

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY



MINUTES OF THE 515th SPECIAL MEETING OF THE SYNDICATE (adjourned on 03.03.2007) HELD ON 10.03.2007

Place of meeting : Administrative Buildings
Kochi - 682 022

Time : 11.00 a.m.

Members present:

1. Prof.(Dr.)P.K.Abdul Azis,
Vice-Chancellor (in the Chair)
2. Dr.N.D.Inasu, Pro-Vice-Chancellor
3. Sri. Alphonse Kannanthanam, M.L.A.
4. Sri.R.S.Sasikumar
5. Sri.S.K.Mohan
6. Prof. (Dr.) P.Sudarsanan Pillai
7. Sri. K. Mohanachandran
8. Sri.N.K.Vasudevan
9. Dr. Joy Job Kulavelil
10. Sri. Zakkariya K.A.
11. Prof. V. Unnikrishnan Nayar
12. Dr. P.S.John

Also present:

Dr.A. Ramachandran,
Registrar.

Before taking up the Agenda Items the Syndicate observed a minute of silence expressing its profound sense of grief at the sad death of students and teachers due to a boat tragedy, in the Thattakkat lake.

The Vice-Chancellor welcomed the new members of the Syndicate, Dr. Joy Job Kulavelil, Adv.K.Mohanachandran and Sri.N.K.Vasudevan and expressed the hope that every one will extend whole hearted support for the growth and welfare of the University.

The Syndicate placed on record its appreciation for the services rendered by the outgoing Members, Prof.B.Suseelan, Sri. Lopus Mathew and Prof. R.Sasidharan.

The request of Dr.K.N.Chandrasekharan Pillai for leave of absence was granted.

The Vice-Chancellor took up the Special Item on the Agenda but he could not proceed as his presentation was disrupted by Dr. Joy Job Kulavelil with a point of order on the propriety of the two members, M/s. R.S.Sasikumar and K.A.Zakkariya, sitting in the Syndicate meeting even after completing their term in the Syndicate. Sri. K.Mohanachandran and Sri. N.K.Vasudevan also stood up supporting the point raised by Dr. Kulavelil. They demanded the chair to send these two persons out of the meeting before proceeding with the Agenda Items. The Vice-Chancellor ruled that the presence of M/s. R.S.Sasikumar and K.A.Zakkariya is in order. The Vice-Chancellor made the following points :-

1. The Government, after issuing the order communicating the nomination of 5 members into the Syndicate, found a legal flaw in the order and withdrew the same forthwith. While nominating 5 new members the Government was under the impression that the tenure of M/s. R.S.Sasikumar and K.A.Zakkariya was over.
2. The Government, in a later order had nominated only three new members namely M/s. Dr.Joy Job Kulavelil, K.Mohanachandran and N.K.Vasudevan.
3. Since a stay from Hon. High Court is in force regarding the termination of Sri.R.S.Sasikumar from the Syndicate, he will continue as member until the court gives a final verdict on the matter.
4. Mr. K.A.Zakkariya's membership, being a tenure appointment as per the Government Order, can continue until 21.05.2007.

In the light of the above points the Vice-Chancellor ruled that M/s. Dr. Joy Job Kulavelil, K. Mohanachandran and N.K.Vasudevan has no right to question the right of two other members in the Syndicate to attend the meeting.

As the above members derive the rights based on the provisions in the Act and as per government orders, the Vice-Chancellor stated that he has no authority to deny the members their right to attend the Syndicate Meeting.

Dr. Joy Job Kulavelil and the two new members did not agree to the ruling given by the Chair and continued their protests and did not allow the chair to take up items on the Agenda.

The Vice-Chancellor urged the members to keep aside the above demand and take up item regarding MHRD fund utilization which has got a time-limit of March 31, 2007. All pleas fell in deaf ears. Dr. Joy Job Kulavelil and others threatened that they will not allow the Syndicate to transact any business.

The Syndicate resolved to engage Sri. M.K.Damodaran, former Advocate General as Senior Counsel to represent the University on the case regarding the termination of Sri. R.S.Sasikumar, which is slated to come up for hearing on 5.3.07.

Dr. Joy Job Kulavelil later wanted Mr. K.A.Zakkariya to go out of the Syndicate as he is no longer a member. M/s. Mohanachandran and Vasudevan also demanded Mr.Zakkariya not to cling to the membership and leave the Syndicate meeting.

M/s. R.S. Sasikumar and K.A.Zakkariya were given a chance to explain their position and they re-iterated their right to attend the meeting of the Syndicate.

The Chair again appealed to the members to accept the legal position and requested them to co-operate in conducting the business scheduled for the day. Other members also wanted the meeting to proceed with the Agenda. The debate continued up to 1.00 p.m.

In between the Chair placed the matter of re-constituting the various Standing Committees and the Syndicate resolved to re-constitute the committees as indicated below :-

Staff & Establishment Committee

1. Sri.K.Mohanachandran (Convenor)
2. Sri. C.M.Dinesh Mani, M.L.A.
3. Sri. Alphons Kannanthanam, M.L.A.
4. Prof.K.N.Chandrasekharan Pillai
5. Sri.N.K.Vasudevan
6. Dr.P.S.John
7. Sri.K.A.Zakkariya
8. Sri.R.S.Sasikumar

Academic Matters

1. Dr.V.Unnikrishnan Nayar (Convenor)
2. Sri. C.M.Dinesh Mani, M.L.A.
3. Sri. Alphons Kannanthanam, M.L.A.
4. Prof. K.N.Chandrasekharan Pillai
5. Prof. P.SudarsananPillai
6. Dr.P.S.John
7. Director of Technical Education
8. Sri.K.A.Zakkariya
9. Sri.R.S.Sasikumar

Finance and Purchase

1. Sri. Alphons Kannanthanam, M.L.A. (Convenor)
2. Sri. C.M. Dinesh Mani, M.L.A.
3. Dr. Joy Job Kulavelil
4. Sri. N.K.Vasudevan
5. Sri. R.S.Sasikumar
6. Dr. V. Unnikrishnan Nayar
7. Dr. P. Sudarsanan Pillai
8. Sri. K.A. Zakkariya
9. Sri. K.Mohananchandran

Works

1. Sri. C.M. Dinesh Mani, M.L.A.. (Convenor)
2. Sri. Alphons Kannanthanam, M.L.A
3. Sri. K.Mohananchandran
4. Dr. P. Sudarsanan Pillai
5. Sri. N.K.Vasudevan
6. Director of Technical Education
7. Dr. Joy Job Kulavelil
8. Sri. K.A. Zakkariya
9. Vice-Chancellor
10. Pro-Vice-Chancellor

Examination Matters

1. Dr. Joy Job Kulavelil (Convenor)
2. Sri. Alphons Kannanthanam, M.L.A.
3. Sri. C.M. Dinesh Mani, M.L.A.
4. Dr. V. Unnikrishnan Nayar
5. Dr. P.S.John
6. Dr. P. Sudarsanan Pillai
7. Sri. R.S.Sasikumar
8. Prof. K.N.Sudarsanan Pillai

The Syndicate adjourned at 1.00 p.m. to meet at 8.00 a.m. on 10.03.2007 to take up the Agenda.

57

**DRAFT MINUTES OF THE 515TH MEETING OF THE SYNDICATE
HELD ON 10.03.2007 (Adjourned on 03.03.2007)**

Place of meeting : Administrative Buildings
Kochi - 682 022

Time : 09.00 a.m.

Members present:

1. Prof.(Dr.)P.K.Abdul Azis,
Vice-Chancellor (in the Chair)
2. Dr.N.D.Inasu, Pro-Vice-Chancellor
3. Sri.R.S.Sasikumar
4. Sri. Alphonse Kannanthanam, M.L.A.
5. Sri.S.K.Mohan, Director of Technical Education
6. Sri. Zakkariya K.A.
7. Sri.N.K.Vasudevan
8. Prof. V. Unnikrishnan Nayar
9. Dr.P.Sudarsanan Pillai
10. Dr. P.S.John
11. Sri. K. Mohanachandran
12. Dr. Joy Job Kulavelil

Also present:

Dr.A. Ramachandran,
Registrar.

The Chair called the meeting to order by highlighting the dare need of taking up all items on the Agenda.

The request of Dr.K.N.Chandrasekharan Pillai for leave of absence granted.

Immediately Dr. Joy Job Kulavelil stood up saying that he wanted to raise an urgent matter. Sri. K. Mohanachandran and Sri. N.K.Vasudevan also stood up with the same demand.

The Chair ruled that the meeting has to proceed with, as per the listed agenda and any member can raise special items of importance at the zero hour, ie. at 12 noon. The

6

above members did not agree. The chair insisted that he cannot allow any matter to be raised in such a manner as to disrupt the meeting convened for special purpose.

The members endorsed the ruling of the chair and the meeting took up the following items as per the Agenda for the meeting.

Item No.515.01 Presentation of Budget Estimates 2007-08 – Regarding.

The Syndicate considered the budget proposals for the year 2007-08 and decided that the same has to be discussed and finalized in the Statutory Finance Committee on 15th March 2007 and place the same at the next meeting of the Syndicate on 24.03.2007.

Item No.515.02 CUSAT upgradation to the level of IIT – Supply of equipments and accessories for setting up a Multimedia Lab in the Department of Computer Application.

Since only one tender was received, namely from M/s. Accel Frontline Limited, The Stars, Veekshanam Road, Cochin – 682018, the purchase was not approved and resolved that the same be retendered. The Head of the Department has to give justification on why Imac is recommended to set up the Lab.

Item No.515.03* Full Mission Engine Room Simulator for Engine Room Simulator Lab of Marine Engineering Division.

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Finance & Purchase on the items of Full Mission Engine Room Simulator for Engine Room Simulator Lab and (i) to supply, erection, commissioning and testing of a Full Mission Engine Room Simulator (latest version), consisting of an Instructor Station, Engine Control Console, Main Switch Board, Simulated Machinery Space and Local Controls, inside the Engine Room Simulator Lab of Marine Engineering Division (ii) To provide the technical brochures, two sets of Instruction manuals and one set of Licenses for all software used inside and (iii) to provide user training and maintenance training at CUSAT site for the designated Marine Engineering personnel.

The Syndicate resolved to place the order for carrying out the work mentioned above on M/s. Applied Research International, New Delhi – 16 at a total cost of Rs.58,32,000/- (Rs. Fifty Eight Lakhs Thirty Two Thousand only) inclusive of all taxes, duties and cesses, etc. during the course of execution of the project.

It is also resolved that the party should be instructed to submit a detailed scheme, with time schedule, to Marine Engineering Division regarding the methodology, execution of the work proposed for the erection, commissioning and testing of Engine Room Simulator Lab. And the work has to be completed by June 2007 in all respects.

The warranty period will be two years.

The expenditure in this connection be met from the MHRD head of account "1-19-2-Q-2-190" provided in the Budget.

(Strategic Planning)

Item No.515.04* MHRD – Upgradation of CUSAT to the level of IIT – upgradation of ICT facilities and Advanced Networking lab – purchase of equipments.

The Syndicate considered the proposal for the purchase of various equipments for the total upgradation CIRM lab consisting of Connectivity upgradation, Server upgradation, Network Security and upgradation of the Intercom facility in connection with the upgradation of CUSAT to the level of IIT.

The Syndicate resolved to approve the following :-

- (1) M/s. Reliance Communications Ltd., Kochi – 16, the lowest quoted firm, be entrusted with the work of connectivity upgradation from the existing bandwidth of 1 Mbps to 8 Mbps at the main campus and from 512 Kbps to 8 Mbps at the Lake side campus with dedicated fiber cable connectivity between the campuses at their quoted rate (Option I) of Rs.28,88,150/- (Rupees Twenty Eight Lakhs Eighty Eight Thousand One hundred and Fifty only) per year.

The revised quote of M/s. BSNL was rejected as there is no provision to accept a revised quote from a firm that was not the lowest quoted firm at the original tender.

- (2) M/s. Siemens Ltd., Kochi – 16, the lowest quoted firm, be entrusted with the work of upgradation of the intercommunication facility in the main and lakeside campus with DID includes the increase of lines from 600 to 1000 at their quoted rate of Rs.12,92,000/- (Rupees Twelve Lakhs Ninety Two Thousand only) for the new system Hipath 4000.

Proposal for Server upgradation and Network Security and Management were not accepted as there were only single tender in both the cases and the Syndicate resolved to retender both these items.

The expenditure for the above be met from the head of account "1-19-2-Q-2-193" provided in the Budget of the University.

Item No.515.05* MHRD – Upgradation of CUSAT to the level of IIT – Dept. of Polymer Science and Rubber Technology – Purchase of equipments.

The Syndicate considered the proposal for purchase of various equipments for the upgradation of Polymer Science Lab at the Department of Polymer Science and Rubber Technology.

The Syndicate resolved to approve the following :-

- (1) To purchase Goodrich Flexometer from M/s. Alfatek Services, Trivandrum – 583, being the lowest quoted firm, at their quoted rate of US \$30,000 (Indian Rs.14,40,000/-).
- (2) To purchase Meltflow Index Tester from M/s. Venture Technologies, Bangalore – 38, being the lowest quoted firm, at their quoted rate of Euro 6315 (Indian Rs.3,72,585/-).

It is also resolved that –

- (i) Only Standing Committee is empowered with price negotiation. Department will not conduct price negotiation.
- (ii) If the lowest tender is not accepted detailed technical justification has to be submitted by the HOD to the University explaining the reason for rejection of the lowest tender. Similarly if second or third or fourth lowest is also not recommended proper justification has to be given for the rejection.
- (iii) The foreign suppliers have to always quote in US Dollars and all tabulations should be done in US Dollars in such cases.

The expenditure for the above be met from the head of account "1-19-2-Q-2-191" provided in the Budget.

Item No.515.06* MHRD – Upgradation of CUSAT to the level of IIT - Ship-in-Campus Lab – Comparative statement – Regarding.

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Finance & Purchase on awarding the work of supply, erection, commissioning and testing of various machinery and equipments for the Ship-in-Campus Lab of the Marine Engineering Division of the School of Engineering under MHRD assistance.

Tenders were invited three times to get competent tender to take up the work by supplying quality materials, responsible for the safe and proper working of all the machinery and equipments supplied and the tenderer has to carry out the entire work as a project, on a turn key basis.

Out of the three tenders received at the third time two were only considered as one of the tenderers, M/s. Haat Incinerators India Pvt. Ltd., has submitted an incomplete offer and also they have not submitted the EMD.

The comparative statement of offers submitted by the two tenderers, namely M/s. Hoosami Metal Industries (P) Ltd., Bhavnagar, Gujarat and Shri. S.Irudaya Nathan, Coimbatore regarding General Terms and Conditions and List of Equipment in Ship-in-Campus Laboratory are appended as **Annexure - I and Annexure - II.**

After negotiation with both the parties and scrutiny of the tenders submitted by them the following observations were noted :-

- 1) M/s. Hoosami Metal Industries (P) Ltd. (HMIPL) is a Ship breaking associated company engaged in the Marine field since 1986. They have made an internal tie up with M/s. Master Shipyard Pvt. Ltd., Cochin for carrying out the erection, commissioning and testing of all the Machinery and Equipments inside the Ship-in-Campus. Though the party has not executed any such complete project on a turn key basis earlier (as this being a rare item), with their vast experience in the Marine field and with the help of local Ship building yard, they may be able to carry out the project.
- 2) Shri. S.Irudaya Nathan (S.I.Nathan), Coimbatore is an individual Marine Engineer running a Marine Training Institute called Coimbatore Marine College at Coimbatore. He is constructing a Ship-in-Campus lab, on concrete structures, in his college campus at Coimbatore.
- 3) HMIPL's offer is for the erection of all Machinery and Equipments on Steel structures built inside the Ship-in-Campus where as S.I.Nathan's offer is for the erection of all machinery and equipments on concrete structures built by CUSAT.

- 4) In order to have a real Engine Room ambience of a ship, it is felt that we have to get all the erection of machinery and equipments done on steel structures.

Keeping all the above aspects in mind and since M/s. Hoosami Metal Industries has satisfied the tender conditions and price of Rs.2,67,00,114/- (Rs. Two Crores Sixty Seven Lakhs One Hundred and Fourteen only) as agreed to the Standing Committee of the Syndicate on Finance and Purchase and has become the lowest, the Syndicate resolved to award the work of supply, erection, commissioning and testing of various machinery and equipments for the Ship-in-Campus Lab of the Marine Engineering Division of the School of Engineering to M/s. Hoosami Metal Industries (P) Ltd., Bhavnagar, Gujrat for Rs.2,67,00,114/- (Rs. Two Crores Sixty Seven Lakhs One Hundred and Fourteen only).

M/s. Hoosami Metal Industries (P) Ltd. make the security deposit as per the tender on commencement of their part of the erection work.

Also resolved that it may be ensured that the related civil works of the Ship in Campus project is got completed expeditiously, in order to avoid any slippage in schedules.

Further resolved that M/s. Hoosami Metal Industries (P) Ltd. is allowed to make the Security Deposit as per the tender on commencement of their part of the erection work.

The expenditure for the above may be met from the head of account "1-19-2-Q-2-190" provided in the Budget.

(Fin & Purchase)

Item No.515.07* MHRD – upgradation of CUSAT to the level of IIT – Purchase of equipments for Photonics and Fibre Optic Lab in the International School of Photonics.

The Syndicate considered the request of the Director, International School of Photonics for sanction for the purchase of Nd-Yag Laser System from M/s. Laser Spectra Services, 80/10, Raj Towers, First Floor, M.S.Ramaiah Main Road, Bangalore – 560054 at a cost of US\$54690 (Rs.25.2 Lakhs) and to draw an amount of Rs.29,50,000/- as advance for opening Letter of Credit in favour of M/s. Spectra Physics Inc, 1335, Terra Bella Avenue, Mountain View, CA – 94043, USA.

Based on the details given by the Director, International School of Photonics (his letter dated March 10, 2007 containing the details is appended as **Annexure – III**) the Syndicate approved the proposal and resolved to give sanction for the purchase of

Nd-Yag Laser System from M/s. Laser Spectra Services, 80/10, Raj Towers, First Floor, M.S. Ramaiah Main Road, Bangalore – 560054 at a cost of US \$54690 (Rs.25.2 Lakhs) as detailed below :-

Sl.No.	Name of items	Quantity	Cost
1	LAB-190-10, Q-Switched Nd-Yag Laser, 1J @ 1064nm, 10Hz rep. rate	1	
2	HG-4C, Second, Third and Fourth harmonic generating Crystals		
3	HIS-532, Mounted Dichoric Bam Splitter for 532 nm operation		
4	OP-355, Un-mounted Dichoric Bam Splitter for 355nm operation		
5	OP-266, Un-mounted Dichoric Bam Splitter for 266nm operation		
6	0450-9080, Flash lamp, Xenon-4 Numbers		US\$53490
Freight and Insurance (CIF Cochin)			US\$1200
TOTAL			US\$54690

Also resolved that the Director, International School of Photonics is permitted to draw an advance of Rs.29,50,000/- (Rupees Twenty Nine Lakhs Fifty Thousand only) for effecting the payment including customs duty, clearing charges and bank charges etc.

The expenditure for the above may be met from the head of account "1-19-2-Q-2-180" provided in the Budget.

Item No.515.08 MHRD – upgradation of CUSAT to the level of IIT – Purchase of Equipments to set up the Mobile Computing Laboratory in the Dept. of Computer Science.

The Syndicate considered the item and resolved to defer the item to be placed in the next meeting of the Syndicate with justification on rejecting the lowest quoted firm.

Resolved further that Head of the Department should prepare a detailed note on each item to be purchased with proper justification for not accepting firms which quoted lower prices.

Item No.515.09* MHRD – Upgradation of CUSAT to the level of IIT – Purchase of equipments for Assistance to upgradation of VLSI and Signal Processing Laboratory – Proposal for purchase of Air Conditioner and Computer Tables and Chairs.

The Syndicate considered the proposal of the Head, Department of Electronics for the purchase of Air Conditioners, Computer Tables and Computer Chairs as detailed below :-

Sl.No.	Item	Firm	Qty.	Rate Rs.	Amount Rs.
VLSI LABORATORY					
1	Air conditioner 2 Ton Split AC	M/s.Blue Star Ltd., XXXIX/4080 Meenakshi Mandiram M.G.Road, Kochi – 16.	2	33,413/-	66,826/-
2	Computer Tables for laboratory	M/s.Alappat Agencies (P) Ltd., Manjooran Centre, Govt. Hospital Jn., Aluva – 683101.	10	5,080/-	50,800/-
3	Compter Chairs for Laboratory	- do -	10	2,822/-	28,220/-
Total					1,45,846/-
Signal Processing Laboratory					
1	Air conditioners 2 Ton Split AC	M/s. Blue Star Ltd., XXXIX/4080 Meenakshi Mandiram M.G.Road, Kochi 16.	2	33,413	66,826
2	Computer Tables for laboratory	M/s. Alappat Agencies (P) Ltd., Manjooran Centre, Govt. Hospital Jn., Aluva – 683101.	4	5,080/-	20,320/-
3	Computer Chairs for Laboratory	-do-	10	2,822/-	28,220/-
Total					1,15,366/-

The Syndicate resolved to approve the above proposal submitted by the Head, Department of Electronics.

The expenses on this account can be met from the head "1-19-2-Q-2-182" and "1-19-2-Q-2-183" respectively.

Item No.515.10* University Library – Purchase of Computers/Accessories under Rate Contract – reg.

The Syndicate considered the request of the University Librarian for sanction to purchase the following items under Rate Contract from M/s. ICPL Systems & Technologies, Kochi – 25.

Sl.No.	Items	Qty.	Rate	Amount (Rs.)
1	Desktop PC (IBM Think Centre)	20	39,350	7,87,000
2	Laser Printer	1	6,447	6,447
3	Manageable Switch Layer	1	18,720	18,720
4	Scanner	1	27,560	27,560
	TOTAL			8,39,727/-

The item nos. 2,3 and 4 are under DGS & D Rate since the required configuration is not available in Rate Contract.

The Syndicate approved the proposal and resolved to give sanction for the purchase of the above items as requested by the University Librarian.

The expenditure on the above may be met from the Head of Account "1-07-0-Q-2-104 Computers/Equipments" provided in the Budget of the University for the year 2006-07.

(Ad.C)

Item No.515.11* Construction of compound wall and gates for Marine Engineering Block – Modified estimate from M/s. CPWD – Consideration of – Reg.

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Finance & Purchase on the modified preliminary estimate amounting to Rs.23,28,600/- (Rupees Twenty three lakhs twenty eight thousand and six hundred only) plus Rs.1,51,400/- as Departmental Costs for the construction of compound wall and gates for Marine Engineering Block.

The Syndicate approved the modified preliminary estimate amounting to Rs.23,28,600/- (Rupees Twenty three lakhs twenty eight thousand six hundred only) plus Rs.1,51,400/- as Departmental costs presented by M/s. CPWD for the construction of compound wall and gates for Marine Engineering Block. CPWD be intimated the

sanction of the fund for the purpose from MHRD and requested not to charge departmental charges as the work is being done with external fund.

The expenses on this account can be met from the head "2-94-4-T-1-300- School of Engineering – Marine Engineering Building".

(Engg.)

Item No.515.12* Purchase of Portable Mini CTD –request for advance and sanction – reg.

The Syndicate considered the request of the Head, Department of Physical Oceanography for sanction for the purchase of Portable Mini CTD from M/s. Richard Brancker Research Limited, Canada at a total cost of Canadian \$17519/- (Rs.7,30,542/- approximate) through M/s. Electrotek International Inc., Chennai, who are the sole distributor for the above mentioned equipment.

The Syndicate approved the request and resolved to grant sanction for the purchase of one number portable Mini CTD from M/s. Richard Brancker Research Limited, Canada through M/s. Electrotek International Inc., Chennai at a total cost of Canadian \$17519/- (Rs.7,30,542/- approximate).

The Head, Department of Physical Oceanography is permitted to draw Rs.7,30,542/- as advance for the above.

The expenditure in this account may be met from "1-48-D-Q-2-104" provided in the current year's budget of the University.
(PL)

Item No.515.13* Renovation and maintenance of Physical Science Block and Department of Ship Technology Building and painting various other buildings – reg.

The Syndicate considered the estimate prepared by the University Engineer for Rs.12.75 lakhs for the renovation and maintenance of Physical Science Block and Rs.9.1 lakhs for Department of Ship Technology building and Rs.15 lakhs for painting the exterior wall with weather shield coat and painting interior walls of Mathematics, Law, Hindi and Polymer Science Lab and Ship Technology Lab., departmentwise details are as given below :-

Sl.No.	Name of Department	Estimate for Repair, Renovation & maintenance	Estimate for Maintenance & renovation
1.	Physical Science Block	Rs.12,75,000	
2.	Department of Ship Technology	Rs. 9,10,000	
3.	Department of Law		Rs.10,00,000
4.	Department of Mathematics		Rs. 5,00,000
	<i>Total</i>	<i>Rs.21,85,000</i>	<i>Rs.15,00,000</i>
	Grand Total	Rs.36,85,000	

The Syndicate approved the estimate for the above works and resolved that the works be carried out departmentally by calling tenders.

It is further resolved that the payment will be done after inspection by the Standing Committee on Finance & Purchase.

The expenditure in this account can be met from the head "1-97-0-T-3-510" provided in the Budget Estimate of the University.

(Engg.)

Item No.515.14* School of Engineering – Division of Marine Engineering – Purchase of furniture – reg.

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Finance & Purchase on the request of the Head, Division of Marine Engineering for sanction for the purchase of furniture for the new Marine Engineering Complex, summary of which is given below :-

Sl.No.	Details of furniture	Name of firm from where purchase be made	Cost
1.	Wooden furniture as per specifications detailed in Annexure - I	M/s. Forest Industries (Travancore) Ltd., Aluva	Rs.27,71,431/-
2.	Steel furniture as per specifications detailed in Annexure - II	M/s. Alappat Agencies (P) Ltd. (under rate contract)	Rs.12,15,148/-
3.	Steel furniture as per specifications detailed in Annexure - II	M/s. Godrej and Boyce Mfg. Co. Ltd.	Rs.12,29,943/-
	Total		Rs.52,16,522/-

The Syndicate approved the proposal of the Head, Division of Marine Engineering for purchase of furniture for the new Marine Engineering Complex and resolved to give sanction for the purchase of wooden and steel furnitures from (1) M/s. Forest Industries (Travancore) Ltd., Aluva (2) M/s. Alappat Agencies (P) Ltd., Aluva and M/s., Godrej and Boyce Mfg. Co. Ltd. as per details given in Annexures IV and V amounting to a total expenditure of Rs.52,16,522 /- (Rupees Fifty Two Lakhs Sixteen thousand Five hundred and Twenty Two only).

The expenditure towards this be met from the head of account "1-19-2-T-1-202 Marine Engineering Complex" provided in the budget of the University.

(Ad.C)

Item No.515.15* UGC Special Assistance to improve basic Scientific Research in DSA/CAS/Depts – Strengthening of infrastructure for Teaching & Research at P.G. level at School of Marine Sciences – Request for sanction of advance for purchase of Lab item & Lab furniture – reg.

The Syndicate considered the proposal of the Director, School of Marine Sciences for the purchase of Lab items & Lab furniture for strengthening of infrastructure for teaching & Research at P.G. level at School of Marine Sciences.

Resolved that the Syndicate approved the proposal submitted by the Director, School of Marine Sciences for purchase of the Lab items and Lab furniture listed in Annexure – VI amounting to Rs.20 Lakhs and resolved to effect the purchase as per the Store Purchase Rules.

Also resolved that the Director, School of Marine Science is permitted to draw Rs.20 Lakhs as advance for the above purchase.

The expenditure in this connection be met from the head of account "1-98-0-F/U-2-120-UGC-DAS/CAS - School of Marine Sciences" provided in the University budget.

Item No.515.16* Purchase of Furniture for the use of B.Tech Men's Hostel – Reg.

The Syndicate considered the proposal for purchase of furniture for the use of B.Tech Men's Hostel at Thrikkakara Campus. The requirement is as follows :-

Cots	-	289 nos.
Tables (Single draw)	-	289 nos.
Arm chairs (with plank seat and back)	-	289 nos.
Office table	-	1 no.
Arm chair (Plastic cane seat back)	-	1 no.
Dining Table	-	21 nos.
Dining chair	-	126 nos.

After negotiation the Forest Industries (Travancore) Ltd., Aluva agreed to deliver the furniture at the University at Rs.39,13,507/-. Unloading charges at the campus will be Rs.40,493/-. Thus the total expense for the procurement of furniture comes to Rs.39,54,000/-. As per their terms FIT demands an advance of 80% of the cost along with the confirmed order.

The Syndicate approved the proposal for purchase of the above listed furniture from M/s. Forest Industries (Travancore) Ltd., Aluva for use of B.Tech Men's Hostel at Thrikkakara Campus amounting to Rs.39,13,507/- (Rs.Thirty Nine Lakhs Thirteen Thousand Five hundred and Seven only) and unloading charges at the campus Rs.40,493/- (Rs. Forty thousand Four hundred and Ninety Three only).

Also resolved that the University Engineer is permitted to draw an amount of Rs.31,30,806/- (Rs.Thirty One Lakhs Thirty thousand Eight hundred and Six only) for payment advance for the above purchase.

The expenditure on this account be met from the head "2-94-1-T-2-476" provided in the University budget.

(Engg)

Item No.515.17* Construction of Sewage Treatment Plant for Marine Engineering Campus – Reg.

The Syndicate considered the preliminary estimate amounting to Rs.41,25,000/- (W.O.) plus Rs.4,95,000/- (D.C.) totaling to Rs.46,20,000/- (Rupees Forty Six Lakhs Twenty thousand only) for the construction of Sewage Treatment Plant and providing horticultural water supply pipe line net work for Marine Engineering Campus having a capacity of 200cum per day. There is provision for laying pipeline network for distribution of treated water from the STP for horticultural purposes in the campus.

The Syndicate resolved that a proposal for larger capacity plant capable of the active requirement of the Hostels, Quarters and Departments be put up.

(Engg)

Item No.515.18* Construction of a Ship-in-Campus for Marine Engineering Campus – Reg.

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Finance & Purchase on the preliminary-cum-detailed estimate submitted by M/s. CPWD amounting to Rs.1,66,81,396/- (Rupees One Crore Sixty Six Lakhs Eighty One thousand Three hundred and Ninety Six only) (Rs.1,56,63,283/- W.O. and Rs.10,18,113/- D.C.) for construction of RCC general ship profile structure around the Engine Room as per design and drawings of CUSAT authorities, the Engine Room Block is of four stories with duck levels at 1m, 4.5m, 8m, 11.5m and 14m. and the external wall of ship shall be of RCC framed work as per design.

The Syndicate approved the estimate submitted by the CPWD for construction of RCC general ship profile structure around the Engine Room as per design and drawings of CUSAT authorities, the Engine Room Block is of four stories with duck levels at 1m, 4.5m, 8m, 11.5m and 14m. and the external wall of ship shall be of RCC framed work as per design for construction of the project 'Ship-in-Campus' amounting to Rs.1,66,81,396/- (Rupees One Crore Sixty Six Lakhs Eighty One thousand Three hundred and Ninety Six only).

The expenditure in this regard will be met from the head of account "1-19-2-T-1-201 Ship-in-Campus (Civil Work)" provided in the Budget.

It is also resolved that sanitary, water supply and electrical works are to be provided for by the Engineering Department and the University Engineer should submit the estimates for these urgently, in consultation with the Marine Engineering Department. This work must be completed by CPWD within a maximum of 3 months.

The existing MoU with M/s. CPWD be got examined to see if it would be possible/necessary to have in place, a penal clause for delay in completion of the work and so also for providing an incentive for completion of the work before schedule.

Item No.515.19 Request for Deputation/Leave Without Allowances received from Dr.Yesodharan E.P., Professor, School of Environmental Studies – reg.

Deferred for detailed study.

Item No.515.20* Special repairs & Modernization of Guest House in Thrikkakara Campus – Reg.

The Syndicate considered the estimate prepared by the University Engineer for the special repairs and modernization of Guest House in Thrikkakara Campus. The estimate includes (i) provision for Wardrobes, plastic emulsion painting for interior walls, Apex weather coat for exterior walls, False ceiling work to the corridors, Venetian blind to the windows, Flooring with vitrified tiles to the rooms and granite slab flooring in the entrance lobby, Terracotta tiles in the porch and repair works, the expenditure comes to Rs.20,00,000/- (ii) Estimate for electricals works which includes provision for concealed wiring, replacing the AC units, providing light fixtures, TV, Water heater, telephone, exhaust fans, UPS, wiring for computers etc. in all the rooms which amounts to Rs.12,00,000/- and (iii) to provide new furniture to all the rooms, like cots, tables, chairs, beds, settees for the VIP rooms and entrance lobby, reception counter etc. which amounts to Rs.9,00,000/-, total of which amounts to Rs.41,00,000/- (Rupees Forty One Lakhs only).

The Syndicate approved the estimate amounting to Rs.41,00,000/- (Rupees Forty One Lakhs only) for the special repairs & modernization of University Guest House in Thrikkakara Campus.

The expenses in this account be met from the head of account "1-97-0-T-3-510" provided in the budget of the University.

Item No. 515.21* Ph.D. thesis entitled "ISOLATION, PURIFICATION AND CHARACTERIZATION OF PROTEASE INHIBITOR FROM MORINGA OLEIFERALAM" submitted by Smt. Bijina B. – Evaluation reports and minutes of Viva-Voce Examination – Consideration of -

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Academic Matters, Reports of the Board of Examiners and the Minutes of the Viva Voce Examination in respect of the Ph.D thesis submitted by Smt. Bijina B., full-time research student who worked in the Department of Biotechnology, Cochin University of Science and Technology, Kochi – 22 under the guidance of Dr.M.Chandrasekharan, Professor, Department of Biotechnology, Cochin University of Science and Technology, Kochi – 22.

Resolved that Smt.Bijina B. be declared eligible for the award of degree of Doctor of Philosophy under the Faculty of Science for her thesis entitled, "ISOLATION, PURIFICATION AND CHARACTERIZATION OF PROTEASE INHIBITOR FROM MORINGA OLEIFERALAM".

(Exam. A)

Item No. 515.22* Ph. D. thesis entitled "DESIGN, FABRICATION AND CHARACTERIZATION OF PASSIVE AND ACTIVE POLYMER PHOTONIC DEVICES" submitted by Smt. Geetha K. – Evaluation reports and minutes of Viva-Voce Examination – Consideration of -

The Syndicate considered the recommendation of the Standing Committee of the Syndicate on Academic Matters, Reports of the Board of Examiners and the Minutes of the Viva Voce Examination in respect of the Ph.D thesis submitted by Smt. Geetha K., part-time research student who worked in the International School of Photonics, Cochin University of Science and Technology, Kochi – 22 under the guidance of Dr.P.Radhakrishnan, Professor & Director, International School of Photonics, Cochin University of Science and Technology, Kochi – 22.

Resolved that Smt. Geetha K. be declared eligible for the award of degree of Doctor of Philosophy under the Faculty of Technology for her thesis entitled, "DESIGN, FABRICATION AND CHARACTERIZATION OF PASSIVE AND ACTIVE POLYMER PHOTONIC DEVICES".

(Exam. A)

Item No. 515.23* Ph. D. thesis entitled "A STUDY ON INDIA'S TRADE RELATIONSHIP WITH SAARC COUNTRIES WITH SPECIAL REFERENCE TO SAPTA" submitted by Sri. Venkatesha M. – Evaluation reports and minutes of Viva-Voce Examination – consideration of.

The Syndicate considered the Reports of the Board of Examiners and the Minutes of the Viva Voce Examination in respect of the Ph.D thesis submitted by Sri.Venkatesha M., part-time research student who worked in the School of Management Studies, Cochin University of Science and Technology, Kochi – 22 under the guidance of Dr.P.Sudarsanan Pillai, Professor, School of Management Studies & Dean, Faculty of Social Sciences, Cochin University of Science and Technology, Kochi – 22.

Resolved that Sri. Venkatesha M. be declared eligible for the award of degree of Doctor of Philosophy under the Faculty of Social Sciences for his thesis entitled, "A STUDY ON INDIA'S TRADE RELATIONSHIP WITH SAARC COUNTRIES WITH SPECIAL REFERENCE TO SAPTA".

(Exam. A)

Item No.515.24 University Library – Purchase of computers/accessories under Rate Contract – Reg.

Deferred to be taken up in the next Syndicate meeting.

Item No.515.25 Department of Computer Applications – Purchase of Computers/Accessories under rate contract – reg.

Deferred to be taken up in the next Syndicate meeting.

Items Outside the Agenda :

1. Framing common rules to be followed by Departments while making purchases.

- (i) The Head of the Department has to give a detailed note justifying the requirements.
- (ii) If the products are available on DGS & D rate that can be purchased. When purchases are proposed from firms having monopoly or of proprietary items proper justification for recommending the items from such firms have to be given. Heads of Departments should not negotiate for price reduction.
- (iii) HOD should not go for any purchase if violative of Store Purchase Rules. UGC be addressed to extend the time of utilization for the required period.
- (iv) The Finance Officer has to prepare a note for circulating the points to be taken care of. A format of norms has to be prepared by him.
- (v) A circular be issued to all Heads of Departments to this effect.

Items raised at the Zero hour :

1. Membership of Sri.R.S.Sasikumar in the Syndicate – Case in the Hon. High Court of Kerala.

Dr. Joy Job Kulavelil enquired whether the statement of facts as desired by Adv. M.K.Damodaran was returned with approval.

The chair clarified that the has approved the statement with a directive that it should not contradict the statement of facts already submitted by the University as it was in consonance with the government stand taken in an earlier similar context. The University cannot take a different stand on a point of law regarding a provision in the Act passed by the legislature. Additional points if any can be submitted after clearance by the Vice-Chancellor. The University's stand will remain consistent with the legal position upheld by the Hon. Division Bench of the High Court while disposing off a similar case a few years ago, the chair ruled.

2. Election to University Union:

On an enquiry by one of the Syndicate members the Chair reported that orders have been already issued for conducting the election to the University Union. The file relating to this also was placed before the Syndicate for reference.


REGISTRAR

ANNEXURE-I

General Terms and Conditions

Sr.no.	Description	Terms & conditions of S.I.Nathan	Terms & conditions of Hoosami Metal Industries
1	Payments	Tendered as per the terms and conditions of CUSAT Tender form. CUSAT should settle the amount with its normal deduction within 7 days from the date of arrival of the items at CUSAT site. Delay in payment will result in progress of completion.	1. 75% to be paid within 2 days of the arrival and inspection of materials of Annexure-A and balance within 2 days on completion. 2. Payments towards other services and transportation on presentation of invoices within 48 hrs. 3. For Annexure-B full payment within 2 working days and inspection of the materials. 4. Erection and commissioning to be paid proportional to the progress of erection.
2	Taxes and duties	Included in the offer	Included in the offer
3	Permission from the local authorities for civil structure and machinery and gate passes required	University should arrange	Not specifically stated
4	Electricity & water supply at site	Not mentioned	Not mentioned
5	Labour, consumables, supervision, food, and accommodation for workers	Not specifically stated	Not specifically stated
6	Validity of offer	As per tender conditions	As per tender conditions
7	Time schedule for completion	As per tender conditions	To be mutually agreed subject to finalization of other works to be performed by CUSAT
8	Warranty	As per tender conditions	Not specifically stated
9	Clause 12(a) regarding security deposit	As per the tender conditions	Clarifications sought before acceptance

ANNEXURE -II
LIST OF EQUIPMENT IN SHIP-IN-CAMPUS LABORATORY
COMPARATIVE STATEMENT OF OFFERS SUBMITTED

Descriptions of equipments	Offer of S.I.Nathan		Offer of Hoosami Industries Pvt. Ltd.	
	Qty	Total cost-Rs	Qty	Total cost-Rs
1. Main propulsion system				
Main engine	1		1	
Gear Box	1		1	
Thrust Block	1		1	
Turning gear	1		1	
Intermediate Shaft	1		1	
Propeller Shaft	1		1	
Stern gland	1		1	
Propeller	1		1	
Bearings as required	1		1	
Steering gear complete unit two ram type	1		1	
Total group cost- Rs.		8775000		55,25,000
2. Electrical equipment				
Diesel Engines for Electrical power - 2 numbers	2		2	
Alternator sets, 440V, 3 phase, 50/60 Hz - 2 sets	2			
Emergency Diesel driven Gen. set	1		1	
Main switch Board, 440V, 3 Phase, 50/60 Hz	1		1	
Emergency Switch Board, 440V, 3 Phase, 50/60 hz	1		1	
Transformers - 2 numbers	2		2	
Shore Connection Box	1		1	
Aux. Switch Board, 220V, 3 Phase, 50 Hz	1		1	
Aux. Emergency Switch Board, 220V, 3 Phase, 50 Hz	1		1	
Engine Room Supply Fans - 2 numbers	2		2	
Engine Room Exhaust fan - 1 number	1		1	
Engine Room crane new/old	1		1	
Engine Room Lighting	4		10	
Engine Room Emergency lighting	4			
Auxiliary Blowers in engine Room	2		1	
Air Conditioning Equipment	1		1	
Refrigeration Equipment	1		1	
Domestic fans	2		2	
Domestic lighting	10		10	
Emergency domestic lighting and fans	2		Full set	
Navigational Equipment (for demonstration)	2		2	
Communication equipment (for demonstration)	2		2	
Fire Alarm with full paneling (working one)	1		1	
Total group cost - Rs.		3803000		25,65,000
3. Fuel Oil Transfer and Purification System				
Diesel Oil Storage tank in Double Bottom	1		1	
Diesel Oil Settling Tank	1		1	
Diesel Oil Service Tank	1		1	

Sounding Pipes for above 3 tanks	3		3	
Vent Pipes for above 3 tanks	3		3	
Diesel Oil Transfer Pump	1		1	
Diesel Oil Purifier feed Pump	1		1	
Fuel Oil Heater and D.O Purifier	1		1	
SDNR Valves - 5 numbers	5		5	
SDSR Valves - 11 numbers	11		11	
Check Valve - 1 number	1		1	
3 Way Valve - 1 number	1		1	
Spring Loaded quick-closing Valves - 5 numbers	5		5	
Pressure Gauges - 5 numbers	5		5	
Temperature Gauges - 4 numbers	4		4	
Sight Glass as required	3		3	
Flow Meter - 1 number	1		1	
Diesel Filter - 1 number	1		1	each
Pipes - as required	1		1	
Total group cost - Rs.		856000		2,65,550
4. Fuel Oil Service System for ME and AE				
Tank as Mixing Column	1			
Vent Pipe for the above tank	1			
Fuel Oil Booster Pump for Main Engine	1			
Fuel Oil Booster Pump for Boiler	1		1	
Fuel Oil Heater for Main Engine	1		1	
Hot Filter - 1 number	1			
Diesel Oil Filter - 2 numbers	2		2	
Pressure Regulating Valve - 1 number	1		1	
Filter - 2 numbers	2		2	
SDNR Valves - 10 numbers	10		10	
Check / SDSR Valves - 17 numbers	17		17	
3 Way Valve - 1 number	9		1	
Spring Loaded quick-closing Valves - 2 numbers	2		2	
Pressure Gauges - 7 numbers	7		7	
Temperature Gauges - 2 numbers	2		2	
Flow Meter - 1 number	1		1	
Viscometer - 1 number	1		1	
Pipes - as required	1		1	
Total group cost - Rs.		9,01,000		2,61,350
5. Incinerator Fuel Oil System				
Incinerator	1		1	
Sludge Tank	1		1	
Diesel Oil Tank for Incinerator	1		1	
Sounding Pipes for the above 2 Tanks	2		2	
Vent Pipes for the above 2 Tanks	2		2	
Burner Pump with Relief valve - 1 number	1		1	
Solenoid Valves - 5 numbers	5		5	
SDNR Valves - 2 numbers	2		2	
Check / SDSR Valves - 9 numbers	9		9	
Sight Glass as required	2		1	
Pipes - as required	1		1	
Total group cost -Rs.		3,21,000		2,12,900
6. Main Lub Oil Purification and Service System				
Lub Oil Storage Tank	1		1	

3

Sounding Pipes for the above tank	1		1	
Vent Pipes for the above tank	1		1	
Main LO Cooler	1		1	
Main Lub Oil Purifier	1		1	
Lub Oil Heater	1		1	
Main LO Pump	1		1	
LO Purifier Feed Pump	1		1	
LO Filters - 3 numbers	3		3	
SDNR Valves - 6 numbers	6		6	
Check / SDSR Valves - 16 numbers	16		16	
3 Way Valve - 1 number	1		1	
Pressure Switch - 2 numbers	2		2	
Pressure Gauges - 7 numbers	7		7	
Temperature Gauges - 6 numbers	6		6	
Sight Glass as required	1		1	
Pipes - as required	1		1	
Total group cost -Rs.		8,78,000		6,03,500
7. Sea Water System				
Water Tanks simulating the Sea - 2 numbers	2		2	
Top side tank (for high suction) - 1 number	1		1	
Bottom Tank (for low suction) - 1 number	1		1	
Sounding Pipes for the above 4 Tanks	4		4	
Vent Pipes for the above 4 Tanks	4		4	
Main SW and Ballast pump - 1 number	1		1	
Fire and General Service pump - 1 number	1		1	
Jacket Cooling FW Cooler - 1 number	1		1	
AE SW Cooler - 1 number	1		1	
Air Compressor SW Cooler - 1 number	1		1	
AC/Ref SW Cooler - 1 number	1		1	
ME Air Cooler - 1 number	1		1	
Sea Chest (P & S) - 2 numbers	2		2	
SW Filter - 2 numbers	2		2	
SDNR Valves - 13 numbers	13		13	
Check / SDSR Valves - 23 numbers	23		23	
3 Way Valve - 2 numbers	2		2	
Pressure Gauges - 4 numbers	4		4	
Temperature Gauges - 6 numbers	6		6	
Pipes - as required	1		1	
Total group cost - Rs.		16,25,000		7,73,721
8. Main Engine FW System				
PW Expansion Tank	1		1	
Vent Pipe for the above Tank	1		1	
FW Generator	1		1	
Main JCFW Pump	1		1	
Check / SDSR Valves - 18 numbers	18		18	
3 Way Valve - 2 numbers	2		2	
Pressure Gauges - 2 numbers	2		2	
Temperature Gauges - 10 numbers	10		10	
Sight Glass as required	1		1	
Pipes - as required	1		1	
Total group cost - Rs.		34,70,000		4,76,650
9. Boiler Feed Water, Steam and Condensate system				
Boiler	1		1	
Boiler FW Tank	1		1	

Sounding Pipe for the above Tank	1		1	
Vent Pipe for the above Tank	1		1	
Hotwell	1		1	
Vent Pipe for Hotwell	1		1	
Condensor	1		1	
Boiler Feed Water Pump	1		1	
SDNR Valves - 13 numbers	13		13	
Check / SDSR Valves - 16 numbers	16		16	
Safety Valve - 1 number	1		1	
Pressure Gauges - 4 numbers	4		4	
Temperature Gauges - 3 numbers	3		3	
Sight Glass as required	1		1	
Pipes - as required	1			
Steam Manifold	1			
Condensate Manifold	1			
Total group cost - Rs.		7,36,500		6,05,400
10. Bilge and Sludge Transfer System				
Bilge Oil Drain tank	1		1	
Sludge Tank (from Purifier)	1		1	
Bilge Holding Tank	1		1	
Vent Pipes for the above 3 Tanks	3		3	
Bilge Wells (P & S) - 2 numbers	2		2	
Sludge Pump	1		1	
Bilge Pump	1		1	
Oily Bilge Water Separator	1		1	
FW Filter - 5 numbers	5		5	
Oil Content Meter - 1 number	1		1	
SDNR Valves - 17 numbers	17		17	
Check / SDSR Valves - 1 number	1		1	
3 Way Valve - 1 numbers	1		1	
Pipes - as required	1			
Total group cost - Rs.		5,80,000		3,22,350
11. Compressed Air System				
Main Air Compressor	1		1	
Emergency air compressor	1		1	
Oil Water separators attached to Comp. - 2 numbers	2			
Main Air Bottle	1		1	
Emergency Air Bottle	1		1	
Control Air Bottle	1		1	
Pressure Reducer	1		1	
Air Drier	1			
SDNR Valves - 18 numbers	18		18	
Relief Valves - 2 numbers	2		2	
Check / SDSR Valves - 8 number	8		8	
Pressure Gauges - 6 numbers	6		6	
Temperature Gauges - 2 numbers	2		2	
Total group cost - Rs.		5,68,000		3,70,900
12. Fixed Carbon-Dioxide Fire Extinguishing System				
Pilot CO ₂ Cylinders - 2 numbers	2		2	
Main CO ₂ Cylinders - 3 numbers	3		3	
Controlled release System with all equipment as shown in drawing	1		1	
Total group cost - Rs.		1,75,000		81,000

5

13. Other Fire Extinguishing Equipment				
Emergency Fire Pump (diesel driven)	1		1	
Fire Mains on Upper Deck and super structure decks	1		1	
Fire hoses for connection to Deck Mains as required	2			
Portable fire extinguishers - adequate number	4		10	
Access to CO ₂ room and Emergency Gen. room from outside	1		2	
Total group cost - Rs.		1,36,000		1,30,500
14. Safety and Escape Systems				
Grill Door 4.0m wide at engine room level to outside	1		1	
At least two flap type doors connecting outside to engine room	2		2	
Outside Staircase from ground level to Tween and Upper Deck levels	1		1	
Inside Staircase from engine room level to Tween and Upper decks	1		4	
Access hatch from Upper deck to Steering Gear Flat	1			
Adequate Passage space for comfortable movement access to stairs				
Ship's funnel with funnel door and flap				
Engine room sky light				
Total group cost - Rs.		1,20,000		3,64,500
Others				
Engine room workshop with lathe, drilling machine, grinding machine, work table with vice and a locker with all tools for the said machines	1			
Eng. Valve Testing unit with tray				
Total group cost-RS.		4,50,000		3,50,000
GRAND TOTAL				1,29,08,321

Extra item required not specified in tender			19,50,000
Additional steel required 55 ton approx.			13,50,000
Electric cables, sockets, tray, connections etc.			3,50,000
Colour to steel structure and machinery			1,65,58,321
Sub Total			20,69,790
General sales tax approx. (X@12.5%) CST			
Cost of Packaging and Transportation	9,00,000		15,00,000
Cost of stuffing, Unloading Etc.			3,50,000
Misc. conveyance, testing/survey etc.			4,50,000

Cost of Erection, commissioning and testing	30,00,000	53,00,000
Grand Total	2,41,71,500	2,62,28,111
Incase of used machinery only		

Annexure -B

Seamanship and Navigation Laboratory:			
Life Boat(35 person)	1		1
Gyro Compass	1		1
Gyro Repeaters	2		1
RACALL DECCA 2490 RADAR, Sextant	1		1
Life Jackets,	4		1
Life raft	1		1
life buoy	1		
SCBA	1		
Pyrotechnics-Cartridges, Hand Flare and Smoke bombs			
Gas Analyzer	1		
Portable radios set	1		
Suez Canal Search light	1		1
Electrical ship log	1		1
Fog horn siren type	1		1
Air horn	1		
Navigation lights			
Hand steering unit with hand wheel			
Total group cost - Rs.		5,60,500	5,42,350
Marine Machinery Dismantling and Assembling Laboratory:			
Aux Engine Crankshaft	1		1
Valve chest ballast	1		1
Piston crown - 4-stroke engine	1		1
Exhaust Valve Mitsubishi UENO engine	1		1
Axial Compensator 400 mm dia	1		1
Turbo Charger rotor assembly- BBC-VTR 250	1		1
Woodward Governor type PGA	1		1
Boiler safety valve, boiler water gauge glass,	1		1
Different types of valves screw down valve, globe valve, butterfly valve, gate valve, non-return valve, main engine fuel valve, cylinder relief valve	2 nos each		16 nos

cooler-tube nest:			
Cylinder lubricator:			
Oil mist detector			
Total group cost - Rs.		4,30,000	1,64,500
Marine Auxillary Machinery Laboratory:			
Deck air compressor	1		1
Heat exchanger	1		1
Incinerator	1		1 each
Oily water separator	1		1
Steering gear	1		1
Cargo Turbine oil pump	1		1
sewage treatment plant	1		1
Wilden Pump	1		1
Heleshaw pump	1		1
Piston pump	1		1
Centrifugal pump	1		1
Gear pump	1		1
Fire & GS Pump	1		1
Screw displacement pump	1		1
Cargo oil pump	1		1
Portable Compressor 10 bar	1		1
Aux Eng. Exh. Valve, quick closing valve, crank case relief valve -- two nos. each			
Air start distributor			
Jerk fuel pump			
Life boat engine with tank			
Total group cost - Rs.		9,71,000	2,33,700
Fire Fighting Laboratory:			
Fixed fire fighting installation (Carbon dioxide flooding system)	1		1
Inert gas generators	1		1
Portable fire extinguishers (water, carbon dioxide, dry powder, mechanical type extinguishers)	6		
Smoke and Thermal Sensors	2		
Smoke detection unit	1		
Fire main system	1		
fire call point & gang bell	1		
Non-portable extinguisher - Mechanical Extinguisher	1		
CABA	1		
Bellow type foot pump	1		1
First aid kit and stretcher	1		1
Total group cost - Rs.		3,26,000	2,33,700
Marine Boiler Laboratory:			
Steam Turbine	1		
Marine Auxiliary water tube boiler	1		
Fresh Water generator	1		1
Total group cost - Rs.		4,30,000	5,71,000
Marine AC & Refrigeration Laboratory:			
Air conditioning plant 60 TR	1		
Refrigeration unit 40 TR	1		

**INTERNATIONAL SCHOOL OF PHOTONICS
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY**



COCHIN - 682 022
Kerala, India
Tel: Off : 0484-25758

March 10, 2007

PROFESSOR & DIRECTOR

Ref. No. ISP/MHRD-II T/06-07/7236

Total group cost - Rs.		1,76,000	2,25,000
Grand Total		28,93,500	27,04,550
CST			3,38,069
Packaging and Transportation		8,35,000	2,00,000
Grand Total		37,28,500	32,42,619
GRAND TOTAL of A + B		2,79,00,000	2,94,70,730

To

The Registrar
Cochin University of science and Technology
Cochin 682022.

Sir,

Sub: Purchase of major items of equipments in International School of Photonics.
Ref: Tender No. MHRD/06-07/T1/ISP, Fibre Optics Lab (copy attached)

MHRD has approved the purchase of major items of equipment for Fiber Optics Lab of ISP. One of the items approved by MHRD is a Q-Switched Nd-Yag Laser with accessories. As per the reference cited above open competitive tenders were invited through notification in the news paper and the same was displayed in CUSAT website, for this item. Copy of the tender notification and the details of specification of the above item are enclosed herewith for your reference. The following four firms have quoted for the Q-Switched Nd-Yag Laser with accessories.

1. Dynotech instruments, New Delhi
2. Laser Science Services (India) Pvt. Ltd., Mumbai
3. Laser Spectra Services India Pvt. Ltd., Bangalore
4. Specialised Instruments Marketing Company, Mumbai

Out of the four firms, the item quoted by M/s. Laser Science Services does not meet our specifications (they quoted LASER with power less than 1 Joule. Tender was invited for 1 Joule LASER) and hence rejected. A comparative statement showing the prices quoted by the other three firms is attached along with this. The price quoted by M/s. Specialised Instruments Marketing Company is on the higher side [70,800 Euros (Rs.41.06 Lakhs)] and hence it is not acceptable. Out of the two remaining firms, M/s. Dynotech Instruments, New Delhi did not quote Laser with gold coated cavity. The gold coated cavity is an important specification in the tender notice. Only Laser Spectra Services, Bangalore has quoted the Laser System with specifications satisfying completely including gold coated cavity. Hence, we selected the item from M/s. Laser Spectra Services, Bangalore. Following additional points may also be noted.

Annexure - IV

ANNEXURE - I (WOODEN FURNITURE)

Sl. No.	Description	Qty (Nos.)	Rate	Total
1.	Hardwood cot of size 200 x 90 cms. Bed portion in Anjiliwood planks	170	4057	689690
2.	Anjiliwood single draw table of size 80x60x75 cms with lock and key	160	3540	566400
3.	Anjiliwood drawing board stand of size 77x52x90/98 cms with board 32"x23"	60	3059	183540
4.	Anjiliwood drawing stool of size 40x40x68/72 cms	60	1202	72120
5.	Teakwood class room board (wall hanging type) 5'x3' glass size. All frame works are in teakwood. Back Commercial plywood	21	10212	214452
6.	Anjiliwood class room table of size 60x45x75 cms, top finished with plywood and Formica	137	1966	269342
7.	Anjiliwood plain table of size 120x75x75cms, top plank 2 cms thick.	8	3833	30644
8.	Anjiliwood worktable of size 240x120x90 cms, 6 legs, top plank 5 cms thick with central separation in 20 cms height horizontally.	2	18677	37354
9.	Anjiliwood workbench of size 180x120x75 cms, top plank 5 cms thick	4	12055	48220
	Total			21,11,782
	Exise duty 16%			3,37,885
	Educational Cess 2%			6758
	Total			24,56,425
10.	White board of size 6'x 3' with aluminium frame	1	3125	3125
11.	White board of size 4'x3' with aluminium frame	2	1164	2328
12.	Black board of size 3'x2' with aluminium frame	2	808	1616
	Total			24,63,494
	KVAT 12.5%			3,07,937
	Grand Total			27,71,431

- Similar system purchased from this company is operating in our laboratory for the past 20 years without any degradation.
- Also, the after sales services of the Laser Spectra Services, Bangalore is highly efficient and reliable for the past several years.

In view of the above facts, I request that sanction may please be granted for the following:

- To purchase one number Q-Switched Nd- Yag Laser with accessories from Laser Spectra Services, 80/10, raj Towers, First Floor, M. S. Ramaiah Main Road, Mathekere, Bangalore- 560 054, as detailed below.

Sl No.	Nasme of items	Quantity	Cost
1	LAB-190-10, Q-Switched Nd-Yag Laser, 1J @ 1064nm, 10Hz rep. rate	1	
2	HG-4C, Second, Third and Fourth harmonic Generating Crystals		
3	HIS-532, Mounted Dichoric Bam Splitter for 532nm operation		
4	OP-355, Un-mounted Dichoric Bam Splitter for 355nm operation		
5	OP-266, Un-mounted Dichoric Bam Splitter for 266nm operation		
6	0450-9080, Flash lamp, Xenon-4 Numbers		US\$ 53490
	Freight and Insurance (CIF Cochin)		US\$ 1200
	TOTAL		US\$ 54690

- To open an irrevocable letter of credit in favor of M/s. Spectra Physics Inc., 1335, Terra Bella Avenue, Mountain View, CA-94043, U.S.A for an amount of US\$54690 (Rs.25.2 Lakhs). 29,5,000
- To draw an advance amount of Rs.28,00,000/- for effecting the payment. Please note that the amount requested is inclusive of customs duty, clearing charges and bank charges and the cost of achiller which has to be locally purchased.

The quotation received along with the details of the items is also enclosed herewith for your reference and return.

The expenditure for this purchase may please be met from University Funds under the MHRD programme to upgrade the University to IIT level.

Kindly treat this as most urgent.

Yours faithfully

(Director)

ANNEXURE - II (STEEL FURNITURE)

Under rate contract from Alappatt Agencies (P).Ltd

Sl. No.	Description	Rate	Qty (Nos.)	Total
1.	Office Chair With caned seat and back with continuous full arm	1625	55	89,375.00
2	Moulded Plastic Chair	803	253	203,159.00
3	Computer Chair 5 prolonged base-360 degree swivel mechanism and twin wheel castors for free movement with back rest height adjustment, with pivoted back rest plastic back cover pneumatic mechanism for seat height adjustment, T-type arm rest-Height -69cm-90cm, Depth-65cm, width-65cm, Seat height (SH)-44cm-56cm	2822	40	112,880.00
4	Office Steel table 1365x680x750mm Novapan top with 3 drawers on right side and 2 drawers on left side	8923	42	374,766.00
5	Office Steel table 119.9x59x75 Novapan top with 3 drawers on right side	5651	14	79,114.00
6	Office steel table 1665x900x750mm Novapan top with 3 drawers on right side and 2 drawers on left side	11413	2	22826.00
7	Computer table Novapan top 90cm Wx59cm Dx75cm H with steel frame plus plastic/novapan keyboard pullout tray with CPU stand and paper shelf printer provision	5080	40	203,200.00
8	Steel Almirah 18 gauge + back 198cm(H)x91.5cm(W)x48.5cm(D)	10797	10	107970.00
9	4 door Filing Cabinet	10929	2	21858.00
	Total			12,15,148.00

From Godrej & Boyce

Sl. No.	Description	Rate	Qty (Nos.)	Total
1	Executive Chair PCH 9101R	12505.35	2	25010.71
2	Chair with desket PCH 7004	4906.41	150	735960.94
3	Chair PCH 7002	8257.13	2	16514.26
4	Chair PCH 7003	4786.74	36	172322.64
5	Centerpiece CPR-530-7E	4068.73	1	4068.73
	Total			953,877.28
6	Conference Table, 22 Seater	5047.03 per seat	1	111034.69
7	VSDU - 1	7060.44	1	7060.44
8	Pantry Tables, T-400	4385.85	2	8771.70
9	Computer Table, C-8	4837.73	9	43485.53
	Total			170,352.36
10	4 Door Book Case	12107.26	6	72643.50
11	Single seat Sofa	8573.67	2	17147.34
12	Tripple Seater	15922.53	1	15922.53
	Total			105,713.37

Total of Godrej & Boyce Rs.12,29,943.01

Grand Total 24,45,091.01

Annexure - VI

Sl. No.	Particulars	Qty.	Estimate Rate in Rs.
1	Common Computer Lab for Library	12Nos.	4,32,000
2	Server	1 No.	1,49,000
3	OS, Antivirus & Combo drive		76,200
4	Net working		25,000
5	Cubicle and flooring of Computer Lab		1,00,000
2	Digital Photocopier/Xerox	1 No.	1,20,000
3	Laser Jet Printer (HP)	1 No.	19,500
4	Scanner	1 No.	3,250
5	UPS - 5 KVA for the above	1 No.	75,000
6	LCD - Epson	1 No.	60,000
7	Compaq Lap Top	1 No.	45,000
8	Air conditioners for Computer Lab	8Nos.	3,60,000
9	Computer table (@ 12354 from FIT)	12Nos.	1,48,248
10	Computer Chair (@ Rs.3,504 from FIT)	14 Nos.	49,056
11	Cupboard with table for keeping electronic items	1 No.	35,000
12	Computer with multimedia for Presentations	1 No.	35,000
13	3KVA UPS for Seminar & Presentations	1 No.	43,000
14	CF Lamps with wiring & fittings	6 Nos.	15,000
15	Tools & Equipments for the computer Lab		4,000
16	Safety equipment for R.V. Anveshika like Safety	12 Nos.	30,000
17	Fire fighting system	1 No.	25,000
18	Rope		5,000
19	Lifebuoy	4 Nos.	12,000
20	Generator for Boat	1 No.	40,000
21	Window A/C-1/2 ton	1 No.	20,000
22	Lab furnitures for Research room for the 5th Floor	7 Nos.	1,27,746
23	Emergency Lamp for Lab	2 Nos.	6,000
Total (Rupees twenty lakhs only)			200,000