

पश्चिम बंगाल पश्चिम बंगाल WEST BENGAL

AA 149835

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is made on this *date of 24th Sept.* of *2020* Between INDIAN PLYWOOD INDUSTRIES RESEARCH AND TRAINING INSTITUTE (IPIRTI) having its registered office at Post Bag No.2273, Tumkur Road, Bangalore-560 022 (hereinafter called the IPIRTI which expression shall include its successors in-interest and assign) of the One Part AND M/s PATINA CHEMICALS (hereinafter called the firm which expression shall include its successors in-interest/business and permitted assigns) of the Other Part.

WHEREAS the IPIRTI is a Society registered under the Karnataka Societies Registration Act, 1960 established inter alia with the object of promoting research, training and other scientific work in connection with forest products utilization for Plywood industry and to investigate in the manufacture and improvement of material used in the production of sawn timber, plywood, block board, flush door and other allied engineered and reconstituted products from wood or other lignocellulosic materials and to establish, equip and maintain laboratories, workshops, factories and conduct experiments and is engaged in technology transfer and consultancy for establishing factories for manufacture of panel products.

AND WHEREAS the M/S PATINA CHEMICALS, VILL-Gangarampur, P.O.-
Dakshin Alipur, P.S.-Bishnupur, Dist-24 Parganas (S), firm has approached IPIRTI
for the procedural formalities, terms and conditions involved to description of the

project "Efficacy and Suitability of Polymate-888 as an binder
additive for amino resin for manufacturing of wood based panels to
improve the quality and reduce the cost"

AND WHEREAS IPIRTI in furtherance of its objectives is agreeable to give to
the firm technical support for applicable as Project-Proposed subject to
covenants and conditions hereinafter contained.

NOW IT IS AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. INTERPRETATION

Subject to the context thereof, the words and expressions shall be construed
and interpreted, so as to have the following meanings:

- A. "Description of the problem to be solved under the project
- B. "EFFECTIVE DATE" shall mean the date on which this MoU is signed by
both the parties for the purpose of transfer of technology.
- C. "KNOW-HOW" shall mean the technology, technical know-how, the
technical knowledge, information and data.
- D. "PROCESS(ES)" shall mean the process, method or manner of manufacture
of product. Optimization of process Optimization of adhesive formulations
and process parameters for making product use, exercise and practice of the
KNOW-HOW and shall not include any improvements, developments or
modifications thereof.
- E. "PLANT" shall mean a factory, facility, works or premises set up by the
firm for the purposes of this MOU.
- F. "TECHNICAL ASSISTANCE" shall mean the technical parameters for
the production of

2. DEVELOPMENT OF PRODUCT/PROCESS OR DEFINE PROBLEM

In consideration of the payment of Rs. 1,65,200/- (Rupees *one lakh sixty five thousand two hundred*) only) by the firm to the IPIRTI in terms of Clause 5 (i) hereinafter provided and in further consideration of due and faithful observance and performance by the firm of the covenants and conditions hereinafter contained, the IPIRTI hereby grants to the firm as detailed below technologies to use and practice the KNOW-HOW and PROCESSES to manufacture product.

3. DURATION

The project duration come into force on the EFFECTIVE DATE and subject to covenants and conditions herein contained will remain in force for a period of year commencing from the accrual of the firm's obligation to pay project fees.

4. COVENANTS

- A. *IPIRTI may, at its discretion, transfer to any other person the technology or permission to use and practice the KNOW-HOW or publish in the journals/Seminars/Workshop etc., in any manner after 2 Years from the date of completion of MoU period.
- B. The firm shall have the right to continue manufacture product developed in accordance with the KNOW-HOW and the benefits of all technical information and experience acquired by it in terms of this MoU.
- C. * The firm shall not represent or threaten to pass off the KNOW-HOW/ PROCESSES as its own technology or KNOW-HOW or invention.
- D. It will not be open to the firm to claim any exemption from or reduction in the payment of royalty accruing under Clause 5 on the plea of having used their own know-how or having effected any improvement upon the said know-how or on the plea that the articles to be manufactured under the said know-how have been manufactured by using a different process.

*Mandatory clause

5. PAYMENT OBLIGATIONS

In consideration of the sponsored project under which technology/know-how/technical assistance hereby granted the firm shall pay to the IPIRTI.

A sum of Rs. 1,65,200/- (Rupees *one lakh sixty five thousand two hundred* only) has to be paid on the day of execution of this MoU

6. REPRESENTATIONS AND UNDERTAKINGS

A. By IPIRTI

The IPIRTI shall within targeted dates from the EFFECTIVE DATE disclose or cause to be disclosed, or provide or cause to be provided, as the case may be to the firm as given in the Annexure.

B. By the FIRM

- i) * The firm shall during the continuance of the MoU and otherwise observe and perform the covenants and conditions of this MoU diligently and faithfully and to the satisfaction of IPIRTI within a period of one year.
- ii) The firm will be free to obtain processing technologies for manufacturing product from other sources.
- iii) * The firm shall notify to the IPIRTI the change, if any, in its registered office/ Plant within 15 days of such change and shall also notify the change in the constitution of the Licensee within the aforesaid stipulated period.
- iv) * The firm shall not in its own name or in the name of any third party, file any Patent Application for the grant of Patent of the KNOW-HOW hereby transferred and shall also not oppose at any time any Patent Application made by IPIRTI.

*Mandatory clause

- v) The firm shall permit authorized representative of IPIRTI to visit the plant and take photograph of the plant provided no PROCESS DETAILS or trade secrets are revealed in these photographs.

7. TERMINATION

- A. The IPIRTI may terminate this MOU forthwith on the occurrence of all or any of the following events:
- i) The firm fails to pay IPIRTI any of the amounts due and payable to it's hereunder.
 - ii) The firm commits any breach of other covenants and conditions to be observed and performed by the firm under this MOU and fails to rectify such breach within 15 days from its occurrence.
 - iii) The firm enters into composition with its creditors or any proceeding for its liquidation or for appointment of a Receiver or for Attachment of its assets/properties is threatened or initiated in any Court of Law.
 - iv) The firm fails to obtain and maintain the necessary permissions and sanctions from the appropriate authorities.
 - v) The firm suspends or discontinues manufacture of product for a period exceeding 3 months without obtaining prior written permission or extension in this regard from the IPIRTI.
 - vi) The firm fails to maintain quality of the product as per specifications of the IPIRTI or BIS specifications as the case may be.
- B. Nothing in this Clause 7 shall or abridge other rights and remedies of IPIRTI under this MoU or in law.

8. WAIVER

- A. Any indulgence shown by IPIRTI to the firm in any manner shall not constitute waiver of its rights and remedies against the firm. The waiver, if any, by IPIRTI of any right of IPIRTI or of any breach by the firm shall not in any event be construed as a waiver or any subsequent right or remedy or breach as the case may be or of any other right or remedy or breach of the same or different nature.

- B. None of the parties hereto shall be construed as an agent or representatives of the other party.
- C. The firm hereby waives any requirement of warranties and guarantees in terms thereof, or arising by law or in contract or tort or otherwise, including any implied warranty or guarantee as regards the quality or merchantability of the ARTICLE or fitness, utility or the workability of the KNOW-HOW and/or the PROCESS for any purpose whatever.

9. NOTICES

All notices required to be served on the Licensee under the terms of the License shall be deemed to be duly served if the same shall have been delivered to, left with or posted by Registered Mail to the Licensee at its last known place of business or the Registered Office.

10. ENTIRE AGREEMENT

This MOU shall be the sole repository of the terms agreed to between the two parties and no amendment thereof shall take effect and will be binding on the IPIRTI unless such amendment is authorized by the Director of IPIRTI and is recorded in writing and signed by both the firm and the IPIRTI.

11. SAVING PROVISIONS

- A. Notwithstanding anything herein contained, the IPIRTI shall always have the right to disclose and provide to the Central Government or its authorized representative, agency or undertaking, the KNOW-HOW and/or the relative PROCESS, to use and practice the same for the purpose of experimentation and/or further research or development thereof, with the right to sell and vend the ARTICLE in such manner as the Central Government may, in its judgment decide, for "Government Purposes" or otherwise in public interest.
- B. The rights of the Licensor hereunder are cumulative and not mutually exclusive.

12. ARBITRATION AND JURISDICTION

- A. * (i) If any dispute of difference arises between the parties hereto as to the construction, interpretation, effect and implication or any provision of this

License including the rights or liabilities or any claim or demand of any party against other or in regard to any other matter under these presents but excluding any matters, decisions or determination of which is expressly provided for in this License, such disputes or differences shall be referred to the Sole Arbitration of the Chairman, Board of Governors of IPIRTI or that of his nominee. A reference to the Arbitration under this Clause 12(A) shall be deemed to be submission within the meaning of the Arbitration and Conciliation Ordinance/Act, 1996 and the rules framed hereunder for the time being in force.

* (ii) If however, the firm does not make any claim or demand or raise any dispute or difference in terms of sub-clause (i) of this Clause 12 within one year from the date on which such claim or demand arises, the firm shall deem to have waived and abandoned such claim or demand or the right to raise such dispute or difference against the IPIRTI.

- a) The venue of the Arbitration shall be at Bangalore.
- b) Each party shall bear and pay its own cost of the arbitration on proceedings unless the Arbitrator otherwise decides in the Award.
- c) The provisions of the Clause 12(A) shall be frustrated, abrogated or become in-operative, notwithstanding this License expires or ceases to exist or is terminated or revoked or declared unlawful.

B. * The Karnataka High Court and Courts subordinate to it at Bangalore shall have exclusive jurisdiction in all matters concerning this License, including any matter arising out of the Arbitration Proceedings or any Award made therein.

*Mandatory clause

IN WITNESS WHEREOF the IPIRTI and the firm have executed those presents
the day and the year first above written

Signed by




J. Director

For and on behalf of the IPIRTI in the presence of:

1. Name

Occupation

Address

AMITAVA SIL
Officer-In-charge, IPIRTI PSK
Signature 

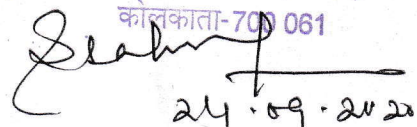
2. Name

Occupation

Address

Saohu Charan Sahoo
Service C.P.E. of Project
IPIRTI, Kolkata

Signature

प्रभारी अधिकारी
आई.पी.आई. आर.टी.आई., फील्ड स्टेशन
R/R, वीरन राय रोड (पश्चिम)
कोलकाता-700 061

24.09.2020

Signed by: Directors/Partners/Proprietor

For and on behalf of the firm in the presence of:

1. Name

Occupation

Address

RANAJIT SARDAR,
SERVICE.

Signature

Ranjit Sardar,

2. Name

Occupation

Address

MONOJ CHAKRABORTY

SERVICE.

VIII P.O - SHIRAKOL

Signature

Monoj Chakraborty

P.S - USTHE, DIST - 24 PHS(S)

PIN - 74 3513₈

PATINA CHEMICALS

Chinmay Das,

24.07.2020 Partner

1. TA/DA of scientists during factory visit for execution of the project work will be borne by the firm as per Institute rate and norms.
2. Any technical assistance in the form of visit of scientists/ technicians are required for the firm after expiry of the project period, will be arranged at extra cost as per the prevailing norms of the Institute.

PROJECT PROPOSAL

1. **Title of the scheme:-** “Suitability & Efficacy Study of POLYMATE -888 as an booster additive for amino resin for manufacturing of wood based panels to improve the quality and reduce the cost.”

2. **Sponsor:** M/s. -PATINA CHEMICALA, KOLKATA

3. **Duration of the project:** 07 months from the date of receipt of the payment and the raw material

4. **Project Team** : Mr.S.C.Sahoo, Scientist – D (Principle Investigator)
Mr. Amitava Sil, Scientist – D
Supporting staff.

5. **Objectives and Scope of the work: -**
 - I. Preparation of conventional Urea formaldehyde, Melamine Urea formaldehyde and Melamine formaldehyde resin by using the booster additive at laboratory scale suitable for both pre-press and direct pressing quality resin.
 - II. Optimization of both resin and adhesive formulation by incorporating additives supplied by the sponsor separately for pre-press and direct hot press resin formulation .
 - III. Optimization of process parameters for the manufacture of MR & BWR grade plywood.
 - IV. Evaluation of bond quality as per **IS: 848 – 2006-** “Specification for synthetic resin adhesives for making plywood (phenolic and amino plastics)”.
V. Evaluation of physical & mechanical properties of the panels.
 - VI. Report preparation
 - VII. Upgrading the formulation on pilot plant scale.
 - VIII. Report preparation



6. Programme of work to be contemplated along with phasing.

Phase I -04 months

- i. Physical and chemical analysis of booster additive (Polymate -888) and its compactibility study for manufacturing of UF, MUF & MF resin .
- ii. Manufacture of liquid UF, MUF, MF resin by using booster additive for making plywood.
- iii. Characterization of Adhesive composition pH, solid content, shelf life, free formaldehyde content, viscosity.
- iv. Plywood preparation using industrial timber species and optimization of glue formulation, spreading, OAT, pressing parameters.
- v. Separate study and resin formulation details study for both pre press and direct press by using UF, MUF & MF resin .
- vi. Testing of plywood to compare with Indian standard for MR & BWR grade plywood as per IS: 848-2006.
- vii. Study on the storage properties.

Phase II- 02 months

- i. Pilot Scale preparation of UF, Mf, MUF resin using formulation and procedure optimized in Phase I.
- ii. Preparation of full size multilayer plywood (2 feet x 2 feet). Optimize process parameters like glue application, OAT/CAT, pressing parameters.
- iii. Evaluation of physical & mechanical properties of the panels..

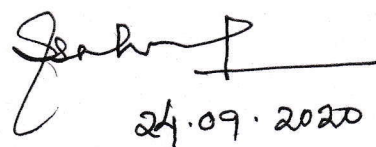
Phase III - 1 months - Report preparation



7. Project Cost: - Rs. 1.652 lakhs.

Institute fees for "Efficacy Study of POLYMATE -888 as an booster additive for amino resin for manufacturing of wood based panels."			
Sl. No.	Item	Cost Rs.	
I	Raw Material		
1.	Timber (Core and Face veneer) Euc. Core veneer - 250mts (1.8mm) Gurj. Face veneer - 100mts (0.35mm)		10,000 5000
2.	Other consumable (chem., glass ware etc.)		25,000
	Total cost of Raw materials		40,000
II	Utility requirement		5000
III	Man power		55,000
	Total Expenditure		1,00,000
III	Institute Fees (40% on total expenditure)		40,000
	Total		1,40,000
IV	GST@18%		25200
	Total Technology fee (Proposed)		1,65,200

We have accepted the project proposal as given.


24.09.2020

PATINA CHEMICALS
Chinmay Das -
Partner
24.09.2020