



## Memorandum of Collaboration

ONGC- Pan-IIT Collaborative Research Program

between

**Oil and Natural Gas Corporation Limited**

and

**Indian Institutes of Technology**



IIT  
Bombay



IIT  
Guwahati



IIT  
Delhi



IIT  
Kharagpur



IIT  
Kanpur



IIT  
Madras



IIT  
Roorkee

---

January 19, 2015

1. This Memorandum of Collaboration (MoC) is entered on 19th January, 2015 between

**Oil and Natural Gas Corporation Limited (ONGC)**, a company registered under the Companies Act, 1956, having its Registered Office at 8th Floor, Jeevan Bharti, Tower-II, 124, Indira Chowk, New Delhi – 110001, hereinafter referred to as “ONGC” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And the Pan-IIT Forum comprising of

**Indian Institute of Technology – Kharagpur, Kharagpur - 721302, West Bengal** established by Govt. of India by an Act of Parliament hereinafter referred to as “IIT Kharagpur” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And

**Indian Institute of Technology – Kanpur, P.O. IIT Kanpur** established by Govt. of India by an Act of Parliament hereinafter referred to as “IIT Kanpur” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And

**Indian Institute of Technology – Bombay, Powai, Mumbai-400076, Maharashtra** established by Govt. of India by an Act of Parliament hereinafter referred to as “IIT Bombay” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And

**Indian Institute of Technology – Madras, Sardar Patel Road, Chennai-600036, Tamil Nadu** established by Govt. of India by an Act of Parliament hereinafter referred to as “IIT Madras” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And

**Indian Institute of Technology – Delhi, Hauz Khas, New Delhi-110016, Delhi** established by Govt. of India by an Act of Parliament hereinafter referred to as “IIT Delhi” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And

**Indian Institute of Technology - Guwahati, North Guwahati, Guwahati-781309, Assam** established by Govt. of India by an Act of Parliament hereinafter referred to as “IIT Guwahati” which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns

And

**Indian Institute of Technology - Roorkee, Roorkee - Haridwar Highway, Roorkee-247667**, Uttarakhand established by Govt. of India by an Act of Parliament hereinafter referred to as "IIT Roorkee" which expression shall, unless repugnant to the context, be deemed to include its successors and permitted assigns.

The above described 7 IITs shall be collectively referred to as the IITs. ONGC and the IITs shall be individually referred to as Party and collectively as Parties.

Initially seven IITs namely IIT Kharagpur, IIT Kanpur, IIT Bombay, IIT Madras, IIT Delhi, IIT Guwahati, and IIT Roorkee comprise the Pan-IIT Forum and are party to this MoC. Other IIT/s may be added in due course, if need be.

2. This MoC shall come into effect from the date of signature of the Party which is the last Party signing this MoC (the Effective Date). It is agreed that this MoC shall not come into effect unless signed by all the Parties.

3. **Oil and Natural Gas Corporation Limited (ONGC)** is an integrated global Energy Company encompassing the entire E&P value-chain with Exploration & Production of oil and gas as its core business and other alternative energy business. ONGC is incorporated and registered under "Companies Act - 1956" having its Registered office at Jeevan Bharti, Tower-II, 124, Indira Chowk, New Delhi-110001.

4. **Indian Institutes of Technology (IITs)** are the premier Engineering Institutes of National Importance funded by Central Government. It has the charter to encourage and undertake interdisciplinary basic/applied research in all the advanced Science & Technology areas.

#### **5. Motivation:**

ONGC as a national oil company has the responsibility of producing oil & gas to meet ever rising demands of the country. Exploration and Production of hydrocarbon (E&P) is an ever-evolving scientific and technologically challenging field. In order to keep pace with the fast changing technologies in this industry, ONGC develop technologies in-house as well as develop in collaboration with Academia and/ or other agencies.

ONGC, over the years, has been collaborating with academia by awarding grants-in-aid projects, for undertaking high quality basic and applied research in the fields of interest to ONGC. Major objective of such collaborations is to harness scientific knowledge and expertise available with the academic institutes. In pursuance of this, ONGC is looking for further active participation of seven reputed IITs, as mentioned above, in its various areas of interest in which different ONGC Institutes are also working or inclined to work.

#### **6. Aims and Objectives:**

This inter-institutional, collaborative research and development initiative is aimed at creating a comprehensive platform for pursuing advanced research works jointly by ONGC Institutes and the IITs. The objectives of this collaboration under the MOC are envisaged as follows:

- (a) Collaborative execution of research projects in the jointly agreed Thematic Research Areas (**Annexure-A**).
- (b) Participating in academic exchanges through the proposed ONGC Scholar Program (**Annexure-B**).
- (c) Promoting Internships, visiting and adjunct faculty programs and research oriented career programs.
- (d) Extending ONGC research labs for use of IITs and vice versa.
- (e) Conducting short and long term courses in IITs and jointly organizing workshops, seminars and conferences.
- (f) Promoting entrepreneurship activities in jointly agreed areas.

#### **7. Responsibilities of ONGC:**

- a) To propose initial list of thematic areas of research and provide funds under projects and programs to carry out basic/applied research/ training/ workshops/ conferences etc. as jointly agreed.
- b) To provide access to labs and libraries of ONGC Institutes to IITs.
- c) To jointly pursue collaborative research and training programmes with the IITs.
- d) To promote research related to the Thematic Areas through the ONGC Scholar Program.
- e) To convene regular meetings of the Program Advisory Committee (PAC).

#### **8. Responsibilities of IITs:**

- a) Provide world class Research under the various thematic areas & Technology development support, and carry out other academic activities in collaboration with ONGC and by engaging students and faculties of requisite number and capabilities.
- b) Surveying & scouting the advanced technologies of interest to ONGC and advising ONGC on their potential benefits/drawbacks on quarterly basis. Collecting and understanding contemporary E&P issues for utilizing their strength and dynamically upgrading the work for best results.
- c) Providing training to ONGC officials as agreed jointly, knowledge building/ knowledge transfer in the agreed areas.
- d) Providing space and basic infrastructural facilities for carrying out the research work smoothly.
- e) To convene regular meetings of the Thematic Research Committee (TRC) to monitor the progress and guide the Pan-IIT faculty to enable and ensure time bound, cost effective and quality solutions on priority.
- f) To provide access to Lab/Libraries of IITs to ONGC professionals.

#### **9. Activities:**

ONGC and IITs will jointly identify the Thematic Research Areas (TRA) matching the ONGC needs and expertise available with IITs. This list may be, however, updated and modified as and when required with the approval of the PAC. These Thematic areas would constitute the primary work scope.

In addition to pursuing joint research and training on the identified areas, ONGC and IITs shall also carry out following activities:

1. International/National conferences involving ONGC scientists.
2. Exchange programme of ONGC scientists/ Engineers and IIT faculty on short/long term basis
3. Workshops for ONGC scientists/Engineers and research fellows.
4. Organizing visits of internationally renowned faculty/scientists/ speakers/specialists for the mutual benefit of ONGC and IITs.
5. Joint efforts for harnessing the research results with appropriate documentation and scientific publications.
6. In addition to scientific publications, efforts are to be made for IPR generation and obtaining patents.
7. Foster and support development of incubation centers in key areas where technology developed can lead to marketable products and processes.

#### **10. Exercise of Executive and Financial Powers:**

Administrative and Financial powers for procurement, movement of personnel and engagement of research staff and their remuneration etc. will be as per the norms and procedures of IITs.

#### **11. Management of the Program:**

For the smooth functioning of the collaborations/ research program, Prof. P.P Chakrabarti, Director, IIT Kharagpur will be the Coordinating Director representing Pan-IIT Forum and Director (Exploration), ONGC will be the Coordinating Director representing ONGC. Each member of Pan-IIT Forum shall be represented by a faculty member who shall act as Coordinator for his respective IIT for the programme. The faculty member will be nominated by the corresponding IIT Director.

To steer through the programme and overall guiding the direction and monitoring the progress, there will be a two tier mechanism namely **Program Advisory Committee (PAC)** and **Thematic Research Committee (TRC)** consisting of ONGC and IIT nominees.

Composition of PAC shall include:

	<b>Chairman</b>
1. <b>CMD, ONGC</b>	Coordinating Director, IITs
2. Director, IIT Kharagpur	Coordinating Director, ONGC
3. Director(Exploration), ONGC	Member
4. Director, IIT Kanpur	Member
5. Director, IIT Delhi	Member
6. Director, IIT Madras	Member
7. Director, IIT Bombay	Member
8. Director, IIT Guwahati	Member
9. Director, IIT Roorkee	Member
10. HOI-KDMIPE & Coordinator-COIN, ONGC	Member Secretary
11. HOI-IDT, ONGC	Member (Invitee)
12. HOI-IOGPT, ONGC	Member (Invitee)
13. HOI-IRS, ONGC	Member (Invitee)

14. HOI-ONGC Academy, ONGC	Member (Invitee)
15. HOI-IEOT, ONGC	Member (Invitee)
16. HOI-SMP, ONGC	Member (Invitee)
17. HOI-GEOPIC, ONGC	Member (Invitee)
18. HOI-IPSHEM, ONGC	Member (Invitee)
19. HOI-CEWELL, ONGC	Member (Invitee)
20. HOI-INBIGS, ONGC	Member (Invitee)
21. Coordinating Professor from IIT KGP	Member

Chairman PAC may invite other experts at his discretion to aid the deliberations of the PAC.

The PAC shall review the activities and progress, provide direction and recommend corpus fund.

The Member Secretary PAC shall ensure regular convening of the meetings, arrange for preparation and circulation of agenda and issue minutes of each of the meetings.

**One Thematic Research Committee (TRC)** will be constituted to smoothly execute the research projects for each of the Thematic Area as per the list mutually agreed. The member IIT or in case of more than one member IIT, which has major work component as its share, will be responsible for the smooth execution of the Research projects and shall be the coordinating IIT. The TRC for each area will include:

1. Director, coordinating -IIT	<b>Chairman</b>
2. HOI of concerned ONGC Institute	Co-Chairman
3. Nominated Expert in the TR by ONGC Institute	Member
4. Thematic Area Coordinator from Coordinating IIT	Member
5. Thematic Area Co-coordinator from a different IIT	Member
6. Dean / Associate Dean (Research) Coordinating IIT	Member
7. Coordinating Professor In-charge Member	Member
8. Designated Professor	Member (from the IIT participating in respective Thematic Area)
9. Designated scientists & Engineer	Member (from ONGC Institute participating in respective Thematic Area)

Chairman TRC may invite other experts at his/her discretion to aid the deliberations of the TRC. A TRC coordination committee may be constituted comprising the coordinator from Pan-IIT and coordinator ONGC Institutes for managing routine works. The TRC shall review the progress of the program in its area and milestones achieved on a half yearly basis in Mid Term Review (MTR), and recommend to PAC any mid-course correction required. The TRC will also review the financial performance and suitably give recommendations to the PAC for re-appropriation etc. After the initial release of funds, the next installment, if due, will be released only after the MTR and approval.

Each TRC will be empowered to sanction, re-appropriate and disburse funds allocated for small valued pilot projects in respective Thematic Areas. TRC also be responsible for responding to research requirements from ONGC in that thematic area, for periodically preparing Call for Proposals (CFPs) in that thematic area and circulating it to all participating IITs, performing an initial scrutiny of submitted proposals and placing the proposals before the PAC for approval of new high-value projects. Details of the functions of the TRC are given in Annexure-C.

## **12. Intellectual Property Rights:**

- (i) The intellectual property arising out of this work shall be jointly held in the name of the specific IIT(s) and ONGC wherein ONGC will be the first party, mentioning inventors from both the sides. ONGC will be responsible to file, maintain and defend the IP against any claims and/or possible encroachment using its own resources. However, technical support to defend any claim and/or possible encroachment will be provided by IITs. IIT shall retain the rights for teaching and to continue research in the specified area using the IP thus developed.
- (ii) The right to first use of IPR/ Patent/ Technology developed through this collaboration for its commercial exploitation shall rest with ONGC and its group companies. However, in case of the generation of profit by its uses from third party will be shared with IIT(s). The extent of such sharing will be mutually decided on a case to case basis. IIT(s) may share the amount so generated, with the inventor(s) from the IIT(s) as per the existing norms of IIT.
- (iii) ONGC shall have full right to transferring/ assigning/ licensing/ product/ process/technology developed to third party. ONGC shall equally share any benefit accruing from assignments/ sale/ licensing/ or any other manner with IITs.

## **13. Grants:**

Grants from ONGC will broadly be of the following types:

- (a) Research grants for R&D projects (details in Annexure-D)
- (b) Grants for ONGC Scholar Program (details in Annexure-B)
- (c) International visitor schemes for inviting renowned international experts for short term participation in advisory capability for important research tasks.
- (d) Grants for Internships, Workshops, Conferences, etc. (Annexure-D)

## **14. Fund Release, Accounting and Audit:**

- (i) ONGC would create a centralized Corpus for the entire ONGC - Pan-IIT initiative.
- (ii) Budgets for each research proposal and/or scholar programme would be allocated/ approved from this corpus after approval of PAC.
- (iii) Research projects approved by the PAC will be funded directly to the IIT by which it was proposed. In case a research project requires joint effort of Professors from more than one IIT, then the work will be divided into work elements and carried out under different IITs as separate projects under the common umbrella provided by the TRC (details in Annexure-D).

- (iv) The grants for items 13 (b), 13 (c) and 13 (d) will be disbursed to individual IITs as proposed by the coordinating institute (IIT Kharagpur) on the basis of applications received, and approved by the PAC.
- (v) The procurement of equipment and other requirements, engagement of research staff, institute overheads and other activities will conform to procedures and regulations as per the norms of the IIT executing that project.
- (vi) The utilization/disposal of equipment, software/hardware shall be done in consultation with ONGC.
- (vii) The detailed audited statements of account in respect of the program will be furnished by each TRC to the PAC after each financial year together with grant utilization certificate.
- (viii) Each IIT will maintain separate inventory of all equipment procured under this MoC and provide final status of inventory procured under MOC.

**15. Duration and Termination of MoC:**

- (i) This MoC will operate initially for five (5) years from the effective date. Thereafter, it will terminate. However, it may be further renewed with mutual agreement between the Parties.
- (ii) The MoC may be terminated at any time by mutual agreement between the Parties. Unspent money on the date of termination after deduction of committed expenses shall be returned to ONGC by the IITs. The committed expenses shall mean, the payment to be made by ONGC to IITs for the works completed and accepted by ONGC till the date of termination.

**16. Resolution of Disputes:**

All disputes regarding the interpretation of contents of this MoC or its implementation shall be resolved bilaterally by the Director of the coordinating IIT and CMD, ONGC. Any disputes remaining shall be resolved through the relevant Ministries and guidelines of the Government. A sample copy is placed as Appendix-A.

**17. Comprehensive Agreement for individual projects**

A detailed Agreement including execution Terms & Conditions, payment terms, milestones, deliverables, confidentiality etc. will be entered into for each individual project between coordinating / individual IIT and respective ONGC Institute under the broad umbrella of this MoC.

**18. Publications & presentations in Journals & Conferences**

Publications shall have prior approval of ONGC to restrict disclosure of any proprietary data of ONGC. Further, publications and presentations in Journals & Conferences respectively shall be under joint authorship of ONGC & IIT. Financial grant of ONGC shall be duly acknowledged in each publication.

## 19. Confidentiality

The Parties shall during the tenure of the Agreement and at any time thereafter maintain in the strictest confidence, all information acquired in pursuance of the Agreement and shall not, unless authorized in writing by the Other Party, divulge or grant access to any information acquired in pursuance of the Agreement or the results thereof and shall prevent anyone becoming acquainted with any such information. "IITs" shall not also destroy any report, note and technical data relating to the operation/ work and not required by the ONGC. ONGC shall be bound by similar obligations w.r.t. confidentiality of information.

The obligation is a continuing one for the Parties and shall survive after the completion/termination of this Agreement.

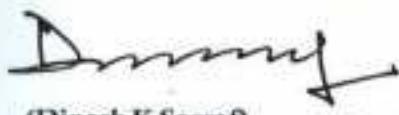
The provisions of this Clause shall not apply to information that:

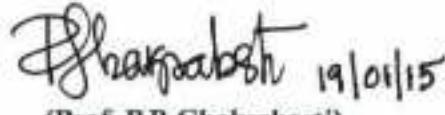
- :(a) is acquired/developed by the Parties independent of this Agreement or is rightfully received free of restriction from another source having the right to so furnish such information; or
- (b) is in Public domain; or
- (c) at the time of disclosure, the information was known to either Parties or its affiliated companies, free of restrictions, as evidenced by documentation in its possessions; or
- (d) is disclosed with prior consent of the Other Party; or
- (e) is required to be furnished or reported under any Law/Order of a Court or is required by Govt. Ministries/agencies /regulatory agencies, Court of Law or the law of land or like Authorities having jurisdiction as regards such information, or in accordance with the rules, by-laws, policies, disclosure standards or codes of professional conduct or ethics that may be applicable to such information. Provided, however, that as soon as the Disclosing Party learns that it is or may be required to disclose any Confidential Information under the above-mentioned circumstances, it shall
  - (i) as promptly as possible take reasonable steps to notify the Other Party of the disclosure requirement so that the Other Party, if it deems fit, may seek a protective order or other appropriate relief.
  - (ii) Provide such cooperation and assistance as the Other Party may reasonably request in any effort by the Other Party to obtain such relief.

**20. Signatories:**

The MoC shall be signed by the CMD, ONGC and the Coordinating Director of Pan-IIT Forum, and the originals, made in duplicate, will be retained by ONGC and Coordinator, Pan-IIT.

**AUTHORIZED SIGNATORIES**

  
(Dinesh K Sarraf)  
CMD, ONGC 19/1/15

  
(Prof. P.P. Chakrabarti)  
Coordinating Director, Pan-IIT

**INITIAL LIST OF THEMATIC RESEARCH AREAS**

- 1. Geological & Geophysical studies**
  - a. Microwave based Remote sensing
  - b. Rock physics modeling including anisotropy and elastic properties to rock and fluid properties
  - c. CSEM forward modeling
  - d. Seismic Interferometry
- 2. Reservoir characterization, modeling & simulation**
  - a. Carbonate reservoir characterization
  - b. Directional permeability; non-radioactive tracers
  - c. Petrophysical data propagation using Artificial intelligence
- 3. Oil & gas Production & Recovery Enhancement**
  - a. HF design/flow assurance
  - b. Development of SOFC from ultra-low pressure gas
  - c. New chemicals/additives, nanomaterial, nano-sensors, nano-particle for water control etc.
  - d. Carbonate reservoirs
  - e. Biotechnology
- 4. Software Development**
  - a. G&G interpretation software
  - b. Reservoir performance & behavior
  - c. Database management
- 5. Unconventional Energy Resources**
  - a. Shale Gas- shale characterization, non-aqueous fracking, Effluent treatment & recycling
  - b. UCG-tapping un-mineable coals
  - c. Gas Hydrates exploration and exploitation
  - d. Uranium leaching solution (In-situ Leaching)
- 6. Engineering solutions/ tools & technology development**
  - a. Development & Application of nano-technology, laser beams, Robotics in different fields of E&P.
  - b. Drilling efficiency, high temp/high pressure solutions, self-healing cements, detection of gas kicks in SOBM, HT stable viscosifiers, etc.
  - c. Completion fluids, tools in deep waters
  - d. Production engineering (Turbo gas lift),
  - e. Offshore engineering including process intensification technologies to reduce footprints & cost,
  - f. Composite materials/alloys
  - g. Safety solutions
- 7. Alternate Energy researches**
  - a. Biofuels, Algal fuels
  - b. Geothermal energy
  - c. Hydrogen production and storage
  - d. CO<sub>2</sub> to methanol
  - e. In-situ CTL processes

**ONGC SCHOLAR PROGRAM**

ONGC will pursue research and manpower training related to the thematic areas jointly with pan-IIT under the ONGC scholar programs. This will include the following:

- 1. ONGC high-value research fellowships for PhD students working on projects identified jointly by ONGC & IIT**
  - a. Option of having access to ONGC labs for collaborative research
  - b. Joint guidance with ONGC R&D scientists
- 2. ONGC MSc/ MS and M. Tech fellowships / top-ups for students working on projects identified jointly by ONGC & IIT**
  - a. Student to spend part of each project semester at appropriate ONGC Lab / Institute, if required
  - b. Joint working with ONGC R&D team
- 3. ONGC undergraduate fellowships for students working on identified jointly projects**
  - a. Student to spend internship(s) at ONGC Lab/ Institute, if required, to undertake project work identified jointly.
- 4. Short term / long term exchange programme of ONGC scientists / Engineers with IITs leading to research degrees to ONGC Scientists/ Engineers, and adjunct faculty programs for eligible ONGC scientists/ Engineers.**

### **FUNCTIONS OF A THEMATIC RESEARCH COMMITTEE (TRC)**

Each Thematic Research Committee (TRC) will be the nodal body for all research and related activities in the respective thematic area. Each thematic research committee will be coordinated by one IIT, but its activities will include all the participating IITs. The responsibilities of a TRC shall include:

#### **1. Coordinating project selection in the thematic area:**

- The TRC will consist of experts in the thematic area from one or more ONGC Institutes, subject experts from all IITs, a coordinator from the coordinating IIT and a co-coordinator from another IIT, and (optional) experts from outside the ONGC-IIT system.
- Each year, the coordinating IIT for each TRC will collect the research needs from the ONGC Institutes and develop a consolidated Call for Proposals (CFP) in its thematic area. The CFP will be circulated to all participating IITs. Note that the coordinating IIT for each TRC will create a separate CFP in its thematic area.
- The coordinating IIT for the TRC will organize a thematic workshop having the following broad agenda:
  - ▶ [PHASE-1] The requirements in that thematic area (as outlined in the CFP) will be presented by a ONGC team. This will be followed by further deliberations among the participating faculty members from different IITs and the ONGC team to define the scope of the work in each problem of the CFP.
  - ▶ [PHASE-2] The IIT professors will brainstorm on the broad approach to be followed for each problem and deliberate between themselves on the set of proposals to be formulated. Professors intending to work on similar areas will try to propose joint projects, and attempts will be made to avoid duplication of effort.
  - ▶ [PHASE-3] A letter of intent outlining the proposals to be submitted to the TRC with the names of participating faculty members will be drafted and recorded in the minutes of the workshop.
- Following the thematic workshop, proposals as indicated by the letter of intent, will be formally submitted by the concerned professors who participated in the thematic workshop. These proposals will be technically evaluated by the TRC and the list of technically approved projects will be submitted to the PAC for financial approval.

**2. Conducting technical reviews of projects in the thematic area:**

- The TRC will review all ongoing projects against milestones on six monthly basis in Mid Term Review, where the Principal Investigators will be asked to submit the half yearly/annual statement of expenditure, fund utilization certificate, and technical progress report for each project.
- The TRC will prepare a comprehensive progress report by compiling the technical reports of the projects in the thematic area, and submit it to the PAC.

**3. Organizing workshops / seminars / tutorials/ courses:** TRC will be responsible for coordinating workshops, seminars, tutorials, international summer/winter courses, invited talks, etc. at various venues, including ONGC Labs/ Institutes and participating IITs for benefit of ONGC professionals.

**4. Approval of pilot projects:** Each TRC will be responsible for initiating pilot projects for early exploration of advanced technology, before a more comprehensive research proposal is formulated. These activities may be funded from the annual budget of the TRC.

**5. Transfer of Technology:** After the successful Pilot Test, the complete technology shall be transferred to ONGC for field applications.

## **FUND MANAGEMENT**

### **1. Creation of Corpus Fund for ONGC-IIT Program**

- ONGC will create a corpus fund at the disposal of the PAC for smooth functioning of the ONGC-IIT program, including ONGC scholar programme.
- Towards the end of each financial year the PAC will determine (on the basis of ongoing and forthcoming activities) the fund requirement for the next financial year
- ONGC will prepare a mechanism for allocating the fund in its budget and enabling timely disbursement as approved by the PAC

### **2. Research grant disbursement mechanism**

- Each TRC will submit a list of technically approved project proposals (with their respective budgets) to the PAC for financial approval.
- If a project clears both technical and financial approval, funds will be disbursed as per the following mechanism:
  - ▶ Destination of funds: If all the PIs of the project are from the same IIT, then funds will be transferred to that IIT. If there are PIs from multiple IITs in a project, then the proposal should indicate the break-up of the work elements to be performed by each of these IITs, and the budget should indicate the break-up of the fund allocation among these IITs. Funds will be transferred to these IITs as indicated in the budget.
  - ▶ Periodicity of disbursements: Funds will be disbursed at the beginning of the project, and thereafter annually after each review cycle. The date of receiving the fund will mark the project commencement date. The PAC will be empowered to release the funds. Disbursement of the first installment at the beginning of the project is imperative to cover expenses such as student salaries. Please also see the bullet on pilot projects below.

### **3. Taxation & other Liabilities:** IITs were set up under the Institutes of Technology act, 1961 as institutes of national importance; are wholly or substantially financed by Government; that their objects are primarily educational; that therefore, their income is unconditionally exempt from Tax under sec 10(23c) (III ab) of the Act; and that they are also not required to file returns of Income u/s 139 of the Act. IITs shall forthwith communicate to ONGC any change in this regard.

- ▶ The sum payable to the IITs would not be subject TDS as per the extant TDS provisions. However sums payable to the other entities, etc., if any, in connection with/under the collaborative program would be subject to TDS as per the extant TDS provisions.

- Regarding applicability of service tax on grant in aid in relation to research, Educational guide of CBEC at para 2.2.7 indicates service tax may be applicable on the grant/funding provided by ONGC to IITs if it is related to consultancy. IITs being the service provider, shall be responsible for the payment of service tax, if applicable, which will be reimbursed by ONGC.
- The actual date of fund receipt by concerned IIT will mark the commencement date of the project.

### **3. Annual Operational Grants for TRCs**

Each TRC will have an annual budget for the following activities. Budget will be proposed by TRC, approved by the PAC and disbursed from the corpus at the beginning of each financial year.

- Conduction of TRC project selection and review meetings
- Workshops, seminars, international summer/winter courses, invited talks
- Funding small scale pilot research activities (without student funding) to prepare the groundwork for a more relevant proposal. Pilot activities must involve at least one mentor from an ONGC Institute.

### **4. Annual Grants for ONGC Scholar Programme**

ONGC scholar programme will be supported from the ONGC-IIT corpus. The coordinating IIT will work with the PAC to develop, modify and enable the execution of this programme.

## APPENDIX-A

1. Arbitration in Public Sector Enterprises: (As per site of ONGC for reference of MM)
2. 1.1: In the event of any dispute or difference relating to arising from or connected with the CONTRACT, such dispute or difference shall be referred by either party to the arbitration of one of the Arbitrators in the Department of Public Enterprises, to be nominated by the secretary to the Govt. of India, In-charge of the Bureau of Public Enterprises. The arbitration and Conciliation act 1996 shall not be applicable to the arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Deptt. of Legal Affairs, Ministry of Law and Justice, Govt. of India. Upon such reference, the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

•••••