

This MEMORANDUM OF UNDERSTANDING made on this .....<sup>16<sup>th</sup></sup>.....day of  
the month .....April..... of the year 2016.

**BETWEEN**

**RESEARCH & DEVELOPMENT CENTRE FOR IRON & STEEL**, located at Ranchi – 834 002 (Jharkhand), a unit of **STEEL AUTHORITY OF INDIA LIMITED**, having its Registered Office at Ispat Bhawan, Lodi Road, New Delhi – 110 003, hereinafter referred to as “**RDCIS/SAIL**” (which terms of expression shall, unless excluded by or repugnant to the context or the meaning thereof be deemed to include its successors and permitted assigns) of the **ONE PART**.

**AND**

**NATIONAL INSTITUTE OF FOUNDRY & FORGE TECHNOLOGY**, an autonomous Institute of Govt. of India under MHRD (Deptt. of Higher Education New Delhi), registered as Society under Societies Registration Act of 1860, situated at Hatia, Ranchi –843 003 hereinafter referred to as “**NIFFT**” (which term or expression unless excluded by or repugnant to the context, shall include its successors and assigns) of the **OTHER PART**.

It is **WITNESSETH** that –

**WHEREAS**, **SAIL/RDCIS**, being the corporate R&D unit of **SAIL** and having inter-alia, extensive laboratory facilities in the field of Metallography and having the expertise in analysing metal's characteristics and their properties etc.

**WHEREAS**, **NIFFT** is a leading institute for teaching, training, research & development, consultancy and documentation and information retrieval services in metal casting and metal forming technology. **NIFFT** is engaged in industrial research, design and development work in the areas of materials technology. Apart from pursuing B. Tech Courses at the institute **NIFFT** also encourages their students for M. Tech Course and Ph.D. programme in Material and Metallurgical Engg.

**WHEREAS**, for carrying out the B. Tech./ M. Tech Courses and Ph. D. programme the students are required to take project work in the institute laboratory or other laboratories or research organisations. Therefore, **NIFFT** is interested to find an arrangement with **RDCIS/SAIL** so that their students can avail the laboratory facilities of **RDCIS/SAIL** for their research/project works.

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**NOW THEREFORE** in consideration of the foregoing and the mutual covenants, terms and conditions expressed herein, both the parties agree as detailed hereinbelow :-

**1.0 PURPOSE :**

1.1 The purpose of this MOU is to finalise arrangement between the parties to facilitate the following:

1.1.1 Availing the laboratory facilities of **RDCIS/SAIL** for undertaking research/project work any B. Tech / M. Tech / Ph.D students as well as faculty members of **NIFFT**.

1.1.2 Availing the facilities at **NIFFT** by engineers/scientists of **RDCIS/SAIL** for research and investigative purposes.

1.1.3 Association of B. Tech / M. Tech students of **NIFFT** in on-going projects of **RDCIS/SAIL**. This will enable a WIN-WIN situation where while speeding up the pace of **RDCIS/SAIL** projects, it will simultaneously enable the students of **NIFFT** to meet the requirement of partial fulfilment of project work for the award of their degrees.

1.1.4 Accessing information and support of **RDCIS/SAIL** while formulating specifications for procurement of sophisticated equipments at **NIFFT**.

1.1.5 Exploring possibility of procuring costly software/equipment by **RDCIS/SAIL** through **NIFFT**, which can offer cost advantage because of discounts available to centralised academic institutions.

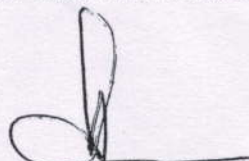
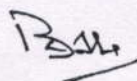
1.1.6 Registering of engineers/scientists working in **RDCIS/SAIL** for Ph.D programmes under Ranchi University with guidance of Professors of **NIFFT**.

1.1.7 Sharing and utilisation of infrastructural facilities, like information and documentation centre, workshop, auditorium etc., by either party in each other's premises for the purpose of dissemination of knowledge.

1.1.8 Undertaking joint research project work with funds provided by Government institutions like, SDF, DST, DSIR etc.

**2.0 SCOPE OF MOU :**

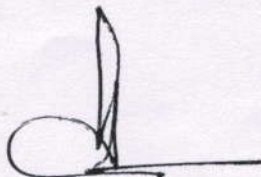
2.1 The scope of this MoU shall broadly cover the areas enumerated in point 1.1, namely, utilisation of laboratory facilities, participation in projects, specification formulation and procurement of equipments/software's, sharing of infrastructural facilities, registering of working professionals for Ph.D under Ranchi University etc. The B. Tech/M. Tech/Ph.D students and faculty members of **NIFFT** shall access the facilities available at **RDCIS/SAIL** against specific recommendations from **NIFFT**. The professionals at **RDCIS/SAIL** can also access the facilities available at **NIFFT** against specific recommendations from **RDCIS/SAIL**.



### 3.0 METHODOLOGY:

- 3.1 NIFFT shall send specific request to **RDCIS/SAIL** on behalf of their **B. Tech./ M. Tech/Ph.D** students/faculty members who may be in requirement of laboratory facilities/services/infrastructure of **RDCIS/SAIL**. The request letter should contain the details of research/project work, equipment/services/infrastructure required, name of the students/faculties, etc. Should there be any requirement of **RDCIS/SAIL** to utilise facilities available at **NIFFT**, **RDCIS/SAIL** shall send specific request letter with corresponding details.
- 3.2 **RDCIS/SAIL** shall inform **NIFFT** about the availability of laboratory facilities/services, the expenses/charges involved and tentative time/schedule for the students/faculties to visit **RDCIS/SAIL** for availing the services. **NIFFT** shall also inform **RDCIS/SAIL** accordingly for any requirement of the latter.
- 3.3 For availing laboratory facilities of **RDCIS/SAIL**, **NIFFT** shall send their request well in advance so that **RDCIS/SAIL** may inform the tentative schedule for taking up their assignments. Advance information will also be sent by **RDCIS/SAIL** for availing facilities at **NIFFT**.
- 3.4 The testing / investigation work would be carried out by **RDCIS/SAIL** experts. However, the students of **NIFFT** may be allowed to be present during the testing / investigation on conditional basis. Reciprocity of similar conditions will be extended by **NIFFT** when there is a requirement of **RDCIS/SAIL**.
- 3.5 **RDCIS/SAIL** shall reserve the rights for allowing the students/faculties to access the laboratory equipment or to witness the investigation or analysis of their samples/specimens. However, for academic/research interest of the students/faculties, **RDCIS/SAIL** may allow their presence at the concerned laboratory at the time of investigation. Similar conditions for undertaking investigative analysis at **NIFFT** shall apply.
- 3.6 For any sponsored project to be taken up by **NIFFT** and **RDCIS/SAIL** funded by a third party, the terms and conditions for such projects will be mutually agreed to on case to case basis. In each of such projects, one principal investigator each from both **RDCIS/SAIL** and **NIFFT** will be identified who will be overall responsible for the project execution.
- 3.7 The modality to be followed for procuring costly software's/equipments by **RDCIS/SAIL**, at concessional rates available to a academic institutes, through the administrative mechanism at **NIFFT**, and the subsequent utilisation and maintenance of such software's/equipments will be worked out on mutually agreed terms.

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3.8 Registering of engineers/scientists of **RDCIS/SAIL** for Ph. D programmes at **NIFFT**, under Ranchi University, will be based on existing rules of the Institute at the time of enrolment.

#### 4.0 **LABORATORY AND INFRASTRUCTURAL SERVICES:**

4.1 **RDCIS/SAIL** shall inform the test charges as per the request of **NIFFT**. The agreed charges shall be considered as addendum to this MOU. The applicable Service tax & Cess shall also be payable by **NIFFT**. Similarly **NIFFT** shall inform test charges and service charges to **RDCIS/SAIL**.

4.2 **RDCIS/ SAIL** and **NIFFT** shall carry out specialised scientific testing jobs and undertake research/ technical investigation assignments on specific request of each other on mutual understanding

#### 5.0 **Financial Arrangement:**

5.1 **RDCIS/SAIL** and **NIFFT** shall finalise financial arrangements on case-to-case basis by way of separate agreements subsequent to this generic MoU, while taking up the projects.

#### 6.0 **General:**

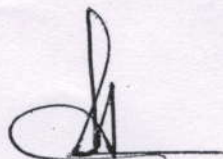
6.1 Both the parties may publish the results obtained under such joint activities, in open technical publications after obtaining prior consent of the other party. Such consent or intimation of refusal should be given within thirty (30) days of the receipt of such request, with adequate reason and explanation in case of latter and shall be deemed approved if no reply is received within thirty (30) days. The names of the investigators and students involved in the activity from both the sides shall be mentioned in such publications.

6.2 Any modifications or amendments to this MOU shall be valid only if they are made in writing and duly signed by authorised representatives of both the parties of this MOU.

6.3 **RDCIS/SAIL** and **NIFFT** shall be free to offer technical, academic and/or professional services to other parties without referring to the terms and conditions of this MOU.

6.4 During the tenure of this MOU, either party can terminate this MOU for breach of any of the terms of this MOU or otherwise giving three (3) months notice in writing to the other party. In the event of termination of this MOU, the rights and obligations of the parties hereto shall be settled by mutual discussion. This MOU may also be terminated by mutual agreement amongst the Parties, if it becomes apparent that the proposed concept is not feasible.

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6.5 This MOU shall come into effect when it has been duly signed by both parties and shall initially remain valid for a period of three (3) years. It shall be extendable for a further period by mutual consent.

7.0 **Confidentiality:**

7.1 In the course of negotiations, non-public, proprietary and confidential information will be exchanged amongst the Parties. The Parties agree to treat such information confidential and to use their best efforts to protect such information from disclosure to any non-party.

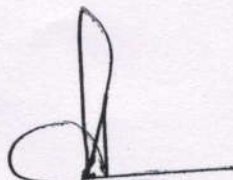
- a. During the period of the MOU, each party agrees to consider as confidential all information disclosed by the other party in written or tangible form or, if orally disclosed confirmed in writing within thirty days of disclosure and identified as confidential by the disclosing party.
- b. The obligations above shall not extend to any confidential information for which the receiving party can prove that this information:
  - i. is in the public domain at the time of disclosure or comes within the public domain without fault of the receiving party.
  - ii. is already known or become known to the receiving party
  - iii. is received from a third party having no obligations of confidentiality to the disclosing party,
  - iv. is independently developed by the receiving party; or
  - v. is required to be disclosed by law or court order.
- c. The obligations of confidentiality will be applicable for a period of two years after the termination of the MOU.

8.0 **Contact Persons:**

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SAIL/RDCIS	NIFFT
Dr. B K Jha, Executive Director In-charge Steel Authority of India Limited, Research & Development Centre for Iron and Steel, Ispat Bhawan, P.O. Doranda Dist. Ranchi – 834 002 Jharkhand Tel. : 0651- 2411126 Fax : 0651- 2411103 E-mail : <a href="mailto:edincharge@sail-rdcis.com">edincharge@sail-rdcis.com</a> <a href="mailto:akbhakat@sail-rdcis.com">akbhakat@sail-rdcis.com</a>	Prof. Partha Pratim Chattopadhyay Director, National Institute Of Foundry & Forge Technology Hatia, Ranchi - 843 003 Tel.: 0651 – 2290859 FAX: 0651 – 2290860 E-mail : <a href="mailto:do_nifft@rediffmail.com">do_nifft@rediffmail.com</a> : <a href="mailto:director.nifft@gov.in">director.nifft@gov.in</a>

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9.0 ENTIRETY :

- 9.1 This MOU contains the entire understanding between the Parties to achieve the objectives and supersedes and replaces all prior discussions, negotiations, representations or agreements relating to the subject matter covered herein.
- 9.2 This MOU is entered only to reflect understanding reached between the Parties and does not create any legal obligations on either Party at this stage.

In witness whereof, the parties hereto have put their hands and seal to this Memorandum of Understanding on the date, month and the year first hereinabove mentioned.

For and on behalf of

Steel Authority of India Ltd.,  
Research & Development  
Centre for Iron & Steel,  
Ranchi - 834 002

For and on behalf of

National Institute Of Foundry & Forge  
Technology  
Hatia, Ranchi - 843 003

*Pavna Devi Ranjandya*

( *BKJ* )  
Dr. B.K.Jha  
Executive Director  
RDCIS, SAIL, RANCHI-2

( निदेशक / Director )  
निफ्ट, राँची / NIFFT, Ranchi

Witness :

1. *B.B. Agrawal*  
( Dr. B. B. Agrawal )  
GM, RDCIS, SAIL  
Ranchi
2. *A.K.B.*  
( Dr. A.K. Bhakat )  
GM, RDCIS, Ranchi

1. *B.K. Chakrabarti*  
( )
2. *N.K.S.*  
( Prof. N.K. SINGH )