

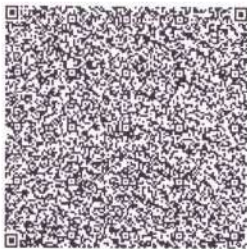


सत्यमेव जयते

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MEMORANDUM OF UNDERSTANDING BETWEEN KUMAUN UNIVERSITY, NAINITAL AND ONGC VIDESH LIMITED, NEW DELHI

CL.1 THE MoU

CL.1.1 THIS MoU made and entered into on 29th day of June 2018 between ONGC Videsh Limited, a Company incorporated under the Companies Act 1956, having its registered office at Deendayal Urja Bhawan, Tower-B, Plot No. 5A-5B, Nelson Mandela Marg, Vasant Kunj, New Delhi 110070 (hereinafter called ONGC Videsh which expression shall where the context so admits include its successors and permitted assigns) of the one part,

And

CL.1.2 KUMAUN UNIVERSITY, NAINITAL, was established in 1973 under the UP State Act, having its office at Kumaun University, Nainital Uttarakhand – 263001 (hereinafter called the KUMAUN UNIVERSITY (KUN) which expression shall where the context so admits include its successors and permitted assigns) of the other part.

**MEMORANDUM OF UNDERSTANDING
BETWEEN
KUMAUN UNIVERSITY, NAINITAL
AND
ONGC Videsh Limited**

CL.1 THE MoU

CL.1.1 THIS MoU made and entered into on 25th day of June 2018 between ONGC Videsh Limited, a Company incorporated under the Companies Act 1956, having its registered office at Deendayal Urja Bhawan, Tower-B, Plot No. 5A-5B, Nelson Mandela Marg, Vasant Kunj, New Delhi 110070 (hereinafter called ONGC Videsh which expression shall where the context so admits include its successors and permitted assigns) of the one part,

And

CL.1.2 KUMAUN UNIVERSITY, NAINITAL, established in 1973 under the UP State Act, having its office at Kumaun University, Nainital, Uttarakhand – 263001 (hereinafter called the KUN which expression shall where the context so admits include its successors and permitted assigns) of the other part.

PREAMBLE:

The Department of Science and Technology Govt. of India and the University Grants Commission have realized the need for a close linkage between the National Laboratories and the Universities in terms of research and academic activities. In compliance to this idea, Kumaun University, Nainital (KUN) and ONGC Videsh have decided to sign a Memorandum of Understanding (MoU) as per the following terms and conditions:

1. GENERAL

- 1.1** The scientist of ONGC Videsh may participate in the teaching programme in the different departments such as Earth Sciences, Geology, Geophysics (SSJ, Almora and DSB, Nainital Campuses), of the Kumaun University on request and subject to mutual convenience.
- 1.2** The scientist of ONGC Videsh and the faculty members of KUN will work towards joint research projects thereby mutually using research facilities developed/to be developed at ONGC Videsh and KUN.
- 1.3** KUN will recognize and accept the students of ONGC Videsh for supervising research leading to Ph.D. degree of KUN.



- 1.4 The Faculty and students of the above mentioned Department of KUN shall be allowed the use of library of ONGC Videsh subject to prior permission of the **Managing Director, ONGC Videsh**. Scientists and Ph.D. students of ONGC Videsh shall likewise be given the above mentioned facilities at KUN.
- 1.5 The Scientists/Faculty members and students of ONGC Videsh/ KUN shall be issued necessary permission, on request, to access to laboratories and other facilities of KUN/ONGC Videsh as per their respective rules.
- 1.6 Whenever required, ONGC Videsh shall arrange hostel/guest house accommodation subject to availability, for KUN faculty members and students visiting New Delhi for research/collaboration work and vice-versa.

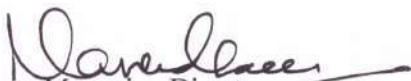
2. ACADEMIC AND DEVELOPMENTAL PROGRAMMES:

- 2.1 For the mutual benefit of the two institutions i.e. ONGC Videsh and KUN, there will be exchange of ONGC Videsh scientists and faculty members of Geology department of KUN.
- 2.2 ONGC Videsh and KUN scientists/faculty members will help each other in preparing common research programmes.
- 2.3 ONGC Videsh will provide laboratory and library facilities to the faculty/technical staff /students of KUN and likewise KUN will also provide the same facilities to the scientists of ONGC Videsh/Ph.D. students/technical staff etc.
- 2.4. For Ph.D. students working under joint supervision with Geology Department's Faculty of KU and scientists of ONGC Videsh, the Research Ordinance related to Ph.D. degree of KUN will be applicable (KU Research Ordinance-2016 could be downloaded from www.kunainital.ac.in Link SRICC). PhD students working in ONGC Videsh shall have to attend Pre-PhD course work classes of Paper-I (Research Methodology) in KU. After completion of course work classes on Research Methodology (Paper-I) in KU, such PhD students may carry-on Paper-II (Recent Advances in the Subject) and Paper-III (Dissertation) in ONGC Videsh.
- 2.5. In case of very specialized research subjects, the Pre-PhD course work will be held in ONGC Videsh, only, after consultation with Convener (RDC)/HOD and final approval of Hon'ble Vice-Chancellor.
- 2.6. The faculty of R&D institutions of Govt. of India with specialization in respective areas may be connected to the Departments of Kumaun University as adjunct Faculty after following due procedure. Such faculty may be requested to deliver lectures in Pre-PhD course work, organized by Kumaun University, Nainital.
- 2.7. All Ph.D. students will have to clear the Pre-PhD course work examination conducted by the Kumaun University, Nainital.



- 2.8. ONGC Videsh and KUN will work closely to generate appropriately trained manpower in the related areas through organization of formal academic curricula, symposia, short term training courses, etc.
- 2.9. ONGC Videsh will provide training facilities (minimum for one months) for selected number of students of KUN as per availability of space. The scientists of ONGC Videsh will help in preparation of project dissertations wherever needed. The students will mention these scientists as senior guide in the Pre-PhD Dissertation reports. Data generated during project work can be published only after technical clearance from ONGC Videsh with equal/amicable sharing amongst ONGC Videsh and KUN.
- 3.0. Honorarium, TA/DA (if applicable) will be provided to the faculty members/Scientists/technical staff of KUN and ONGC Videsh as per rule by requesting organizations.
- 3.1. The MoU related to PhD degree will be done under the JOINT SUPERVISION of the faculty of the respective department of Kumaun University, Nainital and the scientist of ONGC Videsh.
- 3.2. It is further agreed that the Vice-Chancellor, KUN and **Managing Director, ONGC Videsh** through periodic meeting will monitor the progress of this MoU. Any change/modification/termination as introduced/suggested by the Review Committee (Comprising of Vice-Chancellor, KUN and **Managing Director, ONGC Videsh** and other members as may be mutually decided by them) shall be acceptable to both the institutions. In case of difference of opinions and dispute, if any, the verdict of the Hon'ble Vice- Chancellor, Kumaun University, Nainital shall be final.
- 3.3 This MOU shall come into effect on the date of signing (the "Effective Date"). Unless terminated by either Party by giving a written notice of 30 (thirty) days, this MOU shall be valid for a period of 2 (two) years from the Effective Date. The term of this MoU can be extended by written consent of both the parties.

Signed this day of 29 06, 2018 at Kumaun University, Nainital.

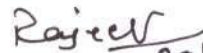


Managing Director
ONGC Videsh Limited
New Delhi

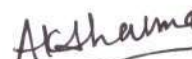
 **नरेन्द्र वर्मा / NARENDRA K. VERMA**
प्रबंध निदेशक / Managing Director
ओ. एन. जी. सी. विदेश लिमिटेड
ONGC VIDESH LTD.
दीनदयाल ऊर्जा भवन, वसन्त कुंज, नई दिल्ली-110070
Deendayal Urja Bhawan, Vasant Kunj, New Delhi-110070



Registrar
Kumaun University,
Nainital
Kumaon University
NAINITAL.



Director-SRICC
Kumaun University
Nainital
DIRECTOR
Sponsored Research And Industrial
Consultancy Cell
Kumaun University, NAINITAL


Convener Geology

Acknowledgment

First and foremost, it gives me utmost pleasure to extend my sincere and heartfelt gratitude to my research supervisor Dr Rajeev Upadhyay, Professor, Department of Geology (Centre of Advanced Study), Kumaun University, Nainital for his valuable technical guidance, immense support and constant encouragement at all stages. His knowledge sharing and motivating words were the prime ingredients for overcoming many dead-end situations in between, and I cannot express enough gratitude to him for the same!

I have the honor to express my most sincere gratitude to the Hon'ble Vice Chancellor and Registrar, Kumaun University, Nainital for their kind administrative support during this long endeavor. I extend my heartfelt gratitude and sense of great appreciation towards Prof. Pradeep K. Goswami, Head of the Department, Department of Geology (Centre for Advanced Study), Kumaun University Nainital, Uttarakhand, India for kind support during the course of preparation and submission of the thesis. I gratefully remember late. Prof. K.S. Valdiya, who was and will always remain a huge source of inspiration. I am extremely thankful to Prof. Charu C. Pant and Prof. Santosh Kumar of the Department of Geology, for their valuable proactive help, guidance, discussions and moral support in many ways since joining research.

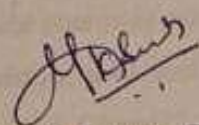
It is my pleasant duty to express gratitude to the Management of my magnificent organization, the Oil and Natural Gas Corporation (ONGC), for permission to carry out the work and make use of available data, software and laboratory facilities for the thesis. I would like to make special mention of Dr. Narendra K. Verma, former MD-OVL, former Director (Exploration), ONGC, and my former Basin Manager (Himalayan Foothills) who not only provided administrative permissions and support to carry out the research but also with his vast experience and expertise in Outer Himalayan Geology, added substantial value to my research work as a personal mentor and guide for which I will remain forever obliged.

The benevolent administrative support personally extended at many times by Shri D. K. Pande, Shri A. K. Dwivedi, former Directors (Exploration), ONGC, and Shri R. K. Srivastava, Director (Exploration) ONGC, is gratefully acknowledged. I remain obliged and utterly grateful to Ms. Sushma Rawat, Basin Manager, Assam & Assam Arakan Basin, ONGC, and soon to take over as Director (E), ONGC for rendering all help at my present place of posting in Jorhat, Assam, to ensure the successful completion of my research study.

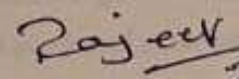
CERTIFICATE

I hereby certify that the work which is being presented in the thesis entitled "TECTONIC EVOLUTION OF MID-DUN THRUSTS IN TRANS-YAMUNA DUN OF NW SUB-HIMALAYA, INDIA" in partial fulfilment of the requirements for the award of the Degree of Doctor of Philosophy in Geology and submitted in the Department of Geology (CAS) of the Kumaun University, Nainital, Uttarakhand, India is an authentic record of my own work carried out during a period from 20 June 2013 to 29 December 2022 under the supervision of Dr. Rajeev Upadhyay, Professor, Department of Geology (CAS), Kumaun University, Nainital.

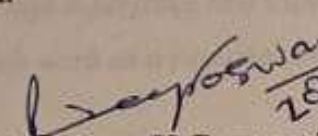
The matter presented in this thesis has not been submitted by me for the award of any other degree of this or any other University/Institution.


(Manoj Kumar Baruah)

This is to certify that the candidate has put more than 200 days attendance during his Ph.D. thesis and the above statement by him is correct to the best of my knowledge.


(Rajeev Upadhyay)
Professor and Supervisor
28/12/2022

It's pleasure for me to forward the thesis of Manoj Kumar Baruah.


(Pradeep K Goswami)
Professor and Head
Department of Geology (CAS)
Kumaun University, Nainital
28.12.2022

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Department of Geology
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