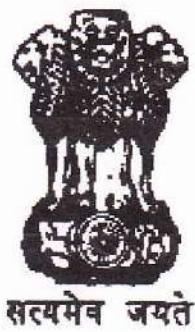


**MEMORANDUM OF UNDERSTANDING
BETWEEN
GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
AND
INDIAN INSTITUTE OF TECHNOLOGY**

DECEMBER 2006



**MEMORANDUM OF UNDERSTANDING
BETWEEN
GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
AND
INDIAN INSTITUTE OF TECHNOLOGY**

PREAMBLE:

This Memorandum of Understanding (MoU) has been entered and made on THIS, THE *Eighteen*. DAY of *December* TWO THOUSAND AND SIX between THE PRESIDENT OF INDIA acting through MINISTRY OF EARTH SCIENCES, GOVERNMENT OF INDIA, NEW DELHI (hereinafter referred to as MoES) on the one Part and IIT KHARAGPUR (hereinafter referred to as IIT KGP) which expression shall unless repugnant to the context or meaning thereof be deemed to include their successors in interest and permitted assigns, on the other part.

WHEREAS the MoES has desired to ESTABLISH An OCEAN & ATMOSPHERIC SCIENCE AND TECHNOLOGY CELL (OASTC)/CENTRE OF EXCELLENCE (CoE) to promote research in marine sciences and technology and to develop human resources required for sustained use of our vast ocean resources for socio-economic benefit of Indian society.

WHEREAS IIT KGP has agreed to undertake research and technology development in the area of OCEAN & ATMOSPHERIC SCIENCE AND TECHNOLOGY needed for the country and extend all support required for carrying out work at the OASTC.

WHEREAS MoES and IIT KGP have agreed as follows:

ARTICLE 1 – COMMITTEES:

1.1 NATIONAL STEERING COMMITTEE FOR OASTCs AND CoE:

A NATIONAL STEERING COMMITTEE (NSC) for OASTCs and CoE shall be constituted under the chairmanship of Secretary, MoES. This committee shall lay down policies and guide effective implementation of the scheme of OASTCs and CoEs at the national level.

1.2 MANAGEMENT BOARD FOR OASTCs/CoE:

In IIT KGP a MANAGEMENT BOARD (MB) shall be constituted by MoES with the following constitution:

Chairman	Director, IIT KGP
Vice Chairman	MoES nominee/ Programme Officer
One expert member	IIT KGP nominee
Three expert members	MoES nominees
Member Secretary	RESEARCH COORDINATOR

MB shall be the executive body to organize, review, monitor and guide the OASTC in implementing the scheme in the University. The MB shall meet at least twice in a year to review the progress and resolve issues, if any.

ARTICLE 2 – ESTABLISHMENT OF OASTC/CoE:

- 2.1 IIT KGP which has expertise, facilities and faculty in the areas of ocean science and technology shall establish an OCEAN & ATMOSPHERIC SCIENCE AND TECHNOLOGY CELL/CENTRE OF EXCELLENCE in IIT KGP with the concurrence of MoES.
- 2.2 The OASTC/CoE shall function as an Autonomous Cell according to the policy, guidelines and procedures laid down by the MB with the concurrence of MoES.
- 2.3 The MoES shall appoint one of the faculty members from a panel of names recommended by IIT KGP in first instance and recommended by the Chairman, MB as Research Coordinator (RC) for OASTC/CoE. He/she shall be the full time incharge of the OASTC/CoE and also the coordinator for all MoES projects/programmes in IIT KGP
- 2.4 RC shall be appointed for a period of TWO years and the term may be reviewed by IIT KGP and extended further with the concurrence of MoES.
- 2.5 The salary and allowances of the RC shall be borne by IIT KGP as per their prevalent norms.

ARTICLE 3 – GRANTS AND FUND DISBURSEMENT:

- 3.1 Towards the grant for sanctioned projects being operated at OASTC, IIT KGP should make a request to MoES for release of funds. MoES will

examine the request and release the grant on an annual basis. The annual grant is to be paid in two instalments. No request for grant-in-aid will be entertained if Utilisation Certificate for the earlier grants have not been received by MoES.

- 3.2 All grants given to IIT KGP by MoES shall be operated through the RC under the management of MB, as per existing SRIC rules of IIT KGP.
- 3.3 IIT KGP shall open and maintain a separate account head in respect of the grants received from MoES and MoES shall have the right to inspect the accounts. This shall be operated as per SRIC norms of IIT KGP.
- 3.4 IIT KGP shall evolve a suitable scheme for proper financial management in consultation with MoES and render accounts and necessary certificates to MoES as per Government of India norms. IIT KGP shall obtain prior approval of MoES regarding operational procedures for the accounts opened for the purpose of OASTC. IIT KGP shall implement such procedures *in toto*.
- 3.5 The General Financial Rules (GFR) in general and its chapter concerning grants-in-aid shall be fully applicable. The Controller and Auditor General of India (CAG) shall have the right to audit the accounts as per the existing rules and regulations. In addition to that the MoES will also have a right to monitor the progress of the project and to inspect and examine the records as and when required.
- 3.6 The funds/grants shall be utilized for the purpose of MoES sanctioned programmes/projects only. The machinery, equipment, instruments, etc purchased from the funds/grants of MoES shall remain the property of MoES during and after the project/programme.
- 3.7 In case, the scheme is foreclosed or not carried forward, the unutilized funds with IIT KGP shall be refunded to MoES.

ARTICLE 4 – FACILITIES AT OASTC/CoE:

- 4.1 All possible equipment and facilities of IIT KGP used for research and development in the area of OAST at IIT KGP shall be pooled and placed under the management of RC as part of OASTC activities, by IIT KGP.
- 4.2 Additional equipment necessary for augmenting the OASTC/CoE to establish facilities for research in ocean science and technology to the state-of-the-art level, shall be procured under separate grant from MoES.

Proposal for establishment of such facilities for OASTC/CoE shall be made by RC and submitted to MoES after review and with the recommendations of the MB.

- 4.3 The equipment/facilities of OASTC/CoE shall be made available to researchers working in this field in other institutions in OAST in general and in particular for all MoES funded projects. RC shall be responsible to coordinate with other academic and research institutions for maximum utilization of facilities.

ARTICLE 5 – INFRASTRUCTURE:

- 5.1 The requisite basic infrastructure like electricity, building, water supply, etc., shall be made available by IIT KGP. However, remodeling, modifications and augmentation of the infrastructure facilities etc., will be met out of grant to OASTC/CoE based on the specific proposals by RC with the due approval of MB.

ARTICLE 6– RESEARCH AND TRAINING PROGRAMME:

- 6.1 MoES will provide fellowships (research fellows and research associates) to OASTC/CoE to support the ongoing research and academic programmes under Marine Manpower Development programme of MoES.
- 6.2 Selection of research fellows and research associates shall be done by the MB constituted for the OASTC/CoE.
- 6.3 Research proposals in OAST shall be generated by IIT KGP faculty and RC. These shall be reviewed and forwarded to MoES with recommendations of MB. Such proposals could include requirements of special equipment/facilities and additional personnel. Faculty members and Research Associates from other institutions could also be associated with these projects, either part-time or full time.
- 6.4 In addition to promoting research in OAST, RC through MB shall arrange offering at least one course in OAST at Post Graduate level by involving faculty members and other specialists associated with the MoES projects. Such courses shall have the prior approval of the IIT KGP. Wherever feasible these courses ought to have a job-training component at one of the national institutions/laboratories related to ocean sciences, maybe MoES institutes or others like IITs.

6.5 RC shall organize a few short term courses/workshops/seminars/symposia etc. on specialized topics of relevance sponsored by MoES, IIT KGP and other agencies for development of human resources.

ARTICLE 7- REPORTING REQUIREMENTS:

7.1 IIT KGP is to submit a quarterly progress report on the projects indicating the project objective, work performed, results obtained, estimate of technical feasibility, funds allocated and expenditure incurred etc.

ARTICLE 8- INTELLECTUAL PROPERTY RIGHTS (IPR):

8.1 All patent rights and designs and inventions derived from research work financed or aided by the MoES shall jointly belong to IIT KGP and MoES.

This Memorandum of Understanding is signed by the parties by their hands hereto in witness thereof, on THIS THE 18th DAY OF Dec., 2006 have set forth and



प्रकाश कुमार
PRakash KUMAR

महाराष्ट्र राज्य/Joint Secretary

मंत्री प्रबोध अवास

मंत्री प्रबोध अवास
Ministry of Earth Sciences

प्रधान सचिव, नई दिल्ली

GOV. of India, New Delhi

Date: -----

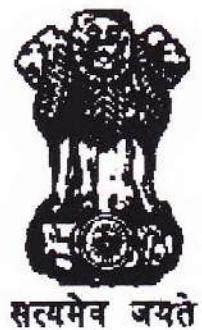


B. S. Dube
18.12.06

Prof. Sishir Kumar Dube
Director, Indian Institute of Technology, Kharagpur,
India
Date: -----

**MEMORANDUM OF UNDERSTANDING
BETWEEN
GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
AND
INDIAN INSTITUTE OF TECHNOLOGY**

DECEMBER 2006



**MEMORANDUM OF UNDERSTANDING
BETWEEN
GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
AND
INDIAN INSTITUTE OF TECHNOLOGY**

PREAMBLE:

This Memorandum of Understanding (MoU) has been entered and made on THIS, THE *Eighteen*. DAY of *December* TWO THOUSAND AND SIX between THE PRESIDENT OF INDIA acting through MINISTRY OF EARTH SCIENCES, GOVERNMENT OF INDIA, NEW DELHI (hereinafter referred to as MoES) on the one Part and IIT KHARAGPUR (hereinafter referred to as IIT KGP) which expression shall unless repugnant to the context or meaning thereof be deemed to include their successors in interest and permitted assigns, on the other part.

WHEREAS the MoES has desired to ESTABLISH An OCEAN & ATMOSPHERIC SCIENCE AND TECHNOLOGY CELL (OASTC)/CENTRE OF EXCELLENCE (CoE) to promote research in marine sciences and technology and to develop human resources required for sustained use of our vast ocean resources for socio-economic benefit of Indian society.

WHEREAS IIT KGP has agreed to undertake research and technology development in the area of OCEAN & ATMOSPHERIC SCIENCE AND TECHNOLOGY needed for the country and extend all support required for carrying out work at the OASTC.

WHEREAS MoES and IIT KGP have agreed as follows:

ARTICLE 1 – COMMITTEES:

1.1 NATIONAL STEERING COMMITTEE FOR OASTCs AND CoE:

A NATIONAL STEERING COMMITTEE (NSC) for OASTCs and CoE shall be constituted under the chairmanship of Secretary, MoES. This committee shall lay down policies and guide effective implementation of the scheme of OASTCs and CoEs at the national level.

1.2 MANAGEMENT BOARD FOR OASTCs/CoE:

In IIT KGP a MANAGEMENT BOARD (MB) shall be constituted by MoES with the following constitution:

Chairman	Director, IIT KGP
Vice Chairman	MoES nominee/ Programme Officer
One expert member	IIT KGP nominee
Three expert members	MoES nominees
Member Secretary	RESEARCH COORDINATOR

MB shall be the executive body to organize, review, monitor and guide the OASTC in implementing the scheme in the University. The MB shall meet at least twice in a year to review the progress and resolve issues, if any.

ARTICLE 2 – ESTABLISHMENT OF OASTC/CoE:

- 2.1 IIT KGP which has expertise, facilities and faculty in the areas of ocean science and technology shall establish an OCEAN & ATMOSPHERIC SCIENCE AND TECHNOLOGY CELL/CENTRE OF EXCELLENCE in IIT KGP with the concurrence of MoES.
- 2.2 The OASTC/CoE shall function as an Autonomous Cell according to the policy, guidelines and procedures laid down by the MB with the concurrence of MoES.
- 2.3 The MoES shall appoint one of the faculty members from a panel of names recommended by IIT KGP in first instance and recommended by the Chairman, MB as Research Coordinator (RC) for OASTC/CoE. He/she shall be the full time incharge of the OASTC/CoE and also the coordinator for all MoES projects/programmes in IIT KGP
- 2.4 RC shall be appointed for a period of TWO years and the term may be reviewed by IIT KGP and extended further with the concurrence of MoES.
- 2.5 The salary and allowances of the RC shall be borne by IIT KGP as per their prevalent norms.

ARTICLE 3 – GRANTS AND FUND DISBURSEMENT:

- 3.1 Towards the grant for sanctioned projects being operated at OASTC, IIT KGP should make a request to MoES for release of funds. MoES will

examine the request and release the grant on an annual basis. The annual grant is to be paid in two instalments. No request for grant-in-aid will be entertained if Utilisation Certificate for the earlier grants have not been received by MoES.

- 3.2 All grants given to IIT KGP by MoES shall be operated through the RC under the management of MB, as per existing SRIC rules of IIT KGP.
- 3.3 IIT KGP shall open and maintain a separate account head in respect of the grants received from MoES and MoES shall have the right to inspect the accounts. This shall be operated as per SRIC norms of IIT KGP.
- 3.4 IIT KGP shall evolve a suitable scheme for proper financial management in consultation with MoES and render accounts and necessary certificates to MoES as per Government of India norms. IIT KGP shall obtain prior approval of MoES regarding operational procedures for the accounts opened for the purpose of OASTC. IIT KGP shall implement such procedures *in toto*.
- 3.5 The General Financial Rules (GFR) in general and its chapter concerning grants-in-aid shall be fully applicable. The Controller and Auditor General of India (CAG) shall have the right to audit the accounts as per the existing rules and regulations. In addition to that the MoES will also have a right to monitor the progress of the project and to inspect and examine the records as and when required.
- 3.6 The funds/grants shall be utilized for the purpose of MoES sanctioned programmes/projects only. The machinery, equipment, instruments, etc purchased from the funds/grants of MoES shall remain the property of MoES during and after the project/programme.
- 3.7 In case, the scheme is foreclosed or not carried forward, the unutilized funds with IIT KGP shall be refunded to MoES.

ARTICLE 4 – FACILITIES AT OASTC/CoE:

- 4.1 All possible equipment and facilities of IIT KGP used for research and development in the area of OAST at IIT KGP shall be pooled and placed under the management of RC as part of OASTC activities, by IIT KGP.
- 4.2 Additional equipment necessary for augmenting the OASTC/CoE to establish facilities for research in ocean science and technology to the state-of-the-art level, shall be procured under separate grant from MoES.

Proposal for establishment of such facilities for OASTC/CoE shall be made by RC and submitted to MoES after review and with the recommendations of the MB.

- 4.3 The equipment/facilities of OASTC/CoE shall be made available to researchers working in this field in other institutions in OAST in general and in particular for all MoES funded projects. RC shall be responsible to coordinate with other academic and research institutions for maximum utilization of facilities.

ARTICLE 5 – INFRASTRUCTURE:

- 5.1 The requisite basic infrastructure like electricity, building, water supply, etc., shall be made available by IIT KGP. However, remodeling, modifications and augmentation of the infrastructure facilities etc., will be met out of grant to OASTC/CoE based on the specific proposals by RC with the due approval of MB.

ARTICLE 6 – RESEARCH AND TRAINING PROGRAMME:

- 6.1 MoES will provide fellowships (research fellows and research associates) to OASTC/CoE to support the ongoing research and academic programmes under Marine Manpower Development programme of MoES.
- 6.2 Selection of research fellows and research associates shall be done by the MB constituted for the OASTC/CoE.
- 6.3 Research proposals in OAST shall be generated by IIT KGP faculty and RC. These shall be reviewed and forwarded to MoES with recommendations of MB. Such proposals could include requirements of special equipment/facilities and additional personnel. Faculty members and Research Associates from other institutions could also be associated with these projects, either part-time or full time.
- 6.4 In addition to promoting research in OAST, RC through MB shall arrange offering at least one course in OAST at Post Graduate level by involving faculty members and other specialists associated with the MoES projects. Such courses shall have the prior approval of the IIT KGP. Wherever feasible these courses ought to have a job-training component at one of the national institutions/laboratories related to ocean sciences, maybe MoES institutes or others like IITs.

6.5 RC shall organize a few short term courses/workshops/seminars/symposia etc. on specialized topics of relevance sponsored by MoES, IIT KGP and other agencies for development of human resources.

ARTICLE 7- REPORTING REQUIREMENTS:

7.1 IIT KGP is to submit a quarterly progress report on the projects indicating the project objective, work performed, results obtained, estimate of technical feasibility, funds allocated and expenditure incurred etc.

ARTICLE 8—INTELLECTUAL PROPERTY RIGHTS (IPR):

8.1 All patent rights and designs and inventions derived from research work financed or aided by the MoES shall jointly belong to IIT KGP and MoES.

This Memorandum of Understanding is signed by the parties by their hands hereto in witness thereof, on THIS THE 18th DAY OF Dec., 2006 have set forth and

Deed 9/1/67

महाराष्ट्र कार्यालय
PRAYAGRAJ KUMAR
मुख्य सचिव/Joint Secretary
भूविज्ञान विभाग
Ministry of Earth Sciences
महाराष्ट्र कार्यालय, नई दिल्ली
Gov. of India, New Delhi


10.12.06