



# UNIVERSITY OF COCHIN

## MINUTES OF THE MEETING OF THE SYNDICATE

4th July, 19th August & 8th September 1981

# UNIVERSITY OF COCHIN

## Minutes of the 153rd Meeting of the Syndicate held on 4-7-1981.

Place of meeting : University Buildings,  
Tripunithura.

Time : 10.30 A. M.

### *Members Present:*

1. Dr. M. V. Pylee,  
Vice-Chancellor (In the Chair)
2. Dr. K. I. Vasu,  
Pro-Vice-Chancellor.
3. Shri. V. Aravindakshan Nair
4. Dr. P. N. Krishnan Nambisan
5. Shri. K. V. Kunhunni Menon
6. Shri. S. C. S. Menon
7. Dr. M. P. Parameswaran
8. Dr. N. Parameswaran Nair
9. Shri. M. K. Raghavan
10. Dr. K. Sathianandan
11. Dr. S. Vasudev
12. Dr. Paul A. Vatakencherry
13. Prof. P. S. Velayudhan

Item No. 153.01. Confirmation of the Minutes of the 152nd Meeting of the Syndicate held on 6-6-1981 and 16-6-1981.

Resolved that the Minutes of the 152nd meeting of the Syndicate held on 6-6-81 and 16-6-81 be confirmed subject to the following emendations:

- a) Resolution No. (i) under Item No. 152.18 be emended to read as follows:

Shri. J. P. Kundu, Associate Professor, Naval Architecture Department, IIT, Kharagpur. P. O. Kharagpur 721 302 (W. Bengal), be appointed Professor of Naval Architecture, taking into account his long years of service in the profession, in relaxation of the prescribed qualifications in the Regulations".

b) The second paragraph in Item No. 152.19 be emended to read as follows:

"Resolved that the list as in Appendix IV be approved and three persons from the list observing the rules of communal rotation, be appointed as Lecturers in Naval Architecture for six months on a monthly salary of Rs. 800/- two of them against existing vacancies and the third in addition.

c) The time of adjournment of the meeting held on 6-6-1981 be indicated as 4.30 P. M. instead of 3 P. M.

d) In Annexure to Item No. 152.35 under (iii) - security Guard - Method of Recruitment (d) the word 'Gurkha' be deleted.

Item No. 153.02. Report of the Vice-Chancellor on important development in the University since the last meeting of the Syndicate.

a) He attended a meeting of the State Co-ordination Committee for the Development of High Education at Trivandrum on June 23rd. Among the issues of relevance to this University discussed at the meeting were: (1) revision of pay scales of University Professors and Readers and (2) allocation of funds earmarked for Science and Technology for the development of selected technology departments of Universities in the State.

Arising out of the Vice-Chancellor's report on point No. 2 above, Syndicate resolved to request the Government to provide adequate finance to this University for setting up a School of Engineering Studies during this financial year itself, as such a School is indispensable for the development of this University as the Science and Technology oriented University of the State. The Syndicate noted that the State's Sixth Plan proposals envisaged the establishment of two Engineering Colleges in the State and recalled that the Engineering College Trichur, had been taken away from the University's control as per a Government decision.

The Syndicate resolved further that the Vice-Chancellor be authorised to take up the matter with the Government immediately.

b) The Hon. High Court of Kerala had issued a directive enabling the University to award and disburse the Scholarship amounts to the Research Scholars listed in the minutes of the Scholarship Committee dated 5-3-1981.

Resolved that the Scholarships be awarded as directed by the High Court.

c) The Director, School of Management Studies had suggested that in view of the urgent teaching requirements of the University, the permission of the High Court be taken for filling on a temporary basis the posts advertised as per Notification dated 17-1-1981 and appointments to which have been stayed by the High Court.

Resolved that the Vice Chancellor be authorised to take appropriate action in the matter.

d) The term of appointment of six lecturers in Naval Architecture appointed temporarily in the Department of Ship Technology would end during the second week of July 1981.

Arising out of the Report the Syndicate resolved that the six lecturers be re-appointed for a further period of six months on a pay of Rs. 800/- per mensem.

e) The University had advertised the posts reserved for S. C / S. T., and for all but one post, there has been no applicant from the reserved communities. The remaining posts have therefore to be re-advertised, and the qualifications prescribed for the post of University Engineer required to be relaxed.

Resolved that the qualifications prescribed for the post of University Engineer as per Syndicate decision under Item No. 147.34 (a) dated 20-1-1981 be revised as follows, and readvertised along with the remaining posts.

"A graduate in Engineering with 5 years' experience in the grade of Assistant Executive Engineer or in a position equivalent thereto in a public or private sector undertaking in building construction."

Item No. 153.03. Report of the Inspection Wing (Works) Finance Department, Government of Kerala - Further action-Reg.

"Deferred for consideration at the next meeting of the Syndicate along with the recommendations of the Standing Committees on Staff & Establishment, Finance & Purchase, and Works."

(Fin.)

Item No. 153.04. Creation of post of Drivers - Consideration of-

Item No. 153.06. Temporary posts - L. D. Typists/Stenographers - Extension of period-

Item No. 153.32. Proposals for a centralised system for undertaking Sweeping and Cleaning of all the Buildings in the two Campuses-consideration of-

Item No. 153.34. Recommendations of the Standing Committee on Staff and Establishment on the demand for additional Staff - Reg.-

The Syndicate considered the additional requirements of staff for the Departments and offices of the University and connected matters, along with the recommendations of the Standing Committee on Staff and Establishment.

Resolved that the following additional posts be created in the University for the Departments/Offices indicated :

Department of Applied Economics	: Assistant Grade II	: One
School of Environmental Studies	: Peon	: One
Department of Industrial Fisheries	: Section Officer	: One
Department of Mathematics & Statistics:	: L. D. Typist/Steno.	: One
Dept. of Polymer Science & Rubber Technology	: { Peon	: One
	: L. D. Typist/	: One
	: Steno.	
University Office-Exam. Saction	: { L. D. Typist/	: One
	: Steno.	
	: Assistant Grade II	: Two
Department of Ship Technology	: L. D. Typist/Steno.	: One
University Office	: Driver (Rs. 380-610)	: One
Department of Electronics	: Technician	: One
Department of Physics	: Machinist	: One
Department of Marine Sciences	: Laboratory Asst.	: One
	: Grade II	

Resolved further that :

a) Records Section be formed in the University with the staff already sanctioned.

b) A viable scheme for the integration of Departmental Libraries with the University Library be worked out at the earliest.

c) The requirements of the Engineering Department for additional staff be assessed by the Works Committee and its report submitted to the Syndicate for consideration.

d) The question of centralized sweeping and cleaning of departmental buildings be discussed with the Heads of Departments at a meeting to be convened and their views reported to the Syndicate.

Item No. 153.05. Promotion of Class IV Employees as Clerical Assistants.

In the light of the recommendation of the Standing Committee on Staff and Establishment, deferred for a decision at the next meeting of the Syndicate pending examination by the Vice-Chancellor of all matters related to the question at issued.

(Ad.)

Item No. 153.06. Temporary posts - L. D. Typists / Steno.- Extension of period.

Considered along with Item No. 153.04 and decision taken.

(Ad.)

Item No. 153.07. University Health Centre - Consulting Physician-Appointment - Extension of.

The Syndicate considered the action of the Vice-Chancellor in having extended the term of appointment of Dr. M. N. Shenoy, Consulting Physician, University Health Centre w. e. f. 31-12-1980 until further orders, along with the recommendation of the Standing Committee on Staff and Establishment.

Resolved that the action of the Vice-Chancellor be ratified.

Resolved further that a Part-time post of Physician be advertised so as to ensure that the services of a Doctor can be made available at the Health Centre two hours a day for six days a week, on a suitable remuneration. (Ad.)

Item No. 153.08. Leave without allowances for study purpose - Shri. K. Mohanachandran, Lib. Asst. Gr. I - University Library - Consideration of

The Syndicate considered the request of Shri. K. Mohanachandran, Library Asst. Gr. I. for leave without allowances for a period of one year for pursuing a course of study leading to B. Lib. Sc. of the University of Kerala, along with the recommendation of the Standing Committee on Staff and Establishment.

Resolved that the request be declined as he is not eligible, as per Rules, for the leave requested. (Ad.)

Item No. 153.09. Application for registration for research.

The Syndicate considered the applications for registration for research leading to the Degree of Ph. D. along with the recommendation of the Standing Committee on Academic Matters.

Resolved that the candidates as in *Annexure - I* be granted Registration for research.

(Ac.)

**Item No. 153.10. Change of Supervising Guide - Request - Consideration of.**

The Syndicate considered the requests of M/s. Arul James and T. K. Govindan for change of supervising Guide along with the recommendation of the Standing Committee on Academic Matters.

Resolved that M/s. Arul James and T. K. Govindan be permitted to work under Dr. C. T. Samuel.

Resolved further that in the event of death or disability of a supervising guide, applications for change of Supervising Guide be made within three months of such event.

(Ac.)

**Item No. 153.11. Faculty of Technology - Board of Studies - Electronics and Communication Systems - re-constitution of.**

**Item No. 153.12. Faculty of Science - Boards of Studies in Applied Chemistry and Mathematics & Statistics - reconstitution of.**

The Syndicate considered the proposals for re-constitution of the Boards of Studies in Electronics & Communication Systems, Applied Chemistry, and Mathematics & Statistics, along with the panel of names submitted by the Deans of the respective Faculties and the recommendations of the Standing Committee on Academic Matters.

Resolved that the Boards of Studies in Electronics and Communication Systems, Applied Chemistry, and Mathematics & Statistics be re-constituted with members as in *Annexure-II* (Ac.)

**Item No. 153.13. Faculty of Social Sciences - Recognition of Supervising Guide - Application of Prof. P. R. Poduval, School of Management Studies - Consideration of.**

The Syndicate considered the request of Prof. P. Ramachandra Poduval of the School of Management Studies for recognition as Supervising Teacher in the Faculty of Social Sciences, along with the recommendation of the Standing Committee on Academic Matters.

Resolved that Prof. P. R. Poduval, School of Management Studies, be recognised as Supervising Teacher in the Faculty of Social Sciences.

(Ac.)

**Item No. 153.14. Ph. D. Thesis - Shri. E. J. Zacharia - Adjudication - Reg.**

The Syndicate considered the question of appointment of examiners for adjudication of the Ph. D. Thesis entitled "Corrugated Flange Technique for Beam shaping of Sectoral Electromagnetic Horn Antennas" submitted by Shri. E. J. Zachariahs working under the supervision of Dr. K. Gopalakrishnan Nair, Head of the Dept. of Electronics, along with the recommendation of the Standing Committee on Academic Matters.

Resolved that expert No. 1 and No. 2 from the panel of experts forwarded by the Supervising Teacher be external examiners, expert one being the Chairman of the Board of Examiners.

Resolved further that expert No. 4 from the above panel be also nominated as an external examiner so that his services would be available in case of need.

(Exam)

**Item No. 153.15. Ph. D. qualifying Examinations - Approval of the Syllabus - Reporting of.**

The Syndicate noted the approval given by the Vice-Chancellor to the Syllabus for the Ph. D. qualifying Examination in respect of each of the following Candidates.

1. Noble A.
2. Sasidharan Pillai. N. K.
3. Chinnamma George
4. Devasadan. K.
5. Krishnamurthy. V.

(Exam.)

**Item No. 153.16. Concessions to Physically handicapped students-Recommendations of the Inter University Consultative Committee - Reg.**

The Syndicate considered the recommendation of the IUCC regarding the concessions that might be extended to Physically handicapped students, along with the recommendation of the Standing Committee on Academic Matters.

Resolved that Physically handicapped students be granted the following concessions :

1. Exemption from the payment of fees.

2. Grant of extra half hour to write answers during examination for paraplegics, orthopaedically handicapped who have hand co-ordination problems, and the blind.
3. Allowing the facility of amenities to the blind students at the time of examination.
4. Priority to the handicapped in the allotment of rooms in the hostels.

[Ac.]

**Item No. 153.17. Board of Studies in Naval Architecture - Nomination of additional members - Reg.**

The Syndicate considered the proposal of the Head of the Department of Naval Architecture for inclusion of two more members to the existing Board of Studies, along with the recommendation of the Standing Committee on Academic Matters.

Resolved that Shri. Dotiwala, Director (Ship Building,) Mazagon Docks, Bombay, be nominated to the Board of Studies in Naval Architecture.

(Ac.)

**Item No. 153.18. Departmental Councils-Draft Rules-Consideration of.**

Deferred for consideration at the adjourned meeting scheduled for 22nd July 1981.

**Item No. 153.19. Purchase of equipments for the Department of Ship Technology-proposals of the Head of the Department - Consideration of.**

The Syndicate considered the proposal of the Head of the Dept. of Ship Technology for the purchase of various items of equipments at a cost of Rs. 84,096/- excluding S. T. and other charges, along with the recommendation of the Standing Committee on Finance and Purchase, and Academic Matters.

Resolved that the proposals as in *Annexure III* be sanctioned, subject to discussions with the Head of the Dept. by the Vice-Chancellor in the matter.

Item No. 153.20. Department of Physics - ISRO Project by Dr. C. P. Girijavallabhan - Purchase of Lock in Amplifier-Reg.

The Syndicate considered the proposal of the Head of the Department of Physics for purchasing one Lock in Amplifier Frequency range 5 H2 to 100 KH2 at a cost of US \$ 3473 excluding other charges for the research scheme sponsored by the ISRO and for opening a letter of credit by drawing the amount as advance, along with the recommendation of the Standing Committees on Finance and Purchase, and Academic Matters.

Resolved that the request be sanctioned and the Head of the Department be granted as advance an amount equal to the exchange value of US \$ 3478 for opening a letter of credit for effect the purchase.

(Ac.)

Item No. 153.21. Department of Physics - Research Project by Prof. Joy George - Purchase of Digibridge - request consideration of.

The Syndicate considered the proposal of the Head of the Department of Physics for the purchase of one Digibridge

Model 1657 required for the Research Project "Development and characterisation IV VI and V VI compounds for thin film application in solid state Technology" at a cost of Rs. 15,780 - excluding other charges through Electronic Trade and Technology Development Corporation Ltd., and for the payment of 10% of the cost as advance, along with the recommendations of the Standing Committees on 'Finance & Purchase' and 'Academic Matters'.

Resolved that purchase of one Digibridge at a cost of Rs. 15,780/- excluding other charges from M/s. Electronic Trade and Technology Development Corporation Ltd., be sanctioned and that 10% of the cost be advanced to the Head of the Department of Physics for making advance payment to the firm.

(Ac.)

Item No. 153.22. School of Environmental Studies - Purchase of Air Compressor - Reg.

The Syndicate considered the proposal of the Head of the School of Environmental Studies for purchase of one Air Compressor at a cost of Rs. 12,526.93 (excluding freight charges etc.), along with the recommendation of the Standing Committee on Finance and Purchase.

Resolved that the purchase of one Air Compressor for the School of Environmental Studies be sanctioned, subject to clarification from the Head of the School as regards the cost of the equipment proposed.

(Pl.)

Item No. 153.23. Non-refundable Advance - Sanctioned Ratification of.



The Syndicate considered the action of the Vice-Chancellor in having sanctioned as non-refundable advance, a sum of Rs. 500/- to Shri. G. Narayana Pillai out of a sum of Rs. 670/- only standing to his credit, along with the recommendation of the Standing Committee on Finance and Purchase.

Resolved that the action of the Vice-Chancellor be ratified.  
(Accts.)

Item No. 153.24. Purchase of equipments for the Dept. of Ship Technology - Consideration of.

The Syndicate considered the proposal of the Head of the Department of Ship Technology for the purchase of various items of equipment at a total cost of Rs. 77,090/- excluding S. T. etc. and for Permission to draw 90% advance for the purpose, along with the recommendation of the Standing Committee on Finance and Purchase.

Resolved that the Purchase of the following items of equipment from M/s. Concord Instruments, Ernakulam be sanctioned for the Dept. of Ship Technology.

- i) Diffused Light Research Polariscopes — 1 Rs. 31,000  
(S. T. etc.)
- ii) Strees Freezing Oven — 1 Rs. 46,090/- ..

Resolved further that the Head of the Department be sanctioned 90% of the above amount as advance for effecting the purchase.

(Pl.)

Item No. 153.25. University Library - Purchase of Books for the departments - action ratification of.

The Syndicate considered the action of the University Librarian in having purchased books at a total cost of Rs. 31,622.74 for various teaching departments of the University on the basis of the recommendations of the respective Heads of Departments, along with the recommendation of the Standing Committees on Finance and Purchase.

Resolved that the action of the University Librarian be ratified.

(Pl.)

Item No. 153.26. Purchase of Impact Testing Machine - Increase in the price of the equipment - granting of permission for the purchase - consideration of.

The Syndicate considered the request of the Head of the Department of Ship Technology that he may be permitted to purchase one Impact Testing Machine from M's. Avery India Ltd., already sanctioned by the Syndicate, at the revised rate quoted by the firm viz. Rs. 55,760/- exclusive of S. T. etc., along with the recommendation of the Standing Committee on Finance and Purchase.

Resolved that the Head of the Department of Ship Technology be permitted to purchase the Impact Testing Machine (1 No.) at the revised cost of Rs. 55,760/- plus S. T. etc.

(Pl.)

Item No. 153.27. Inspection Report for the year 1977-78 Inspection by Accountant General - First replies - furnishing of.

Deferred for detailed consideration.

**Item No. 153.28. Works - Erection of Laboratory II for the Ship Technology Department.**

Deferred for detailed consideration by the Works Committee, pending which the University Engineer may be requested to prepare a detailed estimate for the work proposed.

(Pl.)

**Item No. 153.29. Maintenance to the University Road at Thrikkakara - Revised estimate approved by the Vice-Chancellor - Ratification of.**

The Syndicate considered the action of the Vice-Chancellor in having approved the estimate for the work of repairing 1 km. length of University road from the National High Way to the University Library / Engineering Unit Junction at a cost of Rs. 58,466/-.

Resolved that the action of the Vice-Chancellor be ratified.

(Pl.)

**Item No. 153.30. Delegation of administrative powers now exercised by the Syndicate.**

The Syndicate considered the proposal for delegation of certain administrative powers to the Vice-Chancellor and other Officers of the University, along with the recommendation of the Standing Committee on Finance & Purchase.

Resolved that non-refundable advance against P. F. Accounts within the maximum permissible limit to all employees other than Heads of Departments be sanctioned by the Registrar/Finance Officer and in the case of Heads

of Departments such advance be sanctioned by the Vice-Chancellor.

(Fin.)

**Item No. 153.31. Award of Teacher Fellowship to Shri. A. Sreekumar, Lecturer, S.M.S.-granting of academic leave with full salary-consideration of.**

The Syndicate noted that Shri. A. Sreekumar, Lecturer, School of Management Studies has been selected by the U. G. C. for the award of a Teacher Fellowship under the Faculty Improvement Programme for higher studies at IIM, Ahmedabad, and considered Shri. Sreekumar's request for academic leave with full salary and other service benefits during the tenure of the U. G. C. fellowship, and the question of appointing a substitute in his place, along with the recommendations of the Standing Committees on Academic Matters, and Finance and Purchase.

Resolved that Shri. A. Sreekumar be granted leave with salary and service benefits for the tenure of the fellowship granted to him by the U.G.C.

Resolved further that the Standing Committee on Academic Matters be requested to frame detailed rules regarding grant of Study Leave to teachers.

Resolved also that steps be taken to appoint a substitute in the place of Shri. A. Sreekumar for a period of two years.

**Item No. 153.32. Proposals for a centralised system for undertaking sweeping and cleaning of all buildings in the Campuses.**

Considered along with Item No. 153.04.

Item No. 153.33. Kerala Sastra Sahitya Parishad - Request for co - sponsoring of Seminar on Science & Technology- Regarding.

The Syndicate considered the request of the President, Kerala Sastra Sahitya Parishad, that the University might co-sponsor the Seminar on Science and Technology Education in Kerala with special reference to the Cochin University, the Parishad proposed to organize.

Resolved that the Kerala Sastra Sahitya Parishad be given a donation of Rs. 2500/- for conducting the proposed seminar.

(Ac.)

Item No. 153.34. Recommendations of the Standing Committee on Staff and Establishment on demand for additional staff-reg.

Considered along with Item No. 153.04.

The Syndicate adjourned at 5 P. M. to meet again at 10 A. M. on 22-7-1981.

Sd/-

University Buildings,  
Tripunithura,

REGISTRAR

Dated : 10th July 1981.

# ANNEXURE I

Annexure to item No. 153.09

Name of the Candidates (Part time / Full time) Name of the Guide	Topic of research	Dept. through which registration is sought	Remarks of the Doctoral Committee
1. M. K. Kandoran (Part-time) Dr. C. T. Samuel, Supervisor	Transfer of Technology in the fish curing Indu- stry in India	Dept. of Industrial Fisheries Centre of research CIFT)	Recommended for regi- stration has to appear for a qualifying examination
2. Paul P. O. (Part time) (Dr. K. G. Nair, Supervisor)	Cross Polarisation effect of metallic flan- ges on primary horn feeds and secondary reflectors	Department of Physics	Recommended for regi- stration
3. Gopinathan. V. B. (Full time) (Dr. K. G. Nair, Supervisor)	Cross polarisation eff- ects on plane c. m. waves due to scatter- ing from corrugated surfaces.	Department of Physics	- do -

Contd...

4. Shally Joseph (Full time) (Prof. P. R. Poduval, Supervisor)	A study of the socio- psychological back- ground, behavioral traits and value orien- tation of entrepreneur managers with special reference to small scale industrial units in Ernakulam region.	School of Management Studies	- do - candidate required to prepare two term papers and submit to the guide and the candidate may undergo training in rese- arch methodology.
5. Pereira Gladys Myrtle (Full time) (Prof. P. R. Poduval, Supervisor)	Role of environmental pressure groups in decision making by business organisation with special reference to Kerala.	- do -	Recommended for regi- stration. Candidate requi- red to submit two term papers to the guide.

**ANNEXURE II**

Annexure to item No. 153.12

**Members of the Board of Studies in Electronics and Communication Systems.**

1. Dr. K. P. Rajappan  
Professor of Electrical Engineering  
Indian Institute of Technology  
MADRAS - 600 036.
2. Dr. V. P. Kulkarni  
Head, Electronics Group  
Vikram Sarabhai Space Centre  
TRIVANDRUM - 695 022.
3. Dr. Wazir Hasan Abdi  
Head of the Department of Mathematics & Statistics  
University of Cochin  
COCHIN - 22.
4. Dr. Sathianandan  
Head of the Department of Physics  
University of Cochin,  
COCHIN - 22.
5. Dr. C. S. Sreedhar  
Department of Electronics  
University of Cochin  
COCHIN - 22.
6. Head of the Department of Electronics  
University of Cochin,  
COCHIN - 22.
7. Dr. V. P. Bhatkar  
General Manager  
Technology Development,  
Keltron  
TRIVANDRUM.

8. Shri. P. K. Koshy  
Manager  
O/E/N India Ltd.,  
MULANTHURUTHY
9. Dr. M. Satyam  
Professor of Electronics  
ECE Department  
Indian Institute of Science  
BANGALORE.

#### Members of the Board of Studies in Applied Chemistry

1. Prof. A. R. Vasudeva Murthy  
Dept. of Inorganic & Physical Chemistry  
I. I. Sc., Bangalore.
2. Dr. J. C. Kuriakose  
Prof. of Chemistry, I. I. T., Madras.
3. Dr. A. V. Rama Rao  
Deputy Director, NCL, Poona - 8.
4. Dr. Swaminathan Sivaram  
Principal Research Officer, Research Centre, I. P. C. L.  
Baroda - 391 346.
5. Dr. S. B. Rao  
Managing Director, Navaratna Pharmaceutical Laboratories  
P. B. No. 113, Cochin - 2.
6. Dr. R. S. Bhute  
Propellant Division, VSSC, Thumba, Trivandrum-695 022.
7. Dr. A. I. Jose  
Head of the Division, of Soil Science & Agricultural  
Chemistry, College of Horticulture, Vellanikkara-680 654.

8. Dr. D. Joseph Francis  
Prof. & Head of the Dept. of Polymer Science &  
Rubber Technology,  
University of Cochin.
9. Dr. P. Madhavan Pillai  
Reader, Dept. of Applied Chemistry, University of Cochin.
10. Dr. Paul. A. Vatakencherry  
Prof. & Head of the Dept. of Applied Chemistry  
University of Cochin.

#### Members of the Board of Studies in Mathematics and Statistics

1. Dr. Wazir Hasan Abdi  
Professor and Head  
Dept. of Maths. & Statistics  
University of Cochin, Cochin - 22.
2. Dr. R. N. Pillai  
Reader, Dept. of Maths. & Statistics  
Cochin - 22.
3. Dr. T. Thrivikraman  
Reader, Dept. of Maths. & Statistics, Cochin - 22.
4. The Head of the Dept. of Mathematics  
University of Kerala, Kariavattom, Trivandrum  
(Dr. Y. Sitaraman).
5. The Head of the Dept. of Mathematics  
University of Calicut, P. O. Calicut University  
(Dr. Kumarankutty).

6. The Head of the Dept. of Statistics  
University of Kerala, Kariavattom, Trivandrum  
(Shri. P. S. Janardanan Nair.)
7. Dr. P. U. Surendran  
Professor of Statistics, College of Veterinary and  
Animal Sciences,  
Kerala Agricultural University, Mannuthy P. O. Trichur.
8. Dr. P. S. Rema  
Professor, Ramanujam Institute for Advanced Study in  
Mathematics,  
University of Madras, Madras - 5.
9. Dr. M. N. Channabasappa  
Professor and Head of the Dept. of Mathematics  
Karnataka Regional Engineering College  
P. O. Srinivasnagar, Suratkal (S. K.), Karnataka State.
10. Professor K. Balagangadharan  
School of Mathematics, Tata Institute of Fundamental  
Research  
Homi Bhabha Road, Bombay - 400 005.

**ANNEXURE III**

Annexure to item No. 153.19.

<i>Item</i>	<i>Firms selected</i>	<i>No. required</i>	<i>Cost ex. S. T. etc.</i>
1. Vertical Drilling Machine	M/s. Batliboi and Co., Ltd., Cochin - 16.	1	11,850/-
2. Surface Grinder	-do-	1	29,885/-
3. Hack Saw machine	-do-	1	16,911/-
4. Drying Chamber	M/s. Madras Metallurgical Service, Madras.	1	1,760/-
5. Ultrasonic Detection Device.	-do-	1	<u>24,500/-</u>
Total ex. ST etc.			Rs. <u>84,906/-</u>

## UNIVERSITY OF COCHIN

### Minutes of the 153rd (adjourned) meeting of the Syndicate held on 22-7-1981

Place of meeting : University Buildings,  
Tripunithura.

Time : 10 A.M.

#### *Members present:*

1. Dr. M. V. Pylee,  
Vice-Chancellor (in the Chair)
2. Dr. K. I. Vasu  
Pro-Vice-Chancellor
3. Shri. V. Aravindakshan Nair
4. Shri. C. Cheriyan
5. Shri K. Govinda Pillai
6. Shri. S. C. S Menon
7. Dr. M. P. Parameswaran
8. Dr. N. Parameswaran Nair
9. Shri. M. K. Raghavan
10. Dr. K. Sathianandan
11. Dr. Paul A. Vatakencherry
12. Prof. P. S. Velayudhan

Item No. 153.35. Report of the Vice-Chancellor on important developments in the University since the last meeting of the Syndicate.

- a) The U. G. C. has intimated its pattern of assistance to Universities for the VI Plan period.
- b) The U. G. C. Visiting team is expected at Cochin

by September. Pending the team's visit and its recommendations, the University might identify its requirements of a general and urgent nature which could be directly taken up with the Chairman, U. G. C. for immediate consideration. The Standing Committee of the Syndicate on Planning could meet early and formulate proposals of this nature for discussion with the Chairman of the U. G. C. in August.

Arising out of the V. C's report, resolved that a meeting of the Standing Committee on Planning be convened at 3 P. M. on 25-7-1981 to formulate the University's general requirements of an urgent nature for submission to the Chairman, U. G. C.

c) The U. G. C. has intimated the University of the allotment of a sum of Rs. 50/- lakhs as assistance for the Engineering and Technological branches of studies at this University. This would help strengthen existing courses in these areas and finance new courses of study and research.

Item No. 153.36. Inspection Report for the year 77-78  
Inspection by Accountant General -  
First Replies - Furnishing of.

The Syndicate considered the Inspection Report of the Accountant General in respect of the accounts of the University for the year 1977-78 and the replies thereto, along with the recommendation of the Standing Committee on Finance and Purchase.

Resolved that the replies to the Accountant General's report of the Accounts of the University for the year 1977-78 be approved.

Resolved further that the U. G. C's assistance under the Scheme of Visiting Professors be utilized to the utmost so

that appointment of Guest Lecturers can be reduced to the minimum.

(Fin.), (Ac.A)

Item No. 153.37. Upgradation of the post of Teaching Assistant to that of Lecturer - Shri. Oommen Mathew - School of Management Studies - Consideration of.

Dropped

Item No. 153.38. Adjudication of Ph. D. Thesis submitted by Shri. N. Subhash - Appointment of Examiners - reg.

The Syndicate considered the appointment of examiners for adjudication of the Ph. D. Thesis entitled "Development and Parametric Studies of Pulsed Nitrogen and Q-Switched Nd: Glass Lasers and some of their applications" submitted by Shri. N. Subhash in the Dept. of Physics, along with the panel of experts forwarded by the Supervising Teacher, the Head of the Dept. of Physics.

Resolved that Nos. 1 & 3 of the panel of examiners be appointed as external examiners for adjudicating the thesis and that Sl. No. 1 be the Chairman.

Resolved further that expert No. 6 be on reserve.  
(Exam.)

Item No. 153.39. Study Leave - Dr. K. Dheverdan, Dept. of Marine Sciences - Request - Consideration of.

Deferred for consideration at the next meeting of the Syndicate.

Item No. 153.40. Development of the University as a full-fledged Technical University - Consideration of Expert Committee - Reg.

The Syndicate considered the appointment of an expert committee for preparing a plan for the development of the Cochin University into a full-fledged science and technological University, along with the terms of reference for the committee prepared by the Syndicate sub-committee set up for the purpose.

Resolved that an expert committee consisting of Dr. S. Dhawan, Dr. Nag Chaudhuri, Dr. M. M. Sharma, Dr. P. K. Ayyengar and Shri. P. K. Umasankar be constituted with the following terms of reference and that the Committee be requested to submit its report within a period of 3 months.

1. To prepare a plan and a strategy for the development of the University consistent with the declared objectives of the University set out in the Preamble of the Cochin University Act 1971, and to make recommendations on the following:

- a. The Academic areas in which the University might appropriately concentrate its attention;
- b. The type of courses the University should organise;
- c. The order of priority as regards the starting of new courses, taking into account the present stage of development of the various departments of the University and their infrastructure in terms of personnel and equipment; and
- d. The administrative structure appropriate to the strategy of action proposed.



2. To relate the objectives of the University to the overall needs of the State in terms of trained manpower in the field of Applied Science and Technology.

3. To recommend measures required for transforming the University into a full-fledged centre of higher education and research with particular emphasis on Science and Technology.

4. To indicate the possible sources of assistance for implementing the plan of action proposed.

Resolved further that the members of the Committee be paid TA & DA admissible to officers of the University.

**Item No. 153.41. Appointment of Legal Advisor - consideration of.**

The Syndicate considered the question of extending the term of appointment of Shri. C. K. Sivasankara Panickar, Legal Advisor to the University, and his request for engaging a junior Counsel of his choice on a remuneration of Rs. 300/- p. m. to assist him in his work.

Resolved :

1. Shri. C. K. Sivasankara Panicker's term of appointment as Legal Advisor be extended for one year w. e. f. 6-7-1981 on the existing terms and conditions.

2. He be permitted to engage a junior Counsel of his choice to assist him in his work.

3. The junior Counsel so engaged be paid a monthly remuneration of Rs. 300/-

(Ad.)

**Item No. 153.42. "DST sponsored research project - Photo - conductivity Luminescence - Thermal Lens and two Photon Studies using Dye Lasers".**

The Syndicate considered the implementation of a 3 year research project sanctioned by the Dept. of Science & Technology of the Government of India entitled "Photo-Conductivity, Luminescence Thermal Lens and two Photon studies using Dye Lasers" under the chief investigatorship of Dr. K. Sathianandan, Head of the Department of Physics, along with the recommendation of the Standing Committee on Academic Matters.

Resolved that the research scheme be implemented in the University at a total cost of Rs. 19,12,350/- as per terms and conditions as in *Annexure IV*

Resolved further that the Vice-Chancellor be authorised to approve the purchase of items of equipment for the scheme sanctioned by the Govt. of India.

(Ac.)

**Item No. 153.43. Medical expenses - Reimbursement of.**

Deferred

(Ad.B)

**Item No. 153.44. Research Scheme "Development of Microwave non - destructive test facility for testing curing state and other parameters of solid rocket propellants - Implementation of-reg.**

The Syndicate considered the implementation of 3 year research project sanctioned by the Indian Space Research Organization entitled "Development of Microwave non-destructive test facility for testing curing state and other Parameters of solid rocket propellants" under the principal investigatorship of Dr. K. Gopalakrishnan Nair, Head of the Dept. of Electronics and Communication Systems, along with the recommendation of the Standing Committee on Academic Matters.

Resolved that the Scheme be implemented in the University at a total cost of Rs. 7,55,880/- as per terms and conditions stipulated by the ISRO as in *Annexure V*.

Resolved further that the Vice-Chancellor be authorised to approve purchase of items of equipment sanctioned by the ISRO for the project.

(Ac.)

Item No. 153.45. Rules for the award of University Merit Scholarships for various courses under the University - Reg.

The Syndicate considered the question of revising the rules for the award of University Merit Scholarships along with the recommendation of the Standing Committee on Academic Matters.

Resolved that proposals for revision of the existing rules be invited from Heads of Teaching Departments and the same be placed before the Syndicate for consideration.

(Ac.)

Item No. 153.46. Works-Construction of a new hostel in the Trikkakara Campus for men students - Reg.

The Syndicate considered the action of the Vice-Chancellor in having entrusted with M's. Associated Architects, Cochin-11 the work of preparing the detailed drawing, and the plinth area cost of the proposed hostel for men students at Trikkakara Campus for which the U. G. C. has sanctioned Rs. 12.50 lakhs as its share:

Resolved:

a) The action of the Vice-Chancellor be ratified.

b) Agreement be executed with M/s. Associated Architects for preparing the detailed drawing and providing the plinth area cost of the hostel on a fee of 1½% of the estimated cost of the building.

c) The sketch plans submitted by the Architect be approved.

d) The work of preparing the detailed estimate for the work be also entrusted with the firm on terms to be negotiated.

e) The work be tendered at the earliest.

(Pl.)

Item No. 153.47. Works - Maintenance of University Road at Trikkakara-tenders acceptance of.

The Syndicate considered the proposal of the University Engineer to entrust the maintenance work of the University Road extending from the National Highway to the Engineering Unit/University Library junction to the lowest tenderer at 66% above the estimated amount of Rs. 58,466/-.

Resolved that the lowest tenderer, Shri P. Vijayakumar, Sumalayam, Eloor East, be called for further negotiations in the matter.

(Pl.)

**Item No. 153.48. Works-Electrification of newly constructed 2nd floor of extension to School of Management Studies building - Reg.**

The Syndicate considered the proposal of the University Engineer for entrusting the work of electrification of the newly constructed 2nd floor of the extension to School of Management Studies building estimated at Rs. 19,642/- with the Kerala State Construction Corporation on the usual terms of actuals plus 20% overheads and margin.

**Resolved :**

a) The work of electrification of the 2nd floor of the extension to the School of Management Studies building be entrusted with the Kerala State Construction Corporation on the usual terms of actuals plus 20% overhead and margin.

b) The materials for the work be purchased directly by the University and supplied to the KSCC.

(Pl.)

**Item No. 153.49. Furniture for the extension building to the School of Management Studies-Sanction for purchase-Reg.**

The Syndicate considered the estimate of Rs. 40,875/- forwarded by the University Engineer for providing the class rooms of the extension building of the School of Management Studies nearing completion with furniture for 135 students and his action in having invited quotations for the same in anticipation of sanction.

**Resolved :**

a) The estimate of Rs. 40,875/- for the following items of furniture be approved.

- |  |          |
|--|----------|
| i) Teakwood arm chair                              | 135 Nos. |
| ii) Teakwood class room table                      | 135 Nos. |
| iii) Teakwood class room table-<br>trapezium shape | 12 Nos.  |

b) The action of the University Engineer in having invited quotations be ratified.

(Pl.)

**Item No. 153.50. Minutes of the meetings of the Standing Committee on Works - Consideration of - Reg.**

The Syndicate noted the Minutes of the meetings of the Standing Committee on Works held on 9-7-1981 and 14-7-1981 as in Annexure - VI and resolved:

1) The Ministry of Steel and Industries be approached for adequate supply of steel for the University's construction works.

2) Steps be taken for constructing a five storey building as an adjunct to the Ship Technology building for meeting the space requirements of the Engineering and Technology Divisions of the University, and assistance for the construction be sought from agencies such as the UGC and the State's Department of Science and Technology.

3) The Engineering Unit be reorganised so as to make it capable of effectively supervising the construction and maintenance works on hand, with the powers and responsibilities of its officers more clearly defined.

4) The present Work Superintendents Grade I and Grade II be re-designated as Overseer Grade I and Overseer Grade III.

5) Six additional temporary posts of Overseer Grade III be created in the scale of pay of Rs. 350-580 for ensuring effective on-the-spot supervision of maintenance and construction works, and the posts be filled as per actual requirements to be assessed from time to time, and a ratio of 1:2:3 be maintained among Overseers, as Grade I, II & III.

6) (a) The existing post of University Engineer be in the grade of Superintending Engineer, and the experience required of the post be 5 years as Executive Engineer in building construction.

(b) The post of University Engineer already advertised as reserved for SC/ST communities in the grade of Executive Engineer be treated as supernumerary post specially created for providing representation to the reserved communities.

(c) Two additional posts of Assistant Engineer be created temporarily until the completion of the ongoing construction works and the ones proposed.

(d) One additional post of Assistant Executive Engineer be created.

7) One post of Technical Officer be created in the office of the University Engineer in the scale of pay of Rs. 750/- 1450 to be in charge of technical work in the office, and the qualifications for the post be a degree in Engineering with some experience in the field.

8) (a) Steps be taken for constructing an additional storey to the present Women's Hostel over the area it has only one floor now.

(b) Leak proofing work over the remaining portion of the roof of the Women's Hostel be undertaken as an urgent item of work.

9) Steps be taken to install an additional transformer at the Thrikkakara Campus in order to ensure the uninterrupted supply of electricity.

10) The general quality of wood used for construction be ensured through procurement of the same from FIT Ltd., Alwaye.

11) The powers of the University Engineer be enhanced to the extent provided below:

a) He shall have powers to undertake minor works costing Rs. 500/- or less for which administrative sanction has been accorded without inviting quotations.

b) The imprest money sanctioned to the University Engineer be enhanced to Rs.3,000/-

(Pl. & Ad)

Item No. 153.51. Minutes of the meeting of the Planning Committee held on 8-7-1981 - Consideration of.

Deferred for consideration at the next meeting.  
(Pl.)

Item No. 153.52. Making Teakwood veneer partitions for providing air conditioning of instruments at GLC room in the Applied Chemistry Department at Thrikkakara.

Deferred for consideration at the next meeting.

(Pl.)

Item No. 153.53. Agenda of the meeting of the Senate scheduled for 29-7-1981 - consideration of.

The Syndicate discussed the items on the agenda of the ensuing Senate and resolved:

- a) the answer to the questions put by members be approved.
- b) the following amendments to Statute 208 of the First Statutes 1980 - Absence at a Convocation be recommended for the consideration of the Senate.
  - i) "That in Statute 208. *Absence at a Convocation.* - (1) the words "shall not be admitted to his degree at that Convocation, and shall be required to apply again, paying the prescribed fee for admission to his degree at a subsequent convocation," occurring in lines 3 and 4 be deleted, and the same be substituted with the following: "shall be entitled to admission to the degree in absentia on payment of the difference between the fee prescribed for admission to the degree in person and in absentia, provided that a request to that effect is made to the Registrar not later than ten days before the date fixed for the Convocation, together with a late fee of Rs. 10/-."
  - ii) "That in Statute 208 (2) the first word in the first line 'Such' be deleted and the letter 'c' of the next word beginning with 'c' be capitalized."

Item No. 153.54. Panel of paper setters and examiners - M. Sc. in Industrial Fisheries - approval of.

The Syndicate considered the panel of examiners and paper setters for M. Sc. in Industrial Fisheries forwarded by the Chairman, Board of Studies in Industrial Fisheries.

Resolved that the panel of examiners and paper setters for M. Sc. in Industrial Fisheries, forwarded by the Chairman, Board of Studies in Industrial Fisheries, be approved.

(Exam.)

The meeting came to an end at 3.30 P. M.

University Buildings,  
Tripunithura,  
Dated: 27th July 1981.

Sd/-  
REGISTRAR

**ANNEXURE IV**

Annexure to item No. 153.42

No. HCS/DST/802/79

**GOVERNMENT OF INDIA**

**DEPARTMENT OF SCIENCE AND TECHNOLOGY**  
**TECHNOLOGY BHAVAN**  
**NEW MEHRAULI ROAD**  
**NEW DELHI - 110 016.**  
 Dated the July 9, 1981.

To

The Registrar  
 University of Cochin  
 Hill Palace  
COCHIN - 682 301.

SUB: Funding of Research Programme out of General Research Fund " Photo - Conductivity, Luminescence. Thermal Lens and Two Photon Studies Using Dye Lasers. "

Sir,

I am directed to refer to your letter No. AC / A - Sch dated 7-5-81 and to convey the sanction of the President to the approval of the project entitled "Photo-Conductivity, Luminescence Thermal Lens and Two Photon Studies Using Dye Lasers." Under the guidance of Prof. K. Satyanandan, et. al. Deptt. of Physics, University of Cochin, Cochin-22, at a total cost of Rs. 19,12,350/- (Rs. Nineteen lakhs Twelve thousand three hundred and fifty only). The item of expenditure for a period of 3 years has been approved, are given below:-

Staff Salary	Rs. 1,60,800
Permanent Equipment	
As per list enclosed	Rs. 16,14,550

Supplies & Materials	Rs. 85,000
Contingencies	Rs. 30,000
Travel	Rs. 22,000
<b>TOTAL</b>	<b><u>Rs. 19,12,350/-</u></b>

2. The sanction of the President is also conveyed to the payment of a sum Rs. 16,69,550 (Rupees Sixteen lakhs, sixty nine thousand and five hundred fifty only) as the first instalment of the grant for the year 1981-82 as per details given below :-

Staff Salary	Rs. 32,000
Permanent Equipment	Rs. 16,14,550
Supplies & Materials	Rs. 15,000
Contingencies	Rs. 5,000
Travel	Rs. 3,000
<b>TOTAL</b>	<b><u>Rs. 16,69,550</u></b>

3. The following staff has been agreed to for the duration of the project :

No.	Designation of the Post	No. of Post	Lum-sum-Salary
1.	Senior Research Associate	One @	Rs. 1600/- Fixed
2.	Senior Research Fellow	Two @	Rs. 800/- ..
3.	Junior Research Fellow	Two @	Rs. 600/600/700
4.	Sanction of the grant is subject to the conditions as detailed in Annexure - I.		

5. On the basis of the terms and conditions given in Annexure - I, action is being taken for the drawal of sanctioned amount as the grant to you for the period mentioned in para - 2, above.

6. The expenditure involved is debitable to Demand No. 100 Department of Science & Technology, Major Head- 279-C-Scientific Services & Research, C-2-Assistance for other Scientific Research; C-e (1) - Assistance to other Scientific Bodies, C-2 (1) (16) - General Research Fund (Non-Plan Expenditure) for the year 1981-82.

7. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Dept. of Science & Technology vide their Dy. No. 4649/- IFD/81 dated 2-7-1981.

8. The major equipment facilities being procured under this project would be treated as central facilities that would be available to all scientists in that area for their research work.

9. The undersigned has no reason to believe that grantee institution is involved in corrupt practices.

10. The amount in question will be drawn by the Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to the Registrar, University of Cochin, Cochin - 682 301.

11. The grantee is not required to execute a bond.

Yours faithfully,

Sd/-

(JOSEPH. P. JOHN)

PRINCIPAL SCIENTIFIC OFFICER.

Copy to: Vice-Chancellor, Cochin University, Cochin-682 301  
with ref. to the letter No. Ac/A-Sch.7/(5)/81.

Sd/-

(JOSEPH. P. JOHN)

PRINCIPAL SCIENTIFIC OFFICER.

No. HSC/DST/802/79

# List of equipments

1. Argon Ion Laser
2. Dye Laser system
3. He-Cd Laser
4. Lock-in-amplifier & related electronics
5. 1 HGZ Textronic Oscilloscope
6. Dual Channel chart recorder
7. F-P Etalon
8. Keithly Electrometer
9. D. C. Microvoltmeter
10. PMT & associated electronics (1)
11. Photodiode (2)
12. Wavelength Scan drive (to be fabricated)
13. Vapour Cell-12
14. Crystal growth fabrication
15. Rotary pump, diffusion pumps, etc.

**DEPARTMENT OF SCIENCE & TECHNOLOGY  
(GENERAL RESEARCH FUND)  
TERMS & CONDITIONS OF THE GRANT**

Approval of the research proposal and the grant being released is for the specific project sanctioned and should be exclusively spent on this project within the stipulated time. The Institute is not permitted to seek or utilise funds from any other organisation (Government, Semi Government Autonomous or Private) for the work that is supported under this scheme. Any unspent part of the amount sanctioned would be surrendered to the Government of India and carry forward of funds to the next financial year for utilisation for the same project may be considered only with the specific approval of the Department of Science & Technology

(ii) For permanent, semi-permanent assets acquired solely or mainly out of grant; an audited record in the form of register in the prescribed proforma enclosed shall be maintained by the Institute. The term "assets" means (i) immovable property and (ii) movable property of a capital nature, where the value exceeds Rs. 1,000/-. The grant will not be utilised for construction of any building unless specific provision is made for this purpose.

(iii) All the assets acquired from the grant will be the property of Government of India and should not without the prior sanction of the Department of Science & Technology be disposed off, or encumbered or utilised for purpose other than those for which the grant has been sanctioned.

(iv) At the conclusion of the project, the Government of India will be free to sell or otherwise dispose off assets which are the property of Government. The Institute shall render to Government necessary facilities for arranging the

sale of these assets. The Govt. of India has the discretion to gift the assets to the Institute if it considers it appropriate.

(v) The Institute will furnish half-yearly progress report of the work on the project (with three copies) by 1st September/ 1st February each calendar year. In addition, appropriate persons may visit the Institute periodically for ascertaining the progress of work and resolving any difficulties that might be encountered in the course of implementation. During the progress of the project the Institute will provide all facilities to the Scientists/specialists by way of accommodation, etc. On completion of the project 5 copies of a consolidated report of the work done on the subject shall be sent to the Financial Adviser, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi-110 016.

(vi) The Institute is required to send to the Financial Adviser, Department of Science & Technology at the end of each financial year as well as at the time of seeking further instalments of the grant a list of assets referred to in para (ii) above.

(vii) The Institute will furnish to the Financial Adviser, Department of Science and Technology a statement of accounts along with the progress report, at the time of seeking further instalment of the grant.

(viii) The Institute will furnish to the Financial Adviser, Department of Science & Technology, utilisation certificate and an audited statement of accounts pertaining to the grant within six months following the end of each financial year.

(ix) The Comptroller and Auditor General of India at his discretion, shall have the right of access to the book



and accounts of the Institute for the grant received from the Government.

(x) The Institute will maintain separate audited accounts for this project. It is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest thus earned, should be reported to the department of Science and Technology. The interest thus earned will be treated as a credit to the Institute to be adjusted towards further instalment of the grant.

(xi) Sale proceeds, if any, as a result of the development of the project arising directly from funds granted under the scheme shall be remitted to the Government of India. The Government of India may at its discretion allow a portion of such receipts to be retained by the Institute.

(xii) The know-how generated from the project would be the property of the Government of India and any receipts by way of sale of know-how royalties etc. shall accrue to the Government of India. The Government of India may, in its discretion, allow a portion of such receipts to be retained by the Institute.

(xiii) The Government of India will have the right to call for drawing specification and other data necessary to enable the transfer of know-how to other parties and the Institute should supply all the needed information at the request of the Financial Adviser, Department of Science and Technology.

(xiv) The Institute may not entrust the implementation of the work for which the grant is being sanctioned to another institution and to divert the grant receipts as assistance to the latter institution. In case the Institute itself is not in a position to execute or complete the project

it may be required to refund forthwith the Government of India the entire amount of grants-in-aid received by it. In exceptional cases, this conditions may be relaxed by the Government of India.

(xv) The staff that may be employed for the project by the Institution are not to be treated as employees of the Government of India and the employment of such staff at the time of completion or termination of the project, will not be the concern/responsibility of the Government of India. They will be subjected to administrative control and service rules as applicable (leave, TA and DA, etc) of the Institute where the project is based. For the expenditures implementation of the research Projects; the investigator incharge will take the assistance of the Institutes concerned in the Process of selection and appointment of staff and payment to them. In case of any special posts, rates of pay may be decided by the Department of Science & Technology.

(xvi) The High level committee of Scientists reserve the right to terminate the grant at any stage if it is convinced that the grant has not been properly utilised or appropriate progress is not being made.

(xvii) The project will become operative with effect from the date on which the grant is received by the Institute. The date will be intimated by the Institute to the sanctioning authority.

(xviii) If the investigator to whom a grant for a project has been sanctioned leaves the institution where the project is based, the investigator should submit a complete and detailed report of the work done by him on the project till the date of relief.

### PROFORMA FOR MAILING ASSETS

Assets acquired wholly or substantially out of Government Grants. Register maintained by grantee Institution.

Name of the Sanctioning Authority

Sl. No.	Name of the grantee institution	No. and date of the sanction	Amount of the sanctioned grant	Brief purpose of grant	Whether any condition regarding the right of ownership of Govt. on the property or other assets acquired, out of the grant was incorporated in the grant in-aid sanction.	Particulars actually created or acquired
---------	---------------------------------	------------------------------	--------------------------------	------------------------	---	--

1	2	3	4	5	6	7
Value of the assets as on	Purpose for which utilised at present	Encumbered or not.	Reasons if encumbered	Disposed off or not	Reasons and authority if any for disposal	Amount Realised or Disposed
8.	9.	10.	11.	12.	13.	14.

### ANNEXURE V

Annexure to item No. 153.44

#### EMBLEM

Dr. S. C. Chakravarthi  
Secretary, RESPOND-PB

Ref: 10/3/76

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
ISRO HEADQUARTERS  
CAUVERY BHAVAN  
DISTRICT OFFICE ROAD  
BANGALORE 560 009 INDIA.

Telegram : ISRO  
Telex : 0845.499 : 0845-326  
Telephone : 27371  
July 14, 1981.

Dear Dr. Nair,

This has reference to your research proposal entitled "Development of Microwave non-destructive test facility for testing curing state and other parameters of solid rocket propellants" submitted for the consideration of ISRO funding.

2. I am directed to inform you that the proposal has been approved for ISRO support. The provision of budget under different budget heads for three years of the project is shown in the table attached. An amount of Rs. 5,15,700 is being released as amount required for the first year of the project. You are kindly requested to inform the undersigned about the starting date of the project.

3. The ISRO funding will be subject to the usual terms and conditions as seen by you while signing the agreement for receiving such grants. We mention a few important conditions below for your ready information and timely action :

3.1 You will be required to submit two copies of the accounts statement before the end of every operational year of the project. The expenditure statement should conform to the budget heads which have been approved by ISRO and given in the attached table. Later, when ready, you will be required to submit the accounts duly authenticated by an approved auditor. The audited accounts statement should be addressed to the Pay & Accounts Officer, Department of Space (DOS) with a copy to the undersigned for the information of ISRO HQ.

3.2 You will be required to submit four copies of yearly reports (format attached) indicating the progress of the work accomplished. Two copies of the report should be addressed to the Director (Attn: Sri. R. Aravamudan) VSSC, Trivandrum and the other two to the undersigned for the information of ISRO HQ.

3.3. You will also be required to submit two copies of yearly funds utilisation certificates (format attached) to the Under Secretary, Department of Space (DOS), Cauvery Bhavan, Bangalore 560 009.

3.4. As this is a project in which VSSC, SAC and SHAR Centres of ISRO have interest, it has been suggested to constitute a small ISRO Team to interact with the project group on all technical aspects of its implementation.

4. A separate sanction order is being issued by DOS for the release of the amount of Rs. 5,15,700 meant for the first year of the project followed by the release of funds addressed to the Registrar, Cochin University, Cochin under intimation to you. For the release of the above

amount please send a bill (format attached) duly signed to the Pay & Accounts Officer, DOS at your earliest.

With regards,

Yours sincerely,

Sd/-

SC Chakravarty

Dr. K. G. Nair,  
Prof. & Head,  
Dept. of Electronics & Commn. Systems,  
University of Cochin,  
Cochin 682 022.

cc: Chairman, ISRO

Director (Attn. Sri. R. Aravamudan) VSSC, Trivandrum.  
Sri. R. Aravamudan, VSSC, Trivandrum.  
Sri. M. R. Kurup, Director, C & M Group, VSSC  
The Registrar, University of Cochin, Cochin.

**Provision of budget for the project "Development of a microwave non-destructive test facility for testing curing state and other parameters of solid rocket propellants"**

<i>Sl. No.</i>	<i>Item</i>	<i>I Year</i>	<i>II Year</i>	<i>III Year</i>	<i>TOTAL</i>
<b>1. Staff salary</b>					
1.1 Research Fellow (1) (@ Rs. 600/650/700 p. m. •		7,200	7,800	8,400	23,400
<b>1.2 Technical Staff</b>					
1.3 Technician (@ Rs. 500-30-560)		6,000	6,360	6,720	19,080
1.4 Lab. Asst. (@ Rs. 375-25-425)		4,500	4,800	5,100	14,400
2. Microwave sweep generator HP 8620C, plug in unit 86290B, power meter TWT amplifier, WG components and accessories	4,50,000	1,50,000	—	6,00,000	
3. Consumables & Supplies Micro-wave absorbers, plywood turn table, accessories	30,000	10,000	10,000	50,000	
4. Travel	8,000	8,000	8,000	24,000	

5. Other project costs (contingent expenses, books, reprints, electrical charges, typing charges etc.)	10,000	10,000	5,000	25,000	
	5,15,700	1,96,960	43,220	7,55,880	

Budget provision has been made at revised rates of ISRO Fellowships, but actual payment at these rates will come to effect after the issue of formal DOS orders for this revision.

( True copy )

**ANNEXURE VI**

Annexure to item No. 153.50

**Minutes of Meeting of the works Committee of the Syndicate held at 11 a.m. on 9-7-1981**

Venue : Office of the University Engineer  
 Present : Dr. K. I. Vasu, Pro-Vice-Chancellor  
 Sri. M. K. Raghavan  
 Dr. P. N. Krishnan Nambisan  
 Sri. A. Aravindakshan Nayar

**I. Progress of Work :**

The Committee reviewed the progress so far made in the execution of the ongoing Construction Works viz., Administrative Office Block, Common Facility Centre, Gymnasium and the Ship Technology Buildings.

The Committee observes that the works have not progressed as expected and recommends that expeditious steps be taken to complete these Works within the stipulated period.

One of the difficulties pointed out for the slow progress in the Construction Work is the delay in the supply of steel to the Construction Corporation. Purchase of steel from the open market will result in additional expenditure of at least Rs. 2.30 lakhs by way of difference in price of the steel required for the Construction of Administrative Office Block alone. The Committee therefore recommends that the Vice-Chancellor may take up the matter immediately with the Ministry Steel Industries and other appropriate authorities in order to secure adequate and timely supply of steel to the University.

**II. Space requirements of the Engineering & Technology Division :**

The Committee visited the buildings of the department of Ship Technology. The Committee is of the view that when single storey or shed type buildings are constructed, in future sufficient foundation should be laid for making it possible to construct more floors as and when required. The Committee therefore recommends that:

1. The proposals for the Ship Technology Department for the construction of one more shed type Laboratory building similar to the one already constructed may not be approved.
2. The original proposal prepared for the Construction of a five storey building with provision for Lab space in the Ground floor be implemented in stages as an extension to the east of the present Ship Technology Building in order to meet the space requirements of all the Engineering & Technology Divisions.
3. Steps be taken to get possible financial assistance from the State Department of Science and Technology for the above Construction Work.

**III. Re-organization of the University Engineering Unit**

The Committee considered the proposals presented by the University Engineering Unit for the efficient functioning of the Engineering Unit. It was suggested that it may be considered in detail at the next meeting of the Committee. The next meeting was proposed to be held at 9 A.M. on 14-7-1981.

The meeting came to an end at 2 P.M.

# **MINUTES OF THE MEETING OF THE WORKS COMMITTEE OF THE SYNDICATE HELD ON 14-7-1981**

Place : Office of the University Engineer  
 Present : 1. Dr. K. I. Vasu  
 2. Sri. M. K. Raghavan  
 3. Dr. P. N. Krishnan Nambisan  
 4. Sri. A. Aravindakshan Nayar

## **I. Re-organization of the Engineering Unit**

The present staff position of the Engineering Unit was evaluated and recommends the following:

The services of 9 Overseers for supervising original works and 3 Overseers for attending to the repair and maintenance work may be required as detailed below for effective supervision. The Committee recommends that Work Superintendents Gr. I and Gr. II be designated as Overseer Gr. I and Gr. III respectively.

### **(a) Original Works:**

<i>Name of the Building</i>	<i>No. of Overseers required</i>
1. Administrative Office Block (Temporary)	2
2. Proposed new Hostel (Temporary)	2
3. Common Facility Centre & Gymnasium (Temporary)	1
4. Proposed new building for the Technology Departments (Temporary)	1
5. Extension to the Marine Science Building for the Industrial Fisheries Dept. & extension to the Hostel etc. (Temporary)	1
6. School of Continuing Education (Temporary)	1

7. Compound wall, Road repairs etc. (Temporary) 1

### **(b) Maintenance and Repair**

Electrical Works	(Permanent)	1
Civil Works	"	1
Water supply, Drainage etc.	"	1
		<u>12</u>

There are at present 6 posts of Overseers. The Committee therefore recommends that (1) 6 additional posts of Overseers Grade III be created temporarily till the construction works are completed.

(2) 2 additional posts of Assistant Engineers be created temporarily till the completion of the construction works.

(3) While taking 12 new work Overseers the suggestion was that all of grade III. This may perhaps effect the efficiency. Therefore it is desirable to maintain a ratio of 1:2:3 of grade I, II & III respectively or a ratio similar to the existing ratio for other categories in the University.

(4) It was also decided to recommend for making the appointments of an University Engineer in the scale of Superintending Engineer. On executive who have put in 5 years of experience in construction should be preferred.

(5) The post of an executive Engineer we are having at present.

(6) Whether the University should have one or two posts of Asst. Executive Engineers is to be decided by the Syndicate.

## **II. Technical Work in the Office**

- (1) One post of Technical Officer in the scale of pay of Rs. 750-1450 be created to be incharge of the technical work in the office.
  - (2) The qualification of the Technical Officer shall be degree in Engineering with experience in the field.
- III. The University Engineer be asked to give detailed notes regarding the powers and functions of each of the functionaries in the Engineering Unit.
- IV. Powers of the University Engineer
- (1) The University Engineer shall have powers to undertake any work costing less than Rs. 500/- without inviting quotations.
  - (2) The Imprest money with the U. E. be enhanced to Rs. 3, 000/-.
- V. Repairs to the Women's Hostel:

*The Committee also recommended that*

- (1) The committee also recommended immediate step should be taken to put a storey also for the Women's Hostel where it remains as a single storey building.
- (2) Leak proofing work be undertaken immediately over the remaining portion of the roof of the women's hostel.

#### VI. General Recommendations:

##### 1. Wood used for construction work

The wood now used in some of the buildings are not found to be of prescribed quality. It is therefore proposed that the University should take steps sufficiently early to procure quality wood preferably from the F. I. T. Ltd., Alwaye.

##### 2. Supply of Electricity

Steps be taken to install one more transformer in the Campus in order to ensure supply of electricity from either of the two transformers.

Sd/-  
Convener,  
Works Committee