अभिशासक परिषद् की चौदहवीं बैठक का कार्यवृत्त

MINUTES OF THE 14TH MEETING OF THE BOARD OF GOVERNORS

24TH DECEMBER 2005



भारतीय प्रोघोगिकी संस्थान राइकी राइकी - २४७ ६६७ (भारत)

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE ROORKEE-247 667 (INDIA)



Lt Col A K Srivastava (Retd)
Registrar

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No.IITR/MS/14th BoG/669 Dated 15th February 2006

All Members of the Board of Governors Indian Institute of Technology Roorkee

Sub: Minutes of the 14th Meeting of the Board of Governors of the Indian Institute of Technology Roorkee held on 24th December 2005.

Kindly find enclosed the minutes of the 14th Meeting of the Board of Governors of the Institute, which have been duly approved by the Chairman, Board of Governors.

It is requested that comments, if any, on the above referred minutes may kindly be sent to the undersigned within 15 days. If no comments are received within this period, it will be presumed that you agree with the minutes as recorded, and action would be initiated to implement the same.

Encl: As above

(A. K. Srivastava)

Lt. Col. (Retd.)

Registrar &

Secretary, Board of Governors

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE ROORKEE 247 667



MINUTES OF THE $14^{\rm th}$ MEETING OF THE BOARD OF GOVERNORS

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INDIAN INSTITUTE OF TECHNOLOGY ROORKEE ROORKEE - 247 667



MINUTES OF THE 14th MEETING OF THE BOARD OF GOVERNORS HELD ON 24th DECEMBER 2005 AT 2.30 P.M. IN THE BOARD ROOM OF THE INSTITUTE.

PRESENT:

1.	Prof. Prem Vrat	(In the chair)
2.	Dr. D.V. Singh,	Member
3.	Dr. K.N. Shukla	Member
4.	Prof. H.K. Verma	Member
5.	Prof. A.K. Jain	Member
6.	Mr. S.K. Ray, Financial Advisor, MHRD	Special Invitee
	[on behalf of the Joint Secretary (T), MHRD]	
7.	Prof. S. Ray, Dean Administration	Special Invitee
8.	Prof. A.K. Awasthi, Dean of Faculty Affairs	Special Invitee.
9.	Lt. Col. (Retd.) A. K. Srivastava, Registrar	Secretary

At the outset, Lt. Col. A.K.Srivastava, Registrar and Secretary, Board of Governors, informed the Members about the inability of Sri Jaiprakash Gaur, Chairman, Board of Governors to attend and chair the meeting, which was received in writing from him. The Secretary also apprised them of the statutory provision and requested the members to nominate a person to chair the meeting. In accordance with Statute 3 (3)(f), Prof. H.K.Verma proposed the name of Prof. Prem Vrat, Director of the Institute to Chair the 14th meeting of the Board of Governors; Prof. K.N.Shukla seconded it, and thus the members requested Prof. Prem Vrat to chair the meeting of the Board of Governors.

Communications regarding inability to attend the meeting were received from Mr. K.N. Memani, President, PHD Chamber of Commerce & Industry, New Delhi, Mr. Ajit M. Sharan, IAS, Commissioner & Secretary to Govt. of Haryana, Technical Education Department, Chandigarh, Principal Secretary (TE) to the Govt. of Himachal Pradesh and Mr. Sirajuddin Qureshi, Managing Director, Hind Agro Industries Ltd., New Delhi.



The Chairman welcomed the members to the 14th Meeting of the Board of Governors.

The agenda was then taken up.

Item No.14.1.1: To confirm the minutes of the 13th Meeting of the Board of Governors held on 20th September 2005.

The minutes of the 13th meeting of the Board of Governors held on 20th September 2005 were confirmed.

Item No.14.1.2: To receive a report on the action taken on the minutes of the 12th & 13th Meetings of the Board of Governors held on 30th July 2005 and 20th September 2005, respectively.

The Board **NOTED** the position of the actions taken on the Minutes of the said meetings with the under-mentioned observations.

12.1.6 To report status of auditing of annual accounts:

The Audit Certificates are expected to be issued shortly by AG Uttaranchal.

12.2.16 To consider the issue regarding liability of the Institute to give benefits of EPF Act 1952 to Daily wages/ Contract (U Pool) workers of the Institute:

The EPF & ESI contributions in respect of Daily-wage/Contract workers is being deducted w.e.f. 1.10.2005 and deposited with the relevant authority.

MEETING DATED 1.3.2003

5.4.2 To consider the regularization of the Quasi Regular Staff.

The matter be pursued with the MHRD.

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Item No. 14.1.3: To receive a brief report on the academic activities of the Department of Electronics & Computer Engineering.

The presentation made by Prof. A.K. Sarje, Head, Department of Electronics & Computer Engineering on the academic activities/achievements of the Department was appreciated and evoked considerable interest from the members of the Board.

Item No. 14.1.4: To receive a report of the Director on the significant developments/ issues since the last meeting of the Board held on 20.9.2004.

The Board appreciated the report presented by the Director highlighting the significant developments/issues with special reference to (a) Director's Academic & Administrative Activities (b) IITR Annual Convocation (c) Honors & Awards (d) Faculty (e) Special Courses Organised (f) Conferences/ Seminars/Workshops Organized (g) Sponsored Research & Industrial Consultancy (h) Students Activities (i) New Centre Established (j) Staff Incentives (k) International Collaboration (l) New Initiatives (m) Events Organised (n) Important Visitors.

Item No. 14.1.5 To report the status of implementation of specific projects sanctioned by the Ministry of HRD during the year 2002-03, 2003-04 & 2004-05.

Noted.

Item No. 14.2.1 To consider the revised Consultancy Rules and Guidelines as well as rules for PDF as recommended by the Senate.

RESOLUTION NO. BG/76/2005: RESOLVED THAT as considered and recommended by the Senate, the revised Consultancy Rules and Guidelines as well as rules for PDF as given at **Appendix 'A'**, be approved. The revised rules will be effective from 1st January 2006. The projects which are already approved or negotiated or under negotiation may be undertaken as per existing rules provided PIs' furnish information in respect of such projects along with the documentary evidence of undergoing negotiations.



Further, the Board authorised the Dean, SRIC to make minor editorial changes, wherever necessary, in the Consultancy Rules and Guidelines as well as rules for PDF.

Item No.14.2.2 To consider a proposal for having Post-Doctoral Fellows in the IITs as recommended by the IIT Directors and Standing Committee of IIT Council (SCIC).

The Finance Committee had considered the issue vide item No. 13.4. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/77/2005: RESOLVED THAT the proposal for having Post-Doctoral Fellows as recommended by the IIT Directors and Standing Committee of IIT Council (SCIC) on a consolidated fellowship between Rs.15,000/- to Rs.25,000/- per month with HRA, be approved. However, this will be handled centrally for which guidelines shall be prepared and may be implemented only, if IIT Roorkee is allocated additional Non-plan grant.

Item No. 14.2.3 To consider the waiver of requirement of Ph.D. for recruitment of faculty at the IITs at the entry level in the streams of Architecture & Regional Planning, Design and Medical Sciences as recommended by the IIT Directors and Standing Committee of IIT Council (SCIC).

RESOLUTION NO. BG/78/2005: RESOLVED THAT as recommended by the IIT Directors and approved by the Standing Committee of IIT Council (SCIC), the proposal of waiver of requirement of Ph.D. for recruitment of faculty at the IITs at the entry level in the streams of Architecture & Regional Planning, Design and Medical Sciences be approved.

Item no. 14.2.4 To consider the Concept of establishing a Centre of Nanotechnology at IIT Roorkee.

RESOLUTION NO. BG/79/2005: RESOLVED THAT only the Concept of establishing a Centre of



Nanotechnology at IIT Roorkee as given at **Appendix** 'B', be approved.

Further resolved that separate proposals for functioning of the Centre, including the budget, should be putup to the appropriate authorities/bodies.

Item No. 14.2.5 To consider establishing a Centre of Disaster Mitigation and Management at IIT Roorkee.

RESOLUTION NO. BG/80/2005: RESOLVED THAT only the Concept of establishing a Centre of Disaster Mitigation and Management at IIT Roorkee be approved.

Further resolved that separate proposals for functioning of the Centre, including the budget, should be putup to the appropriate authorities/bodies.

Item No.14.2.6 To take a note of the Minutes of the 11th meeting of the Building & Works Committee held on 30th November 2005. (The items, which require specified approval, have been included in the agenda, separately).

The Board noted the Minutes of the 11th meeting of the Building & Works Committee held on 30th November 2005.

Item No.14.2.7 To consider the revised Preliminary Estimate amounting to Rs. 37.86 crores for Development of the Greater Noida Extension Centre under Phase-I, as submitted by M/s EIL, New Delhi.

The Finance Committee had considered the issue vide item No. 13.15. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/81/2005: RESOLVED THAT an amount of Rs. 30.00 crores including service charges against the revised Preliminary Estimate of Rs. 37.86 crores be worked out by the M/S Engineers India Ltd., New Delhi, for development of the Greater Noida Extension Centre under Phase-I.

In addition, the Guest House should be used partly as a Guest House and partly as a hostel, in order to economise on the cost of construction. It was also suggested that air-conditioning etc. be provided only in some rooms and not all rooms. Secondly, the 500 seat auditorium may be shifted to another phase, to be taken up in future as per the requirement of such a facility.

Item No.14.2.8 To consider the Preliminary Estimate amounting to Rs. 21.75 lacs for conversion of the Old Teachers' Hostel into a Girls' Hostel as recommended by the B&WC.

The Finance Committee had considered the issue vide item No. 13.11. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/82/2005: RESOLVED THAT the Preliminary Estimate amounting to Rs. 21.75 lacs as given at **Appendix 'C'** as recommended by the Building & Works Committee and the Finance Committee for conversion of the Old Teachers' Hostel into a Girls' Hostel be approved.

Item No. 14.2.9 To consider the Preliminary Estimate amounting to Rs.15.00 lacs for replacement of a certain portion of the sewer line in the Azad Wing- Niti Nagar area.

The Finance Committee had considered the issue vide item No. 13.12. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/83/2005: RESOLVED THAT the Preliminary Estimate amounting to Rs.15.00 lacs as given at Appendix 'D' as recommended by the Building & Works Committee and the Finance Committee for replacement of a certain portion of the sewer line in the Azad Wing- Niti Nagar area be approved.

Item No. 14.2.10 To consider the proposal for engaging one J.E. (Horticulture) on contract, for the Estate & Works Division, IIT Roorkee to look after the lawns and gardens in Departments and Hostels, chargeable to the Non-Plan grant of the Institute as recommended by the B&WC.

The Finance Committee had considered the issue vide item No. 13.13. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/84/2005: RESOLVED THAT one post of J.E. (Horticulture) in the pay scale of Rs.4,500-125-7,000 for the Estate & Works Division, as recommended by the Building & Works Committee and the Finance Committee to look after the lawns and gardens in the Departments and the Hostels, chargeable to the Non-Plan grant of the Institute be filled in the regular cadre. The qualifications for the same will be as specified below:

Master's degree in Horticulture with one year of relevant experience.

OR

Bachelor's degree in Agriculture with 3 years of relevant experience.

Item No.14.2.11 To consider the Preliminary Estimate amounting to Rs. 75.00 lacs for construction of 75 rooms in Ganga Bhawan as recommended by the B&WC.

The Finance Committee had considered the issue vide item No. 13.10. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/85/2005: RESOLVED THAT the Preliminary Estimate amounting to Rs. 75.00 lacs as given at **Appendix 'E'** as recommended by the Building & Works Committee and the Finance Committee for construction of 75 additional single



seated rooms in the Ganga Bhawan complex, be approved.

Item No.14.3.1 To consider the case regarding payment of Transfer T.A. to Emeritus Fellow after relinquishing the fellowship at the expiry of their tenure.

The Finance Committee had considered the issue vide item No. 13.5. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/86/2005: RESOLVED THAT since this is only a technicality, the tenure of the Emeritus Fellowship be treated as "re-employment" and the concerned Emeritus Fellows be allowed to avail the transfer T.A., after relinquishing the fellowship.

Item No.14.3.2 To consider Inter-IIT Faculty Exchange Scheme.

RESOLUTION NO. BG/87/2005: RESOLVED THAT the Inter -IIT Faculty Exchange Scheme as given at **Appendix 'F'** be approved.

Item No. 14.3.3 Post retirement medical benefit scheme for the retired employees of IIT Roorkee.

RESOLUTION NO. BG/88/2005: RESOLVED THAT the post retirement medical benefit scheme for the retired employees of IIT Roorkee be accepted in principle. The financial details may be worked out and a concrete proposal may be routed through the Finance Committee.

Item No.14.3.4 To consider the relaxation in eligibility criteria for various faculty positions in respect of those who joined the Institute prior to conversion to IIT.

After discussion, the Board came to the conclusion that the flexibility clause similar to those in other IITs i.e. "Minimum requirement of qualifications and/or experience may be relaxed in respect of outstanding exceptional cases", be included in the advertisement as a note.

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Item No. 14.4.1 To consider the request of Dean, Saharanpur Campus for filling up a post of PTI Gr. II in the pay scale of Rs. 5000-8000 which has fallen vacant due to the retirement of Sri P.D. Dhyani, PTI Grade-II.

The Finance Committee had considered the issue vide item No. 13.6. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/89/2005: RESOLVED THAT since the vacancy of a PTI Gr. II in the pay scale of Rs.5,000-150-8,000 is a vacancy that has been created due to retirement, the same be filled, on regular basis, as per the approved qualifications and pay scale for this post.

Item No.14.4.2 To consider the request of Dr. V.K. Gupta, Professor, Chemistry Department, as ADOSW and Chairman CCB for providing licence fee free accommodation in the line with the Deans and the licence fee paid by Dr. Gupta from November 2004 to date be refunded to him and in future rent against accommodation may not be deducted from his salary at par with the Deans.

RESOLUTION NO. BG/90/2005: RESOLVED THAT no licence fee for accommodation be charged in future from all the Associate Deans, as in case of Deans. In the specific case of Dr. V.K.Gupta, the licence fee paid by him w.e.f. November 2004, i.e. the date he was neither getting remuneration nor getting licence fee free accommodation, be refunded.

Item No. 14.4.3 To consider the payment of Non-Productivity Linked Bonus to the employees who are in the payscale of Rs. 6,500-200-10,500 after promotional time scale and mapping

The issue be deferred to the next meeting.

मद सं0 14.4.4

भारतीय प्रौद्योगिकी संस्थान दिल्ली की तरह ही भारतीय प्रौद्योगिकी संस्थान रुड़की में भी हिन्दी में अधिकाधिक कार्यलयीन कार्य करने के लिये प्रोत्साहन योजनाओं को स्वीकृत किये जाने के संबंध में विचार करना ।

वित्त समिति ने यह मामला मद सं0 13.7 द्वारा विचार किया। वित्त समिति की संस्तुति अभिाशासक परिषद के सम्मुख प्रस्तुत की गई। विचारोपरान्त अभिशासक परिषद ने वित्त समिति की संस्तुति को स्वीकार कर लिया।

प्रस्ताव सं0 बी0जी0/91/2005ः पारित किया कि भारतीय प्रौद्योगिकी संरथान रुड़की में हिन्दी में अधिकाधिक कार्यलयीन कार्य करने के लिये प्रस्तावित प्रोत्साहन योजनाओं (परिशिष्ट— जी) को स्वीकृती प्रदान की जाती है।

मद0 सं0 14.4.5

हिन्दी कक्ष के लिये अनुवादक के दो पदो के सृजन हेतु विचार करना

वित्त समिति ने मद सं0 13.8 द्वारा विचार किया । वित्त समिति की संस्तुति अभाशासक परिषद के सम्मुख प्रस्तुत की गई । विचारोपरान्त अभिशासक परिषद ने वित्त समिति की संस्तुति को स्वीकार कर लिया ।

प्रस्ताव सं0 बी0जी0/92/2005ः पारित किया कि भारतीय प्रौद्योगिकी संस्थान रुड़की में राजभाषा अधिनियम का सुचारू रूप से कार्यान्वयन के लिये राजभाषा हिन्दी प्रकोष्ट में रु.4,500—125—7,000 के वेतनमान में तकनीकी सहायक (अनुवादक) के दो पदो को सृजित करने के प्रस्ताव को स्वीकृत किया जाता है । इन पदो के सृजन के लिए एक विस्तृत प्रस्ताव मानव संसाधन विकास मंत्रालय में भेज दिया जाए । इन पदो के लिए वॉछित योग्यता इस प्रकार होगी:—

"किसी मान्यता प्राप्त विश्वविद्यालय से स्नातक स्तर पर अंग्रेजी एक विषय के रूप में तथा हिन्दी में स्नातकोत्तर उपाधि या किसी मान्यता प्राप्त विश्वविद्यालय से स्नातक स्तर पर हिन्दी एक विषय के रूप में तथा अंग्रेजी में स्नातकोत्तर उपाधि तथा कम से कम एक वर्ष का संबंधित अनुभव तथा कम्पयूटर की जानकारी की योग्यता हिन्दी/अंग्रेजी में अनिवार्य है।

या

10 + 2 स्तर (बारहवीं कक्षा) तक अंग्रेजी एक अनिवार्य विषय के रूप में पढ़ा हो, तत्पश्चात, रनातक स्तर पर हिन्दी एक मुख्य विषय के रूप में पढ़ा हो, एवं रनातक की उपाधि हाने के साथ किसी केन्द्रीय/ राज्य सरकार के कार्यालय या अन्य किसी सरकारी अथवा स्वायत्तशासी संगठन में हिन्दी से अंग्रेजी तथा अंग्रेजी से हिन्दी अनुवाद कार्य का कम से कम

तीन वर्ष का अनुभव तथा कम्पयूटर की जानकारी की योग्यता हिन्दी/अंग्रेजी में अनिवार्य है।

वॉछनीय हिन्दी या अंग्रेजी विषय में स्नातकोत्तर उपाधि के साथ स्नातक स्तर पर विज्ञान की उपाधि तथा वैज्ञानिक व तकनीकी सामग्री के अनुवाद का कम से कम दो वर्ष का अनुभव रखने वाले अभ्यर्थी को वरीयता दी जायेगी।

Item No. 14.4.6 To approve the Constitution of Roorkee School for the Deaf.

RESOLUTION NO. BG/93/2005: RESOLVED THAT the constitution of Roorkee School for the Deaf as modified and given at **Appendix 'H'** be approved.

Note: Action on this item be deferred, in view of the opinion of the Chairman, BOG, communicated vide his letter dated 4th February 2006, and status quo of the existing constitution be maintained.

Item No. 14.4.7 Eligibility requirement of regular service for the first and second financial upgradation under MACP Scheme.

After discussion, the Board decided that the issue be not taken up, as the matter is sub-judice.

Item No. 14.4.8 To consider the request of Manager, Adarsh Bal Niketan, Senior Secondary School, Indian Institute of Technology Roorkee, Roorkee for addition a clause in the constitution of Adarsh Bal Niketan, Senior Secondary School.

RESOLUTION NO. BG/94/2005: RESOLVED THAT the under-mentioned provision in the Constitution of Adarsh Bal Niketan Senior Secondary School, IIT Roorkee be added:

"In case, the School Management Committee recommends to BoG to dissolve the society/school due to inability in running the school or any other reason, the buildings and land will go back to IIT Roorkee. The other assets will be utilized to meet the liabilities of the school. The remaining assets will also be transferred to IIT Roorkee. The Board of Governors, IIT Roorkee will



be fully empowered to take any decision regarding transfer of buildings and remaining assets to any other organization for the same purpose of imparting the education."

Item No. 14.4.9 To consider the revision of emoluments and designations for 'Y' Pool Contract Workers w.e.f. 1st April 2005.

The Finance Committee had considered the issue vide item No. 13.14. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/95/2005: RESOLVED THAT the revised emoluments for Y' Pool Contract workers working in projects be approved as given at **Appendix** 'I'. The revised emoluments be effective from 1st April 2005.

Item No. 14.4.10 To consider filling up a post of Lab. Assistant (Glass Blower) in the Department of Chemistry on contract basis.

The Finance Committee had considered the issue vide item No. 13.9. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/96/2005: RESOLVED THAT one post of Laboratory Assistant (Glass Blower) in the pay scale of Rs.3050-75-3,950-80-4,590 in the Department of Chemistry in the regular cadre be filled. The educational qualifications and experience requirement for this post will be the same as per the entry level qualifications for the post of Laboratory Assistant which are approved for this post and pay scale.

Item No.14.4.11 To consider the assessment of Scientific Officers working in the Institute for long time for up gradation.

After discussion, the Board decided that a self contained proposal be brought before the Board in the next meeting, creating slots for outstanding people, to be recognised for career advancement.

Item No.14.4.12 To consider the report of enquiry conducted by Professor B.C.Nakra of IIT Delhi regarding placing purchase orders with M/s Universal Refrigeration Corporation, Faridabad in 1991 by the then University of Roorkee.

After discussion, the Board accepted the report of Prof. B.C.Nakra and expressed deep appreciation to him. Further decided that the report may be studied including legal implications/ advice for follow up action.

Item No. 14.4.13 Purchase of a vehicle for the Director, IIT Roorkee.

The Finance Committee had considered the issue vide item No. 13.15. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/97/2005: RESOLVED THAT the proposal for buying a Mahindra Scorpio SLX Model/ Chevrolet Tavera (LT-L1/LT-L2 Model)/ Tata Safari (LX 4x2) costing approximately Rs. 7.00 lacs, for outstation visits of the Director be approved, without engagement of an additional driver.

Item No. 14.5.1 To report the Decisions/Actions taken by the Chairman, Board of Governors on behalf of the Board of Governors.

The Board ratified the approvals accorded by the Chairman, BoG on behalf of the Board.

RESOLUTION NO. BG/98/2005: RESOLVED THAT the approvals accorded by the Chairman, BOG on



behalf of the Board, in the matters listed below, are ratified.

- (a) Signing of MoU between New Jersey Institute of Technology (NJIT), Newark, USA and IIT-Roorkee. (refer Appendix 'J').
- (b) Signing of MoU between National Institute of Hydrology, Roorkee and IIT- Roorkee. (refer Appendix 'K').
- (c) Annual Report of IIT Roorkee for the year 2004-2005 (Hindi & English version).
- (d) Re-employment of Prof. A.N. Garg, Chemistry Department, Prof. R.M. Manickvasagam, Institute Instrumentation Centre and Prof. S. Basu, Earthquake Engineering Department upto the end of Autumn Semester i.e. 31.12,2005.
- (e) Permission to relieve Sri Gopal Kumar Rastogi, Assistant Registrar (Finance) on lien for a period of one year.
- (f) Extension of contractual appointment of Dr. H.S. Dhaliwal, as Professor (On contract) w.e.f. 20.11.2005 to 29.2.2008.
- (g) Recommendations of the Selection Committee for the post of Associate Professor, Assistant Professor and Lecturer (On contract) in the Department of Electronics & Computer Engineering held on 17.11.2005.
- (h) Recommendations of the Selection Committee for the post of Professor, Associate Professor, Assistant Professor and Lecturer (On contract) in the Department of Mechanical & Industrial Engineering held on 21.11.2005 & 22.11.2005.
- (i) Recommendations of the Selection Committee for the post of Associate Professor, Assistant Professor in the Department of Earthquake Engineering held on 25.11.2005.



- (j) Recommendations of the Selection Committee for the post of Professor, Associate Professor, Assistant Professor and Lecturer (On contract) in the Department of Electrical Engineering held on 28.11.2055 & 29.11.2005.
- (k) Permission to relieve Prof. V.K. Tewari, Metallurgical & Materials Engineering Department on lien for a period of three year w.e.f. 2.12.2005 to 1.12.2008 to join as Vice Chancellor, Uttranchal Technical University, Dehradun.
- (l) Permission to relieve Dr. R.P. Agarwal, Professor, Electronics & Computer Engineering Department w.e.f. 5.12.2005 (AN) on lien upto the date of his superannuation.
- (m) Extension of contractual appointment of Dr. R.K.Peddinti, Assistant Professor (on contract) till the end of Academic Session 2005-2006 i.e. 30.6.2006.
- (n) Appointment of Dr. Ila Gupta, Assistant Professor, Architecture & Planning Department as Joint Faculty in the Department of Humanities & Social Sciences for a period of 3 years.
- (o) Extension of Emeritus Fellowship to Prof. P.K.Swami, Department of Civil Engineering for the remaining admissible period i.e. upto 30.6.2006.
- (p) Acceptance the request of Dr. (Mrs)Irene Sarkar (i) for Voluntary Retirement w.e.f. 27.2.2006 (FN), and (ii) to permit the weightage in the qualifying service of 4 years 8 months 5 days on voluntary retirement under Rule 48-B of the CCS (Pension) Rules.
- (q) Recommendations of the Assessment Committee in respect of Sri Madhurjee alias R. P. Pandey, Public Relations Officer for granting him the higher Government approved pay scale of Rs. 12,000-420-18,300.

- (r) Resignation of Dr. P.P.De from the post of Asstt. Professor in the Department of Electronics & Computer Engineering w.e.f. 31.12.2005, waving a period of one month and twenty days falling short of three months notice period from 20.11.2005 i.e. the date of resignation.
- (s) Correction at Sl.No.14 & 17 in the reporting item No. 12.5.2(e) reported to the BOG in its meeting held on 30.7.2005.
- Re-employment of Prof. D.B.Goel, Department of (t) Metallurgical & Materials Engineering, Prof. H.G.Sharma, Department of Mathematics, Prof. S.R.Gupta, Department of Mechanical Industrial Engineering, Prof. Kailash Chandra, Instrumentation Institute Centre, Prof. A.N.Garg, Department of Chemistry Rs.14,000/- p.m. (as emoluments of emeritus fellow and thereafter as per rules and practice), Prof. Manickavasagam, R.M. Instrumentation Centre, Prof. M.Bhattacharya. Department Mechanical of 85 Industrial Engineering, Prof. H.C.Mehndiratta, Department of Civil Engineering and Dr. V.K.Tandon, Associate Professor, Department of Physics up to 30.6.2006.

Item No. 14.5.2 To report certain matters for the Information of the Board of Governors.

RESOLUTION NO. BG/99/2005: RESOLVED THAT the matters, as listed below, were noted and recorded.

- (a) Payment of Dearness Allowance, Dearness Relief to Pensioners/Family Pensioners at revised rates w.e.f. 1.7.2005 and Non Productivity Linked Bonus (ad-hoc bonus) for the year 2004-2005 to the employees of IIT Roorkee
- (b) Actions/decisions taken by the Deans' Committee.

(c) The following faculty members were appointed as per the details given below:-

Sl.	Name	Designation	Department	Date
No	·			
1.	Dr. Pravinder Kumar	Asstt. Professor	Biotechnology	23.11.2005 (AN)
2.	Dr. P.K. Jain	Professor	MIED	29.11.2005 (AN)
3.	Dr. Dinesh Kumar	Professor	Mechanical &	29.11.2005 (AN)
			Industrial Engg.	·
4.	Dr. B.K. Gandhi	Assoc. Professor	Mechanical &	29.11.2005 (AN)
		<u> </u>	Industrial Engg.	<u> </u>
5.	Dr. Navneet Arora	Assoc. Professor	Mechanical &	29.11.2005 (AN)
L			Industrial Engg.	
6.	Dr. Ravi Kumar	Assoc. Professor	Mechanical &	29.11.2005 (AN)
			Industrial Engg.	
7.	Dr. K. Murugesan	Asstt. Professor	Mechanical &	29.11.2005 (AN)
			Industrial Engg.	
8.	Dr. J.P.Narayan	Assoc. Professor	Earthquake	30.11.2005
]			Engineering	
9.	Dr. Biswarup Das	Assoc. Professor	Electrical Engg.	02.12.2005 (AN)
10.	Dr. R.P. Maheshwari	Assoc. Professor	Electrical Engg.	02.12.2005 (AN)
11.	Dr. R.S.Anand	Assoc. Professor	Electrical Engg.	02.12.2005 (AN)
12.	Dr. S. Mukherjee	Professor_	Electrical Engg.	05.12.2005

(d) The following faculty members and other staff have been brought on regular cadre:

S1. No.	Name	Designation	Department	Date on which brought on Regular Cadre
1.	Mr. Ravi Kumar Chauhan	Jr. Programmer	Institute Computer Centre	30.07.2005
2.	Dr. D.K. Dwivedi	Assistant Professor	Mechanical & Industrial Engineering	03.08.2005
3.	Mr. Sanjeev Shukla	Scientific Officer Gr. –II	Institute Computer Centre	16.08.2005
4.	Dr. M.L. Sharma	Associate Professor	Earthquake Engineering	28.09.2005
5.	Dr. Pankaj Agarwal	Assistant Professor	Earthquake Engineering	28.09.2005
6.	Dr. Ramesh Chandra	Assistant Professor	Institute Instrumentation Centre	24.11.2005
7.	Dr. U.P.Singh	Associate Professor	Chemistry	13.05.2005

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(e) The following Faculty Members and other staff have superannuated/resigned:-

S1. No.	Name		Designation	Department	Date of Superannuation/ Resignation
1.	Dr. S. Basu	· · · · · ·	Professor	Earthquake Engineering	30.11.2005 (Retd.)
2.	Dr.	R.M.	Professor	Institute	30.11.2005 (Retd.)
	Manickavasa	agam		Instrumentation Centre (IIC)	

(f) The following faculty members have been extended/granted Extra Ordinary Leave:-

SI.	Name,	Per	riod	Nature	Purpose
No.	Designation & Department	From	То		
1.	Dr. M.C. Bansal, Professor, Department of Paper Technology Saharanpur	18.08.2005	14.07.2006 (Tentatively)	EOL	Join the post of Director at RIT, Puhana Roorkee
2.	Dr. A.K. Jain, Professor, Physics Deptt.	15.09.2005	15.06.2006	EOL	Join the post of Visiting Professor in Kuwait University
3.	Dr. M.L. Dewal, Asstt. Professor, Electrical Engg. Deptt.	15,10.2005	14.10.2007	EOL/ Deputation	Extended

(g) Minutes of the 14th Meeting of the Senate of the Institute held on 5th December 2005.

UNDER ANY OTHER ITEM:

Item No.14.4.14: To consider the case of Dr. Sanjay Palsule, Associate Professor, Department of Paper Technology.

Considered the conduct of Dr. Sanjay Palsule, Associate Professor as reported by Departmental Professorial Committee (DPC), Department of Paper Technology and DOFA. The Board of Governors decided that as his conduct was not satisfactory, his probation be extended further by six months w.e.f.

30th November 2005, totalling one year extension. His conduct and performance be observed during the extended period of probation.

The Director proposed a vote of thanks for Prof. H.K.Verma and Prof. A.K.Jain, the out going members of the BOG for their valuable committed contribution in the deliberations of the Board, during the meetings held in the last two years.

The meeting ended with a vote of thanks to the Chair.

Existing Rule	Revised Rules as approved by the BOG
1.6 Individual Consultancy Projects	1.5 Individual Consultancy Projects
All consultancy Projects which are not	All Consultancy Projects which are not
Departmental Consultancy Projects will be	Departmental Consultancy Projects will be
treated as Individual Consultancy Project.	treated as Individual Consultancy Project.
1.7 Type-I Consultancy Projects	1.6 Type-I Consultancy Projects including
	HRD Programmes in the Continuing
	Education Centre
Consultancy Projects without the use of	Consultancy Projects without the use of
laboratory facilities of the Institute will be	laboratory facilities of the Institute will be
classified as Type –I Consultancy Projects.	classified as Type –I Consultancy Projects.
1.8 Type-II Consultancy Projects	1.7 Type-II Consultancy Projects
Consultancy Projects involving use of	Consultancy Projects involving use of
laboratory facilities of the Institute will be	laboratory facilities of the Institute will be
classified as Type-II Consultancy Projects.	classified as Type-II Consultancy Projects.
Such projects will cover field testing, and field	Such projects will cover field testing, and field measurements, calibration of equipment/
measurements, calibration of equipment/ instruments and testing of material/ equipment	measurements, calibration of equipment/ instruments and testing of material/ equipment
in laboratory and development work using	in laboratory and development work using
laboratory facilities.	laboratory facilities.
1.5 Departmental Consultancy Projects	1.8 Type- III Departmental Consultancy
	Projects with/ without use of lab facilities
A project referred to the Head of the	A project referred to the Head of the
Department may be taken up as a Departmental	Department or a functionary of the Institute
Consultancy Project. Further, a project referred	(i.e. Deans or Director) may be taken up as a
to an individual faculty member may also be	Departmental or individual Consultancy
taken up as Departmental Consultancy Project	Project. Further, a project referred to an
at the request of that faculty member.	individual faculty member may also be taken up
Normally, Consultancy Projects involving	as Departmental Consultancy Project at the request of that faculty member. Normally,
multi disciplinary/ inter departmental inputs or requiring use of large facilities, likewise	Consultancy Projects involving multi
projects which were expected to run for a long	disciplinary/ inter departmental inputs or
period may be considered by a department to	requiring use of large facilities; likewise
be taken up as Departmental Consultancy	projects which were expected to run for a long
Projects. A Departmental Consultancy Project	period may be considered by a department to be
will have at least three investigators.	taken up as Departmental Consultancy Projects.
However, the centers / departments with	A Departmental Consultancy Project will have
special character different from that of normal	at least three investigators.
teaching departments the respective centers/	
departments may define the scope of	
Departmental Consultancy Project, in accordance with their needs, subject to the	
approval of the Board of Governors.	
approvator are board or obvertions.	

1.11 Institute Development Fund (IDF)

A part of the Institutional Overhead Charges (IOC) received for sponsored research and a part of the Institute share from Industrial Consultancy project will be credited to a separate Dean (SRIC) fund as per budget approved by the Budget Committee of fund to be called as SRIC fund and to be operated by Dean of the Institute. A part of the SRIC fund will be transferred every year to Institute Development fund, which will form the Corpus of the Institute.

1.11 Institute Development Fund (IDF)

A part of the Institutional Overhead Charges (IOC) received for sponsored research and a part of the Institute share from Industrial Consultancy project will be credited to a separate **fund** to be called as SRIC fund and to be operated by Dean (SRIC) of the Institute, as per budget approved by the Board SRIC. A part of the SRIC fund will be transferred every year to Institute Development fund, which will form the Corpus of the Institute.

2.4

For projects involving only site visits for consultation work and/ or personal discussion, fees may be charged on per day basis at mutually acceptable rate subject to minimum of Rs.2500/- per man-day for academic staff, including the days spent on travel.

2.4

For projects involving only site visits for consultation work and/ or personal discussion, fees may be charged on per day basis at mutually acceptable rate which shall normally be a minimum of Rs.5000/- per man-day for academic staff, including the days spent on travel.

2.5

For technical and other non-academic staff, making only site visits outside the scope of an on-going Consultancy Project, fees may be charged on per day basis at minimum of Rs.200/- per man-day.

2.5

For technical and other non-academic staff, making only site visits outside the scope of an on-going Consultancy Project, fees may be charged on per day basis at minimum of Rs.500/- per man-day.

2.7

No Consultancy project from any agency can be taken up for an amount less than Rs.2500/-. This will, however, not apply for cases where rates have been fixed by the department / Institute. This limit may be reviewed every three years.

2.7

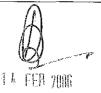
No Consultancy project from any agency can be taken up for an amount less than Rs.10,000/-. This will, however, not apply for cases where rates have been fixed by the department / Institute. This limit may be reviewed every three years.

2.10

In addition to academic & technical staff, the PI may distribute upto Rs.5000/- or 2% of total amount of honorarium being distributed, whichever is less, as remuneration to other staff of the department for miscellaneous assistance rendered in the execution of the project.

2.10

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3.2 Students Assistance

The Principal Investigator may engage Institute Students as Student Assistants for consultancy and testing work on payment of Rs.50/- per hour subject to a maximum of 50 hours per month. However, students receiving fellowship from any agency shall not be entitled to such payments.

3.2 Students Assistance

The Principal Investigator may engage Institute Students (who may or may not be getting fellowship) as Student Assistants for consultancy and testing work on payment of Rs.100/- per hour subject to a maximum of 50 hours per month.

3.3 Hospitality

Expenses incurred on reasonable hospitality not exceeding Rs.300/- per head per meal and Rs.75/- per head for snacks etc., in connection with the consultation work can be charged as expenses out of the fee received subject to the condition that the total expenditure on this account should not exceed 5% of gross fees contracted for the project. For larger expenditure approval of Dean (SRIC) will be necessary.

3.3 Hospitality

Expenses incurred on reasonable hospitality not exceeding Rs.400/- per head per meal and Rs.150/- per head for snacks etc., in connection with the consultation work can be charged as expenses.

3.4 Travel

The most expeditious and convenient mode of travel should be used to minimize period of absence from the Institute. There will be no restriction placed by the Institute on the mode of travel. Actual boarding & lodging expenses, in addition to DA, will be paid on production of receipt, subject to a maximum of twice the daily gross salary at the ceiling of the person's pay scale. All these expenses will be met out of the Consultancy project funds.

3.4 Travel

The most expeditious and convenient mode of travel should be used to minimize period of absence from the Institute. There will be no restriction placed by the Institute on the mode of travel. In addition to the admissible DA as per rules of the Institute, Actual boarding & lodging expenses will be paid on production of receipt, subject to a maximum of twice the daily gross salary at the ceiling of the person's pay scale. Expenses on local travel by taxi will be reimbursed against cash receipt as per actuals. All these expenses will be met out of the Consultancy project funds.

3.5 Out of Pocket Expenses for Field Work*

The payment of "Out of Pocket Expenses" to the faculty and other staff sent for field work connected with the sponsored research or consultancy projects will be admissible on the following conditions:

3.5 Out of Pocket Expenses for Field Work

The payment of "Out of Pocket Expenses" to the faculty and other Institute staff, project staff and persons engaged on work hire basis sent for field work connected with the sponsored research or consultancy projects will be admissible on the following rates:



(d) The rate of payment of Out of pocket expenses will be as under:	(d) The rate of payment of Out of pocket expenses will be as under:
Category of Staff Class 'A' and 'B' Class 'C' and 'D' *See notification No. SRIC/1165/BSRIC-2003 dated March 24, 2003.	Category of Staff Class 'A' and 'B' Rs.450/- per day Class 'C' and 'D' Rs.200/- per day Person engaged on work hire basis Rs. 200/- per day.
3.6 Consultants 3.6.1	3.6 Consultants 3.6.1
Normally provision for involving experts from outside the Institute as consultants, if necessary, will be made at the time of acceptance / approval of the project.	Normally provision for involving experts from outside the Institute as consultants, if necessary, will be made at the time of acceptance / approval of the project and in case of large consultancy project the involvement will be decided by monitoring committee as per clause 12 of guidelines for industrial consultancy.
3.6.2	3.6.2
An amount upto Rs.25,000 or 10% of the Consultancy fee, whichever is lower, can be paid to Consultant(s) after obtaining approval from the Dean (SRIC).	An amount upto Rs.50,000 or 20% of the Consultancy fee, whichever is lower, can be paid to Consultant(s) after obtaining approval from the Dean (SRIC).
3.6.3	3.6.3
For payment over Rs.25,000 and upto Rs.50,000 or 15% of the total fees, whichever is lower, approval of a Committee set up for this purpose by the Director under the Chairmanship of Dean (SRIC) would be required	
3.6.4	3.6.4
For payments over Rs.50,000 or over 15% of the Consultancy fee, Director may approve payments on the recommendations of the Committee mentioned above.	For payments over Rs.1,00,000 or over 30% of the Consultancy fee, Director may approve payments on the recommendations of the Committee mentioned above.
3.6.5	3.6.5
Payment exceeding 20% of the total Consultancy fee shall not normally be allowed to consultant(s).	Payment exceeding 40% of the total Consultancy fee shall not normally be allowed to consultant(s).

3.7	3.7 Standing Committee
	A committee as at 3.6.3 duly proposed by the Dean (SRIC) and approved by the Director shall be the Standing Committee for Consultancy Projects.
	3.7.1 The composition of the Standing Committee shall be as under:-
	(i) Dean SRIC (ex-officio) - Chairman (ii) Three Professors from - Members different Departments proposed by the Dean SRIC & approved by Director
	3.7.2 Functions of Standing Committee
	(i) To consider involvement of consultants/ outside experts as per rule 3.6 consultants. (ii) To consider the sub-contract, if any, as
	proposed by the PI/ Monitoring Committee of the project.
4.1 INDIVIDUAL CONSULTANCY PROJECTS	4.1 INDIVIDUAL CONSULTANCY PROJECTS (including HRD activities in the Continuing Education Centre).
For Consultancy work without use of Laboratory Facilities, the norms for calculation of various percentages for distribution will be as follows:	For Consultancy work without use of Laboratory Facilities and for HRD activities in the Continuing Education Centre, the norms for calculation of various percentages for distribution of the total money received from client (excluding service tax in every case) will be as follows:
4.1.1 Consultancy work without use of laboratory facilities(Type I) Total Fee received from client = I	4.1.1 Consultancy work without use of laboratory facilities(Type I) Total money received from client = I (excluding Service Tax)
Amount paid as Institute share in the beginning = 0.05 I Remaining amount (F) = 0.95 I Total expenditure on the project = E	Amount paid as Institute share in the beginning (I*)= 0.20 I Remaining amount (F) = 0.80 I
Savings = (S) = (F - E) Amount paid as Institute share = 0.15 S Remaining amount = 0.85 S	Total expenditure on the project = E Savings = $(S) = (F - E)$ Amount S to be distributed to Investigators,
0.80 S to be distributed to Investigators	technical and other staff on the recommendation

Research & Industrial Consultancy (BSRIC) from time to time. 4.2.1 In 'Departmental Consultancy Projects' without use of laboratory facilities, the Institute share from the saving(S) will be 0.35 S; 0.6 S	decided by the Board for Sponsored Research & Industrial Consultancy (BSRIC) from time to time. 4.2.1 In 'Departmental Consultancy Projects' Type III (with & without use of lab facilities)
be decided by the Board for Sponsored Research & Industrial Consultancy (BSRIC) from time to time.	support and staff welfare fund will be decided by the Board for Sponsored Research & Industrial Consultancy (BSRIC) from time to time.
4.1.3 The guidelines for distribution of 0.05 S will	The guidelines of distribution for office
Total Fee received from client = I Amount paid as Institute share in the beginning = 0.05 I Remaining amount (F) = 0.95 I Total expenditure on the project = E Savings = (S) = (F - E) Amount paid as Institute share = 0.30 S Remainder = 0.70 S0.65 S to be distributed to Investigators / Technical Staff 0.05 S to be distributed for office support and staff welfare fund.	Total money received from client = I (excluding Service Tax) Amount paid as Institute share in the beginning (I*)= 0.30 I Remaining amount (F) = 0.70 I Total expenditure on the project = E Savings = (S) = (F - E) Amount S to be distributed to Investigators, technical and other staff on the recommendation of PI
For Consultancy work involving use of Laboratory Facilities, the norms for calculation of various percentages for distribution will be as follows:	
 0.05 S to be distributed for office support and staff welfare fund. 4.1.2 Consultancy work involving use of laboratory facilities(Type II) 	

4.2.3.

For deficit departments/ centres the Institute share of saving(S) as given in 4.2.1 and 4.2.2 above will go towards salary of staff of the concerned department. 0.05 S to be distributed as per clause 4.3 and remaining to be distributed to investigators/technical staff.

4.2.2

To be deleted & substituted by following clause:-

However, in case of a large consultancy project to be funded by a Government Organisation, Institute share may be negotiated with the approval of Director.

Existing Guideline

Revised Guideline as approved by BoG

BUDGETARY **NORMS** FOR. CONSULTANCY PROJECTS

3. BUDGETARY **NORMS FOR** CONSULTANCY PROJECTS

(viii)Contingency expenses to cover cost of supplies. preparation of report, typing. word processing, drawing, drafting, stationery, reproduction, literature (books, iournals, membership fee for professional societies), postage, courier. FAX and telephone (including rental and STD/ trunk call bills of at residence), entertainment expenses, cost of insurance of personnel/ equipment being used for the project, etc.

(viii)Contingency expenses to cover cost of supplies, preparation of report, word processing, drawing, drafting, stationery, reproduction, literature (books, iournals, membership fee for professional societies), postage, courier, FAX and telephone (including rental and STD/ ISD call bills of telephone at residence or mobile phones), cost of insurance of personnel/ equipment being used for the project and also, medical reimbursement for staff on duty (excluding major ailments) etc.

12. LARGE CONSULTANCY **PROJECTS**

12. **LARGE** PROJECTS

CONSULTANCY

For projects with an outlay of more than Rs.50 lacs, the P.I. will ensure that the project proposal before it is submitted to the sponsoring agency is vetted by the Head of the Department and Dean (SRIC). The project, after it is approved by Dean, SRIC, will be monitored by a Monitoring Committee, appointed specially for each such project by the Director on the recommendation of the Dean (SRIC).

For projects with an outlay of more than Rs.50 lacs, the P.I. will ensure that the project proposal before it is submitted to the sponsoring agency is vetted by the Head of the Department and Dean(SRIC). The project, after it is approved by Dean, SRIC, will be monitored by a Monitoring Committee, appointed specially for each such project by the Director on the recommendation of the Dean, SRIC.

12.1 COMPOSITION OF **PROJECT** MONITORING COMMITTEE

The Principal Investigator of the Consultancy Project (having outlay of more than Rs.50.00 lac) may propose a Monitoring Committee for approval with the following composition:

- (1) Dean, SRIC
- Chairman
- (2) Head of the concerned Deptt.
- Member
- (3) Head of one more relevant Member department
- (4) One faculty Member from Member relevant field
- (5) Principal Investigator
- Member
- (6) A.R. (SRIC-Admn.)
- Non-Member

Secretary



12.2 FUNCTIONS OF MONITORING COMMITTEE

The role of Monitoring Committee will be as follows:

- 12.2.1 To assess the progress periodically for timely completion of the projects and submit the report to Dean SRIC.
- 12.2.2 To consider and approve Involvement of outside experts and sub-contracting if any.
- 12.2.3 To vet the major financial reallocation proposals of budget of the project(s) including modifications, if any.
- 12.2.4 To advice Dean, SRIC, in any other matter related to the project.

The recommendations of the Board, SRIC are put up for consideration of the Senate.

Distribution of Institute Share (I*) in % age

Existing Rule for generate of PDF			Revised Rule for generate of PDF as approved by the BoG					
(B) Type of Industrial Consultancy	IDF	DDF	PDF	(B) Type of Industrial Consultancy	IDF	DDF	PDF	Incentive
Project				Project				to office
·								staff &
								staff
					:			Welfare
				-]	1		Fund
								Remarks
(i) Type-I, Individual (w/o Lab)	50	25	25	(i) Type-I, Individual (w/o Lab)	50	15	25	10
(ii) Type-II, Individual (with lab)	70	15	15	(ii) Type-II, Individual (with Lab)	70	10_	15	5
(iii) Type-I, Departmental (w/o Lab)	80	10	10	(iii)Type-III, Departmental (with	70	10	15	5
			ļ ! .	Lab / without Lab)				
(iv) Type-II, Departmental (with Lab)	85	7.5	7.5					
(C) HRD Programmes								
Institutional Overhead Charges(I)								<u> </u>
(i) Sponsored Courses	50	10	30	(i) Sponsored Courses	Be Deleted as HRD Programme			
(ii) Special Courses	60	05	30	(ii) Special Courses	are included			
					in TYPE-I			

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Existing Rule for Utilization of PDF	Revised Rule for Utilization of PDF
Rule 2 - PDF can be utilized by concerned faculty member for the	Rule 2 - PDF can be utilized by concerned faculty member for the following purposes:
following purposes: 2.1 TA/DA and registration fee for attending a conference in India or abroad and for making exploratory visits for sponsored research/ consultancy work.	2.1 TA/DA and registration fee for attending a conference/workshop/symposia/seminar/meeting etc. or deliver a talk without restriction on number of such visits (subject to sanction of appropriate leave by competent authority) to a place in India or abroad and for making exploratory visits for further sponsored research/consultancy work, with advance approval of Dean, SRIC In case a student is a co-author of a paper being presented in a conference etc. and the PI wishes to pay from his PDF for the student's registration fees and travel, the same will also be permissible.
2.4 Equipments/Air conditioned facilities for laboratories and Phone/ Fax facilities in the office.	2.4 Equipments/Phone/Fax Facilities/ air-conditioner for laboratory/office can be purchased with the prior approval of Dean SRIC, which shall be treated as T&P items as per the existing norms of the Institute and therefore shall remain property of the Institute.
2.5 Upgradation or outright purchase of laptop or desktop computer and related peripherals for use by the faculty member at any location as per the work requirement.	2.5 Upgradation or outright purchase of laptop or desktop computer and related peripherals like digital camera/web camera for use by the faculty member at any location as per the work requirement on approval of Dean, SRIC.
2.7 Cost of handset (Cellular Phone) once in five years and Rs.500/- p.m. on any type of telephone calls including prepaid cash card.	2.7 Cost of handset (Cellular Phone) once in two years and Rs.1000/- p.m. on any type of telephone calls including pre-paid cash card. In case of a theft, repurchase may be allowed by Dean, SRIC on furnishing of a copy of FIR along with the request for repurchase. On subsequent incident of theft, repurchase shall however, be allowed after the completion of two years period.
Rule 4 The items procured out of PDF shall be properly accounted for and shall remain property of the Institute. However, any non-consumable items mentioned at serial nos. 2.3, 2.5, 2.7 above may remain as loan to the concerned faculty from the Departmental Library/Laboratory, where the stock entry was made.	Rule 4 The items procured out of PDF shall be properly accounted for and shall remain property of the Institute. However, any non-consumable items mentioned at serial nos. 2.3, 2.5, 2.7 above may be taken away by the concerned faculty from the Departmental Library/Laboratory, on payment of book value as per income tax rules during the period of service or within 3 years of retirement/leaving the service of Institute.
·	Rule 7 Donations to IDF from PDF by desiring faculty member(s) /academic staff are permitted

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Concept Paper

On

NANOTECHNOLOGY CENTRE AT IITR (To be established)



Indian Institute of Technology Roorkee, Roorkee-247667, Uttaranchal December, 2005

1 % FEB 2006

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Preface:

It has been understood in India that the field of Nanotechnology is having wide scope and major challenges for the Scientists, Engineers and Technologists with a promising endeavor. The emphasis of Nanotechnology lies in its multifunctionality and unique combination of properties that are not achievable in the bulk materials. To materialize this vision, it is proposed to launch an Interdisciplinary Centre of Excellence at IIT Roorkee in the field of Nanotechnology. The Strategic Planning Group of the Institute has strongly recommended that a few Centres of Excellence in the selected areas of Technology be developed. In this context it was recommended at different conventions (including an Institute committee constituted for the purpose) that the faculty engaged/working in related areas should be brought together on one platform to give a major thrust to nanotechnology initiatives in the IITR campus. To achieve this aspiration, a group of faculty members from various departments of the Institute.

This concept paper has taken shape during debated and discussion meetings within this group. The Institute Committee has evaluated the concept paper for recommending the same for the consideration and approval of the BoG to launch the Nanotechnology Centre (NTC) at IITR.

Nanotechnology Centre

1. Background

Nano technology today, a major frontier field of research for the production of materials and devices, with the constituents having dimensions in the nanoscale, has reached greater heights of Scientific and Technological developments. Nanotechnology exploits the novel and improved physical, chemical, mechanical & biological properties, phenomena and processes of systems that are intermediate in size between isolated atoms/molecules and bulk materials. It implies the ability to generate and utilize structures, components and devices with a size range falling between about 0.1 nm (atomic and molecular scale) to about 100 nm (or larger in some situations) by the control at either atomic/molecular or macromolecular levels. Novel properties occur compared to bulk behavior because of the small structure size with enormous surface area and short time scale of various processes.

1.1 Applications of Nanotechnology

This technology is already having a significant commercial impact and it will very certainly have much greater impact in the future. Areas of current academic and industrial activity where the use of the nanostructure approach may have significant impact are,

- Miniaturization in the microelectronics industries, as evidenced through reduction on chips of the area and volume needed per transistor leading to rapid increase in computing power,
- Microporous materials for energy storage and separation technologies, including nanostructured materials for highly selective adsorption/separation processes such as H₂O, H₂S, or CO₂ removal; high capacity, low volume gas storage of H₂ and CH₄ for fuel cell applications and high selectivity; high permeance gas separations such as O₂ enrichment; and H₂ separation and recovery,
- · The development of tailored photonic devices,
- The development of new solar energy conversion devices, photocatalysts and fluorescent materials,
- Magnetic materials; multicomponent oxides, bulk metals and alloys and coatings for recording heads and tapes etc.
- Anti-corrosion/wear coatings for controlling marine corrosion, anti-bacterial coatings for arresting microbial corrosion, non-chromate corrosion inhibitors etc.
- Nanofluids with very effective coolant properties during various metal cutting processes due to high heat removal rate in the metal cutting process,
- Thermal barrier materials for the use in high temperature engines, understanding
- Materials for nano tribology applications,
- Fine functional ceramics made from nano-sized powders like BaTiO₃, PZT, ZnO, C-ZrO₂, Al₂O₃ etc.,
- Smart materials for industrial applications,

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- Carbon and other nano tubes, solid state battery or multilayer ceramic capacitor elements for miniaturization,
- Biochemical and pharmaceutical separations and their determination at nanomaterial electrode,
- Product-specific catalysts for petrochemical processes, and
- Environmental remediation applications.

2. Objectives

Nanotechnology center, a multidisciplinary initiative aims at linking engineers and scientists including bio-medical researchers utilizing micro- and nano technologies to address major challenges in the emerging area. The Centre aims to provide state of the art facility for mainly research in the area of Nanotechnology with the expertise of faculty members at ITR. The Center also aims at the following:

- Promotion of awareness across the region of the potential impact of nanotechnology techniques and processes,
- Development of infrastructure for the synthesis and characterization of nanoscale materials,
- Co-ordination between cross-disciplinary undergraduate and postgraduate training in nanoscale science and technology,
- Providing a highly visible and efficient point of contact for: prospective undergraduate and postgraduate students seeking advanced training in next generation technologies, research sponsors, public bodies, the press, investors and industry,
- Providing a forum for the development of Institute research policy and research strategy in nanotechnology area,
- Providing a focal point within the Institute and the region, for nano-material/device, research and development, with particular emphasis on different applications and
- Encouraging technological innovation in the wealth creating sector through entrepreneurial activity, technology licensing and skills transfer.

3. Functional Aspects of the Centre

The proposed activities by the Centre include, PhD Research Programme, Sponsored and Consultancy Research Programme, Teaching Programme, Seminar/ Conference/ Workshop etc.

3.1 Research Activities

Under the research activities, two main components namely broad area of research which involves the participation of various departments and research that involve individuals aims to exist with the support of present scenario at IIR. The details are tabulated below.

3.1.1 Broad area of Research with allied Departments

SI .No.	Research Area	Interacting Department
1	Quantum Dots Applications	Biotechnology , Physics, Mathematics
2	Nano-particles	Biotechnology, Physics, Metallurgical & Materials Engg., Chemistry, Chemical Engg.
3	Environmental applications, Drug design/delivery	Mathematics, Biotechnology, Chemistry, Chemical Engg.
4	Semiconducting materials	Chemistry, Metallurgical & Materials Engg., Physics
5	Nanofluids	Mechanical Engg., Chemical Engg.
6	Modeling and Simulation	Mathematics , Physics, Metallurgical & Materials Engg, Mechanical Engg., Chemical Engg.
7	Thin films	Metallurgical & Materials Engg., Physics, Chemistry, IIC, DPT
8	Nanograined materials	Metallurgical & Materials Engg., DPT
9	Carbon nanotubes	Metallurgical & Materials Engg., DPT
10	Gold/ carbon nanoelectodes	Chemistry

3.1.2 Research involving individuals

`	·	
SI. No.	Topic of Research	Investigators & Department
1	Nano Sized Metal (S) Semiconductor (S) – their Physicochemical Properties	Prof. Anil Kumar, Chemistry Dept
2	Quantum Dots Applications in Biotechnology	Dr.M.A.Khan Biotech. Dept.
3	Physics of Nanomaterials	Dr.Tashi Nautiyal Physics Dept
4	Synthesis and Characterization of	Dr. R.C Agarwala MMED
-	Nanocoatings by Electroless and Sputter Coating Techniques	
5	Thin films-Super hard Nano Compsite	Dr.Davinder Kaur Physics Dept.
6	Thin films coatings	Dr.Ramesh Chandra IIC
7	Nano-grained intermetallic Materials by Gas Reduction and Mechanical Alloying Routes	Prof. V. Agarwala MMED
8	Mechanical/chemical Properties of Nano-materials.	Dr.R.Jeyaganthan MMED Dr. B. Mohanty
	Nano- crystalline composites in Amorphous Matrix	Dr.B.S.S.Daniel MMED
	Synthesis of Nano-ceramics	Dr.Anjan Sil, MMED
	Use of Nano-Fluids as Coolant in Metal Removal Processes	Dr.P.K.Jain Mech.Engg.Dept.
	Nano Science & Technology of Polymeric composite Materials	Dr. Sanjay Palsule, Paper & Pulp Tech.
ļ	Synthesis and Characterization of Nano-crystalline Ferro-electric Powder	Dr.K.L.Yadav, Physics Dept
	Synthesis and Characterisation of Ferrite nanoparticles	Prof. Kailash Chandra IIC and Dr. S.K.Barthwal, Physics
15	Carbon nanotubes	Prof. S. Ray, MMED
1	Preparation of carbon/gold nanoelectrodes and their use in the determination of biomolecule	Prof. R.N.Goyal, Chemistry Department
	Modelling in Nanobiotechnology	Prof. V.K. Katiyar, Mathematics
r	Development of Electroless nanocoating and multilayer coatings by sputtering	Dr. R.C. Agarwala

3.2 PhD Programme

The PhD research programme aims to be offered in the above said areas in the proposed nanotechnology research Centre.

3.2.1.1 Sponsored and Consultancy Research Programme

Funds are aimed to procure by carrying out sponsored and consultancy research programme in the proposed Centre.

3.3.1 Possible Funding Agencies

- The funding agencies like DST, DRDO, CSIR, etc. would be approached for provide funding to the proposed Centre.
- With the existing collaborations of IITR with foreign Institutions, joint funding from EU, STINT, etc. would be sorted.

3.4 Teaching Programme

The proposed Centre aims to offer postgraduate programme of duration two years leading to a Degree M. Tech in Nanotechnology.

3.5 Training Programme

The proposed Centre aims to organize regular short term and long term training programmes independently or through either QIP or Continuing Education Centre.

3.6 Seminar/ Conference/ Workshop

To bring the researchers working in the field of Nanotechnology on a common platform for exchange of views seminars / symposium/ conference/ workshop are aimed to be organized thorough the proposed Centre.

4. Strength for Nanotechnology Centre establishment

The main strength of the proposed Centre is knowledgeable band of faculty from different departments who work in the area of Nanotechnology (i.e. research that have been carried out in the past, present and proposed for the future).

4.1 Work already carried out by the researchers at IITR

- i. Bulk or Structural Nanomaterials
- ii. Nanocoatings
- iii. Semiconductor nanosystems
- iv. Nanoparticles for microwave applications
- v. Use of nanogold modified ITO electrodes for determination of uric acid
- vi. Nanocrystalline thin films

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4.2 Details of on going work at IIT Roorkee

4.2.1 Sponsored research projects

1.	Title of Project	Funding Agency & Year	Amount		
⊥ No.		and Dept.	(Rslacs)		
1	Synthesis and characterization of nano- grained materials by Hydrogen gas reduction	DST Nano Science and Tech. Initiation	18		
2	Synthesis and characterization of nanocoatings by Electroless technique		18		
3	Analysis of electronic properties of nanoclusters of semiconductors – development of semiconductor based integrated photocatalytic systems	•	20		
4	Synthesis and Photochemistry of Composite Metal-Semiconductor Nanostructured Materials	Initiation scheme, 2004.	10		
5	Synthesis of nano-ceramics by Sol-gel/Hydrothermal method for IR-Devices Project proposal funding		6.44		
6	Study of Optical & Mechanical properties of nanophase materials	DST, 2005. Nano Science & Technology Initiation scheme, 2005 PI: Ramesh Chandra IIC	24.00		
7	Study of nanocomposite superhard coatings of Transition Metal Nitrides	DRDO, 2005 PI:Devender Kaur, Physics	9.99		
8	grained materials for structural applications	MHRD 2005 PI : R.C. Agarwala, MMED	12.00		
9	Development of Nanograins TiAl- C by Mechanical Alloying.	DST, Indo-Poland, 2005 PI : V. Agarwala, MMED	8.00		
	Total 126.43				

4.2.2 Short term courses

Short term course entitled NANO TECHNOLOGY- NANO MATERIALS & THEIR APPLICATIONS are planned regularly. The one that has been carried out very successfully through QIP,IITR during 21 - 25 February, 2005. Another one expected in Feb. 2006.

4.2.3 Seminar

Seminars on Nanotechnology have also been planed to organize at IITR.

5. Human Resource and Infrastructural Requirement

In order that the proposed Centre for Nanotechnology comes into existence and take off smoothly the basic requirements include, faculty members/ scientists, laboratory technical staff, administrative staff, research assistants, equipments, building, required finance. The brief descriptions of the needs are given below.

5.1 Faculty members/ Scientists

Eight faculty members/Scientists are proposed for the Centre. Out of the above mentioned, two can be with the visiting status from outside ITR (i.e. either from India or from abroad with high caliber), three from the participating departments from ITR (may be with about 50% of total time allocation for teaching and research) and three fresh recruits.

5.2 Laboratory Technical staff

Minimum 3 technical staffs (may be on contract but in scale of pay) will be needed for maintaining the laboratories and equipments in the Centre.

5.3 Administrative staff

Minimum 2 technical staffs (may be on contract but in scale of pay) will be needed for maintaining the accounts and taking care of the day-to-day affairs of the Centre.

5.4 Research Assistance

The Centre needs to have JRFs, SRFs and RAs for carrying out the research work under the guidance of the proposed faculty members. These research fellows/assistants may get their fellowships from the Institute fellowship grant or from any other funding agencies like UGC, DST, CSIR, etc.

5.5 Equipment

The participating departments and individuals have identified about 20 equipments, which include few very sophisticated instruments like Transmission Electron Microscope, TEM with EDS, Nano Hardness Tester, SPM (AFM/MFM/STM), Nano-Tribometer, Impedance Analyzer, Nano-particle size analyzer, FESEM etc.

In addition to the departmental facilities, the Centre proposes to utilize the existing Institute Instrumentation Centre facilities to its fullest.

5.6 Building

Adequate space needs to be realized for housing the basic equipments, books/journals etc. A committee room and 2 class rooms are proposed for the purposes spelt in section 3.4, 3.5 and 3.6. To begin with, any existing building space at IITR will be preferred.

6. Strategies for Growth

The growth of the centre will be paved ways from the following:

- Nucleation of Centre with indigenous resources.
- Outreach other agencies/organization/industries (i.e. FIST, DST etc.) for growth in terms
 of equipment, fellowships to PG/ PhD students and Professorial Chairs.
- Sponsored Projects and Consultancy projects.
- Collaboration with industries in the country.
- Collaboration with Institute of fame with in the country and abroad.
- Develop Human Resource through training, continuing education and other programme.

7. Administrative Structure

- The Centre will take on multidisciplinary as well as interdisciplinary research and support other activities such as consultancy, contact programme and teaching programme
- The Centre will be a separate physical entity and will be independent of any other department.

Preliminary Estimate for the Modification of old Teachers Hostel to convert into the Girls Hostel for 120 Girls.

SI.	Proposed Items	Qty.	Rate	Amount
No.				
$\int \overline{1}$.	Modification of existing old			
	teachers Hostel to convert into the			
1	Girls Hostel by providing security	ŀ		
}	windows, pelmet and by replacing	[
	the damaged floors etc. having 30 flats.	30	D - 50 000	D- 15 00 000 00
	Hats.	30	Rs.50,000 Per flat	Rs. 15,00,000.00
		,	(L.S.)	
2.	Construction of outside Boundary	,		
	wall 8 Ft. High i/c Security grills			
	made from M.S. Iron			
	Qty.= 21.00 RM in each flat	215	D 000:00	D 252 002 00
	i.e. 21.00 x 15	315 R.M	Rs. 800.00 Per R.M.	Rs. 2,52,000.00
		K.1VI	FEI K.IVI.	
3.	Supply of furniture i.e. bed,Study			
	table, Tea Table, Chair etc.	120	Rs. 3000.00	Rs. 3,60,000.00
		Sets	Per Sets	
. 1		1		
	1110			Rs. 21,12,000.00
	Add Contingencies 3%	i		Rs. 6,3360.00
	·		Total	Rs. 21,75,360.00
. {		ĺ	Cov	D 21.751
			Say	Rs. 21.75 lacs

(Sharwan Kumar)

Asstt. Executive Engineer-I

EASTATE & WORKS INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

Details of Items ad Expenditure required for conversion of Old Teacher Hostel into Girls Hostel.

Sl.No.	Name of Work	Qty	Rate	Amount
$\int 1$.	Palmet Work]		
	$1 \times 3 \times 1.80 = 5.40$	5.40 RM	183.00 per RM	988.00
2.	Steel Window i/c Gard bar&	}		
}	fixed Jali		1750.00 per Sq.M.	7560.00
ļ 	$1 \times 3 \times 1.20 \times 1.20 = 4.32 \text{ Sq.M.}$	4:32 Sq.M		<u></u>
<u>3.</u>	Replacement of worn-out P.C.C.			
	floor into Mosaic floor.			
1	1 x 5.00 x 4.00 =20.00		,	ł
1	$1 \times 4.00 \times 3.00 = 12.00$	46.00Sq.M.	250.90.per Sq.M.	11,541.40
,	$1 \times 4.00 \times 3.50 = 14.00$			
}	46.00 Sq.M.			ļ
4.	Providing steel Alu. Shutter	7700) 1	100500	_
	$1 \times 3 \times 1.25 \times 2.05 = 7.70 \text{ Sq.M.}$	7.70 Sq.M.	1095.00 per Sq.M.	8431.50
5.	Replacement of worn-out Jali			
	door/Flush door i/c fitting		1147.00 per Sq.M.	6882.00
	$1 \times 6 = 6 \text{ Sq.M.}$	6.00 Sq.M.		i.
6.	Providing looking Mirror			
	4 Nos.	4.00 Nos	274.00 each	1096.00
7.	Genral Plaster repair work/wood	One Flat	5000.00 each	5000.00
	work.		 	
8.	White Wash/Painting Work	One Flat	2500.00 each	2500.00
9.	Extra Electric Fan/Elect.Point	One Flat	6000.00 each	6000.00
	for Computer.			l

Total Rs. = 50,000.00

Assti. Executive Engineer

Amount for one Flat

= Rs. 50,000.00

Preliminary Estimate for the Sewer line

SI.	Proposed Items	Qty.	Rate	Amount
No.				
1.	Replacement of old existing Sewer line of lower diameter with 16 inch dia R.C.C. Hume pipe i/c earth work, P.C.C,			
	R.C.C. pipe collers, main Holes & its cover.	1200 R.M.	Rs. 1200.00 Per R.M.	Rs. 14,40,000.00
	Add 3 % Contingencies		Total	Rs. 43,200.00 Rs. 14,83,200.00 Say Rs. 15.00 Iacs

Shawan Kurner) Asst-Executive Eyes I

PROFORMA-2 JOB CD/EST.

CONSTRUCTION DIVISION UNIVERSITY OF ROORKEE ROORKEE

PROFORMA FOR APPROVAL OF ESTIMATE PAR	T-A-REPORT.
Complaint from : SPEAN, OF STUDENTS! L	IELFARE
Item Extension of Boys Hostel (Ganga Bhaw.	
Referred to	for report
Reported by	
(a) Nature	Security affected/Urgent/Routine
(b) Estimated Cost Rs 75 00)	
(c) Remarks (i) detailed estimote needed	Yes/No
(ii) Chargeable Head	Vi Rolling
Forwarded by	Signature District
	J.E. Incharge
S.U.B./A.E.	
PART-8-ESTIMA	XIE
(a) Estimate prepared by Havean Singh Bis.	Lt
(b) Estimate Checked by	word, IECO
(c) Amount Rs 75 00 Lous.	A. A.
PREPARED BY J.E.	CHECKED BY J.E. 'T'
(d) Funds position.	
D.A.	

PART-C-APPROVAL

1 4 FEB 2006

University Engineer

Preliminary Estimate for the Extension of Boys Hostel (Ganga Bhawan)

Sl.	Proposed Items	Qty.	Rate	Amount in Rs.
1.	Extension of Boys Hostel (Ganga Bhawan)	-		
	Plinth Area of G.F. $1 \times 25 \times 3.28 \times 3.65 = 299.30 \text{ M}^2$ $\frac{1}{2} \times 82.00 \times 2.44 = 100.04 \text{ M}^2$			
	399.34 M ²			
	Add 25% for mess and Toilet 99.83 M ²			
	Total= $499.17 \mathrm{M}^2$	499.17 M ²	Rs. 4798.00 Per M ²	23,95,017.66
2.	Plinth Area of 1st Floor 499.17 M ²	499.17 M ²	Rs.4219.00 Per M ²	21,05,998.23
3.	Plinth Area of IInd Floor 499.17 M ²	499.17 M²	Rs.4399.00 Per M ²	21,95,848.83
4.	Furniture for 75 rooms	75 Rooms	Rs.4000.00 Per Room	3,00,000.00
L		<u>, </u>	Γotal Amount Rs.	69,96,864.72
	. ,		Contingency 3%	2,09,905.94
		Site 1	Development 4 %	2,79,874.59
			Grand Total	74,86,645.25

RATES CHECKED

J.E.(L. ロエ のかつない話点 Say Amount Rs. 75.00 Lacs

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TA FEB 2006

दरों का विशलेषण

कार्य का नाम:- गंगा भवन मे 75 अतिरिक्त कमरों का निर्माण।

(पत्रांक-72 / कैम्प-मु०अभि०) भवन) / 97 दिनांक 26.2.97 मुख्य अभि० (भवन) लो० नि० वि०, लखनऊ के अनुसार

1.	उच्च अनावासीय भवन की कुर्सी क्षेत्रफल पर प्रथम मंजिल हेतु	₹50 3760.00/M²
2.	सामान्य उचाई 2.90मी०से उपर प्रत्येक 0.30 मी०ऊँचाई के लिए	₹50 105.00/ M²
3.	बाद में कभी एक अतिरिक्त मंजिल हेतु दृढतर नीव बनाने के लिए	₹50 265.00/ M²
	दीमक प्रतिरोध के लिए	₹50 90.00 / M²
5.	भूकम्प रोधी संरचनाओं के लिए	₹50 45:00 / M²

मूल लागत रू0 4265.00 / M2 (क)

6. आन्तरिक विद्युतीकरण-12.5 प्रतिशत (क) पर

₹50 533.13/M²

भवन लागत रू० 4798.13 M² अथवा रू० 4798.00/M²

RATES CHECKED

J.E. (五) J.I.T. ROORISEE

Asstt. Executive Engineer
I.I.T., Roorkee

दरों का विशलेषण

कार्य का नाम:- गंगा मवन मे 75 अतिरिक्त कमरों का निर्माण।

(पत्रांक-72/कैम्प-मु०अभि०) भवन)/97 दिनांक 26.2.97 मुख्य अभि० (भवन) लो० नि० व्रि०, लखनऊ के अनुसार) उच्च अनावासीय भवन की कुर्सी क्षेत्रफल दर दुसरी मंजिल हेतु।

आन्तरिक विद्युतीकरण–12.5 प्रतिशत (क) पर

ক0 3600.00 / M²

- 1. सामान्य उचाई 2.90मी०से उपर प्रत्येक 0.30 मी०ऊँचाई के लिए रू० 105.00/M²
- 2. भूकम्प रोधी संरचनाओं के लिए

₹50 45.00/M²

मूल लागत रू0 3750.00 / M² (क) रू0 468.75 / M²

भवन लागत रू० 4218.75/M² अथवा रू० 4219.00/M²

RATES SHECKED

J.E. (T.)

Assit. Executive Engineer

I.I.T., Roorkee

दरों का विशलेषण

कार्य का नाम:- गुँगा भवन मे 75 अतिरिक्त कमरों का निर्माण।

(पत्रांक-72 / कैम्प-मु०अभि०) भवन) / 97
 दिनांक 26.2.97 मुख्य अभि० (भवन)
लो० नि० वि०, लखनऊ के अनुसार)
उच्च अनावासीय भवन की कुर्सी क्षेत्रफल दर
तील्त्रीमंजिल हेतु।

₹0 3760.00 / M²

2. सामान्य उचाई 2.90मी०से उपर प्रत्येक 0.30 मी०ऊँचाई के लिए रू० 105.00/ M²

3. भूकम्प रोधी संरचनाओं के लिए

₹50 45.00 / M² ;

मूल लागत रू0 3910.00/ M² (क)

3. आन्तरिक विद्युतीकरण–12.5 प्रतिशत (क) पर

₹50 488.75 / M²

भवन लागत रू० 4398.75/M² अथवा रू० 4399.00/M²

RATES SHECKED

J.E. (T.)

Assit. Executive Engineer I.I.T., P.oorkee

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8

Faculty Exchange Scheme

- a) Faculty exchange among the IITs should be encouraged. Such exchanges should not however affect the academic commitments of the faculty in the parent IIT. So visits should be for a minimum of one semester, unless the visit is during the summer or winter vacation periods.
- b) The host Institution should send an invitation to the faculty and the parent institution will have to give its consent to release the faculty for the propsed period.
- c) The faculty's designation will be the same in the host IIT as in the parent IIT.
- d) Furnished accommodation will be provided by the host IIT to the visiting faculty.
- e) The host IIT will not have to make any leave salary contribution for pension contribution for the faculty to the parent IIT. The faculty's pension contribution will be transferred to the parent IIT where the service record of the faculty will remain. The faculty will be entitled to casual leave and earned leave for the period of visit at the host IIT. Normally, accumulated leave at the parent IIT will not be utilized by the faculty during such visits. If it is, with the consent of the host IIT, then the parent IIT will be informed of the leave taken. This can include commuted leave, half pay leave etc. as may become necessary during periods of illness.
- f) The salary of the faculty will be protected by the host IIT (protection of basic only will be insisted on, as other parts may vary).
- g) The faculty will be provided for travel expenses to & fro. Family expenses may or may not be included.
- h) The faculty will be paid a relocation allowance of Rs. 5000/- per month of stay over and above the salary.
- i) The terms and conditions may be modified on mutual agreement among the host IIT, the parent IIT and the faculty. The above are guidelines if agreed by all the IITs will make transferseasy without a need for agreements in each case.

1. सरकारी कामकाज में मूल हिन्दी टिप्पण/आलेखन के लिये प्रोत्साहन

इस प्रोत्साहन योजना में सभी श्रेणियों के वे अधिकारी/कर्मचारी भाग ले सकेंगें जो सरकारी काम पूर्णतः या कुछ हद तक मूल रूप में हिन्दी में करते हैं । इस योजना के अन्तर्गत वे अधिकारी/कर्मचारी पुरस्कार के पात्र होंगे जो एक वर्ष में कम से कम 20 हजार शब्द हिन्दी में लिखेंगे । इस प्रोत्साहन योजना की एक विशेषता यह है कि इसमें मूल टिप्पण व प्रारूपण के अलावा हिन्दी में किए गये अन्य कार्य जिनका सत्यापन किया जा सके, जैसे रिजस्टर में इन्दराज, सूची तैयार करना, लेखा का काम आदि भी शामिल किये जायेंगे । आशुलिपिक/टाइपिस्ट, जो सरकारी काम—काज में हिन्दी के प्रयोग को बढ़ावा देने संबंधी किसी अन्य योजना के अन्तर्गत आते हैं तथा हिन्दी अधिकारी और हिन्दी अनुवादक जो सामान्यतः अपना काम हिन्दी में करते हैं, इस योजना में भाग लेने के पात्र नहीं होंगे ।

पुरस्कार

भाग लेने वाले कर्मचारियों को प्रतिवर्ष उनके हिन्दी में किए गए काम के आधार पर निम्नलिखित नकद पुरस्कार दिए जायेंगे :--

पहला पुरस्कार (दो पुरस्कार) प्रत्येक 1000 / - रूपए दूसरा पुरस्कार (तीन पुरस्कार) प्रत्येक 600 / - रूपए तीसरा पुरस्कार (पाँच पुरस्कार) प्रत्येक 300 / - रूपए

2. अंग्रेजी टाइपिस्टों, आशुलिपिकों को हिन्दी में भी टाइपलेखन और आशुलिपि कार्य करने के लिये ''प्रोत्साहन भत्ता''

उन आशुलिपिकों और टाइपिस्टों को, जो अंग्रेजी आशुलिपि/टाइप जानते हैं और अंग्रेजी के अतिरिक्त हिन्दी में अपना सरकारी कार्य करते हैं, क्रमशः 120/-रु. तथा 80/-रु. प्रतिमास विशेष भत्ता दिया जाएगा । केवल वे ही टाइपिस्ट/आशुलिपि इस भत्ते के पात्र होंगे जो हिन्दी में औसतन 5 टिप्पणियां/प्रारूप/पत्र प्रतिदिन अथवा लगभग 300 टिप्पणियां/प्रारूप/पत्र प्रति तिमाही टंकित करते हैं । केवल एक या दो पंक्तियों के प्रारूप/टिप्पणियां इसमें शामिल नहीं होगी । यह विशेष भत्ता 'वेतन' नहीं माना जायेगा और इस राशि पर मंहगाई भत्ता, मकान किराया भत्ता, नगर प्रतिकर भत्ता और अन्य भत्ते देय नहीं होंगे ।

- 3. (अ) वैयक्तिक वेतन (12 माह के लिए एक वेतन वृद्धि की राशि के बराबर)
 - टाइपिंग / हिन्दी आशुलिपि परीक्षा उत्तीर्ण करने वाले ग्रुप 'सी' एवं 'डी' के सभी कर्मचारियों को ।
 - 2, ग्रुप 'बी' के ऐसे सचिवों / आशुलिपिकों को जिन्होंने हिन्दी आशुलिपि परीक्षा 80 प्रतिशत या इससे अधिक अंक प्राप्त कर उत्तीर्ण की हो ।

टिप्पणी: जिन आशुलिपिकों की मातृभाषा हिन्दी नहीं है वे हिन्दी आशुलिपि परीक्षा उत्तीर्ण करने पर पहले 12 माह के लिए 2 वेतन वृद्धियों के तथा उससे अगले 12 माह के लिए एक वेतन वृद्धि के समकक्ष वैयक्तिक वेतन प्राप्त करने के हकदार होंगे।

(ब) नकद पुरस्कार (विशेष योग्यता सहित परीक्षा उत्तीर्ण करने पर)

राशि	हिन्दी टाइपिंग	हिन्दी आशुलिपि
300 ∕ −रु.	97 प्रतिशत अंक	95 प्रतिशत या उससे अधिक अंक
200 ∕ −रु.	95 प्रतिशत अंक	92 प्रतिशत या उससे अधिक अंक
100 ∕ —रु.	90 प्रतिशत अंक	88 प्रतिशत या उससे अधिक अंक

हिन्दी में मौलिक पुस्तकें लिखने के लिये इन्दिरा गाँधी पुरस्कार

कर्मचारियों का जिन विषयों से सरकारी तौर पर संबंध हो उन पर हिन्दी में मौलिक पुस्तकें लिखने के लिये प्रोत्साहन करने हेतु ऐसी पुस्तकों के लिये वार्षिक तीन पुरस्कार प्रारम्भ करने का प्रावधान है जो सर्वोत्कृष्ट घोषित हो और जिनसे संस्थान के अध्यापन, अनुसंधान और प्रशासनिक कार्य में हिन्दी के प्रगामी प्रयोग को बढ़ावा देने में सहायता मिलती हो । पुरस्कारों की राशि निम्न प्रकार है :--

प्रथम पुरस्कार 20,000 / -रुपए द्वितीय पुरस्कार 16,000 / -रुपए तृतीय पुरस्कार 10,000 / -रुपए

पुरस्कार उस वर्ष नहीं दिया जायेगा जिस वर्ष न्याय निर्णयन के लिये प्रस्तुत की गई मौलिक पुस्तकों स्तर से नीचे की पाई जायेंगी ।

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इसके अतिरिक्त संस्थान के मानकों के अनुसार उन संकाय सदस्यों को हिन्दी में मौलिक पुस्तक लेखन के लिए आर्थिक सहायता भी स्वीकृत की जाएगी ।

हिन्दी निबंध लेखन प्रतियोगिता

चतुर्थ श्रेणी और तृतीय श्रेणी / द्वितीय श्रेणी के कर्मचारियों के लिये प्रतिवर्ष आयोजित की जाएगी तथा परिणामों के आधार पर वित्तीय पुरस्कार प्रदान किए जायेंगे ।

- 6. नकद पुरस्कार की राशि वृद्धि के बारे में तीन वर्ष के पश्चात् पुनः समीक्षा की जाएगी ।
- 7. पुरस्कार/अवार्डस् तथा अन्य प्रोत्साहनों के लिये विशेषज्ञ समिति

निदेशक द्वारा नियुक्त की गई एक समिति शैक्षणिक वर्ष में समस्त प्रतिभागियों द्वारा हिन्दी में किये गये सरकारी कामकाज का मूल्यांकन करेगी और उनमें जो भी हकदार होंगे उन्हें अवार्ड / पुरस्कार आदि प्रदान करने की सिफारिश करेगी ।

यह इन्दिरा गाँधी अवार्ड के लिये हिन्दी में लिखी मौलिक पुस्तकों के संबंध में भी निर्णय करेगी । इस योजना में दी गई पात्रता की शर्ते पूर्ण नहीं होने पर कोई अवार्ड / पुरस्कार और अन्य प्रोत्साहन नहीं दिया जायेगा।

ROORKEE SCHOOL FOR THE DEAF INDIAN INSTITUTE OF TECHNOLOGY ROORKEE CAMPUS ROORKEE - 247 667

PREAMBLE: The Roorkee School for the Deaf was set up in the University of Roorkee Campus, through Resolution No. 4.18 dated 27/28th January 1989, of the Syndicate of the University of Roorkee. The Constitution of the School was approved by the Syndicate of the University of Roorkee, vide Resolution No. 4.7 dated 8/9th January 1990. The said Constitution required review on conversion of the University of Roorkee into Indian Institute of Technology Roorkee, on 21st September 2001. The revised Constitution, as approved by the Board of Governors of the Institute on 24th December 2005, vide item No. 14.4.6, is given hereunder.

CONSTITUTION

1. NAME

Roorkee School for the Deaf (RSD)

2. LOCATION

Indian Institute of Technology Roorkee (IITR) Campus, Roorkee -247 667

3. OBJECTIVES

- (i) To impart Quality Education and Vocational Training to the children handicapped by deafness on modern and scientific lines to make them self reliant and independent in life.
- (ii) To create Barrier Free Environment for the disabled in the school and this may serve as a Demonstration Park. According to Chapter VIII of Disability Act, 1995 passed by both houses of Parliament, Barrier Free Environment is a requirement for construction of all public buildings.
- (iii) To provide hearing loss damage control and speech correction guidance and solutions.
- (iv) To prepare teaching aids and other resource material as well as develop educational technology relevant to Indian context for teaching & training the deaf as such suitable material is not readily available in the Indian market.
- (v) To do all those necessary things which may assist in achieving the objectives as laid down above.

4. PATRON

Director, Indian Institute of Technology Roorkee, shall be the Patron of the school.

5. MANAGEMENT COMMITTEE (MC)

The Management Committee shall consist of the following:

- (i) Spouse of the Director, IIT Roorkee who shall be the President.
- (ii) Three persons nominated by the Chairman, Board of Governors, IITR
- (iii) Two persons nominated by the Director, IITR
- (iv) Dy. Director/ Dean (Administration), IITR
- (v) Dean (SRIC), IITR
- (vi) President, Faculty Forum, IITR
- (vii) President, ITR Employees Union
- (viii) Principal, RSD
- (ix) Teacher/employee representatives, RSD (one representative per 10 teachers/ employees. This number would not exceed 02)

Note: In section 5 (ii) & (iii), the members would be generally from ITR campus. However, upto two members may be from outside ITR.

6. OFFICE BEARERS

Following shall be the office bearers of the school:

- (i) President, Management Committee
- (ii) Vice-President, Management Committee
- (iii) Secretary, Management Committee
- (iv) Joint Secretary, Management Committee
- (v) Treasurer

Note for Clauses 5 & 6

As per Clause 5(i), the spouse of the Director, IITR shall be the President of the Management Committee of the school. In case the spouse of the Director is not available to assume the office of President for any reason, or the Director does not have a spouse, the Director shall nominate the President of the Management Committee from amongst the members. Except the President and the ex-officio members, no other member/ office bearer will have more than two terms as a member of the Management Committee.

7. TENURE AND RE-CONSTITUTION OF MANAGEMENT COMMITTEE

Tenure of the MC will be 3 years. Secretary will obtain the names of new members from concerned authorities two months before the expiry of the tenure of the committee. Except for the President and the, Principal, RSD the other new office bearers will be elected by the members in the first meeting of incoming MC for three years duration.

8. WORKING OF THE MANAGEMENT COMMITTEE

- (i) About three meetings of the committee will be called in a year. Its information will be sent by Secretary at least three days in advance.
- (ii) The quorum for the meeting will be one third of the MC strength.
- (iii) Urgent meeting may be called at 24 hours notice.
- (iv) A special meeting may be called on a written request of one third members for any specific purpose not inconsistent with the constitution.

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9. RESPONSIBILITIES OF THE MANAGEMENT COMMITTEE

- (i) Every member may endeavor to participate in the meetings.
- (ii) To look after the working of school and appointment of employees as well as take disciplinary action against them.
- (iii) To approve the list of selected employees, presented by the Secretary.
- (iv) To inspect the school.
- (v) To make efforts to increase the assets/funds of school in order to offer better teaching facilities and extra curricular activities and to give suggestions for the development of the school. Also to undertake any activity which may be beneficial for the school.
- (vi) To give suggestions and make efforts for the general & particularly professional development of school and maintain top quality related to every aspect of the school.
- (vii) To approve the admissions/termination of studentship in the school. However, the President on behalf of the MC may approve admissions to avoid delay and to terminate studentship of any child in the interest of the school on sufficient grounds.
- (viii) To make working rules for the teachers, selection committees and various other operations of the school. (Rules made by MC to be approved by the Patron).

10. RESPONSIBILITIES OF PRESIDENT

- (i) To preside over the Management Committee meetings.
- (ii) To oversee the functioning of the school.
- (iii) To approve expenditure not included in the budget.
- (iv) To make adhoc appointments in the school and also in special circumstances, as an urgent measure to take disciplinary action against the erring employees.

11. RESPONSIBILITIES OF VICE PRESIDENT

To perform the duties of the President in his/her absence and exercise the powers delegated to him from time to time.

12. RESPONSIBILITIES OF SECRETARY

He/She will manage the school as below:

- (i) To call the MC and any other meeting on the instruction/approval of President.
- (ii) To issue the notice of meeting and prepare the agenda.
- (iii) To write the minutes of the meetings.
- (iv) To maintain a dialogue between parents and teachers.
- (v) To assist the MC to examine and review the performance of the school.
- (vi) To make correspondence on behalf of the MC.
- (vii) To implement the resolutions of the MC.
- (viii) To pass and forward all the bills for payment.

13. RESPONSIBILITIES OF JOINT SECRETARY

- (i) To perform the duties of Secretary in his/her absence.
- (ii) To shoulder responsibilities given by the MC.

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14. RESPONSIBILITIES OF TREASURER

- (i) To maintain the financial records of the school.
- (ii) To prepare the Annual Accounts, get it audited and then approved from the MC.
- (iii) To prepare the Annual Budget of the school and present it before the MC.
- (iv) To collect the funds related to school and to incur the expenditure as per rules of the school / directions of the competent authority.

15. RESPONSIBILITIES OF THE PRINCIPAL.

The Principal will be responsible to ensure smooth execution of the decisions for the school taken in the MC and other meetings, and to look after the academic and other activities of the school.

16. SCHOOL FUNDS

School Funds will be collected from the following sources:

- (i) Fees
- (ii) By undertaking fund raising activities.
- (iii) Grants from Organizations of IIT Employees and Students as well as individuals.
- (v) Grants from Government organizations & departments.
- (vi) Any other donations/grants/contributions from individuals or bodies from within India or abroad.

17. OPERATION OF BANK ACCOUNT

Bank Account shall be operated jointly by any two amongst President, Secretary, and Treasurer. However, the President is authorized to delegate his/her powers at his/her pleasure.

18. MODIFICATION IN THE CONSTITUTION

The MC, with the consent of two third members will have the right to suggest modifications in the constitution. For this purpose, the notice along with modifications would be sent to Secretary at least two weeks in advance to the date of MC meeting. The modifications suggested by MC would become operative only after approval of the Board of Governors, IIT Roorkee. However, the Board of Governors on its own is fully empowered to modify/suspend/dissolve the constitution.

19. AUDIT

The MC will nominate the auditor(s) to audit the accounts of the school.

20. IIT ROORKEE - RSD

- 1. No financial/legal/employment/ and or any other liability/ responsibility would lie on ITR as a result of functioning of RSD.
- 2. RSD is located on IITR land. At no point of time, RSD will have any claim, whatsoever, on the land in future.

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- 3. RSD will not carryout any construction or modification of existing buildings on this land without the explicit permission of the competent authorities of IJTR.
- In case of special circumstances or adverse reports about the functioning of school, the authorities of IITR would be free to initiate steps to windup the school or ask the MC to shift to a new location outside the IITR campus. In such a case, the land and the buildings thereon will go back to IITR and other assets would be utilized to meet other liabilities of the RSD. The process of dissolution/ shifting of the school may start on MC request, if agreed to by IITR, or IITR authorities may on their own initiate the process.
- 5. In all cases/ situations not covered above, the decisions/ actions taken by the Director/ BOG would be final.
- 6. Competent authorities of ITR are Deans/Director/ BOG.

21. GENERAL

- (i) The school will be run on the pattern of a day school, without hostel facilities.
- (ii) The concept of "Quality" must be thoroughly taught and reinforced in the minds and work culture of the deaf students, which is a necessary pre-requisite in their process of rehabilitation. The quality must, therefore, be reflected in all aspects of the school including its teaching methodologies, teaching and training resource material, buildings and their maintenance and other infrastructural facilities etc.
- (iii) Guidelines / Byelaws for the smooth functioning of the school may be framed / amended and enforced, whenever necessary, by the MC, with the approval of the Patron.
- (iv) Admission of students to the school will only be for a period of one year at a time and will have to be renewed at the beginning of each academic session. The renewal will depend upon the academic performance, behavior and other aspects of a student and the participation of the parents as suggested by the school. The Management Committee will also have the authority to terminate the studentship of a child even in the middle of an academic session if it becomes necessary in the interest of the school. Further, Roorkee School for the Deaf is meant for the handicapped deaf children only. Children belonging to other categories of handicap or with multiple handicap problems will not be admitted to this school because teaching methodologies are different for each category. But, those having orthopedic problems in addition to deafness will be eligible for admission, as the teaching methodologies remain the same in this case.
- (v) As far as possible the school will be run on the pattern of "Oral System" and suitable measures shall be taken to develop speech to the extent possible among deaf students. Since, Special Education and Speech Development is a highly professional job, the identity of the school may be kept as an independent unit so that the Residual Potential of the deaf children is harnessed to the maximum possible level. Further, the school will be run mainly as a Community Supported Rehabilitation model.

Statement showing the revised range of emoluments for various categories of 'Y' Pool Contract workers

S1. No.	Contract Workers	Emoluments (fixed) from 1.4.2004	Increase allowed in the range from 1.4.2005	Revised Range of Emoluments (fixed) from 1.4.2005	Qualifications and Experience approved by the BOG.
1	2	3	4	5	6
1.	Helper	3250-3550	140	3390-3690	8th Pass
2.	Skilled Worker 'A'	3450-3750	160	3610-3910	8 th Pass + One year relevant technical experience
3.	Skilled Worker 'B'	4000-4300	175	4175-4475	ITI/High School & One year relevant experience
4.	Field Asstt.	4100-4400	175	4275-4575	High School/ITI & Two years experience in the relevant field
5.	Technical Asstt. 'A'	4525-4825	195	4720-5020	Inter Science/ITI & two years experience in relevant field
6.	Ministerial Astt. 'A'	4525-4825	195	4720-5020	Intermediate and two years experience in handling office work. OR High School and ten years experience in handling office work.
7.	Technical Asstt. B'	5150-5450	230	5380-5680	B.Sc/Three years Diploma in relevant field OR Inter Science/ ITI with ten years experience.
8.	Ministerial Asstt. B'	5225-5525	230	5455-5755	Graduate OR Intermediate and ten years experience in handling office work
9.	P.C. Operator	5275-5575	230	5505-5805	Three years Diploma in relevant field/
		6225-6525	265	6490-6790	Graduate and one year working experience on
		7700-8000	335	8035-8335	PC/ Main Frame in an organization of repute subject to passing department test.
10.	Technical Asstt. 'C'	6225-6525	265	6490-6790	B.Sc./Three years Diploma in relevant field, and 4 years experience.
11.	Project Technician	8225-8525	350	8575-8875	B.Sc./Three Years Diploma in relevant field and seven years experience.



INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

Chairman Board of Governors

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Dated: 25 11 05

Subject: Request for approval for signing an MOU between ITT Roorkee and News Jersey Institute of Technology, Newark, NJ.

There is a proposal to sign MoU with New Jersey Institute of Technology (NJIT). 1. Newark, NJ, USA. The MoU is for cooperation between NJIT with III Roorkee primarily in the areas of Computer & Electrical Engineering.

The draft MoU was discussed in the Educational Research & Planning Committee (ERPC) in its meeting held on 4.10.2005 and found the proposal in order. The committee recommended that the MoU be signed with NJiT.

3. The Provost and Senior Vice President of NJIT Dr. Priscilla P.Nelson has sent an MoU duly signed by him.

- The matter was also discussed in the Deans' Committee in its meeting held on 9 4. Nov 2005 which recommended that Director may sign the MoU with the NUTT
- A copy of the MoU signed by Dr. Priscilla P.Nelson, Provost and Sepior Vice 5. President, NJIT is enclosed.

It is requested that approval of signing the MoU with New Jersey Institute of Technology (NJIT), Newark, may kindly be accorded.

The entire matter shall be reported in the next meeting of Board of Governors

Sri Jai Prakash Gaur -Chairman, BoG

J.A.House, 63, Basant Lok, Vasant Vihar, New Delhi 110 057

U.O.No.PIP/NJIT/MoU

Dated 25 11 25

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MEMORANDUM OF UNDERSTANDING between INDIAN INSTITUTE OF TECHNOLOGY-ROORKEE and NEW JERSEY INSTITUTE OF TECHNOLOGY Newark, New Jersey (USA)

This agreement is a general enabling document for inter-institutional cooperation between Indian Institute of Technology-Roorkee (IITR) and the New Jersey Institute of Technology (NJIT). Memoranda of cooperation between individual divisions, schools, colleges and faculties may be attached to it. Those memoranda will be signed by appropriate officers of the units and will specify details of the cooperation between units.

PART I SCOPE OF THE COOPERATION

The purpose of this agreement is to promote international understanding, scholarly collaboration, cultural interaction and friendship by supporting educational, professional and cultural activities among faculty and students of the two institutions. Accordingly, the areas of cooperation will include, subject to mutual consent, any program offered at either institutions as felt desirable and feasible on either side and that both sides feel contribute to the fostering and development of the cooperative relationship between the two institutions.

PART II AREAS OF COOPERATION

Specific areas of cooperation between the two institutions, subject to the availability of funds and the approval of the Chairman, Board of Governors of IIT (Roorkee) and the faculty and administration at NJIT include, but are not limited to the following:

- 1. Exchange of faculty members;
- 2. Exchange of students;
- 3. Joint research activities;
- 4. Participation in seminars and academic meetings;
- 5. Exchange of academic materials and other information;
- 6. Special short-term academic programs.

The terms of such mutual assistance and necessary budget for each specific program and activity that is implemented under the terms of this agreement shall be mutually discussed and agreed upon in writing by both parties prior to the initiation of the particular program and activity shall be negotiated on an annual basis. Each institution will designate a Liaison Officer to develop and coordinate specific activities or programs.

PART III FACULTY EXCHANGE

- 1. Faculty members or post-doctoral researchers from the two institutions may apply to spend an academic semester or a shorter period at the other institution serving as a visiting member of the teaching faculty or research staff. The two institutions will negotiate remuneration.
- 2. The exchange of faculty members shall be subject to the instructional and staffing requirements of each institution. The approval of exchange faculty, the assignment of teaching responsibilities and all other features of an academic appointment shall require the approval of the appropriate academic and administrative officers at each institution.
- 3. The arrangement and expense of accommodation will be the responsibility of the faculty member exchanged, but each institution agrees to use its best efforts to find suitable housing for the exchange visitor.
- 4. The exchange shall continue until such time as either institution gives notice to terminate the agreement. In such an event, the faculty members shall continue their duties until the end of the then current semester in which notice of termination is given.

PART IV STUDENT EXCHANGE

Qualified upper division and graduate students from each institution may apply to the other institution for the purpose of pursuing an approved course of instruction extending over one semester or one academic year. Undergraduate students may consider a summer at the other institution. Stipends and housing support may be offered on a funds available basis; however NJIT intends to provide \$500 per month stipend and a housing grant.

Each institution shall appoint a staff member to be the liaison officer for the exchange program who will have the responsibilities described below. For NJIT, the liaison officer will be the Associate Director of the Office of International Students and Faculty who will work closely with the Associate Chair for Graduate Studies of the Electrical Engineering department.

1. The number of students to exchange each year is to be determined by mutual consent of the two parties as early as possible each year. The liaison officers of the two institutions will review the program annually to determine any imbalance in the number of exchange students, and adjust the number of students the following year if necessary, to maintain a reasonable balance in the exchange.

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- 2. The initial phase of the agreement shall focus on specializations within electrical and computer engineering. At the graduate level, master's and doctoral, the specializations of most-interest are communications and networking, nanotechnology, biocontrols, and biomems. It is expected that initially, the number of students participating will be 5 or less. Any financial support for doctoral study at NJIT will subject to availability of funds and shall be drawn only from funds available from the NJIT Electrical and Computer Engineering department. However, this agreement does not preclude students from IITR from applying for admission to any of its programs through regular means.
- 3. Exchange students must satisfy language proficiency and all other requirements for admission to the host institution as determined by the regulations of the host institution unless exceptions are noted and added to this agreement in an appendix. A TOEFL (Test of English as a Foreign Language) score as required by NJIT for undergraduate admission or graduate admission should be met (550 pencil and paper, 213 computer based, or its equivalent on the internet-based test).
- 4. At IITR, the first semester of the academic year begins in late July, the second semester in early January. At NIIT the first semester begins in early September and the second semester in mid-January. Students at NIIT should submit complete applications to their liaison officer no later than March 1st to start the program in the first semester of the academic year at IITR or November 1st to start the program in the second semester of the academic year. IITR students should submit completed applications to their liaison officer no later than 1st March to begin the program at NIIT. The liaison officer of the home institution will forward the applications and all other required documents to the liaison officer to the host institution. Students accepted to the program should be notified one month to six weeks after the application deadline.
- 5. Exchange students generally pay tuition to their home institutions. Students attending NJIT as the host institution, and not paying tuition to their home institution at comparable rates to NJIT students, will nevertheless have the difference between NJIT out-of-state and NJIT in-state rates waived during attendance at NJIT. Living costs are the responsibility of each participating student; however NJIT will offer a \$2500 annual room grant to HTR students choosing to live in NJIT Residence Halls.
- 6. Exchange students will be responsible for all other expenses including:
 - a. Transportation to and from the host institution.
 - b. Room and board expenses, except that \$2500 annual room grants for up to 5 students, for two years in less for each student, who choose to live in the NJIT Residence Halls will be available for students from MTR.
 - c. Medical insurance; Health Service fees, if any.
 - d. Textbooks, clothing and personal expenses.
 - e. Passport and visa costs, and residence permit, if any.

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- f. Fees to the host institution as required of all regular students, except as noted in item 5 above.
- 7. Exchange students must agree to abide by all the rules and regulations of the host institution.
- 8. Academic credit earned at the host institution shall be recognized at the home institution in accordance with the practices of the home institution. The host institution agrees to provide the liaison officer of the home institution with an official transcript for all exchange students on a regular basis, preferably each semester. These shall be reviewed by the liaison officers and appropriate academic officers of each institution. Students desiring copies of their transcripts shall be subject to regular fees for these.

The handling of credit by the two institutions shall recognize, subject to university quality control practices for transfer credit, the following intended model:

- a. Master's students moving from IITR to NJIT will complete a first semester, equivalent to 9 credits or more at NJIT, at IITR. The second semester and any following semesters, which may include a thesis, will be completed at NJIT. This is intended to allow granting of separate degrees by both NJIT and IITR at the master's level.
- b. Students completing a master's degree, subject to doctoral admission requirements, may remain at the host institution and continue into an appropriate doctoral program. The credits for the master's degree will be creditable toward the doctoral programs. Admission to doctoral programs assume that doctoral students will receive tuition and fee support but will be admitted only if such support is available.
- 9. The host institution agrees to provide appropriate counseling and other assistance to the exchange students, including assistance in finding adequate on-campus or off-campus housing.

PART VI RENEWAL, TERMINATION AND AMENDMENT

This agreement shall remain in force for a period of three (3) years from the date of last signature, with the understanding that it may be terminated by either party giving notice to the other party in writing no later than the end of March in any year. The agreement may be extended by mutual consent of the two parties.

This agreement may be amended by the exchange of letters between the two institutions. Such amendments, once formally approved by both institutions, will become part of this Memorandum of Agreement.

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In witness whereof, the parties hereto have offered their signatures:

For: IITR

President Jurea

Date: NOV. 30. 2005

For: NJIT

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Date: August 17,2005

MEMORANDUM OF UNDERSTANDING BETWEEN NATIONAL INSTITUTE OF HYDROLOGY (NIH), ROORKEE AND INDIAN INSTITUTE OF TECHNOLOGY ROORKEE, ROORKEE

This Memorandum of Understanding (MoU) entered into the Twenty Third day of November 2005 between the National Institute of Hydrology Roorkee a Society of Govt. of India, registered under the Indian Societies Registration ACT XXI of 1860 under the Ministry of Water Resources having its Headquarter at Roorkee (hereinafter referred to as NIH which expression shall include its representatives, successors and assigns) of the first part;

AND

Indian Institute of Technology, Roorkee a premier academic research Institute and having its Headquarters at ROORKEE (hereinafter referred to as IITR which expression shall include its representatives, successors and assigns)) of the other part.

PREAMBLE

WHEREAS, NIH is engaged in basic, applied and strategic research and consultancy in the field of Hydrology, Water Resources Development and Management.

WHEREAS, ITR, which is charged with the responsibility of training technical manpower in different areas of Engineering, Technology, Sciences, Management, and Humanities & Social Sciences, is also contributing to the rapidly growing scientific and technological knowledge and professional excellence in S&T by undertaking industrial & applied research and consultancy.

AND

WHEREAS, both NIH and IITR, now

- Recognizing the importance of research and development in the areas of Hydrology, Hydropower and Water Resources,
- Appreciating the need for creation of large reservoir of highly qualified manpower in all fields related to Hydrology and Water Resources, Civil Engineering, Chemistry, Nuclear Physics, Geology, Geophysics and Hydrometeorology,
- Desiring to club their efforts by pooling their expertise and resources.

INTEND to form a nucleus for promoting excellent quality manpower with a focus on Hydrology, Water Resources and related sciences.

NOW, THEREFORE, in consideration of the mutual promises made herein and of good and valuable consideration, the receipt and sufficiency of which both NIH and IITR hereby acknowledge, NIH and IITR hereby agree as under:

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SHARING OF IMPORTANT FACILITIES

The two institutions will share their important R&D equipment facilities on the mutually agreed terms.

2. JOINT CONFERENCES/WORKSHOPS/TRAINING COURSES

Both the institutes agree to hold/conduct whenever feasible join conferences/workshops/training courses in areas of mutual interest.

M.TECH./PH.D. REGISTRATION

Up to five engineers/scientists of NIH at a given time may be registered for Ph.D. at IITR as per the following terms:

- Only such candidates who are working/have worked on joint programmes for at least one year/two years will be eligible for M.Tech./Ph.D. Registration respectively.
- Students registered in a particular department/centre will be over and above the existing IIT Roorkee limit for the M.Tech./Ph.D. students in that department/centre.
- The officers/staff recommended by NIH will be selected by IITR as per its norms for M.Tech./Ph.D. registration.
- There will be a provision for joint supervision of M.Tech./Ph.D. students.

4. TRAINING FOR STUDENTS

N!H agrees to provide training for five students each year in its field of specialization.

5. JOINT RESEARCH/CONSULTANCY PROJECTS

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NIH and IITR staff will undertake jointly sponsored research and consultancy projects with the approval of their respective competent authorities according to the following terms:

- Project proposals will be formulated jointly by the concerned faculty/experts of the two Institutions.
- Project would require approval of the respective competent authorities of both the institutions.
- Income arising out of the consultancy works will be shared by the two Institutions, on the basis of inputs and approved norms in each Institution.

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Consultancy/ man-months and cost of project will be calculated on the basis of input.

6. SHARING OF INFORMATION

Both Institutions agree to share information about their research activities so as to educate the staff of one organization about the activities of the other organization.

EXCHANGE/DEPUTATION OF STAFF 7.

Both NIH and IITR agree to the exchange of staff through deputation on full time/ part time basis and up to one year at a time for purpose of implementation of joint tasks. Such staff member will be treated to be on duty with the parent organization for this period and will be paid TA/deputational allowance by the host organization.

CO-ORDINATION COMMITTEE 8.

The organizations will constitute a co-ordination committee to co-ordinate and monitor the collaboration between the two organizations. The Committee will have the following members:

- Director, NIH
- Director, IIT Roorkee
- Two representatives from NIH
- Two representatives from IIT Roorkee

VALIDITY 9.

This MoU shall be valid initially for a period of three years from the date of signatures and can be extended for further periods by mutual consultations and reviews and concurrence of Ministry of Water Resources and Director, ITR.

This MoU is signed subject to approval by the appropriate authorities on both sides.

(K.D.Sharma)

Director

National Institute of Hydrology, Roorkee

Director

Indian Institute of Technology, Roorkee

Witness: Karan Bhatha

Date: 23/11/05

Witness: S.7. Crope

Date: 23.11.05