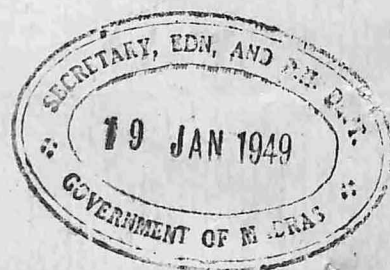
While these points ^{are} examined, the Premier is anxious that some provision for scientific research should be made in the budget and he desires that a provision of Rs. 7 lakhs may be made as a lump sum provision - the scheme to be actually sanctioned and the grants to be actually made, should be determined in due course after an examination on the general lines referred to above, and on an examination of the individual schemes also, and on an examination, further, of the question whether the University concerned would itself be in a position to bear a portion of

the cost.

I suggested that the provision of Rs.7 lakhs may be taken up as an item in the Standing Finance committee which is shortly to be held for the selection of Part II schemes in the budget. They ^{might be done} agreed that it will be suitable and that in the meanwhile, the note may be circulated to H. M.(Edn.) and H.M.(Finance) also.

Finance may see before circulation to H.M.(Edn) and H.M.(Finance).

In item may be worked for schemes of post-graduate study and research in the Presidency College, Madras, and in the universities of the Province.



E+P.H.(G3)

Res. No. 1625/49

8/1/49.

Fin (BG)

The note of E+P.H. on pp 1-2 above may be perused and the file returned to E+P.H. no.

A copy of the E+P.H. Secretary's note may be put along with the papers of the meeting. (8/1/49) [E+P.H.]



Copy of note taken

Fin. No. 1809. BG/49-1 8-1-49.

E+P.H.(G3)

[This Devel. note on pp 1-2 above and Finance Devel. note above may be perused]. May be circulated to H.M.(Edn) and H.M.(Fin).

8/1/49 10-1-49 10/1/49

A copy of 3 1/2 lakhs was provided. No. 19

The Vice-Chancellor's proposals in his letter in the cf are for the development of the departments specified below, with facilities for research studies, under the auspices of the Madras University:—

- (1) Applied Physics (2) Chemistry (3) Botany (4) Zoology (5) Geology (6) Statistics (7) Legal Studies

The total recurring and recurring cost of the schemes, according to the proposals, will be Rs 11.20 lakhs and Rs 3.82 lakhs respectively. In view of the schemes of post-graduate and research studies in the Presidency College, separately under consideration, it was suggested that a provision of Rs 7 lakhs might be made in Part II "for schemes of post-graduate study and research in the Presidency College Madras and in the universities of the Province".

It is seen from the copy of the proceedings of the S.F.C. on Part II Schemes that a provision of Rs 3.16 lakhs has been agreed to for schemes 120 and 121, which appear to be schemes pertaining solely to the Presidency College. In view of this decision, it is for consideration whether the Vice-Chancellor's proposals may be deferred and whether he may be informed

p 17 f

Rs 13 f

p - 2 ante -

x p-2 g (A)

for the do
are at the
part 7. when the
committee may well

informed accordingly. Finance may see the case, for remarks, if any, before circulation -

241.49

$$\frac{h_2}{29-1-h_2}$$

~~AS 11~~ 1149
5

5.

244

Fm (Bq)

~~Please see the note of E & P. H. on pp 3-4 above,~~

Finance may agree that the proposals of the Vice-

~~Chancellor mentioned on p 3 above may be deferred~~

and that he may be informed accordingly

may be perished and the case returned to that dept. - (the provision agreed to by the S. F. C. & the Cabinet is for the provisional at flag ①).

229

6131
1. FEB 1949
ASSISTANT SECRETARY TO GOVERNMENT
FINANCE DEPARTMENT

This Dept. agrees to the Vice Chancellor being informed that the Govt. have made a provision of Rs 3.16 lakhs for reorganising the Presidency College with a view to ~~promoting~~ improving facilities for research & that ~~no further~~ it is ~~provision~~ ^{considered unnecessary} ~~how to be made~~ ^{to} for the present - to allot funds ~~for~~ the University ~~separately~~ for the same purpose.

2.2.49 E & PH (93)

Fin. u. o. No. 6131-BH-1
3.2.69

7942

FEB 1946

Interview of the above. The
Case may now be circulated to Hm
(Edw), Hm (Fin) & Hm Pr for orders
whether the Vice Chancellor,
University of Madras may be informed
in reply to his letter in the ef,
as in the note of Secy, Finance above.

A circular postmark from the Secretary, I.D. and P.E. Dept., dated 19 MAR 1940. The text "SECRETARY, I.D. AND P.E. DEPT." is curved along the top inner edge, and "19 MAR 1940" is in the center. The bottom edge is partially obscured by a signature.

3.2.49

$\frac{u}{u+2u} = \frac{1}{3}$ Do $\frac{As}{u+2u}$

S
O.P.R.
1813

SA

Bl. 1
127/2

E. + Pt (Gr2)

Please see the orders in circulation
on p. 4 ante. A draft letter to the
Registrar, University of Madras, is
sub for approval.

$$\begin{array}{r} 19.314 \\ \times 1.9849 \\ \hline 154516 \\ 178881 \\ 386282 \\ 386282 \\ \hline 38.314 \end{array}$$
$$\frac{m}{21-3-69}$$

5 $\frac{1}{2}$ in

[Issued as L. MS. NO. 825 Education
2-23.3.68]

It is not the way to forward accounts
transmitted with 3 others with the letter

6

W
P.H. pr



Extracts may be
sent from here
to E.P.H.
S.G.A.

Dev no. 133634 P.H. pr
30.12.48.

J. E. P. H. Dept.

Development Department

Extracts from file C.NO.133634 BI/48 relating
to opening of B.Com. (Hons.) degree in co-operation.

XX

XX

XX

The Vice-Chancellor's reply to H.M. (Edn.)'s
letter at p.3 C.F. has not yet been received. The
file was called for by H.Pr. and he has addressed a
letter to the Vice-Chancellor.

2. E.P.H. department is concerned with para 2 of
that letter. The file may be sent to E.P.H. deptt.
for taking extracts of para 2 of H.Pr.'s letter for
further action. On return of the file, it may be
submitted to H.M. (Edn.) as desired by him at M on p.6
above.

V.C.C.
30.12.48

The file may now be submitted to H.M. (Edn.)

(True extracts.)

Inwarded/By adv

P.H. pr
Sub

S.C. 12-48.
A.S.I.

M.T.R.
30-12-48
D.S.