MEMORANDUM OF UNDERSTANDING

BETWEEN



CSIR-Central Road Research Institute, New Delhi

And



National Institute of Technology (NIT), Delhi, New Delhi

JANUARY 2024

Memorandum of Understanding

Between

CSIR-Central Road Research Institute, New Delhi

And

National Institute of Technology (NIT), Delhi

This Memorandum of Understanding is made and executed of this (31/01/2024) between CSIR - Central Road Research Institute, New Delhi 110025 which is a constituent establishment of the Council of Scientific and Industrial Research, a Society registered under the Societies Registration Act XXI of 1860, and having its registered office at Anusandhan Bhawan, 2, Rafi Marg "New Delhi -110001 hereinafter referred to as CSIR-CRRI through its authorized representative, the Director, CSIR-CRRI.

And

The National Institute of Technology, Delhi an Institute of National importance through Act of Parliament (2007) and a CFTI under Ministry of Education, Government of India and having its office at Plot No. FA7, Zone, P1, GT Karnal Road, Delhi-110036, INDIA are involved in academics and research in different areas of Science and Engineering, hereinafter referred to as NIT, Delhi through its authorized representative, the Director, NIT Delhi.

PREAMBLE

WHEREAS, CSIR-CRRI has expertise and capabilities for conducting research & development activities and carrying out consultancy assignments, including dissemination of knowledge through training, etc., in the areas of roads and bridges, traffic and transportation, ground improvement and geotechnical engineering, rural roads, pavement design, pavement performance and its evaluation, instrumentation, use of sustainable materials in road infrastructure, environment and road safety, and AI&ML applications in engineering areas.

WHEREAS, NIT Delhi, is charged with the responsibility of training technical manpower in different areas of Civil Engineering and is also contributing to the rapidly growing scientific and technological knowledge and professional experience in Science and Technology by undertaking industrial & applied research and consultancy.

WHEREAS, both CSIR-CRRI and NIT, Delhi now

- Recognizing the importance of research and development in the areas of road and transportation sector.
- Appreciating the need for creation of large reservoir of highly qualified manpower in all fields related to road and transportation sector.
- Desiring to club their efforts by pooling their expertise and resources.

INTEND to form a nucleus for promoting excellent quality manpower in the fields of engineering, technology and science with special emphasis on Transportation Engineering, Traffic Engineering, Transportation Planning, Pavement Design and Performance Evaluation, Bridge Engineering, Geotechnical Engineering, Environment, Road safety and Al&ML applications and other civil engineering areas in related fields of road and transportation sector etc.

NOW, THEREFORE, in consideration of the mutual promises made herein and of good and valuable consideration, the receipt and sufficiency of which both CSIR-CRRI and NIT, Delhi hereby agree to sign a memorandum of understanding (MOU).

ARTICLE-I: SCOPE OF THE MOU

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The MOU details the modalities and general conditions regarding collaboration between CSIR-CRRI and NIT, Delhi for enhancing within the country, the availability of highly qualified manpower in the area of road and transportation sector without any prejudice to prevailing rules and regulations in CSIR-CRRI and NIT, Delhi and without any disregard to any mechanism evolved and approved by the competent

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authorities under Govt. of India in so far as such mechanism applies to CSIR-CRRI and or NIT, Delhi. The areas of cooperation can be extended through mutual consent.

ARTICLE-II: SCOPE OF ACADEMIC INTERACTION

In order to promote co-operation between CSIR-CRRI and NIT Delhi, the two institutions agree as follows:

- 1. The two institutions will encourage direct contact and co-operation between their faculty and administrative staff, departments and research institutions and centers.
- 2. Within mutually acceptable fields, the following general forms of co-operation for programmes or activities will be explored for potential negotiations:
 - Academic and Research collaboration in the areas of mutual interest
 - Joint Supervision of M.Tech. (Projects and Internships) and Ph.D. students
 - Conduct of conferences, seminars, workshops and other academic meetings

NIT Delhi and CSIR-CRRI further agree that detailed terms and conditions that guide each activity identified above will be separately determined and agreed upon by the two institutions.

Academic and Research collaboration in the areas of mutual interest:-

NIT, Delhi and CSIR-CRRI will exchange information on research and educational programmes relevant to their educational and research programmes. Both the institutions may also exchange academic information, scholarly information, materials and publications.

Joint Supervision of M.Tech and Ph.D.works:-

NIT Delhi and CSIR-CRRI agree to jointly supervise M.Tech and Ph.D students for their thesis work. The students of NIT under joint supervision may visit CSIR-CRRI for discussion with the joint mentor/guide and use laboratory facilities of CSIR-CRRI that may be required to carry out the thesis work. Prior permission must be obtained from the mentor(s)/guide(s) of the visiting institute before each such visit by the students. Selection of the students may be jointly decided considering the merit of the candidate.

Conduct of conferences, seminars, workshops and other academic meetings:-

NIT and CSIR-CRRI agree to organize seminars, conferences, workshops, short term courses or any other academic/research meetings on topics of mutual interest. Both the parties will identify and invite faculty members from the other institution to participate in conferences, workshops and short-term courses. The terms and conditions for such participation will be worked out by mutual agreement between NIT and CSIR-CRRI.

- Both CSIR-CRRI and NIT Delhi will be free to independently carry out followup research on the thesis work conducted under this scheme.
- 4. If the outcome of the project related to product development, process technology and design etc. which involves matter of secrecy and concern with security of the state and country, the same will not be allowed for publication/printing in any form such as an electronically/verbally etc. If the outcome of a project results into an intellectual property, for which rights can be secured, it will be decided on case to case basis by mutual consent of both the institutions. Similarly, sharing of expenditure in securing such right and income assured through royalty etc. by the parties under the law will be decided on case to case basis after mutual consultation
- 5. Research supervisors from both the institutes will be corresponding authors in any publication resulting from the collaborative work. All the efforts put by the scientists/students as a part of this MOU will be accounted for by way of reporting the work in thesis and/or paper publication except the part for which IPR need be claimed.
- Neither of the supervisors will publish the work carried out under this MOU without knowledge of the other.
- 7. The raw data (traffic engineering, transportation planning, modeling exercises) from third-party projects for purely academic and research purposes can be shared or used on mutually agreeable terms and conditions.

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ARTICLE -III: SHARING OF FACILITIES

- (a) CSIR-CRRI and NIT, Delhi shall make provisions to share their respective important R&D facilities in order to promote academic and research interaction in the areas of cooperation.
- (b) CSIR-CRRI and NIT, Delhi shall permit the exchange of software and other materials and components developed in-house in the areas of cooperation, if permissible, within the rules governing the two institutions.
- (c) CSIR-CRRI and NIT, Delhi shall provide access to the library facilities to scientists, members of faculty and students as per the prevailing rules and norms in the respective institutes.

ARTICLE IV: CO-ORDINATION OF THE PROGRAMME INCLUDING FINANCIAL ARRANGEMENTS

- (a) It is agreed that the terms and conditions of any agreed programme and activity contemplated in this MOU shall be the subject matter of separate written agreements to be negotiated and agreed upon by both parties, wherever applicable. Provided always, the decision whether to initiate and/or implement any programme or activity shall be at each party's sole discretion.
- (b) This memorandum is not intended to create binding or legal obligations on either party. It merely expresses the intentions and understanding of the parties, which will form the basis of any legally binding agreement to be drafted and executed in the future.
- (c) Both parties understand and agree that this memorandum creates no financial obligations on either party, and all financial arrangements will have to be negotiated and will depend on the availability of funds.
- (d) The collaborative programme between CSIR-CRRI and NIT, Delhi shall be coordinated by a coordination committee appointed by Directors of both the Institutes mutually.
- (e) Financial arrangements for each specific collaboration will be decided on a case-to-case basis and brought on record in each after due approval from heads of both the institutions.

ARTICLE -V: EFFECTIVE DATE AND DURATION OF MOU

- (a) This MOU shall be effective from the date of its approval by competent authorities at both ends.
- (b) The duration of the MOU shall be for a period of **5 years** from the effective date,
- (c) During its tenancy, the MOU may be extended or terminated by a prior notice of not less than three months by either party. However, termination of the MOU will not in any manner affect the interests of the students/faculty/scientists who have been admitted to pursue a programme under the MOU.
- (d) Any clause or article of the MOU may be modified or amended by mutual agreement of CSIR-CRRI and NIT, Delhi.

ARTICLE -VI: IPR

- (a) NIT, Delhi and CSIR-CRRI agree to respect each other's rights to intellectual property. Further, the intellectual property rights that arise as a result of any collaborative research or activity under this MOU will be worked out on a case-by-case basis, and will be consistent with the officially laid down IPR policies of the two institutions.
- (b) Rights regarding publications, patents, royalty, ownership of software/design/product developed etc. Under the scope of this MOU shall be decided by the two parties by mutual Consent on caseto-case basis.

ARTICLE — VII: CONFIDENTIALITY

During the tenure of the MOU both CSIR-CRRI and NIT, Delhi will maintain strict confidentiality and prevent disclosure of all the information and data exchanged under the scope of this MOU for any purpose other than in accordance with this MOU.



Both CSIR-CRRI and NIT, Delhi shall bind their respective personnel who come into possession or knowledge of any confidential information not to disclose the same to third parties without written approval of the disclosing party or use such confidential information for any use other than intended under the MOU. Further both CSIR-CRRI and NIT, Delhi put in place adequate and reasonable measure to keep and store confidential information as you are so as to prevent any unauthorized use.

ARTICLE- VIII: AMENDMENTS

Any amendment and/or addenda to the MOU shall be in writing and signed by the PARTIES hereto and shall only after such execution be deemed to form part of the MOU and have the effect of modifying the MOU to the extent required by such amendment or addenda.

ARTICLE- IX: RESOLUTION OF DISPUTES

- This MOU Shall takes effect and be construed in accordance with the Law of India and be subject to the jurisdiction of the courts at New Delhi.
- b) The dispute or difference whatsoever arises between PARTIES in relation to or in connection with this MOU both the parties shall try to resolve the dispute/difference amicably between themselves through mutual consent.

ARTICLE- X: MISCELLANEOUS

a) Both CSIR-CRRI and NIT, Delhi shall not directly or indirectly solicit or offer employment or engagement to any of the personnel of other party without the prior consent in writing of that other party during the term of this MOU.

IN WITNESS THEREOF, the Parties have caused this MOU to be executed by their duly authorized representatives.

Director, CSIR-Central Road Research Institute,
New Delhi

Seal:

CSIR

CSIR

CRRI, NEW Delhi

Witnesses:

1. P. Subremany Card

CDr. P.S. PRASAD, Child from Head Pmos

2. Waleur

(DR. Malin Akhlar Chief

Date: 31.01.2024

Director, National Institute of Technology (NIT), Delhi,

New Delhi

Seal:

Witnesses:

1.

RAVINDER KUMAR, Registrar

2.

Dr. obbu. Chandra Selchar;

Dean PELD. NIT Pelhi

Date: