## The Technological Institute of Textile & Sciences Bhiwani



Affiliated to Maharishi Dayanand University, Rohtak, Haryana

**3.5.1.** Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year.

The Technological Institute of Textile & Sciences, Birla Colony, Bhiwani – 127021(Haryana)

> Phone: +91 1664 242561(4 Lines) Fax: +91 1664 243728 Website: https://www.titsbhiwani.ac.in



 ♥ Birla Colony, Bhiwani - 127 021 (HARYANA) INDIA
 ■ 91+1664-242561-64
 ■ 91-1664-243728

# **THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES**

Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

Criteria 3

NAAC 2022/ DVV/ Criteria-3/3.5/3.5.1

Date: 09/06/2022

Criteria	Criteria 3- Research, Innovations and Extension3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years			
Key Indicator				
Finding In DVV	<ul> <li>Please provide:</li> <li>1. Copies of collaboration.</li> <li>2. List of collaboration activities.</li> <li>3. Report on collaboration activity.</li> </ul>			
Response/ Clarification :	<ol> <li>Copies of collaboration or MOU is attached (Appendix-I).</li> <li>List of collaboration activities is authenticated by the Director is attached (Appendix-II).</li> <li>Reports on collaboration activities are authenticated by the Director is attached (Appendix-III).</li> </ol>			
Description	<b>Response Relevant Link :</b>			
Copies of collaboration or MOU (Appendix-I). List of collaboration activities (Appendix-II).Report on collaboration activities are authenticated by the Director is attached (Appendix-III).	http://titsbhiwani.ac.in/NAAC/dvv/3.5.1.pdf			

Director Director, THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES, BHIWANI



## **THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES**

Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

Ref: DVV Clarification for Metric level: 3.5.1

Sub: Response to DVV Clarification for Metric level: 3.5.1

Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

HEI Input :

2020-21	2019-20	2018-19	2017-18	2016-17
11	11	06	04	01

1) Copies of collaboration or MOU is attached (Appendix-I).

2) List of collaboration activities is authenticated by the Director is attached (Appendix-II).

**3**) Report on collaboration activities are authenticated by the Director is attached (Appendix-III).

DIRECTOR

Director, THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES, BHIWANI

# Appendix – I

#### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") is made and executed on 16<sup>th</sup> day of October 2019 at Kolkata

#### By and Between

Kesoram Industries Limited (Unit Birla Tyres) having its office at Birla Building, 7th Floor, 9/1 R.N. Mukherjee Road, Kolkata, West Bengal, India 700 001 represented by Mr. Kaushik Biswas, Company Secretary, Kesoram Industries Ltd (hereinafter referred to as "BIRLA TYRES"), which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators of the Party of the FIRST PART

And

The Technological Institute of Textile and Sciences, an institute affiliated to Maharishi Dayanand University, Rohtak having its address at Birla Colony, Tosham Road, Bhiwani 127021 Haryana represented by its Director, Prof. G.K.Tyagi (hereinafter "TIT&S") which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators of the Party of the SECOND PART.

WHEREAS party of the First Part is Manufacturer & Exporter of various types of tyres for two wheelers, three wheelers, four wheelers, farm and mining etc.

AND WHEREAS Party of the Second Part is engaged in providing academic services to students.

AND WHEREAS the Parties, to establish a cordial relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MOU.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING PREMISES, MUTUAL REPRESENTATIONS SET FORTH HEREIN, AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, THE RECEIPT AND SUFFICIENCY OF WHICH ARE HEREBY ACKNOWLEDGED BY THE PARTIES, THE PARTIES HERETO INTENDING TO BE LEGALLY BOUND, HEREBY AGREE AS FOLLOWS:-

1. Scope of MOU

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- i) to develop academic co-operation, Industry Institute linkages and knowledge sharing between BIRLA TYRES and TIT&S, both the parties agree to develop cooperation for exposure in research, visit of BIRLA TYRES staff to TIT&S, Collaborative research projects, Joint-Collaborating, Co-sponsoring and participating in seminars, conferences, workshops, etc., Exchange of published academic material, Co-operation in training, projects on specified areas of development, Collaborative research wok and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.
- to carry out research activities, Training, sampling, designing, spinning, weaving, processing and testing activities.
- iii) All other activities in pursuit of Industrial and Academic excellence.

#### 2. Engagement Activities

- 1) BIRLA TYRES with TIT&S:
  - I. Campus Placement:
    - a. B Tech Students (Mechanical Engineering, Electronics & Communication, Computer Sciences and Information Technology)
    - b. MBA Students

#### II. Summer Internship:

- a. B Tech students (3<sup>rd</sup> Year)
- b. MBA students

#### III. Plant Visit for B. Tech Students:

for all year students at all three location of BIRLA TYRES at Balasore, Orissa

- IV. Guest lecture by senior management team of BIRLA TYRES regarding:
  - a. Technical aspects

a. Seminars

b. Career Counseling aspects

#### V. Providing TIT&S with Projects / Case studies:

- a. 1 to 2 days for 1<sup>st</sup> Year students
- b. 3 to 5 days for 2<sup>nd</sup> Year students
- c. 4 to 6 months projects for 4<sup>th</sup> Year students
- VI. To support TIT&S in engagement activities like:

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- b. Conferences
- c. Workshops

## VII. providing platform to TIT&S where professors can do research work whenever required which shall be in between 6 days to 45 days.

VIII. Any other form of collaboration upon mutual MOU in advance.

## 2) TIT&S with BIRLA TYRES

- I. treating BIRLA TYRES as one of the preferred company for research work & application of any new concept in manufacturing sector.
- II. creating a positive brand image of BIRLA TYRES among all B. Tech. Students.
- **III.** sharing list of 1<sup>st</sup> year students every year along with their background details so that BIRLA TYRES can keep a track of all prospective candidates which can be recruited in future.
- IV. arranging a platform where BIRLA TYRES management can have interaction with 1<sup>st</sup> Year students within 10 – 15 days of joining for creating a positive impact.
- V. giving first preference to BIRLA TYRES for campus placement and Summer Internship.
- VI. arranging Guest Lectures by senior faculty in Factory Premises time to time on required deign study.
- VII. support BIRLA TYRES for product / process modification, modernization, trouble shooting etc. by the staff/ professors
- VIII. BIRLA TYRES employees can apply for Ph.D/ M. Tech./ B. Tech. Courses in TIT&S subject to availability of seat and clearing the eligibility criteria.
  - IX. Any other form of collaboration upon mutual MOU in advance.

### 3. Term and Termination

reason of termination.

This MOU shall be valid for a period of three years from the date of its execution unless terminated earlier and can be renewed/ modified with mutual consent. Either party can terminate the same by giving 90 days' notice to the other party stating the

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#### 4. No Third Party Beneficiaries

Except as expressly provided by this MOU, nothing in this MOU, express or implied, is intended to or shall (a) confer on any person other than the Parties hereto and/or their affiliates and their respective successors or assignees any rights (including third party beneficiary rights), remedies, obligations or liabilities under or by reason of this MOU or (b) constitute the Parties as partners or as participants in a joint venture; or (c) as the agent of the other for any purpose, or (d) entitle any Party to commit or bind the other Party in any manner. Except as expressly provided by this MOU, this MOU shall not provide third parties with any remedy, claim, liability, reimbursement, cause of action or other right in excess of those existing without reference to the terms of this MOU.

#### 5. Entire MOU

This MOU constitutes and contains the final understanding among the Parties and supersedes all proposals or other prior representations or communications, either oral or written between the parties

#### 6. Intellectual Proprietary Rights

Each Party shall retain all right, title and interest in its name and its related marks and logos. This MOU shall not be construed to give either party the right to use the marks of the other party. it is agreed between the parties that during the subsistence of this MOU any Trademark/ copy right or Patent or any other Intellectual Proprietary Right is generated or any form of benefit arising out of research done shall be exclusive property of BIRLA TYRES and TIT&S cannot use the same without written consent of BIRLA TYRES.

#### 7. Dispute Resolution

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That In case any dispute or difference arises between the Parties with regard to the terms and conditions of this MOU or relating to the interpretation thereof, which cannot be mutually resolved, the same shall be referred to sole arbitrator appointed in accordance with the provisions of the Arbitration and Conciliation Act, 1996, or any statutory modification or center thereof for the time being test.

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force, which shall take place at Kolkata in English language. The Parties agree that the arbitration award shall be final and binding.

#### 8. Confidentiality

Both the parties acknowledge that by virtue of the performance of this MOU, they and/ or their employees, shareholders, officers, directors, principals, agents and contractors (collectively, "Representatives") will be and shall hereafter may entrusted with "confidential information", the disclosure of any of which to competitors or to the general public would be highly detrimental to the best interests of the disclosing party. Both the parties further acknowledge that the right to maintain confidential such confidential information constitutes a proprietary right of the receiving party, which the receiving party is entitled to protect. Accordingly, and notwithstanding anything to the contrary herein expressed, both the parties covenant and agree that they shall not use or copy, or permit the use or copy of any of the confidential information, directly or indirectly, for any purpose other than the discharge of their duties and obligations arising from this engagement. Both the parties shall maintain the absolute confidentiality of the confidential information.

#### 9. Force Majure

The performance of either party shall be subject to Force Majeure clause for the following reasons:

Fire, Explosion, Cyclone, Flood, Landscape, War, Revolution, acts of public enemies, any law & order proclamation, ordinance, demand or requirements of any Government or authority or representative of any such Government agency or any acts of God or any other reason beyond the control of party affected.

#### 10. Other Terms and Conditions

- a) Any project / research work requested by BIRLA TYRES team, which will have financial implication must be pre-approved by BIRLA TYRES management in writing before implementation.
- b) Any project / research work requested by TIT&S, which will have financial implication must be pre-approved by BIRLA TYRES management (if BIRLA TYRES has to pay) in writing before implementation.

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- c) Any project / research work being done jointly by both team, which will have financial implication; financial impact will be shared on 50:50 basis or such other terms as mutually agreed.
- d) For any form of summer training / internship / project work / case study; giving stipend to students will be on sole discretion of BIRLA TYRES management.
- e) Any student coming for training / research / project to BIRLA TYRES; he/ she has to make own stay arrangement and BIRLA TYRES shall not be responsible.
- f) For any guest lecture request from BIRLA TYRES; lodging and boarding arrangements will be done by BIRLA TYRES.
- g) Summer Internship will be offered to those students only who if shortlisted and given Pre Placement Offer; cannot reject the same. If candidate rejects P.P.O. then college will consider that student placed and will not allow him / her to sit in placement.
- h) Neither parties will make any presentations pertaining to the other or its business or affairs, without the express written consent and approval of other.

IN WITNESSES WHEREOF the parties hereto have signed this MOU in on the day of the month and year first written above

Signed For and On Behalf of { Kesoram Industries Limited (Unit { Birla Tyres) { For Kesoram Industries Limited (Unit Birla Tyres)

Kaushik Biswas

Signed For and On Behalf of The { Technological Institute of Textile { and Sciences, Prof G K Tyagi { Director,

Signed For and On Behalf of The { For The Technological Institute of Textile and Sciences

Prof G K Tyagi Director

Director The Technological Institute of Textile & Sciences BHIWANI

In Presence of

1.

2.





#### MEMORANDUM OF UNDERSTANDING BETWEEN COLLEGE OF ENGINEERING AND TECHNOLOGY (CET), BHUBANESWAR AND THE TECHNICAL INSTITUTE OF TEXTILE AND SCIENCES (TIT&S), BHIWANI

This memorandum records the institutions of Technological Institute of Textile and Sciences (TITS), Bhiwani and Department of Textile Engineering, College of Engineering and Technology (CET), Bhubaneswar to strengthen ties between the two institutions, which might lead in future to the

establishment of one or more partnership agreements. In order to develop academic cooperation and exchange between the two Colleges, both the parties agree

- to develop cooperation in the following areas as per rules and regulations operative in both the Institutions.
- 1) Innovation in education to restructuring of courses, new materials and teaching and laboratory.
- 2) Faculty and students related to academic and research ---.
- 3) Collaborative research projects at individual as well as institution level.
- Sharing of facilities practical training and project work of students and sharing of academic published material, library books/journals.
- 5) Co-sponsoring seminars, conferences, workshops etc.
- 6) Cooperation in training projects or specified areas of development.

The terms of specific areas of cooperation shall be further considered and shall be operative as agreed upon before execution of any particular activity by both the parties. Whenever and wherever needed, financial support shall be secured before initiating the planned activity.

The MoU will be come into effect from the date; it is signed by both the parties and will be valid for a period of four years. However, it can be renewed by mutual agreement of both the parties.

Authorised Signatory

Signature OSCO PRINCIPAL CET, Bhubaneswar

Head of the Department Textile Engineering, CET, Bhubaneswar

Authorised Signatory

Signature DIRECTOR

The Technological Institute of Textile and Science, Bhiwani BHIWANI THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES PO BIRLA COLONY BHIWANI 127021



CH. BANSI LAL GOVT. POLYTECHNIC HUDA, SEC 13 BHIWANI

## MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is signed on 31st day of August 2018 between Ch. Bansi Lal Govt. Polytechnic Bhiwani (hereinafter "GPB"), whose address is Ch. Bansi Lal Govt. Polytechnic, Sec 13 Bhiwani (127021) Haryana.

and

The Technological Institute of Textile and Sciences (hereinafter "TIT&S") whose address is TIT&S, P.O. Birla Colony, Bhiwani, Haryana - 127021.

Whereas the Parties which wish to establish a friendly relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MoU and agree hereby as per Articles given below:

#### ARTICLE-I

The parties hereby agree to promote the development of cooperation with their responsibilities as under:

- i) In order to develop academic co-operation, Institute –Institute linkages and faculty exchange between GPB and TIT&S, both the parties agree to develop cooperation for exchange of staff, Exposure visit of GBP students and faculty to TIT&S, Collaborative research projects, Joint-Collaborating, Co-sponsoring and participating in seminars, conferences, workshops, etc., Exchange of published academic material, Co-operation in training, projects on specified areas of development, Collaborative research work and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.
- TIT&S will provide consultancy services to GPB in every field (long term and short-term).
- iii) TIT&S will help in career counseling activities of the students of GPB
- iv) TIT&S will carry out Skill and Technology Up gradation programmers in GPB
- v) TIT&S will depute subject experts with industrial experience
- vi) TIT&S will help GPB in designing and Trend and Forecasting activities
- vii) TIT&S will allow students of GPB to carry out research activities, Training, sampling, designing, spinning, weaving, processing and testing activities.



THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES PO BIRLA COLONY BHIWANI 127021



CH. BANSI LAL GOVT. POLYTECHNIC HUDA, SEC 13 BHIWANI

#### ARTICLE-II

The Advisory Committee comprising members from GPB and TIT&S will develop suitable work plan to carry out above responsibilities

#### ARTICLE-III

Intellectual property, research publications and benefits arising out of commercialization of technologies generated out of co-operation under this agreement shall be jointly owned/ shared by GPB and TIT&S.

#### ARTICLE-IV

A joint Follow up Committee will be set up with representatives from both parties to meet periodically to follow up execution of this MoU and suggest necessary measures for its development.

#### ARTICLE-V

The parties to this MoU, by mutual consent, add, modify, amend or delete any word, phrase, sentence, or article in this MoU at any time during the operation of MoU.

#### **ARTICLE-VI**

The MoU shall be effective from the date of its signing by both the parties and shall remain in operation for five years or until either party service notice to the other of its intention to terminate it, in which event, the MoU shall stand terminated at the end of one calendar month from the date of issue of such a notice. In case both the parties agree to terminate the MoU, the ongoing research work will be completed.

#### ARTICLE-VII

In case of any discrepancy that may crop up during execution of MoU the matter would be settled through arbitration by referring it to a committee jointly appointed by the Competent Authority, GPB and Director, TIT&S





THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES PO BIRLA COLONY BHIWANI 127021



CH. BANSI LAL GOVT. POLYTECHNIC HUDA, SEC 13 BHIWANI

IN WITNESS, WHEREOF, the two parties signed this Memorandum of Understanding on the dates indicated below:

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(Signature of Authorized Representative Of

The Technological Institute of Textiles And Sciences

Director The Technological institute of Textile & Sciences ENWAN

Countersigned by Witness:

Signature: Maly

Name: Dr. K.N. Chel

Address: TITAS , M.

(Signature of Authorized Representative Of

> Ch. Bansi Lal Govt. Polytechnic Bhiwani (127021) Haryana.

(PBRIJ MOHAN) PRINCIPAL GP BHINNNI

(With name & address) Date <u>31-08-18</u> Place <u>路相い</u>れい

Countersigned by Witness:

Signature: .

Address: T.P.O. CODI. POLYTECH BHIWANI





#### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is signed on 9<sup>th</sup> day of February 2018 between GOVERNMENT POLYTECHNIC, Hisar (hereinafter "GPH"), whose address is GOVERNMENT POLYTECHNIC. Near Guru Jambheshwar University, Delhi Bye-pass road, Hisar (Hry)-125001

and

The Technological Institute of Textile and Sciences (hereinafter "TIT&S") whose address is TIT&S, P.O. Birla Colony, Bhiwani, Haryana - 127021.

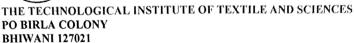
Whereas the Parties which wish to establish a friendly relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MoU and agree hereby as per Articles given below:

#### **ARTICLE-I**

The parties hereby agree to promote the development of cooperation with their responsibilities as under:

- i) In order to develop academic co-operation, Institute –Institute linkages and faculty exchange between GPH and TIT&S, both the parties agree to develop cooperation for exchange of staff, Exposure visit of GPH students and faculty to TIT&S, Collaborative research projects, Joint-Collaborating, Co-sponsoring and participating in seminars, conferences, workshops, etc., Exchange of published academic material, Co-operation in training, projects on specified areas of development, Collaborative research wok and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.
- TIT&S will provide consultancy services to GPH in every field (long term and shortterm) on payment basis mutually agreed upon.







GOVERNMENT POLYTECHNIC NEAR GURU JAMBHESHWAR UNIVERSITY, DELHI BYE-PASS ROAD, HISAR (HRY)-125001

- iii) TIT&S will help in career counseling activities of the students of GPH
- iv) TIT&S will carry out Skill and Technology Upgradation programmes in GPH
- v) TIT&S will depute subject experts with industrial experience
- vi) TIT&S will help GPH in designing and Trend and Forecasting activities
- vii) TIT&S will allow students of GPH to carry out research activities, sampling, designing, spinning, weaving, processing and testing activities.

#### ARTICLE-II

The Advisory Committee comprising members from GPH and TIT&S will develop suitable work plan to carry out above responsibilities

#### ARTICLE-III

Intellectual property, research publications and benefits arising out of commercialization of technologies generated out of co-operation under this agreement shall be jointly owned/ shared by GPH and TIT&S.

#### ARTICLE-IV

A joint Follow up Committee will be set up with representatives from both parties to meet periodically to follow up execution of this MoU and suggest necessary measures for its development.

#### ARTICLE-V

The parties to this MoU, by mutual consent, add, modify, amend or delete any word, phrase, sentence, or article in this MoU at any time during the operation of MoU.

#### **ARTICLE-VI**

The MoU shall be effective from the date of its signing by both the parties and shall remain in operation for five years or until either party service notice to the other of its intention to terminate it, in which event, the MoU shall stand terminated at the end of one calendar month





**GOVERNMENT POLYTECHNIC** NEAR GURU JAMBHESHWAR UNIVERSITY, **DELHI BYE-PASS ROAD, HISAR (HRY)-125001** 

from the date of issue of such a notice. In case both the parties agree to terminate the MoU, the ongoing research work will be completed.

#### **ARTICLE-VII**

In case of any discrepancy that may crop up during execution of MoU the matter would be settled through arbitration by referring it to a committee jointly appointed by the Competent Authority, GPH and Director, TIT&S

IN WITNESS, WHEREOF, the two parties hereunto signed this Memorandum of Understanding on the dates indicated below:

(Signature of Authorized Representative Of The Incheological The Technolog Cartinstitute of Textiles and Sciences (With name & address) Place ... Mui

**Countersigned by Witness:** 

Signature: Rhalla

Name: Dr. K. N. CHATTENJEE Address: hopm, TITas

(with name & address) Date .912118 Place Bhiwani

Govt. Polytechnic, Hisar

## **Countersigned by Witness:**

Signature:

Name: KAVITA

## Address: LECTURER, G.P. HISAR



Of

onn

(Signature of Authorized Representative





## Memorandum of Understanding (MoU)

This agreement is made on **15<sup>th</sup> July 2021**.

#### Between

Article I.

(1) The University of Huddersfield, Queensgate, Huddersfield, West Yorkshire, HD1 3DH, United Kingdom ("UoH");

And

(2) The Technological Institute of Textile & Sciences, Birla Colony, Bhiwani-127021 (Haryana), India (TIT&S)

#### 1. Introduction

The purpose of this MoU is to foster collaboration between the University of Huddersfield and The Technological Institute of Textile & Science. The aim is to establish an academic link between the institutions for mutual benefit and in a spirit of friendship and co-operation.

#### 2. Areas of Co-operation

The parties agree to promote the collaboration in the following areas to further the common interests of the two parties:

- a. Exploration of collaborative research projects
- b. Exchange of teaching and research staff
- c. Organisation of joint academic activities such as seminars, lectures, conferences
- d. Exchange of academic materials and other information of common interest
- e. Progression and exchange of students

Senior staff from TIT&S and UoH will communicate and meet regularly in order to promote the collaboration.

#### 3. Intellectual Property

Ownership of intellectual property shall vest in the party who creates it and shall be treated

as confidential information unless specifically agreed otherwise by the parties.

#### 4. Use of Names, Logos, Marketing and Publicity

Neither party shall use the name or logo, or any variation thereof, of the other without first obtaining written consent from the other party.

#### 5. Review

This agreement will be reviewed bi-annually but may only be varied in writing, signed by the parties (or their authorised representatives).

#### 6. Validity and Termination

This agreement shall remain valid for 5 years unless terminated by:-

- a. mutual agreement between the two parties; or
- b. either party by 6 months written notice.

Signed on behalf of **University of Huddersfield** 

Alto Shall

Professor Alistair Sambell Pro Vice-Chancellor (International)

Signed on behalf of The Technological Institute of Textile & Sciences

Professor Gajendra Kumar Tyagi Director

Date: 15th July 2021

Date 15<sup>th</sup> July 2021

## MEMORANDUM OF UNDERSTANDING

This **Memorandum of Understanding ("MOU")** is made and executed on 16<sup>th</sup> day of October 2019 at Kolkata By and Between

Kesoram Industries Limited (Units Vasabdatta Cement and Kesoram Cement), having its 9, 1, RN Mukherjee Rd, Bow Barracks, Kolkata, West Bengal 700001, India represented by Mr. Kaushik Biswas, Company Secretary, Kesoram Industries Ltd (hereinafter referred to as "Kesoram Industries Limited"), which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators of the Party of the FIRST PART.

And

The Technological Institute of Textile and Sciences, an institute affiliated to Maharishi Dayanand University, Rohtak having its address at Birla Colony, Tosham Road, Bhiwani 127021 Haryana represented by its Director, Prof. G.K.Tyagi (hereinafter "TIT&S") which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators of the Party of the SECOND PART.

WHEREAS party of the First Part is Manufacturer & Exporter of various types of Cements

AND WHEREAS Party of the Second Part is engaged in providing academic services to students.

**AND WHEREAS** the Parties, to establish a cordial relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MOU.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING PREMISES, MUTUAL REPRESENTATIONS SET FORTH HEREIN, AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, THE RECEIPT AND SUFFICIENCY OF WHICH ARE HEREBY ACKNOWLEDGED BY THE PARTIES, THE PARTIES HERETO INTENDING TO BE LEGALLY BOUND, HEREBY AGREE AS FOLLOWS:-

1. Scope of MOU



- Bana



- i) to develop academic co-operation, Industry Institute linkages and knowledge sharing between Vasabdatta Cement and Kesoram Cement and TIT&S, both the parties agree to develop cooperation for exposure in research, visit of Vasabdatta Cement and Kesoram Cement staff to TIT&S, Collaborative research projects, Joint-Collaborating, Co-sponsoring and participating in seminars, conferences, workshops, etc., Exchange of published academic material, Co-operation in training, projects on specified areas of development, Collaborative research wok and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.
- ii) to carry out research activities, Training, sampling, designing, spinning, weaving, processing and testing activities.
- iii) All other activities in pursuit of Industrial and Academic excellence.

#### 2. Engagement Activities

- 1) VASABDATTA CEMENT AND KESORAM CEMENT WITH TIT&S:
  - I. Campus Placement:
    - a. B Tech Students (Mechanical Engineering, Electronics & Communication, Computer Sciences and Information Technology)
    - b. MBA Students

#### II. Summer Internship:

- a. B Tech students (3<sup>rd</sup> Year)
- b. MBA students

#### III. Plant Visit for B. Tech Students:

for all year students at all three location of Vasabdatta Cement and Kesoram Cement at Hyderabad, Telangana.

# IV. Guest lecture by senior management team of Vasabdatta Cement and Kesoram Cement regarding:

- a. Technical aspects
- b. Career Counseling aspects

Providing TIT&S with Projects, Sase studies: V. 1 to 2 days for 1st y 05 a.

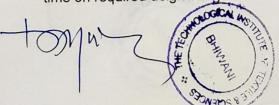
- b. 3 to 5 days for 2<sup>nd</sup> Year students
- c. 4 to 6 months projects for 4<sup>th</sup> Year students

#### VI. To support TIT&S in engagement activities like:

- a. Seminars
- b. Conferences
- c. Workshops
- VII. providing platform to TIT&S where professors can do research work whenever required which shall be in between 6 days to 45 days.
- VIII. Any other form of collaboration upon mutual MOU in advance.

#### 2) TIT&S with VASABDATTA CEMENT AND KESORAM CEMENT

- treating Vasabdatta Cement and Kesoram Cement as one of the preferred company for research work & application of any new concept in manufacturing sector.
- II. creating a positive brand image of Vasabdatta Cement and Kesoram Cement among all B. Tech. Students.
- III. sharing list of 1<sup>st</sup> year students every year along with their background details so that Vasabdatta Cement and Kesoram Cement can keep a track of all prospective candidates which can be recruited in future.
- IV. arranging a platform where Vasabdatta Cement and Kesoram Cement management can have interaction with 1<sup>st</sup> Year students within 10 – 15 days of joining for creating a positive impact.
- V. giving first preference to Vasabdatta Cement and Kesoram Cement for campus placement and Summer Internship.
- VI. arranging Guest Lectures by senior faculty in Factory Premises time to time on required deign study.



- VII. support Vasabdatta Cement and Kesoram Cement for product / process modification, modernization, trouble shooting etc. by the staff/ professors
- VIII. Vasabdatta Cement and Kesoram Cement employees can apply for Ph.D/ M. Tech./ B. Tech. Courses in TIT&S subject to availability of seat and clearing the eligibility criteria.
  - IX. Any other form of collaboration upon mutual MOU in advance.

#### 3. Term and Termination

This MOU shall be valid for a period of three years from the date of its execution unless terminated earlier and can be renewed/ modified with mutual consent. Either party can terminate the same by giving 90 days' notice to the other party stating the reason of termination.

#### 4. No Third Party Beneficiaries

Except as expressly provided by this MOU, nothing in this MOU, express or implied, is intended to or shall (a) confer on any person other than the Parties hereto and/or their affiliates and their respective successors or assignees any rights (including third party beneficiary rights), remedies, obligations or liabilities under or by reason of this MOU or (b) constitute the Parties as partners or as participants in a joint venture; or (c) as the agent of the other for any purpose, or (d) entitle any Party to commit or bind the other Party in any manner. Except as expressly provided by this MOU, this MOU shall not provide third parties with any remedy, claim, liability, reimbursement, cause of action or other right in excess of those existing without reference to the terms of this MOU.

#### 5. Entire MOU

This MOU constitutes and contains the final understanding among the Parties and supersedes all proposals or other prior representations or communications, either oral or written between the parties

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6. Intellectual Proprietary Rights

Each Party shall retain all right, title and interest in its name and its related marks and logos. This MOU shall not be construed to give either party the right to use the marks of the other party. it is agreed between the parties that during the subsistence of this MOU any Trademark/ copy right or Patent or any other Intellectual Proprietary Right is generated or any form of benefit arising out of research done shall be exclusive property of Vasabdatta Cement and Kesoram Cement and TIT&S cannot use the same without written consent of Vasabdatta Cement and Kesoram Cement.

## 7. Dispute Resolution

That In case any dispute or difference arises between the Parties with regard to the terms and conditions of this MOU or relating to the interpretation thereof, which cannot be mutually resolved, the same shall be referred to sole arbitrator appointed in accordance with the provisions of the Arbitration and Conciliation Act, 1996, or any statutory modification or re - enactment thereof for the time being in force, which shall take place at Kolkata in English language. The Parties agree that the arbitration award shall be final and binding.

Courts in Kolkata only shall have the exclusive jurisdiction to try and entertain any type of suit.

#### 8. Confidentiality

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Both the parties acknowledge that by virtue of the performance of this MOU, they and/ or their employees, shareholders, officers, directors, principals, agents and contractors (collectively, "Representatives") will be and shall hereafter may entrusted with "confidential information", the disclosure of any of which to competitors or to the general public would be highly detrimental to the best interests of the disclosing party. Both the parties further acknowledge that the right to maintain confidential such confidential information constitutes a proprietary right of the receiving party, which the receiving party is entitled to protect. Accordingly, and notwithstanding anything to the contrary herein expressed, both the parties covenant and agree that they shall not use or copy, or permit the use or copy of any of the confidential information, directly or indirectly, for any purpose other than the discharge of their duties and obligations arising from this engagement. Both the parties shall maintain the absolute confidentiality of the confidential information.

#### 9. Force Majure

The performance of either party shall be subject to Force Majeure clause for the following reasons:

Fire, Explosion, Cyclone, Flood, Landscape, War, Revolution, acts of public enemies, any law & order proclamation, ordinance, demand or requirements of any Government or authority or representative of any such Government agency or any acts of God or any other reason beyond the control of party affected.

## 10. Other Terms and Conditions

- a) Any project / research work requested by Vasabdatta Cement and Kesoram Cement team, which will have financial implication must be pre-approved by Vasabdatta Cement and Kesoram Cement management in writing before implementation.
- b) Any project / research work requested by TIT&S, which will have financial implication must be pre-approved by Vasabdatta Cement and Kesoram Cement management (if Vasabdatta Cement and Kesoram Cement has to pay) in writing before implementation.
- c) Any project / research work being done jointly by both team, which will have financial implication; financial impact will be shared on 50:50 basis or such other terms as mutually agreed.
- d) For any form of summer training / internship / project work / case study; giving stipend to students will be on sole discretion of Vasabdatta Cement and Kesoram Cement management.
- e) Any student coming for training / research / project to Vasabdatta Cement and Kesoram Cement; he/ she has to make own stay arrangement and Vasabdatta Cement and Kesoram Cement shall not be responsible.
- f) For any guest lecture request from Vasabdatta Cement and Kesoram Cement; lodging and boarding arrangements will be done by Vasabdatta Cement and Kesoram Cement.
- g) Summer Internship will be offered to those students only who if shortlisted and given Pre Placement Offer; cannot reject the same. If candidate rejects P.P.O. then college will consider that student placed and will not allow him / her to sit in placement.

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Neither parties will make any presentations pertaining to the other or its h) business or affairs, without the express written consent and approval of other.

IN WITNESSES WHEREOF the parties hereto have signed this MOU on the day of the month and year first written above

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Signed For and On Behalf Kesoram Industries Limited (Units Vasabdatta Cement and Kesoram Cement)

and Sciences, Prof G K Tyagi

of { For Kesoram Industries Limited (Units { Vasabdatta Cement and Kesoram Cement)

Kaushik Biswas,



Signed For and On Behalf of The Technological Institute of Textile

{ For The Technological Institute of Textile { and Sciences

٤ { Prof G K Tyagi, Director Direct of Tertile & Sciences The Technological Institute

In Presence of

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Director

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#### MEMORANDUM OF UNDERSTANDING

This **Memorandum of Understanding ("MOU")** is made and executed on 16<sup>th</sup> day of October 2019 at Kolkata

#### By and Between

**Kesoram Rayon**, having its office at Industry House, 10, Camac Steet, Kolkata, West Bengal 700017 represented by its President, Mr. Ravichandran (Hereinafter referred to as **"KESORAM RAYON**"), which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators of the Party of the **FIRST PART**.

#### And

The Technological Institute of Textile and Sciences, an institute affiliated to Maharishi Dayanand University, Rohtak having its address at Birla Colony, Tosham Road, Bhiwani 127021 Haryana represented by its Director, Prof. G.K.Tyagi (hereinafter "TIT&S") which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators of the Party of the SECOND PART.

WHEREAS party of the First Part is Manufacturer & Exporter of viscose filament/rayon yarn and cellophane paper etc.

AND WHEREAS Party of the Second Part is engaged in providing academic services to students.

**AND WHEREAS** the Parties, to establish a cordial relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MOU.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING PREMISES, MUTUAL REPRESENTATIONS SET FORTH HEREIN, AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, THE RECEIPT AND SUFFICIENCY OF WHICH ARE HEREBY ACKNOWLEDGED BY THE PARTIES, THE PARTIES HERETO INTENDING TO BE LEGALLY BOUND, HEREBY AGREE AS FOLLOWS:-

#### 1. Scope of MOU

 to develop academic co-operation, Industry – Institute linkages and knowledge sharing between KESORAM RAYON and TIT&S, both the parties agree to develop cooperation for exposure in research, visit of KESORAM RAYON staff to TIT&S, Collaborative research projects, Joint-Collaborative, Co-sponsoring and participating in seminars, conferences, workshops, etc. Exchange of published academic material, Co-operation

in training, projects on specified areas of development, Collaborative research wok and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.

- to carry out research activities, Training, sampling, designing, spinning, weaving, ii) processing and testing activities.
- iii) All other activities in pursuit of Industrial and Academic excellence.

#### 2. Engagement Activities

#### 1) KESORAM RAYON with TIT&S:

#### ١. **Campus Placement:**

- a. B Tech Students (Mechanical Engineering, Electronics & Communication, Computer Sciences, Information Technology, Textile Technology, Textile Chemistry and Fashion & Apparel Engineering)
- b. MBA Students

#### Summer Internship: 11.

- a. B Tech students (3<sup>rd</sup> Year)
- b. MBA students

#### Ш. Plant Visit for B. Tech Students:

for all year students at all three location of KESORAM RAYON at Kolkata, West Bengal.

#### IV. Guest lecture by senior management team of KESORAM RAYON regarding:

- a. Technical aspects
- b. Career Counseling aspects

#### V. Providing TIT&S with Projects / Case studies:

- a. 1 to 2 days for 1<sup>st</sup> Year students
- b. 3 to 5 days for 2<sup>nd</sup> Year students
- c. 4 to 6 months projects for 4<sup>th</sup> Year students

#### VI. To support TIT&S in engagement activities like:

- a. Seminars
- b. Conferences
- c. Workshops

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## VII. providing platform to TIT&S where professors can do research work whenever required which shall be in between 6 days to 45 days.

VIII. Any other form of collaboration upon mutual MOU in advance.

#### 2) TIT&S with KESORAM RAYON

- I. treating KESORAM RAYON as one of the preferred company for research work & application of any new concept in manufacturing sector.
- II. creating a positive brand image of KESORAM RAYON among all B. Tech. Students.
- **III.** sharing list of 1<sup>st</sup> year students every year along with their background details so that KESORAM RAYON can keep a track of all prospective candidates which can be recruited in future.
- IV. arranging a platform where KESORAM RAYON management can have interaction with 1<sup>st</sup> Year students within 10 – 15 days of joining for creating a positive impact.
- V. giving first preference to KESORAM RAYON for campus placement and Summer Internship.
- VI. arranging Guest Lectures by senior faculty in Factory Premises time to time on required deign study.
- VII. support KESORAM RAYON for product / process modification, modernization, trouble shooting etc. by the staff/ professors
- VIII. KESORAM RAYON employees can apply for Ph.D/ M. Tech./ B. Tech. Courses in TIT&S subject to availability of seat and clearing the eligibility criteria.
- IX. Any other form of collaboration upon mutual MOU in advance.



#### 3. Term and Termination

This MOU shall be valid for a period of three years from the date of its execution unless terminated earlier and can be renewed/ modified with mutual consent. Either party can terminate the same by giving 90 days' notice to the other party stating the reason of termination.

#### 4. No Third Party Beneficiaries

Except as expressly provided by this MOU, nothing in this MOU, express or implied, is intended to or shall (a) confer on any person other than the Parties hereto and/or their affiliates and their respective successors or assignees any rights (including third party beneficiary rights), remedies, obligations or liabilities under or by reason of this MOU or (b) constitute the Parties as partners or as participants in a joint venture; or (c) as the agent of the other for any purpose, or (d) entitle any Party to commit or bind the other Party in any manner. Except as expressly provided by this MOU, this MOU shall not provide third parties with any remedy, claim, liability, reimbursement, cause of action or other right in excess of those existing without reference to the terms of this MOU.

#### 5. Entire MOU

This MOU constitutes and contains the final understanding among the Parties and supersedes all proposals or other prior representations or communications, either oral or written between the parties

#### 6. Intellectual Proprietary Rights

Each Party shall retain all right, title and interest in its name and its related marks and logos. This MOU shall not be construed to give either party the right to use the marks of the other party. it is agreed between the parties that during the subsistence of this MOU any Trademark/ copy right or Patent or any other Intellectual Proprietary Right is generated or any form of benefit arising out of research done shall be exclusive property of KESORAM RAYON and TIT&S cannot use the same without written consent of KESORAM RAYON.

#### 7. Dispute Resolution

That In case any dispute or difference arises between the Parties with regard to the terms and conditions of this MOU or relating to the interpretation thereof, which cannot be mutually resolved, the same shall be referred to sole arbitrator appointed in accordance with the provisions of the Arbitration and Conciliation Act, 1996, or any statutory modification or re - enactment thereof for the time being in force, which shall take place at Ludhiana in English language. The Parties agree that the arbitration award shall

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be final and binding.

Courts in Ludhiana Only shall have the exclusive jurisdiction to try and entertain any type of suit.

#### 8. Confidentiality

Both the parties acknowledge that by virtue of the performance of this MOU, they and/ or their employees, shareholders, officers, directors, principals, agents and contractors (collectively, "Representatives") will be and shall hereafter may entrusted with "confidential information", the disclosure of any of which to competitors or to the general public would be highly detrimental to the best interests of the disclosing party. Both the parties further acknowledge that the right to maintain confidential such confidential information constitutes a proprietary right of the receiving party, which the receiving party is entitled to protect. Accordingly, and notwithstanding anything to the contrary herein expressed, both the parties covenant and agree that they shall not use or copy, or permit the use or copy of any of the confidential information, directly or indirectly, for any purpose other than the discharge of their duties and obligations arising from this engagement. Both the parties shall maintain the absolute confidentiality of the confidential information.

#### 9. Force Majure

The performance of either party shall be subject to Force Majeure clause for the following reasons:

Fire, Explosion, Cyclone, Flood, Landscape, War, Revolution, acts of public enemies, any law & order proclamation, ordinance, demand or requirements of any Government or authority or representative of any such Government agency or any acts of God or any other reason beyond the control of party affected.

#### 10. Other Terms and Conditions

- a) Any project / research work requested by KESORAM RAYON team, which will have financial implication must be pre-approved by KESORAM RAYON management in writing before implementation.
- b) Any project / research work requested by TIT&S, which will have financial implication must be pre-approved by KESORAM RAYON management (if KESORAM RAYON has to pay) in writing before implementation.
- c) Any project / research work being done jointly by both team, which will have financial implication; financial impact will be shared on 50:50 basis or such other terms as mutually agreed.

- d) For any form of summer training / internship / project work / case study; giving stipend to students will be on sole discretion of KESORAM RAYON management.
- Any student coming for training / research / project to KESORAM RAYON; he/ she e) has to make own stay arrangement and KESORAM RAYON shall not be responsible.
- For any guest lecture request from KESORAM RAYON; lodging and boarding f) arrangements will be done by KESORAM RAYON.
- Summer Internship will be offered to those students only who if shortlisted and given g) Pre Placement Offer; cannot reject the same. If candidate rejects P.P.O. then college will consider that student placed and will not allow him / her to sit in placement.
- Neither parties will make any presentations pertaining to the other or its business or h) affairs, without the express written consent and approval of other.

IN WITNESSES WHEREOF the parties hereto have signed this MOU in 16<sup>th</sup> October 2019 on the

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For CYGENT INDUSTRIE	<b>s lim</b> ited A <b>yon)</b>
Ravi/Chandran	
(President)	

Signed For and On Behalf of The { For The Technological Institute of Textile and Technological Institute of Textile and { Sciences, Prof G K Tyagi Director, { 

Sciences Prof G K Tyagi Direct The Technological Institute of Textile & Sciences Director BHIVYANI

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In Presence of

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#### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is signed on 1<sup>st</sup> day of January 2018 between MADHYAM EXIM, FARIDABAD (hereinafter "MEF"), whose address is Madhyam Exim., NHPC Chowk, Faridabad – 121 008

and

The Technological Institute of Textile and Sciences (hereinafter "TIT&S) whose address is TIT&S, P.O. Birla Colony, Bhiwani, Haryana - 127021.

Whereas the Parties which wish to establish a friendly relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MoU and agree hereby as per Articles given below:

#### ARTICLE-I

The parties hereby agree to promote the development of cooperation with their responsibilities as under:

i) In order to develop academic-industry co-operation and exchange between MEF and TIT&S, both the parties agree to develop cooperation for exchange of staff, Exposure visit of TIT&S students and faculty to MEF and staff and worker visit to TIT&S, Collaborative research projects, Joint-Collaborating, Co-sponsoring and participating in seminars, conferences, workshops, etc., Exchange of published academic material, Co-operation in training, projects on specified areas of development, Collaborative research wok and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.

- TIT&S will provide consultancy services to MEF in every field (long term and shortii) term) on payment basis mutually agreed upon.
- TIT&S will help in career counseling activities of the wards of MEF employees iii)
- TIT&S will carry out Skill and Technology Upgradation programmes in MEF
- iv) MEF will depute subject experts with industrial experience
- TIT&S will help MEF in designing and Trend and Forecasting activities V)
- MEF will provide placement opportunities for TIT&S students mainly in Textile vi) Technology, Textile Chemistry, Fashion & Apparel Engineering, Mechanical vii) Engineering, Electronics & Communication, CSE, IT, M.Tech and MBA students.
- MEF will allow UG, PG and Doctoral research scholar of TIT&S to carry out research viii)
- activities, sampling, designing, spinning, weaving, processing and testing MEF will allow students of TIT&S for exposure Factory visit & Summer/Winter ix)

training

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#### ARTICLE-II

The Advisory Committee comprising members from MEF and TIT&S will develop suitable work plan to carry out above responsibilities

#### ARTICLE-III

Intellectual property, research publications and benefits arising out of commercialization of technologies generated out of co-operation under this agreement shall be jointly owned/shared by MEF and TIT&S.

#### ARTICLE-IV

A joint Follow up Committee will be set up with representatives from both parties to meet periodically to follow up execution of this MoU and suggest necessary measures for its development.

#### ARTICLE-V

The parties to this MoU, by mutual consent, add, modify, amend or delete any word, phrase, sentence, or article in this MoU at any time during the operation of MoU.

#### ARTICLE-VI

The MoU shall be effective from the date of its signing by both the parties and shall remain in operation for five years or until either party service notice to the other of its intention to terminate it, in which event, the MoU shall stand terminated at the end of one calendar month from the date of issue of such a notice. In case both the parties agrees to terminate the MoU, the on going research work will be completed.

#### ARTICLE-VII

In case of any discrepancy that may crop up during execution of MoU the matter would be settled through arbitration by referring it to a committee jointly appointed by the Competent Authority, MEF and Director, TIT&S

IN WITNESS, WHEREOF, the two parties hereunto signed this Memorandum of Understanding on the dates indicated below:

(Signature of Authorized, Representative Of BHWANI

The Technological Institute of Textiles and Sciences

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(Signature of Authorized Representative

Of

MEF Ltd

With name & address)

Date .2.3.1.12.1.2013. Place .. Faridabaal.

# Countersigned by Witness: Signature: Mawing Name: Dr. Janini Ihangi Address: T.J. T.G. J Shi wani

Countersigned by Witness:

With name & address)

Date .....

Signature: Malay Name: K.N.Chely Address: Mon + Hw, TITES, Non





## MEMORANDUM OF UNDERSTANDING General Partnership

Between the undersigned institutions:

The Technological Institute of Textile and Sciences, an institute affiliated to Maharishi Dayanand University, Rohtak having its address at Birla Colony, Tosham Road, Bhiwani 127021 Haryana, India represented by its Director, Prof. G.K.Tyagi (hereinafter "TIT&S") which expression shall unless repugnant to the subject or context mean and include its successors, assigns and administrators

and

Network "n+i" – engineering institutes Non Profit Association registered under SIRET nº452 644 255 00021 hereunder referred to as Network "n+i" 79 avenue Denfert-Rochereau – 75014 Paris France represented by Dr. Georges SANTINI, Executive Director

#### 1. Preamble

Network "n+i" is a France based not-for-profit association which links together French higher education institutions in all areas of engineering. Network "n+i" represents more than 30 000 student engineers and 250 research laboratories spread over 40 cities and 13 regions of France. It is also currently the largest engineering network in France that strives to help science and engineering students and young engineers from foreign institutions wishing to pursue their Masters or PhD education in France.

THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES is an application-driven and industryoriented engineering institute. It offers five undergraduate programmes – B. Tech. (Electrical), B. Tech. (Mechanical), B. Tech. (Computer Science), B. Tech. (Information Technology) and B. Tech. (Electronics and Communication). The four-year programmes prepare the students into industryready graduates.

THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES and Network "n+i" recognize:

- their mutual interest in training engineers and managers with an international vocation,
- the importance of the role of higher education institutions in the promotion of relations and their contribution to social development.

The term partner institutions used in this MOU refers to THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES and Network "n+i".

Network "n+i" shall serve as the exclusive coordinator on behalf of its members.

#### 2. Fields of cooperation

Cooperation between the 2 institutions may be established within any field related to science, engineering, technology and management.

Cooperation will concern the promotion of training programs and the exchange of students and faculty.

The 2 institutions agree to promote, to their students, the possibilities of studies and training in their partner institutions.

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Cooperation in the areas of research, learning programs, short exchanges, invitation of academics, etc. could be discussed and will be subject of specific and separate agreements.

# 3. General principles

This MOU is intended to determine the areas of cooperation which might be explored and further developed by the partner institutions.

THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES and Network "n+i" agree to:

- consider the introduction of a dual international Master's program for students in order for them to be able to complete their training in INDIA and France,
- inform their competent and relevant constituencies and ministries about their arrangement in order to obtain their approval whenever needed.

Cooperation between partner institutions can be developed under different schemes:

- THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES students can apply to Network "n+i" member institutions programs through the "n+i" portal,
- Network "n+i" member institutions students can apply to The University programs through the "n+i" portal,
- Network "n+i" member institutions can enter into bilateral discussions leading to specific agreement(s).

Whenever a specific agreement between any member institution of Network "n+i" and THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES, which enters within the scope of the present MOU, is contemplated, these institutions will sign, together with Network "n+i", an Associate MOU(A-MOU). This A-MOU will specify, in particular:

- The program involved (refer to § 4.2 and 4.3),
- The engineering institution member of Network "n+i" concerned,
- Bilateral conditions of the cooperation (reciprocal tuitions fees, number of students per year, duration of the training...).

The signature of each A-MOU will be under the coordination of the Network "n+i".

## 4. Promotion of training programs

- 4.1 Each partner institution will get acquainted with the other party's training programs offer. Since each partner institution has stressed the importance of implementing active international mobility programs, both will make every effort to involve students in it. Therefore, THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES commits to inform its students about Network "n+i" training programs offer and Network "n+i" commits to inform its member institutions about THE TECHNOLOGICAL INSTITUTE OF TEXTILE OF TEXTILE AND SCIENCES training programs offer.
- 4.2 The training programs offered within the Network "n+i" concern Bachelor, Master or Doctorate students in sciences, engineering, technology and management. One or more of these programs will be offered to THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES students to allow them to achieve their study abroad project. The Network "n+i" programs are indicated here:
  - An Undergraduate research internship program (two months),
  - A Governance of engineering and technological programs (Six months),
  - PreMasters programs (one year),
  - Masters programs (two or three years),
  - Post Masters programs (one year),
  - A pre doctoral studies program (Five months),
  - A discovery of culture and technology short term program "Rendez-Vous" (two three weeks).
- 4.3 The training programs offered by THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES are Undergraduate (4 years) B.Tech programmes in: Textile Technology, Textile Chemistry. Fashion & Apparel Engineering Computer Science Engineering, Electronics & Communication Engineering, Information Technology, Mechanical Engineering.

- 4.4 The partner institutions agree to broadly publicize in particular, but with no limitation to, through their respective web sites and networks, their printed documentation and relevant events, the partnership subject to the present MOU.
- 4.5 The partner institutions agree to commonly and periodically review the promotion programs developed on both sides, their results and to identify and implement new action plans in order to improve their efficiency. Understanding that the efficiency of the programs is evaluated in particular, but not limited to, by the number of exchange students participating to the programs.

# 5. Student exchange process

- 5.1 Each institution will select, among their students, highly motivated candidates for studies abroad (selection by THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES of candidates from India wishing to go to France and by French Engineering Institutes of French candidates for studies or training in THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES).
- 5.2 Students from both partner institutions will apply through the Network "n+i" website. Each partner of this MOU will have access to the application forms of students stored on the Network "n+i" database by using a confidential login and password given by Network "n+i".
- 5.3 In order to respect the French law regarding the rights of people who have personal information stored in a database, each partner, by signing this MOU certifies that:
  - they will not and at any time transfer the confidential login and password to anybody even from the same University or Institute,
  - they will not and at any time use this database for any other purpose different than the recruitment of students for engineering studies with Network "n+i".
- 5.4 Only students with validated application forms could be selected.
- 5.5 THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES and Network "n+i" institutions welcoming students for any period from few weeks up to several years commit to inform exchange students about the precise nature of the qualification they will obtain after the exchange period.
- 5.6 Students involved in an exchange program will receive a certificate or a degree and/or credits corresponding to the validated training program parts achieved abroad. If the work and the number of credits comply with the national regulations, the students could receive the degree from the foreign institution.
- 5.7 Students of either institution, who wish to undertake a Network "n+i" program, will be assisted by the host institution for administrative registration and daily requirements including, but not limited to, accommodation, transport, office, library and laboratory facilities...
- 5.8 The student exchange shall bear on theoretical and practical academic teaching as well as on professional training and internships.

## 6. Double Master's degree diploma

The 2 partner institutions agree to study the possibility of awarding a Master's degree with "experience abroad" or a double Master's degree for well selected students willing to complete their engineering training in India and France.

A special Memorandum of Agreement (MOA) for such schemes will be signed separately. In this case the MOA will be signed between THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES, Network "n+i" member institution and Network "n+i".

## 7. Student exchange balance, financing

7.1 For each program selected from the list in § 4.2 and 4.3, specific mention of student exchange balance arrangements will be made in each A-MOU.

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- 7.2 Partner institutions will commit to facilitate access to students participating in this exchange program to scholarships programs by interacting as much as possible with scholarships organizations they have contact with.
- 7.3 The partner institutions will offer logistic support for initiating the cooperation.

# 8. Special benefits associated with the Network "n+i" partnership

In order to encourage organizations to consider a general partnership with Network "n+i" and to offer a range of advantages to those who have committed to enter into such a partnership, Network "n+i" grants the following benefits to the partner institution:

- 8.1 Administrative fees relative to their application are waived for THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES students.
- 8.2 Possibility to enter, as partner, when applicable and relevant, in Network "n+i" Erasmus Plus programs.
- 8.3 Special support on scholarships for which Network "n+i" has preferred access to, with no guarantee to success.
- 8.4 THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES will have a courtesy invitation (air flight tickets on economy class, welcome in Paris, 7 days hotel) for one week in France and one THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES person for each group of 15 students having enrolled in a "n+i" program (all programs, all member institutions) over a period of 4 years.

# 9. Management of the MOU and administration

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9.1 Negotiation, implementation and coordination of this MOU fall under the responsibility of:

Prof. G.K.Tyagi	Dr. Georges SANTINI
Director	Executive Director
The Technological Institute of Textile and	Network "n+i" – engineering institutes
Sciences	

- 9.2 Contact persons mentioned above can nominate an academic member staff within their institutions to coordinate the activities.
- 9.3 This MOU shall have a duration of 4 years, renewable under request unless party gives notice of termination not later than 6 months prior to expiration of the existing MOU.
- 9.4 This agreement will take effect upon ratification by THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES and Network "n+i".

Hereby THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES and Network "n+i" agree to launch the program "promotion and exchange of students" in establishing collaboration according to the terms and conditions set out in all the articles mentioned above.

for for Network "n+i" - engineering institutes The Technological Institute of Textile and Sciences Color Color NSTITUTE BHIWAN P. Dr. Georges SANTINI ′G.K.Tyagi Director **Executive Director** SECIOCES . Place: Bhiwani, Haryma NEN Place: 19/2/2019 Date: 05-02-2019 Date: Director The Technological Institute of Textile & Sciences

## MEMORANDUM OF UNDERSTANDING

Memorandum of Understanding between TIT&S, Bhiwani and NISTI (Regd.), Delhi

- The Technological Institute of Textile & Sciences (TIT&S), situated at Bhiwani in Haryana State, is one of the premier Institutes for textile & management education in India. It has an annual intake of over 600 students with a current enrolment of 1500 students in graduate, postgraduate and doctoral programmes/courses. Its alumni, nearly 40000 in number, generated through 75 years of its existence have contributed immensely with acknowledged merits and distinction in the Indian and global textile industries.
- North India Section of the Textile Institute (NISTI) is a registered entity and acknowledged as one of the most thriving sections of the Textile Institute. It has jurisdiction over North Indian States including Haryana. It has professional members and corporate members on its rolls. NISTI conducts conferences, events, professional development activities, etc.
- Now TIT&S & NISTI have agreed to partner together in mutually beneficial outcomes.
- Accordingly:
- a) NISTI will recommend and support TIT&S bid for corporate membership of TI.
- b) On a bi-monthly basis, NISTI will nominate two of its members to visit the TIT&S campus for a day and give lectures to students on topics of larger interest with a view to facilitate knowledge building among students. The Institute will confirm the dates/schedule depending on Academic Calender.
- c) NISTI and TIT&S may jointly organise a one day conference event in TIT&S campus on a mutually agreed theme at a mutually convenient date and time.
- For all activities/events at 4 (b) and 4(c) involving NISTI members participation, arrangements for conveyance and accommodation will be made by TIT&S at their cost as per existing TIT&S rules. Similarly, honorarium shall be paid as per TIT&S rules by TIT&S to NISTI member participants.
- NISTI will support and recommend admissions to C.Text FTI and C.Text AT1 of faculty and graduates of TIT&S.

- This MOU is valid for one year from the date of signing and subject to renewal with mutual consent for one ٠ periods thereafter from time to time, and also subject to alterations as mutually convenient and agreed.
- fifth This MOU is entered into by NISTI and TIT&S on -----day of October, 2018. .

Prof. (Dr.) G.K.Tyagi Director, TIT&S, Bhiwani

the entries Birla Colony, Bhiwani (Haryana)-127021



Subra Bit A

Dr. V.Shanbhag Chairman, NISTI, Delhi



of. (Dr)-Ing G K TYAGI



# **MEMORANDUM OF UNDERSTANDING**

Memorandum of Understanding between TIT&S, Bhiwani and NISTI (Regd.)

- The Technological Institute of Textile & Sciences (TIT&S) situated at Bhiwani in Haryana State, is one of the premier Institutes for Textile & Management Education in India. It has an annual intake of over 600 students with a current enrolment of 1500 students in graduate, postgraduate and doctoral programmes/courses. Its alumni, nearly 40000 in number, generated through 75 years' of its existence have contributed immensely with acknowledged merits and distinction in the Indian and global textile industries.
- North India Section of the Textile Institute (NISTI) is a registered entity and acknowledged as one of the most thriving sections of the Textile Institute Manchester. It has jurisdiction over North Indian States including Haryana. It has professional members and corporate members on its rolls. NISTI conducts conferences, events, professional development activities, etc.
- 3. Now TIT&S & NISTI have agreed to partner together in mutually beneficial outcomes.
- 4. Accordingly, NISTI will :-
- a) On a periodic basis, NISTI will nominate two of its members to visit the TIT&S campus for a day and give lectures to students in topics of larger interest with a view to facilitate knowledge building among students. The Institute will confirm the dates/schedule depending on Academic Calender.
- b) NISTI and TIT&S may jointly organise an one day conference event in TIT&S campus on a mutually agreed theme at a mutually convenient date and time.

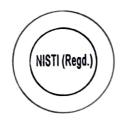
- 5. For all activities/events at 4 (a) and 4(b) involving NISTI members participation, arrangements for conveyance and accommodation will be made by TIT&S at their cost as per existing TIT&S rules. Similarly, honorarium as per TIT&S rules by TIT&S to NISTI member participants shall be payable.
- 6.
- 7. NISTI will support and recommend admissions to C.Text FTI and C.Text ATI of faculty and graduates of TIT&S.
- 8. This MOU is valid for one year from the date of signing and subject to renewal with mutual consent for one year period thereafter from time to time, and also subject to alterations as mutually convenient.
- 9. This MOU is entered into by NISTI and TIT&S on Eighteenth day of October, 2019.

INSTITUTE TECHNOLOGO Prof. (Dr.) G.K. Tyagi BHIVJAN Director, TIT&S, Bhiwani Director Mi ... SE The Technological Institute of Textile & Sciences BHIWANI

NISTI (Read) SRADBHA

Cheirman-cum-Tr++

Dr. V.Shanbhag Chairman, NISTI, Delhi





Birla Colony, Bhiwani - 127021 (HARYANA) INDIA

91-1664-242561-64
91-1664-243728

# THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

## **MEMORANDUM OF UNDERSTANDING**

Memorandum of Understanding between TIT&S, Bhiwani and NISTI (Regd.)

- The Technological Institute of Textile & Sciences (TIT&S) situated at Bhiwani in Haryana State, is one of the premier Institutes for Textile & Management Education in India. It has an annual intake of over 600 students with a current enrolment of 1500 students in graduate, postgraduate and doctoral programmes/courses. Its alumni, nearly 40000 in number, generated through 75 years' of its existen to have contributed immensely with acknowledged merits and distinction in the Indian and global textile industries.
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- 5. For all activities/events at 4 (a) and 4(b) involving NISTI members participation, arrangements for conveyance and accommodation will be made by TIT&S at their cost as per existing TIT&S rules. Similarly, honorarium as per TIT&S rules by TIT&S to NISTI member participants shall be payable.

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- 6. NISTI will support and recommend admissions to C.Text FTI and C.Text ATI of faculty and graduates of TIT&S.
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- 8. This MOU is entered into by NISTI and TIT&S on Eighteenth day of October, 2019.

Prof. (Dr.) G.K. Tyagi Director, TIT&S, Bhiwani

Director The Technological Institute of Textile & Sciences BHIWANI



NISTI (Regd)

Chairman-cum-Treasurer Dr. V.Shanbhag Chairman, NISTI, Delhi





# THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES PO BIRLA COLONY BHIWANI 127021

Phone : (01664) 242561

Fax: (01664) 243728

## MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is signed on 1 <sup>st</sup> day of January 2018 between TEXTILE ASSOCIATION OF INDIA (DELHI), NEW DELHI (hereinafter "TAID"), whose address is GAGANDEEP BUILDING. NEW DELHI- 110020.

and

The Technological Institute of Textile and Sciences (hereinafter "TIT&S) whose address is TIT&S, P.O. Birla Colony, Bhiwani, Haryana - 127021.

Whereas the Parties which wish to establish a friendly relationship to promote and accelerate the programmes of Industry-Academic cooperation in the areas of mutual concern, have decided to enter into this MoU and agree hereby as per Articles given below:

## ARTICLE-I

The parties hereby agree to promote the development of cooperation with their responsibilities as under:

- i) In order to develop academic co-operation, Institute –Industry linkages and faculty exchange between TAID and TIT&S, both the parties agree to develop cooperation for exchange of staff, Exposure visit of TIT&S students and faculty to Industries of TAID Members, Collaborative research projects, Joint-Collaborating, Cosponsoring and participating in seminars, conferences, workshops, etc., Exchange of published academic material, Co-operation in training, projects on specified areas of development, Collaborative research wok and thesis, Industrial exposure & mill training, sampling work, Testing facilities, Library facilities, special lectures by subject experts, etc.
- TIT&S will provide consultancy services to TAID Industry members in every field (long term and short-term) on payment basis mutually agreed upon.
- iii) TIT&S will carry out Skill and Technology Upgradation programmes in Industries belonging to TAID Industry members



# THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES PO BIRLA COLONY BHIWANI 127021 Fax: (01664) 243728

Phone : (01664) 242561

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- iv) TAID will depute subject experts from TAID industry members with industrial experience for the benefit of students, technical staff and faculty members of TIT
- v) TIT&S will help TAID industry members in designing and Trend and Forecasting activities
- vi) TAID industry members will allow students of TIT&S to carry out research activities, sampling, designing, spinning, Weaving, processing, garmenting and other activities.
- vii) TIT&S will help TAID industry members in developing diversified and value-added products
- viii) TAID industry members will help TIT&S students in providing Training and Placement activities

## ARTICLE-II

The Advisory Committee comprising members from TAID and TAID industry members and TIT&S will develop suitable work plan to carry out above responsibilities

## ARTICLE-III

Intellectual property, research publications and benefits arising out of commercialization of technologies generated out of co-operation under this agreement shall be jointly owned/shared by TAID and TAID industry members and TIT&S.

## ARTICLE-IV

A joint Follow up Committee will be set up with representatives from both parties to meet periodically to follow up execution of this MoU and suggest necessary measures for its development.

# ARTICLE-V

The parties to this MoU, by mutual consent, add, modify, amend or delete any word, phrase, sentence, or article in this MoU at any time during the operation of MoU.

## ARTICLE-VI

The MoU shall be effective from the date of its signing by both the parties and shall remain in operation for five years or until either party service notice to the other of its intention to



#### THE TECHNOLOGICAL INSTITUTE OF TEXTILE AND SCIENCES PO BIRLA COLONY BHIWANI 127021 Fax: (01664) 242561 Fax: (01664) 243728

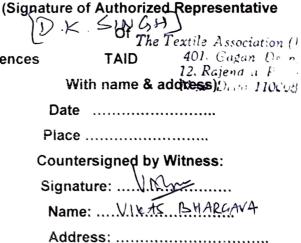
Phone : (01664) 242561

terminate it, in which event, the MoU shall stand terminated at the end of one calendar month from the date of issue of such a notice. In case both the parties agrees to terminate the MoU, the on going research work will be completed.

## ARTICLE-VII

In case of any discrepancy that may crop up during execution of MoU the matter would be settled through arbitration by referring it to a committee jointly appointed by the Competent Authority, TAID and TAID industry members and Director, TIT&S

IN WITNESS, WHEREOF, the two parties hereunto signed this Memorandum of Understanding on the dates indicated below:









91-1664-242561-64

🔓 91-1664-243728

# THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

# **MEMORANDUM OF UNDERSTANDING**

This instrument by the nomenclature of 'Memorandum of Understanding' is made and executed at Bhiwani (Haryana) on this 23<sup>rd</sup>day of June, 2021

between

The Technological Institute of Textile and Sciences, Bhiwani (Haryana) through its Director Dr. G. K. Tyagi ... First Party

and

TITIANS WORLD at C-15, Varun Apartments, Sector-9, Rohini, Delhi through its President Sh. Mahendra Kumar Arora ...Second Party

WHEREAS the First Party is the institute engaged in imparting education in the arena of textile, fashion design, information technology, management and various other disciplines.

AND WHEREAS the Second Party is the Society (registration under process) formed by ex-students of The Technological Institute of Textile (a) The Technological Institute of Textile and Sciences, Bhiwani (Haryana) and is committed to its avowed objectives aimed at extending its support to the ex-students and the existing students of the institute / First Party in various sectors.

AND WHEREAS the parties hereto, after mutual discussions, have arrived at a mutual understanding and agreed to reduce it into writing as under:

(1) That, the Second Party shall support the students of the institute by way of conducting Technical Seminars and delivery of Lectures by the experts / luminaries in the institute under pre-intimation to and confirmation of date, venue and event from the First Party;



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- (2) That, the Second Party shall arrange Mills Visits / Summer Training for the students of the institute to the extent possible;
- (3) That, the Second Partyshall utilize its resources to extend its support in providing placements in the industry to the passing-outs of the instituteby arranging campus interviews or otherwise, to the best of its ability;
- (4) That, the Second Party shall also extend financial support in the nature of annual scholarships to the needy and deserving students as being identified, selected and recommended by the First Party;
- (5) That, both the parties to this instrument shall be obligated to extend all cooperation to each other for the successful implementation of this memorandum of understanding in letter and spirit;
- (6) That, theSecond Party shall continue to explore more avenues to support the students of the institute to the extent practicable and the understanding between the parties shall be exclusive in nature;
- (7) That, the Second Party shall be doing the foregoing as a part of its avowed objectives, solely at its own costs.

Both the parties to this instrument have set their hands hereto on the even day and date in presence of witnesses who have also signed the same in presence of each other and one another.

WITNESS

(Vijay Sharona) 2. Jel ygf JUDHISH ASSARWAY

TITUTE DE BHIMER Texpolouusai ani SHI : FIRST

SECOND PARTY

## MEMORANDUM OF UNDERSTANDING (MOU)

### between

# FACULTY OF TEXTILE ENGINEERING TECHNICAL UNIVERSITY OF LIBEREC, CZECH REPUBLIC

and

## **TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES, BHIWANI, INDIA**

Representatives of the Faculty of Textile Engineering Technical University of Liberec (FT TUL), Studentská 2, 461 17 Liberec 1, Czech Republic and the Technological Institute of Textile & Sciences, Bhiwani, India, have agreed to establish a relationship between the two institutions. This Memorandum of Understanding (hereafter referred to as MOU) is intended to set the framework terms of mutual cooperation between the partners. Both partners believe that this collaboration will contribute to the understanding between their nations and open new possibilities in research and teaching.

Objectives:

- 1. To cooperate in the further development of the institutions, especially with regard to academic programmes, research activities and PhD. supervisions.
- 2. To provide faculty, students and staff with an opportunity to increase their intercultural competences and another activities of mutual benefit for both institutions.

The above goals will be accomplished by undertaking the following activities:

- 1. The institutions mutually agree to exchange information, faculty staff and students in both academic and research programmes.
- 2. The institutions will formulate specific action agreements to assist in creating and operating academic, research programs and transfer of technology and knowledge.

Specific matters requiring greater detail will be included as an Annex to this Agreement.

Both partners will explore ways and means to finance joint projects through special government and other funding sources, however, this MOU is not a commitment of funds.

Representatives of both partners will evaluate the effectiveness and adherence to this MOU on a yearly basis.

This MOU is a master agreement and describes the arena for future projects and relationships between both parties to this MOU. This MOU is at-will and may be modified by mutual consent of authorized officials of both parties.

The MOU, as well as succeeding plans of cooperation, shall be effective for 3years after approval by the appropriate authorities of both parties. The MOU may be extended for additional 3years with written consent of all parties. Each party may terminate the MOU by written notice.

The MOU should be concluded in two original documents, both written in English language and being equally authentic. This MOU shall become effective upon signature by the authorized officials of both parties.

## **Contact Information:**

Faculty of Textile Engineering Technical University of Liberec

Ing. Jana Drašarová, Ph.D.

Dean

Address

Studentská 2, 461 17 Liberec 1,

Czech Republic

Phone Number

+420 485353592, +420 485353258

E-mail

jana.drasarova@tul.cz

daniela.brzezinova@tul.cz

Technological Institute of Textile & Sciences, Bhiwani

Prof. (Dr.) G. K. Tyagi

Director

Address

Birla Colony, Bhiwani,

127021, India

Phone Number

+91 1664242561, +91 1664242564

E-mail

profgktyagi@titsbhiwani.ac.in

Partner Signature:



Ing. Jana Drašarová, Ph.D., FT TUL, Dean

Date:

**18** -11 - 2019

OLOGIC Partner Signature: AHI : Prof. (Dr.) G. K Tyagi, Ph.D. (Tech.)

MBA, FTA (I), TIT&S, Director

Date: Director The Technological Institute of Textile & Science BHIWANI





#### COPYRIGHT LICENCE AGREEMENT

This agreement is dated 26 November 2018

#### PARTIES:

- 1. THE WOOLMARK COMPANY PTY LTD (ACN 067 866 657) (acting for and on behalf of its affiliates and related entities) of Level 6, 68 Harrington Street, The Rocks, Sydney NSW Australia 2000 (Licensor); and
- 2. THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES (Company Number S/47450) of Birla Colony, tosham Road, Bhiwani Haryana 127021(Licensee).

#### BACKGROUND:

- A. The Licensor has created the contents of the Wool Science, Technology and Design Education Program including, but not limited to, all units, modules, aids, documents, notes, tutorial/ practical sheets, slides, images, videos, materials, certificates, assignments, guides, manuals and information contained therein (Materials) and is the owner of all Intellectual Property rights (IPR) subsisting in the Materials.
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- 4. Protection of Copyright. The Licensee will immediately notify the Licensor in writing if it becomes aware of any actual, suspected or threatened infringement of the Materials. The Licensor will, at its sole discretion, decide whether to take any action.
- 5. Feedback and Reporting. The Licensee must provide written reports to the Licensor on dates and covering subject advised by the Licensor.



- 6. Indemnity. The Licensee indemnifies the Licensor and its associated entities against all liabilities, expenses, losses, claims, damages and costs (on a solicitor and own client basis and whether incurred by or awarded against those indemnified) arising out of or in connection with the Licensee's exercise of its rights granted under this agreement or the Licensee's breach or negligent performance of this agreement.
- 7. Assignment and Other Dealings. The Licensee shall not assign, sub-licence, transfer or otherwise deal in any manner with its rights under this agreement without the prior written consent of the Licensor.
- Term and Termination. This agreement will commence upon signature by both parties and will continue for the duration of the Licence Term. This agreement expires automatically upon expiry of the Licence Term. The Licensor may terminate this agreement by notice to the Licensee with immediate effect.
- 9. Governing Law. This agreement is governed by the laws of New South Wales. Australia. The parties irrevocably submit to the non-exclusive jurisdiction of the courts of New South Wales, Australia.

Executed as an Agreement.

Signed for and on behalf of The Woolmark Company Pty Ltd by its authorised officer	Signed by The Technological Institute of Textile & Sciences by its authorised officer
Signature Julie Davies	Signature
General Manager	Prof(Dr.) G.K. Tyagi
Printrocessing Innovation &	Print full name
Education Extension	Director
Position	Position The Technological Institute of Textile & Sciences BHIWANI
Signature of Witness	Signature of Witness Goyal
Print full name of witness	Dr. Ashvani Goyal Print full name of witness
Date 3/12/2018	Date: 30.11.2018
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[The contents of this publication have	been translated by The Technological Institute of Textile & Sciences]

# Appendix –II



#### Numbe Name of the Title of the Year of S r of the collaborative collaborating agency collabor Duration Link to the relavant document No. partici activity with contact details ation pant College of Egineering **Expert Lecture** &Technolgy 103 1 2016-17 4 years https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2016-17.pdf Bhubaneswar College of Egineering &Technolgy 2 **Expert Lecture** 98 2017-18 4 years https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2017-18.pdf Bhubaneswar Textile Association of 2017-18 3 **Guest Lecture** 144 https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2017-18.pdf 5 years India (Delhi) Sampling & Madhyam Exim, Product 10 4 2017-18 5 years https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2017-18.pdf Faridabad Development Faculty **Government Polytechnic** exchange 5 https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2017-18.pdf 5 2017-18 5 years , Hisar worksop Ch.Bansi Lal Govt. **Expert Lecture** 65 2018-19 https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2018-19.pdf 6 5 years Polytechnic Bhiwani Woolmark Company Faculty Pvt Ltd.Julies 7 exchange 2018-19 3 year 1 https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2018-19.pdf Davies, General worksop Manager Scholarship Textile Association of 8 4 2018-19 https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2018-19.pdf 5 years Distribution India (Delhi)

Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla



Director, The Technological Institute Of Textile & Sciences, Bhiwani



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9	Expert Lecture	Madhyam Exim, Faridabad	31	2018-19	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2018-19.pdf
10	Career Counselling	Government Polytechnic , Hisar	1	2018-19	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2018-19.pdf
11	Awareness Lecture	Network "n+I" – engineering institutes	100	2018-19	4 Years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2018-19.pdf
12	MOU signed & Conference attended by faculty	North India Section of The Textile Institute ( NISTI)	5	2019-20	1 year	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
13	Student Training	Kesoram Industries Limited (Unit Birla Tyres)	5	2019-20	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
14	Student Training	Kesoram Rayon	4	2019-20	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
15	Student Training	Kesoram Industries (Vasabdatta Cement & Kesora Cement)	5	2019-20	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
16	Webinar/Semi nar	Textile Association of India (Delhi)	146	2019-20	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
17	Sampling & Product Development	Madhyam Exim, Faridabad	10	2019-20	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
18	Expert Lecture	Government Polytechnic , Hisar	140	2019-20	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf

## Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla



Director. THE TECHNOLOGICAL INSTITUTE **OF TEXTILE & SCIENCES, BHIWANI** 



## Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

19	Expert Lecture	Technical University of Liberec	219	2019-20	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
20	Expert Lecture	Ch.Bansi Lal Govt. Polytechnic Bhiwani	95	2019-20	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
21	Wool fibre science certificate course	Woolmark Company Pvt Ltd,Julies Davies,General Manager	45	2019-20	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
22	Awareness for Summer School	Network "n+I" – engineering institutes,Dr Georges Santini	20	2019-20	4 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2019-20.pdf
23	Webinar	Textile Association of India (Delhi)	55	2020-21	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
24	Sampling & Product Development	Madhyam Exim, Faridabad	10	2020-21	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
25	Expert Lecture	Government Polytechnic , Hisar	75	2020-21	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
26	Expert Lecture	Ch.Bansi Lal Govt. Polytechnic Bhiwani	65	2020-21	5 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
27	Expert Lecture	Woolmark Company Pvt Ltd,Julies Davies,General Manager	58	2020-21	3 year	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf



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28	Online Summer Program	Network "n+I" – engineering institutes,Dr Georges Santini	22	2020-21	4 Years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
29	Virtual Industrail Training	Kesoram Industries Limited (Unit Birla Tyres)	156	2020-21	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
30	Expert Lecture	Kesoram Rayon	263	2020-21	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
31	Virtual Industrail Training	Kesoram Industries (Vasabdatta Cement & Kesora Cement)	210	2020-21	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
32	Webinar	North India Section of The Textile Institute ( NISTI)	70	2020-21	1 year	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf
33	Expert Lecture	Technical University of Liberec	100	2020-21	3 years	https://titsbhiwani.ac.in/NAAC/cr3/3.5.1/3.5.1-Appendix-II-2020-21.pdf

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S No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Number of the participant	Year of collaboration	Duration	Link to the relavant documen
1	Expert Lecture	College of Egineering & Technolgy Bhubaneswar	103	2016-17	4 years	
2	Expert Lecture	College of Egineering & Technolgy Bhubaneswar	98	2017-18	4 years	
3	Guest Lecture	Textile Association of India (Delhi)	144	2017-18	5 years	
4	Sampling & Product Development	Madhyam Exim, Faridabad	10	2017-18	5 years	and the second
5	Faculty exchange worksop	Government Polytechnic, Hisar	5	2017-18	5 years	
6	Expert Lecture	Ch.Bansi Lal Govt. Polytechnic Bhiwani	65	2018-19	5 years	
7	Faculty exchange worksop	Woolmark Company Pvt Ltd, Julies Davies, General Manager	1	2018-19	3 year	
8	Scholarship Distribution	Textile Association of India (Delhi)	4	2018-19	5 years	
9	Expert Lecture	Madhyam Exim, Faridabad	31	2018-19	5 years	
10	Career Counselling	Government Polytechnic, Hisar	1	2018-19	5 years	
11	Awareness Lecture	Network "n+I" – engineering institutes	100	2018-19	4 Years	
12	MOU signed & Conference attended by faculty	North India Section of The Textile Institute (NISTI)	5	2019-20	1 year	
13	Student Training	Kesoram Industries Limited (Unit Birla Tyres)	5	2019-20	3 years	
14	Student Training	Kesoram Ravon	4	2019-20	3 years	
15	Student Training	Kesoram Industries (Vasabdatta Cement & Kesora Cement)	5	2019-20		
16	Webinar/Seminar	Textile Association of India (Delhi)	146	2019-20	3 years	
17	Sampling & Product Development	Madhyam Exim, Faridabad	140	2019-20	5 years	And the second
18	Expert Lecture	Government Polytechnic , Hisar	140	2019-20	5 years	
19	Expert Lecture	Technical University of Liberec	219	2019-20	5 years	
20	Expert Lecture	Ch.Bansi Lal Govt. Polytechnic Bhiwani	95	2019-20	3 years	
21	Wool fibre science certificate course	Woolmark Company Pvt Ltd, Julies Davies, General Manager	45	2019-20	5 years	
22	Awareness for Summer School	Network "n+I" – engineering institutes, Dr Georges Santini	20	2019-20	3 years	
23	Webinar	Textile Association of India (Delhi)	55		4 years	
24	Sampling & Product Development	Madhyam Exim, Faridabad	10	2020-21	5 years	
25	Expert Lecture	Government Polytechnic , Hisar	75	2020-21	5 years	
26	Expert Lecture	Ch.Bansi Lal Govt. Polytechnic Bhiwani	65	2020-21	5 years	
27	Expert Lecture	Woolmark Company Pvt Ltd, Julies Davies, General Manager	58	2020-21	5 years	
28	Online Summer Program	Network "n+l" – engineering institutes, Dr Georges Santini	22	2020-21	3 year	
29	Virtual Industrail Training	Kesoram Industries Limited (Unit Birla Tyres)		2020-21	4 Years	
30	Expert Lecture	Kesoram Rayon	156	2020-21	3 years	
31	Virtual Industrail Training	Kesoram Industries (Vasabdatta Cement & Kesora Cement)	263	2020-21	3 years	
32	Webinar	North India Section of The Textile Institute (NISTI)	210	2020-21	3 years	
33	Expert Lecture	Technical University of Liberec	70	2020-21 2020-21	1 year 3 years	

# 3.5.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year (10)



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# Appendix – III



# **THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES**

Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

	Report on collaborative activity under MOU
Academic year	2016-17
Name of the activity	Expert Lecture on the topic of "Culture of Enzymes"
Date of activity	20 <sup>th</sup> August 2016
Organized by	TIT&S Bhiwani and collaboration with College of Engineering &Technology Bhubaneswar
Resource person/Contact Person	Dr. Asimanand Khanduwal
Objective	The objective of the program is to impart special knowledge of enzymes and its application in textile processing
Brief report	<ul> <li>The objective of the program is to impart special knowledge of enzymes and its application in textile processing. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes: <ul> <li>Enzymes the wonder chemical and its culture for industrial uses.</li> <li>Applications of enzymes for the value addition of textile garments.</li> <li>Surface finishing techniques of Enzymes in textiles.</li> <li>Merits and demerits of Enzymes.</li> </ul> </li> </ul>

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	Report on collaborative activity under MOU
Academic year	
Name of the activity	Expert Lecture on the topic "Geometrical Modelling od 3D woven structures and mechanical analysis of their composites"
Date of activity	24 <sup>th</sup> November 2017
Organized by	TIT&S Bhiwani and collaboration with College of Engineering &Technology Bhubaneswar
Resource person/Contact Person	3
Objective	The objective of the program is to impart special knowledge of composites and its geometrical modelling
Brief report	The objective of the program is to impart special knowledge of composites and its geometrical modelling. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes:
	<ul> <li>Composites and its features.</li> <li>Applications of composites.</li> <li>Geometrical modelling of composites.</li> <li>Merits and demerits of composites.</li> <li>Sustainability issues of composites.</li> </ul>

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	Report on collaborative activity under MOU
Academic year	2017-18
Name of the activity	Expert Lecture by Sh D K Singh- Texturising Sh Ritesh Gupta- Narrow width Weaving Sh Ashish Gupta- Marketing
Date of activity	25 <sup>th</sup> April 2018
Organized by	TIT&S Bhiwani and collaboration with Textile Association of India (Delhi)
Resource person/Contact Person	Sh D K Singh- Texturising Sh Ritesh Gupta- Narrow width Weaving Sh Ashish Gupta
Objective	The objective of the program is to impart special knowledge of Auxetic weave structures and its application
Brief report	<ul> <li>The objective of the program is to impart special knowledge on Texturing, Narrow width weaving and Marketing concept to the textile students. All the speaker were renowned Textile industrialist. They have vast experience in their respective field.</li> <li>Their presentation covered the following aspects: <ul> <li>Texturing of filament yarns and their application.</li> <li>Concept of narrow width fabric and its application.</li> </ul> </li> </ul>
	All the textile students got benefitted with these technical lectures which would help them in their professional growth.

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Report on coll	aborative activity under MOU
Academic year	2017-18
Name of the activity	Sampling and product Development
Date of activity	Throughout the Year
Organized by	TIT&S & Madhyam Exim, Faridabad, Haryana
Resource person/Contact Person	Mr. Amit Chauhan
Objective	The objective of the activity is to avail the facility of the Industrial resources for the final year project sampling.
Brief Report	<ul> <li>The activity was to take the advantage of the Industrial resources for the development of designer samples and end products for the creation of digital printed samples of moodboards, storyboards and fabric textures on polyester fabrics as strikethroughs.</li> <li>The digital printed strikethroughs are used as the Inspiration themes for raising the complete collections for the products with effective marker planning using Adobe Photoshop software. The following end products are developed under the assistance of Madhyam Exim-Table runners</li> <li>Different types of towels with digital printed borders</li> <li>The final projects of two groups are accomplished with the youthful and uninterrupted help of the industry.</li> </ul>

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Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

	Report on collaborative activity under MOU
Academic year	2017-18
Name of the activity	Visit to your polytechnic by our faculty members to address students of TT, TC, TD FD, FT, IT, CSE and ECE
Date of activity	26th February, 2018
Organized by	TIT&S & Government Polytechnic, Hisar
Resource person/Contact Person	Sh. Sunil Jindal
Objective	Admission drive for Leet students
Brief report	Special lecture was conducted as part of admission drive for LEET students by TIT&S faculty members. The lecture was delivered to 6 <sup>th</sup> semester students (TT, TC, TD FD, FT, IT, CSE and ECE) of Govt. Polytechnic, Hisar. B. Tech LEET refers to the lateral entry in any B.Tech program. Lateral entry allows LEET candidates to ge admitted directly to the 2nd Year (3rd semester BTech program). The candidates who opt for B.Tech Lateral Entry enjoy the same benefits as other students because the specialized course study starts from the 2nd year. The students were apprised of the fact that the Leet students taking lateral entry in B.Tech do not face any problem ir engineering colleges or in companies if they work hard, study well and develop their technical as well as their soft skills. Lecture also highlighted that B.Tech after Diploma helps the students to take off their career as they will be subjected to a higher salary, better job positions and also opens up the way to pursue higher education.

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Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

Report on collaborative activity under MOU Academic year 2018-19 Name of the Expert Lecture on the topic "Career Opportunities in Textile & Fashion Industry" activity 22<sup>nd</sup> February 2019 Date of activity TIT&S Bhiwani and collaboration with Ch. Bansilal Government Polytechnic Organized by college, Bhiwani Resource Er. Sunny Pannu person/Contact Person Objective The objective of the program is to guide for Career Opportunities in Textile & Fashion Industry Brief report The objective of the program is to guide for Career Opportunities in Textile & Fashion Industry. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes: Introduction to Textile and Fashion Industry. Carrier options at Textile and Fashion Industry Industry 4.0.

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	Report on collaborative activity under MOU		
Academic year	2018-19		
Name of the activity	Wool Science, Technology and Design Education Programme -Train the trainer workshop		
Date of activity	10-11 December, 2018		
Organized by	TIT&S & Woolmark Company Pvt Ltd		
Resource person/Contact Person	Julie Davies		
Objective	To make the faculties aware of Woolmark online courses		
	The workshop was held in Mumbai – where faculties from all parts of India participated. From TIT&S, Dr Ashvani Goyal participated in this workshop. The programme started with introduction to The Woolmark Company (TWC) and Australian Wool Innovation (AWI). Speaker gave an overview of The Woolmark Company's education programme (primary, secondary, trertiary, retail and trade). Topics that were discussed are aim of the programme, material and resources, Woolmark Company support services along with some technical key-points. This was followed by delicious lunch. Finally, program feedback was taken and participants were asked to share their opinion for further improvement and effective utility of this workshop. Attending this workshop has several benefits. Faculties were made aware of the list of available online courses. These course materials add a new dimension to the knowledge of a learner. Faculties after getting trained would be able to share their		

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<b>Report on collaborative activity under MOU</b>			
Academic year	2018-19		
Name of the activity	TAI- Delhi's Scholarship for Students of Textile Institutes		
Date of activity	18-2-2018		
Organized by	TIT&S & TAI, Delhi		
Resource person/Contact Person	Ritesh Gupta		
Objective	Felicitation of students for Scholarship award		
Brief report	The Textile Association (India) (commonly known as TAI) award Merit-cum means scholarship sponsored by different industrial groups and individual professionals for the performance of students in first year of Textile, Apparel Fashion or related undergraduate courses. Name of the students who were offered scholarship are Ms. Soni Kumari (B.Tech, FAE), Ms. Sakshi (B.Tech FAE), Mr. Brajesh Kumar (TT), Mr Aviraj Kumar (TC). Students were accompanied by institute's faculty members to receive the scholarship award Chairman of TAI congratulated the students and wished a very bright academic and professional performance in their career. To add flavor to the programme, TAI Delhi also organized its Annual Family picnic together of all its members on the same occasion. During this get-together there will be fun-activities, children games and lots of other entertainment along with Hi-tea and lunch. There were also entertaining programs for students. Finally, the students felt inspired on receiving the scholarship. This kind o program/activity promotes the desire of students to improve further in academic terms.		

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Report on collaborative activity under MOU		
Academic year	2018-19	
Name of the activity	Expert lecture	
Date of activity	12th September 2018	
Organized by	TIT&S & Madhyam Exim, Faridabad, Haryana	
Resource person/Contact Person	Mr. Amit Chauhan	
Objective	The objective of the programme is to provide the students of Textile branches with an insight into the latest trends ongoing in the Fashion Industry.	
Brief Report	<ul> <li>The guest lecture was organized on 12<sup>th</sup> September 2018 with Mr. Amit Chauhan as the eminent speaker. The audience comprised of all respective years from Textile Technology, Textile Chemistry and Fashion &amp; Apparel Engineering departments. He primarily focused on the following areas-</li> <li>Practical limitations of the conventional printing techniques in the current Industrial scenario.</li> <li>Advent of the latest Digital printing techniques for the Fashion Industry.</li> <li>Role and position of the digital printing methods in the present Fashion oriented Industry.</li> <li>Importance of new avenues for the unconventional methods of textile designing as printing, embroidery and other art works using CAD modules to shorten the lead times and capitalization of the Industrial resources.</li> <li>Scope of the new advancements in textile designing methods.</li> <li>The lecture was successfully completed with the thoughtful areas to be explored by the students.</li> </ul>	

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	Report on collaborative activity under MOU	
Academic year 2018-2019		
Name of the activity	Career counselling & industry-oriented lectures	
Date of activity	18-1-2019	
Organized by	TIT&S & Government Polytechnic, Hisar	
Resource person/Contact Person	Principal Government Polytechnic, Hisar and Dr Yamini, TITS, BHiwani	
Objective	Career counselling & future prospects in textile, garment, fashion designing sectors	
Brief report	As of today, there are many opportunities and new fields of work are emerging to sui the life. Career option should suit the interest and attitude of the students. Alongside technical jobs, there is also career after pursuing management studies. This programme was meant for second year LEET students for career counseling and future prospects in textile, garment, fashion designing sectors. In this programme several important points as regards career and future prospects were discussed. The topics covered are importance of higher education, different career opportunities after pursuing B.Tech, opportunities of jobs in public and private sectors etc. Career growth with special reference to fashion technology was also highlighted. Students with inclination towards fine arts were suggested to have their career in design. For those students who have inclination towards academic and research were advised to pursue PhD. This program is beneficial to the students as very often it is observed that students remain confused and indecisive to choose the right career option in their life.	

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Awareness Lecture under MOU with N+I Network, France		
Academic year	2018-19	
Name of the activity	Awareness Lecture	
Date of activity	16-01-2019	
Organized by	TIT&S & N+I Network, France	
Resource person/Contact Person	Mrs Golda Malhotra, Network N+I	
Objective	The objective of the Awareness Lecture was to disseminate knowledge among students about scope of higher studies and scholarships in France	
Summary	This Awareness Lecture allowed participation to our students under MOU with the N+I Network, a consortium of institutes of higher technical education in France. This one-day Awareness lecture focused on dissemination of knowledge regarding various processes required for pursuing higher technical education in France. The resource person gave a detailed presentation on eligibility factor, application and scholarship process, Visa, and other relevant areas.	
Outcome	A total of 100 students participated in this Awareness Lecture. It gave them adequate knowledge on various academic and diplomatic processes required for higher technical education in France. The resource person answered the questions of students and cleared their doubts regarding their studies. The resource person also assured that students being routed through proper channel by the institute will have the benefit of the entire application fee waived off in the course of their application for higher studies in any institute from the N+I cluster.	

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	<b>Report on collaborative activity under MOU</b>	
Academic year	2019-20	
Name of the activity	NISTI-ITTA JOINT CONFERENCE and MOU Signed	
Date of activity	12-7-2019	
Organized by	TIT&S & North India Section of The Textile Institute (NISTI)	
Resource person/Contact Person	Vinod Shanbhag	
Objective	Awareness of high growth segments in technical textiles	
Brief report	Technical Textiles are defined as materials and products manufactured primarily for their technical and performance properties rather than their aesthetic or decorative characteristics. Technical textiles are used in different forms in various industries like construction, transport, agriculture, medical, hygiene, and sporting. In industrial manufacturing operations technical textiles are used for filters, machine clothing, conveyor belts, and abrasive substrates. They are also incorporated into industrial products such as electrical components and cables, flexible seals and diaphragms, and acoustic and thermal insulation for other domestic appliances. Currently, technical textile materials are most widely used in filters, clothing, furniture, hygiene, medical and construction products.	
	It is a large and growing sector that supports a vast array of other industries. The global growth rate of technical textiles is about 4% per year greater than the growth of home and apparel textiles, which are growing at a rate of 1% per year. Technical textile accounts for approximately 13% of India's total textile and apparel market and contributes to India's GDP at 0.7%. There is a huge potential to fulfil a large demand gap as the consumption of technical textiles in India is still only at 5-10% against 30-70% in some of the advanced countries. This conference benefitted the participants by making them aware of different emerging fields in technical textiles.	

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<b>Report on collaborative activity under MOU</b>	
Academic year	2019-20
Name of the activity	Short Term Internship Training
Date of activity	13-10-2019 to 20-10-2019
Organized by	TIT&S & Kesoram Industries Limited (Unit Birla Tyres_& Birla Cement)
Resource person/Contact Person	Shyama Prasad Goswami
Objective	To provide comprehensive learning platform to students where they can enhance their employ ability skills and become job ready along with real corporate exposure.
	TIT&S final B Tech students showed their interest and accordingly ten numbers of students were selected for Short Term Internship Training programs. These programs were conducted in different fields namely - Birla Tyre & Birla Cement. Duration of this training program was for one week. Birla Tyres accommodated five numbers of students (Mechanical Engineering: 3 Students, Electronics & Commn. Eng.: 2 Students). Another five students (Mechanical Engineering in Birla Cement. Lodging and board of these students were on bona-fide basis. This kind of training program is beneficial to the students. They understood technical know-how as regards manufacturing of safe, hard-wearing, quality tyres at affordable prices. Apart from this, this training program significantly improved their 'communication' and 'work attitude'. The experience gained has given them the opportunity to become better students and could, in the future, provide them with better employment prospects.

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	Report on collaborative activity under MOU	
Academic year	2019-20	
Name of the activity	Industrial training at Kesoram Rayon	
Date of activity	10-1-2020 to 23-1-2020	
Organized by	TIT&S & Kesoram Rayon	
Resource person/Contact Person	Pradip Dutta, Ravi Chandran	
Objective	To Increase self-confidence of students and helps in finding their own proficiency	
	Four students of TIT&S (Ankit Bansal, Gaurav Kumar, Rahul & Rahul Tanwar) went through Industrial training program for two weeks at Kesoram Rayon. It produces Viscose/Rayon filament yarn (VFY) – which is cellulosic man-made fibre produced from wood pulp and is widely used to manufacture woven and knitted fabrics, velvet, chords, threads and more. Apart from this, it produces Kesophane Transparent Paper (commonly known as cellophane paper) - which is cellulose transparent paper. Cellophane paper is non-toxic and biodegradable. Another variant of its products is Kesophane Nature Wrap – which is available in user-friendly small reel. It is made specifically for manual wrapping of food items and other essentials. This unique product prevents oxidation and protects the food wrapped in it. So, it is healthy, hygienic and safe food wrap. Another interesting variant of cellophane is Kesophane Craft – which develops and flourishes creative mind in young students. At the same time, kids are being enriched with knowledge of the need of conservation of ecosystem as Kesophane is nature-friendly. This kind of training program is beneficial to the students as they get exposure to various products and learn how to make eco-friendly products. Looking to the environmental issues as of today, this sort of industrial training bears immense importance.	

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Report on collaborative activity under MOU	
Academic year	2019-20
Name of the activity	Short Term Internship Training
Date of activity	13-10-2019 to 20-10-2019
Organized by	TIT&S & Kesoram Industries Limited (Unit Birla Tyres & Birla Cement)
Resource person/Contact Person	Shyama Prasad Goswami
Objective	To provide comprehensive learning platform to students where they can enhance their employ ability skills and become job ready along with real corporate exposure.
	TIT&S final B Tech students showed their interest and accordingly ten numbers of students were selected for Short Term Internship Training programs. These programs were conducted in different fields namely - Birla Tyre & Birla Cement. Duration of this training program was for one week. Birla Tyres accommodated five numbers of students (Mechanical Engineering: 3 Students, Electronics & Commn. Eng: 2 Students). Another five students (Mechanical Engineering: 3 Students, Electronics & Commn. Eng.: 2 Students) underwent training in Birla Cement. Lodging and board of these students were on bona-fide basis. This kind of training program is beneficial to the students. They understood technical know-how as regards manufacturing of safe, hard-wearing, quality tyres at affordable prices. Apart from this, this training program significantly improved their 'communication' and 'work attitude'. The experience gained has given them the opportunity to become better students and could, in the future, provide them with better employment prospects.

Director, THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES, BHIWANI

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### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

Under UGC Section 2 (f) & 12 (B)

Report on collaborative activity under MOU		
Academic year	Academic year 2019-20	
Name of the activity	Expert Lecture on the topic "sustainable cotton and its trend" and "Apparel Merchandising"	
Date of activity	30 <sup>th</sup> April 2020	
Organized by	TIT&S Bhiwani and collaboration with Textile Association of India (Delhi)	
Resource person/Contact Person	Mr. Sumit Garg and Mr. Rahul Garg	
Objective	The objective of the program is focus on the sustainable cotton and its trend as well as on the Apparel Merchandising.	
Brief report	<ul> <li>The objective of the program is to focus on the sustainable cotton and its trend as well as on the Apparel Merchandising. The speakers are textile industry veterans. They have vast experience in Industry. They served the industry at different capacities including the top decision makers. Their presentation covered the following aspects of sustainable cotton and its trend as well as on the Apparel Merchandising</li> <li>Cotton and its market share-</li> <li>Cotton is not a sustainable fiber</li> <li>Cotton waste recycling</li> <li>Uses of recycled cotton</li> <li>Apparel merchandising and its scope for students</li> <li>Steps involved in apparel merchandising</li> </ul>	

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#### **THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES**

Under UGC Section 2 (f) & 12 (B) in 1943 by Padma Vibbushan Dr. G. D. F

Report on collaborative activity under MOU	
Academic year	2019-20
Name of the activity	Sampling and product Development
Date of activity	Throughout the Year
Organized by	TIT&S & Madhyam Exim, Faridabad, Haryana
Resource person/Contact Person	Mr. Amit Chauhan
Objective	The objective of the activity is to avail the facility of the Industrial resources for the departmental activity i.e. Fashion Exhibition
Brief Report	<ul> <li>The activity was to take the advantage of the Industrial resources for the development of designer samples and end products for the departmental activity of Fashion &amp; Apparel Engineering. The department has to organize the Fashion Exhibition, 2K19 with the theme of fusion of Traditional and Contemporary textile designing arts. The following prototypes and end product was printed for the customized exhibits-</li> <li>a. Indigo printed sofa covers</li> <li>b. Digital printed ties</li> <li>c. Digital printed home textiles</li> <li>The printed fabrics are digitally designed inhouse and are printed at the printing house with economical markers for the maximization of the fabric utilization.</li> </ul>

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### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

And	Report on collaborative activity under MOU	
Academic year	2019-20	
Name of the activity	Expert Lecture on the topic "Challenges and Opportunities of Textile Industry in India"	
Date of activity	25 <sup>th</sup> November 2019	
Organized by	TIT&S Bhiwani and collaboration with Govt. Polytechnic, Delhi Bye-Pass, Near GJU, Hisar	
Resource person/Contact Person	Er. Rakesh Jindal	
Objective	The objective of the program is to impart knowledge of Challenges and Opportunities of Textile Industry in India	
Brief report	The objective of the program is to impart knowledge of Challenges and Opportunities of Textile Industry in India. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes: • Introduction to Textile and Fashion Industry.	
	<ul> <li>Contribution of Textile and Fashion Industry in Indian GDP</li> <li>Export scope in Textile and Fashion Industry</li> <li>Skill labour issue.</li> <li>Automation in Textile and Fashion Industry</li> </ul>	

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#### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	Report on collaborative activity under MOU	
Academic year	2019-20	
Name of the activity	Expert Lecture on the topic "Electronics Textiles" and "Nanotechnology: past- present-future"	
Date of activity	04 <sup>th</sup> January 2019	
Organized by	TIT&S Bhiwani and collaboration with Technical University of Liberec	
Resource person/Contact Person	Prof. Jiri Militky, Prof SAVVAS and Dr. Rajesh Mishra	
Objective	The objective of the program is to impart special knowledge of Electronics Textiles and Nanotechnology.	
Brief report	<ul> <li>The objective of the program is to impart special knowledge Electronics Textiles and Nanotechnology. The speakers are renowned Textile academicians. They have vast experience in both Teaching and Industry. They published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes: <ul> <li>Introduction to Electronics Textiles</li> <li>Scope of Electronics Textiles</li> <li>Applications of Electronics Textiles</li> <li>Introduction to Nanotechnology</li> <li>Scope of Nanotechnology</li> <li>Applications of Nanotechnology</li> <li>Past- present-future areas of Nanotechnology</li> </ul> </li> </ul>	

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#### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	<b>Report on collaborative activity under MOU</b>	
Academic year	2019-20	
Name of the activity	Expert Lecture on the topic "Compact Spinning and its pros and cons"	
Date of activity	15 <sup>th</sup> January 2020	
Organized by	TIT&S Bhiwani and collaboration with Ch. Bansilal Government Polytechnic college, Bhiwani	
Resource person/Contact Person	Er. Sunny Pannu *	
Objective	The objective of the program is to impart special knowledge on Compact Spinning and its pros and cons	
Brief report	<ul> <li>The objective of the program is to impart special knowledge on Compact Spinning and its pros and cons. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes: <ul> <li>Introduction to traditional spinning.</li> <li>Concept of Compact Spinning</li> <li>Compact Spinning its pros and cons</li> <li>Costing for Compact Spinning yarns.</li> </ul> </li> </ul>	

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Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

a Para attanta attanta attanta at	<b>Report on collaborative activity under MOU</b>	
Academic year	2019-20	
Name of the activity	Wool science, Design and Education Program	
Date of activity	8-11-19 to 28-11-19	
Organized by	TIT&S & Woolmark Company Pvt Ltd	
Resource person/Contact Person	Padmaja Mohanty, Rajesh Bahi & Jyotiranjan Parida	
Objective	To make the students aware of wool fibre and its processing	
	This program was intended for B.Tech, 3 <sup>rd</sup> semester students in which forty five students participated. The discussion was primarily focused on 'wool fibre science' The discussion covered several areas such as – structure of wool, properties of wool wool processing etc. Wool is 100% natural grown by sheep. During discussion all the varieties of wool, including Merino, were discussed At microscopic level, each Merino wool fibre is like a coiled spring that returns to its natural shape after being bent. This gives Merino wool garments a natural resistance to wrinkles. Fashior designers and active-wear brands can choose from a range of innovative treatments and manufacturing techniques to create unique textures and finishes on Merino wool garments. Merino wool is one of the most breathable fibres. This program benefitted the students in a big way. They understood details of wool fibres, their types, how to make woolen yarn, fabrics and their processing techniques At the end, examination was conducted and certificates were distributed to the eligible students.	

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Re	Report on Awareness Lecture under MOU with N+I Network, France	
Academic year	2019-20	
Name of the activity	Awareness Lecture	
Date of activity	06-07-2020	
Organized by	TIT&S & N+I Network, France	
Resource person/Contact Person	Mrs Golda Malhotra, Network N+I	
Objective	The objective of the Awareness Lecture was to educate students about scope of the Summer Programme offered by Ecole Polytéchnique Feminine (EPF) and École Spéciale des Travaux Publics 9ESTP), France	
Summary	This Awareness Lecture allowed participation to our students under MOU with the N+I Network, a consortium of institutes of higher technical education in France. I was organised to disseminate knowledge among students about scope of the Summer Programme offered by Ecole Polytéchnique Feminine (EPF) and École Spéciale des Travaux Publics 9ESTP), France. The resour e person gave detailed information or the Summer Programmes on Application of Artificial Intelligence on Smart Cities to be organised by the institutes mentioned above	
Outcome	A total of 20 students participated in this Awareness Lecture. The lecture focused or how the students can enroll in the summer programme and possibility of further application to the institutes for higher studies.	

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#### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	Report on collaborative activity under MOU	
Academic year	2020-21	
Name of the activity	Expert Lecture on the topic "Reweaving the success story of the textile industry amid COVID 19"	
Date of activity	28 <sup>th</sup> April 2020	
Organized by	TIT&S Bhiwani and collaboration with Textile Association of India (Delhi)	
Resource person/Contact Person	Mr. Ashok Juneja	
Objective	The objective of the program is focus on the challenges faced by the textile industry in India during Covid 19 pandemic	
Brief report	The objective of the program is to focus on the challenges faced by the textile industry in India during Covid 19 pandemic. The speaker is a textile industry vetran. He has vast experience in Industry. He served the industry at different capacities including the top decision makers. He is currently serving as the President of TAI. His presentation covered the following aspects of challenges faced the textile industry in India during Covid 19 pandemic • Covid 19 and its effect on Indian textile industry	
	<ul> <li>New scope for textile products for exports</li> <li>PE kits and its effect to combat the Covid 19</li> <li>Masks are the major contributor to MSME industries</li> </ul>	

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### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

Report on collaborative activity under MOU	
Academic year	2020-2021
Name of the activity	Sampling and product Development
Date of activity	Throughout the Year
Organized by	TIT&S & Madhyam Exim, Faridabad, Haryana
Resource person/Contact Person	Mr. Amit Chauhan
Objective	Industrial sampling and product Development
Brief Report	Sample preparation under various departmental activities were held for improved learning process. Various Industrial resources were availed for the development of samples for the departmental activities of Fashion & Apparel Engineering. The department has to conduct multiple activities in online and offline modes according to the covid protocols. The digital moodboards and storyboards were taken as an assistance for the projects related to the accessory design, ethnic- cum- contemporary garment designing and home textile range designing for final year projects.
	The concept room revamp activity was also supported by this MOU between the two organizations using the digital printed fabricated home décor' and surface embellished product range.
	The guidance provided by the Industry in the online mode supported by MAD (Mobile aided designing) was of immense support to the faculty as well as to the students.

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Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

	Report on collaborative activity under MOU	
Academic year	2020-21	
Name of the activity	Expert Lecture on the topic "Sustainability approaches in Spinning Industry"	
Date of activity	28 <sup>th</sup> January 2021	
Organized by	TIT&S Bhiwani and collaboration with Govt. Polytechnic, Delhi Bye-Pass, Near GJU, Hisar	
Resource person/Contact Person	Er. Rakesh Jindal	
Objective	The objective of the program is to impart knowledge of Sustainability approaches in Spinning Industry	
Brief report	<ul> <li>The objective of the program is to impart knowledge of Sustainability approaches in Spinning Industry. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes:</li> <li>Definition and concept of Sustainability.</li> <li>Energy requirement at different stages of spinning processes</li> <li>Water requirement at different stages of spinning processes</li> <li>Noise problem</li> <li>Optimisation of energy need.</li> <li>Automation in spinning</li> </ul>	

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#### **THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES**

Under UGC Section 2 (f) & 12 (B)

	Report on collaborative activity under MOU	
Academic year	2020-21	
Name of the activity	Expert Lecture on the topic "Career Opportunities in Textile & Fashion Industry"	
Date of activity	20 <sup>th</sup> November 2020	
Organized by	TIT&S Bhiwani and collaboration with Ch. Bansilal Government Polytechnic college, Bhiwani	
Resource person/Contact Person	Er. Sunny Pannu	
Objective	The objective of the program is to guide for Career Opportunities in Textile & Fashion Industry	
Brief report	<ul> <li>The objective of the program is to guide for Career Opportunities in Textile &amp; Fashion Industry. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes:</li> <li>Introduction to Textile and Fashion Industry.</li> <li>Carrier options at Textile and Fashion Industry</li> <li>Industry 4.0.</li> </ul>	

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# THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	Report on collaborative activity under MOU
Academic year	2020-21
Name of the activity	Expert Lecture on the topic "Sustainable fashion and the positive effects wool has on the environment"
Date of activity	23 <sup>rd</sup> February 2021
Organized by	TIT&S Bhiwani and collaboration with Woolmark Company Pvt. Ltd.
Resource person/Contact Person	Dr. Bosco Henriques, Mr. Tarn Chhabra and Mrs. Shivani Thakur
Objective	The objective of the panel discussion is to gather the ideas of the industry veterans regarding the sustainability issues and the role of wool in sustainability
Brief report	<ul> <li>The objective of the program is to focus on the challenges faced by the textile industry in India during Covid 19 pandemic. The speakers are textile industry veterans. They have vast experience in Industry. The panel discussion covered the following aspects of sustainability issues of the fashion industry</li> <li>Sustainability and circular fashion</li> <li>Sustainable textile products for exports</li> </ul>
	<ul> <li>Sustainable textile products for exports</li> <li>Wool and its products for sustainability</li> <li>Challenges faced for sustainability</li> </ul>

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# THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

Report on Online Summer School under MOU with N+I Network, France	
Academic year	2020-21
Name of the activity	Online Summer School
Date of activity	28-06-2021 to 02-07-2021
Organized by	TIT&S & N+I Network, France
Resource person/Contact Person	Ecole polytéchnique feminine (EPF) France
Objective	The objective of the programme was to allow international exposure to engineering students through virtual platform under MOU with N+I Network, France
Summary	The Online Summer School was organised by the institute in association with Ecole Polytéchnique Feminine (EPF) France and allowed participation to our students under MOU with the N+I Network, a consortium of institutes of higher technical education in France. This one-week summer school was in the form of a Virtual Tech Camp which allowed our students to learn from international faculty from EPF France. The focus of the programme was on basic yet crucial technical knowhow which the Indian students are generally deprived of.
Outcome	A total of 22 students participated in this summer school organised by Ecole Polytéchnique Feminine (EPF) France. This programme gave the students a prelude of how technical education is delivered in France. Students having completed this programme will have some leverage in the selection process of Ecole Polytéchnique Feminine (EPF) France in case they apply for higher studies in future.

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Director



### THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	Report on collaborative activity under MOU	
Academic year	2020-21	
Name of the activity	Virtual training of Birla Tyres	
Date of activity	20-8-2020	
Organized by	TIT&S & Kesoram Industries Limited (Unit Birla Tyres)	
Resource person/Contact Person	Debasish Bhattacharyya	
Objective	To Increase self-confidence of students and helps in finding their own proficiency	
	This training programme was arranged for 2 <sup>nd</sup> year students. Mode of training was on virtual mode due to COVID. This training program enlightened students about Birla Tyres. Presentation through virtual mode served the purpose in best possible way and it was a huge success. This programme was beneficial to the students. The sort of training also helps in other way to make people's lives safer on India's roads. Students understood technical knowhow as regards manufacturing of safe, hard-wearing, quality tyres at affordable prices. Apart from this, this training program significantly improved their 'communication' and 'work attitude'. The experience gained has given them the opportunity to become better students and could, in the future, provide them with better employment prospects. Also, this program enables to enlighten the students with innovative ideas towards developments.	



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Under UGC Section 2 (f) & 12 (B) Estd. in 1943 by Padma Vibhushan Dr. G.D. Birla

	Report on collaborative activity under MOU	
Academic year	2020-21	
Name of the activity	Expert Lecture on the topic "New application for Viscose Rayon"	
Date of activity	19 <sup>th</sup> August 2020	
Organized by	TIT&S Bhiwani and collaboration with Kesoram Rayon	
Resource person/Contact Person	Mr. M. L. Bhattacharyya	
Objective	The objective of the program is to impart special knowledge on New application for Viscose Rayon	
Brief report	<ul> <li>The objective of the program is to focus on the innovative applications of Viscose Rayon. The speaker is a textile industry vetran. He has_vast experience in Industry. He served the industry at different capacities including the top decision makers. His presentation covered the following aspects of challenges faced the new application for Viscose rayon <ul> <li>Viscose a regenerated fiber</li> <li>Comfort aspects of products of viscose</li> <li>Economic aspects of viscose fiber production</li> <li>Innovative applications of viscose fiber</li> </ul> </li> </ul>	

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# THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	Report on collaborative activity under MOU
Academic year	2020-21
Name of the activity	Virtual training of Birla Cement
Date of activity	20-2-2021
Organized by	TIT&S & Kesoram Industries Limited (Unit Birla Cement)
Resource person/Contact Person	M. L. Bhattacharyya
Objective	To provide learners hands on practice within a real job situation
Brief report	This training programme was arranged for 1st year students. Mode of training was or virtual mode due to COVID. This training program enlightened students about Birla Cement. There are varieties of cements catering to the specific needs for different applications and these varieties/brands of cement come with a guarantee of superior performance. Birla Cement is ideal for all constructions, mass concrete and RCC/pre-stressed/precase structure. Speaker highlighted that controlled-particle-size-distribution has a significant influence on the quality of cement. Available in four variants (PPC, OPC 43, OPC 53 and SRC), MP Birla Chetak comes with the promise of strength and durability. The fly ash used in these products is rich in silica, which reacts with lime to produce a binding gel. This gel, in turn, makes the construction strong and lasting Chetak is available in Rajasthan, Haryana, Punjab, Delhi (NCR), Gujarat, Madhya Pradesh, Uttar Pradesh, Maharashtra. This programme was of immense utility looking to the present scenario. Students learnt how to manufacture quality cement so that one can judiciously select the type of cement for construction of heavy works in industry, multi-storeyed building, road construction etc.



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# THE TECHNOLOGICAL INSTITUTE OF TEXTILE & SCIENCES

	Report on collaborative activity under MOU
Academic year	2020-21
Name of the activity	Expert Lecture on the topic "Personal Protective Equipment"
Date of activity	15 <sup>th</sup> July 2020
Organized by	TIT&S Bhiwani and collaboration with North India Section of Textile Institute (NISTI)
Resource person/Contact Person	Ms. Mohan Priya R (ATDC Bnagalore)
Objective	The objective of the program is to impart special knowledge of Personal Protective Equipment
Brief report	<ul> <li>The objective of the program is to impart special Personal Protective Equipment. The speaker is a renowned Textile academician. She has vast experience in both Teaching and Industry. She published a large number of research papers in high standard journals. Her presentation covered the following aspects of enzymes: <ul> <li>Introduction to Personal Protective Equipment.</li> <li>NIS standards.</li> <li>Materials for Personal Protective Equipment.</li> <li>Comfort aspect of Personal Protective Equipment.</li> <li>Fabric weaving for Personal Protective Equipment.</li> </ul> </li> </ul>

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Under UGC Section 2 (f) & 12 (B)

	Report on collaborative activity under MOU	
Academic year	2020-21	
Name of the activity	Expert Lecture on the topic "Fiber reinforced composites for aerospace applications"	
Date of activity	9 <sup>th</sup> March 2021	
Organized by	TIT&S Bhiwani and collaboration with Technical University of Liberec	
Resource person/Contact Person	Prof. Jiri Militky	
Objective	The objective of the program is to impart special knowledge of Fiber reinforced composites for aerospace applications	
Brief report	The objective of the program is to impart special knowledge Fiber reinforced composites for aerospace applications. The speaker is a renowned Textile academician. He has vast experience in both Teaching and Industry. He published a large number of research papers in high standard journals. His presentation covered the following aspects of enzymes: • Composite and its classification.	
	<ul> <li>Fiber reinforced composites and its properties</li> <li>Geometrical modelling of Fiber reinforced composites.</li> <li>Merits and demerits of Fiber reinforced composites.</li> <li>Requirements of composites in aerospace applications</li> <li>Applications of Fiber reinforced composites in aerospace industry.</li> </ul>	

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