

3.3.1 - Industry Consultancy Potential

Collaborative report

BETWEEN

ALAGAPPA UNIVERSITY

Alagappa Nagar, Karaikudi – 630 003



AND

GALAXY RESEARCH TECHNOLOGIES

Registered Office

2/578, Thayagam Street, Thanthai Periyar nagar, Karaikudi- 630 001

Galaxy Research Technologies has a MOU with Department of Physics, Alagappa University dated on 20-01-2016. The signed MOU has extended and have been doing various activities with them. In this connection, in line with the MOU, we would like to highlight the work done for the last five years (2018- 2023).

1.0 SCOPE AND ACTIVITY

1.1 GRT conducted collaborative Research projects with Alagappa university Professors, preferably with Department of Physics/Industrial Chemistry and Microbiology Departments.

a) Prof. Dr. Arun Alagarsamy, Head of the Microbiology Department at Science Campus and Associate Professor. GRT created bio hydrogen from waste-water by applying his expertise. As a result, the committee chose our project, which falls under RUSA 2.0, and granted it Rs 98.0 lakhs. The project entitled "Waste to Energy: Production of Green Hydrogen and Bioelectricity Using an Innovative Process at a Large-Scale Sewage Treatment Plant (STP)."



b) We have been collaborating on the development of several kinds of effective electrodes for use in electrolyzers to produce green hydrogen with Prof. Yuvakumar of the Physics Department.

c) Developed an intellectual property in collaboration with H2next, the Departments of Microbiology and Physics, and filed a patent application for "A method of preparing Green Hydrogen" in March 2024.

1.1 Conducted industrial oriented research methodology programs for students in Physics Department, Alagappa University – Miss. Ranjani from Department of Physics done some polymer material synthesis in our lab for their paperwork.

1.2 Utilized the research facilities by both parties in each other's labs for research purposes in areas of mutual interest.

2.0 OBLIGATIONS OF GRT

- 2.1 GRT provided necessary facilities at their laboratories to the faculty/research staff of AU connected with the ACTIVITY to carry out experiments.
- 2.2 GRT and AU (Prof Arun, Head, Biological Sciences) applied for joint proposal to DST mainly in hydrogen valley.
- 2.3 We have hired Prof Arun as Research Consultant and we paid the respective amount to the University, it shall be done by GRT as per the norms of AU upon mutual consent of the parties.

3.0 OTHER WORK

- 3.1 We have maintained all the water treatment plants and water dispensers in Main Building, Science building, BEd college, PG hostel campus, Convocation Hall, Seminar hall, Library. We have attended and did the service in a short period, and we have been doing this as free of charge. We have billed if there is any major repair or component changing in the dispenser.
- 3.2 The desalination plants and water treatment plants (Paramakudi college and Thondi campus) have been running in a good condition for more than seven years. We have been providing our service in time.
- 3.3 In the science campus, a 5 KLD and a 20 KLD STP plant were designed and installed. Additionally intending to establish green hydrogen and bio hydrogen production in both plants.



Fig-1 : (a) 5 KLD STP plant near jasmine ladies hostel (b) 20KLD STP plant back side of Science building

3.4 We demonstrated waste water treatment and green hydrogen projects at the skill development center and science campus during the Governor's visit.

Skill Development center



Science Campus



3.5 IQAC, Alagappa University, our organization, and Canara Bank established a battery-operated bicycle venture, which was inaugurated by our Honorable Governor R.N. Ravi.



3.6 On February 14, 2024, a sewage treatment facility with green hydrogen generation was



installed in the Karaikudi larger municipality. This plant was designed by H2next, our company, and Alagappa University. It is currently operational. We are the sole sponsors of this plant for the Karaikudi Municipality. The plant was opened by the Prof Senthirajan because our Vice chancellor Prof Ravi went to Chennai for a official meeting.

3.7 Five Masters MEMFILL students from the Departments of Physics and Energy Science were hired during this period; they have been working as Research Staff on various projects.



ALAGAPPA UNIVERSITY

**(State University | A+ Grade by NAAC (CGPA : 3.64) in the 3rd Cycle | Category - I
University by MHRD - UGC)**

Karaikudi

**THE OFFICE OF INDUSTRY AND
CONSULTANCY (I and C)**

OFFICE OF INDUSTRY AND CONSULTANCY (I and C)

Dr. A. Arun

Dean- Industry and Consultancy

Dr. R. Yuvakkumar

Deputy Coordinator

MoUs Signed – Fourteen.

Year	No. of MoUs	
	National	International
2017-2020	Evolva Biotech Pvt Ltd., Chennai and Dept. of Biotech, ALU	-
2016-2019	ITC, Bangalore and Dept. of Biotech, ALU	
2015-2018	SPD laboratory, Japan and Dept. of Energy Science	
2015-2018	Tablets (India) Limited, Bangalore	
2016 - 2019	Galaxy Research Technology, Karaikudi and ALU	-
2016-2019	TCP and Dept. of Industrial Chemistry	
2021-2024	Galaxy Research Technology, Karaikudi and ALU	-
2020 - 2023	ITC, Bangalore and Dept. of Biotech, ALU	-
2023 onwards	1 Theevanam additives, Chennai 2. Bohar Biobee Pvt. Ltd., Coimbatore 3. Agam Labs, Madurai. 4. Yaazh Genomics, Madurai. 5. Theevanam additives, Chennai and Bohar Biobee Pvt. Ltd., Coimbatore	Sustainable Hydrogen for Valuable Application (SHYVA), France
Total	13	01

Evolva Biotech Pvt Ltd., Chennai and Dept. of Biotech, ALU- 2017-2020



EVOLVA BIOTECH PRIVATE LIMITED
CHENNAI 600113

BG 103689
R. SATHI SANKARAN
REGISTRAR OF COMPANIES
CHENNAI
No. 12017
CHENNAI - 600009

**MEMORANDUM OF UNDERSTANDING
BETWEEN EVOLVA BIOTECH PRIVATE LIMITED, CHENNAI
AND ALAGAPPA UNIVERSITY, KARAIKUDI**

1.1 THE AGREEMENT

1.1.1 THIS AGREEMENT made and entered into at Chennai on this 6th day of July Two Thousand and Seventeen [2017] between the Alagappa University, a State University established by the Alagappa University Act 1985, having its registered office at Alagappa Nagar, Karaikudi - 630 003, Tamil Nadu represented by Prof. V. Balachandran The Registrar Ue, Alagappa University (hereinafter called the Party 1) which expression shall where the context so admits include its successors and permitted assigns of the one part, and

1.1.2 Evolva Biotech Pvt. Ltd., a [COMPANY/FIRM/SOCIETY] registered in India under the Companies Act 1956 and having its registered office at 401-405, 4th floor, TICEL Bio Park, Taramani Road, Taramani, Chennai-600113, together with its Affiliates (hereinafter called the PARTY 2 which expression shall where the context so admits include its successors and permitted assigns) of the other part.

1.2 PREAMBLE

1.2.1 WHEREAS THE PARTY 2 is a pioneer and global leader in sustainable, fermentation-based approaches to ingredients for health, wellness and nutrition (both for


REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI-630003

2.7 ASSIGNMENT OF THE AGREEMENT

3.1.1 Without the prior written consent of the other party and subject to such terms and conditions as may be mutually agreed upon, neither party may assign this Agreement and its rights and obligations hereunder in whole or in part to any third party.

2.8 ARBITRATION

2.8.1 In the event of any dispute or difference between the parties arising out of or in connection with this Agreement such dispute or differences shall be referred to the sole arbitration of a person nominated by Party 1 and the other nominated by PARTY 2. The award of the Arbitrator shall be final and binding on both the parties. Arbitration proceedings shall be governed by existing law on arbitration matters.

SEAL OF THE PARTIES

In witness whereof the parties hereto have signed this Agreement on the day, month and year mentioned hereinbefore.

Parties

For and on behalf
of Evulva Biotech Pvt. Ltd.,

Signature: _____

Name: _____

Designation: _____

Seal: _____

Witnesses (Name and Address)

1. A.S. Sathish Kumar (A.S. Sathish Kumar)

2. _____

Date: _____

Parties

For and on behalf
of Alagappa University

Signature: _____

Name: Prof. V. BALACHANDRAN

Designation: _____

Seal: _____

REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI-630 003

Witnesses (Name and Address)

1. R. [Signature]

2. _____

Date: 06 JULY 2017

Dr. S. Karutha Pandian
Professor & Head
Department of Biotechnology
Alagappa University
Science Campus
Karaikudi - 630 003.

2. [Signature]
06.07.2017
Dr. A. Veera Ravi
Associate Professor
Department of Biotechnology
Science Campus
Alagappa University
Karaikudi - 630 004

ITC, Bangalore and Dept. of Biotech, ALU-2016-2019



AGREEMENT

This Agreement of is made on this 29th day of June 2016 at Bangalore.

By and Between

ITC Limited, an existing company within the meaning of the Companies Act, 2013, having its registered office at 37, Jawaharlal Nehru Road, Kolkata 700071 through its ITC Life Sciences and Technology Centre situated at #3, First Main Road, Peenya Industrial Area, Phase 1, Bangalore 560 058 (hereinafter referred to as the "ITC" which expression shall, unless it be repugnant to the subject or context thereof, include its successors in business and permitted assigns) of the one part

And

Alagappa University a State University established by the Alagappa University Act 1985 (Tamil Nadu Legislature), located at Alagappa Nagar, Karaikudi 630 003, Tamil Nnadu (herein after called as 'Alagappa University' which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors and permitted assigns) of the other part.

WHEREAS ITC is engaged in multifarious businesses which inter alia include tobacco, paper, printing and packaging, hotels, food products and is also in the process of developing various new lines of businesses;

AND WHEREAS Alagappa University is a State University meant for fostering research, development and dissemination of knowledge in various branches of learning and has expertise to undertake a sponsored project in the Department of Biotechnology,

AND WHEREAS ITC and Alagappa University are desirous of carrying out a collaborative project on "**Natural Actives & In vivo models for Health & Hygiene Applications**".

AND WHEREAS Alagappa University has represented that it has the expertise and capability to carry out the project required by ITC, and has expressed its willingness to do so.

AND WHEREAS based on the representations made by Alagappa University, ITC and Alagappa University hereby agree that both parties shall conduct collaborative research in the areas specified in Annexure A (hereinafter called Activity) as per the terms and conditions contained in this Agreement

15.2 If the dispute arising between the parties is not amicably resolved as per Clause 15.1, the parties shall subject themselves to the exclusion jurisdiction of the courts in Bengaluru, Karnataka, to the exclusion of all other courts.

16. Designated contact persons for parties to the Agreement

All notices, communication under this Agreement will be sent by Registered AD and shall be addressed to:

On Alagappa University side:

Alagappa University,
Department of Biotechnology,
Science Campus,
Karaikudi 630004

Attn: Dr S. Karutha Pandian, Professor & Head Department of Biotechnology

On ITC side:

ITC Limited

ITC Life Sciences & Technology Centre
No.3, Phase 1, Stage 1
Peenya Industrial Area
Peenya, Bangalore – 560058

Attn: Dr. James Prabhanand Bhaskar

IN WITNESS WHEREOF, the parties to this Agreement, intending to be legally bound, have duly executed this Agreement to become effective as of the date first written above.

For and on behalf of
ITC Limited

Signature: *Lakshmanan C*

Dr.C.C.Lakshmanan
Chief Scientist
Research & Technology Innovation
and Head of R&D
ITC LIMITED
ITC Life Sciences & Technology Centre
1st Phase, Peenya Industrial Area
Bangalore-560058 INDIA

Witness Name: *S. Adhithan*
Designation:



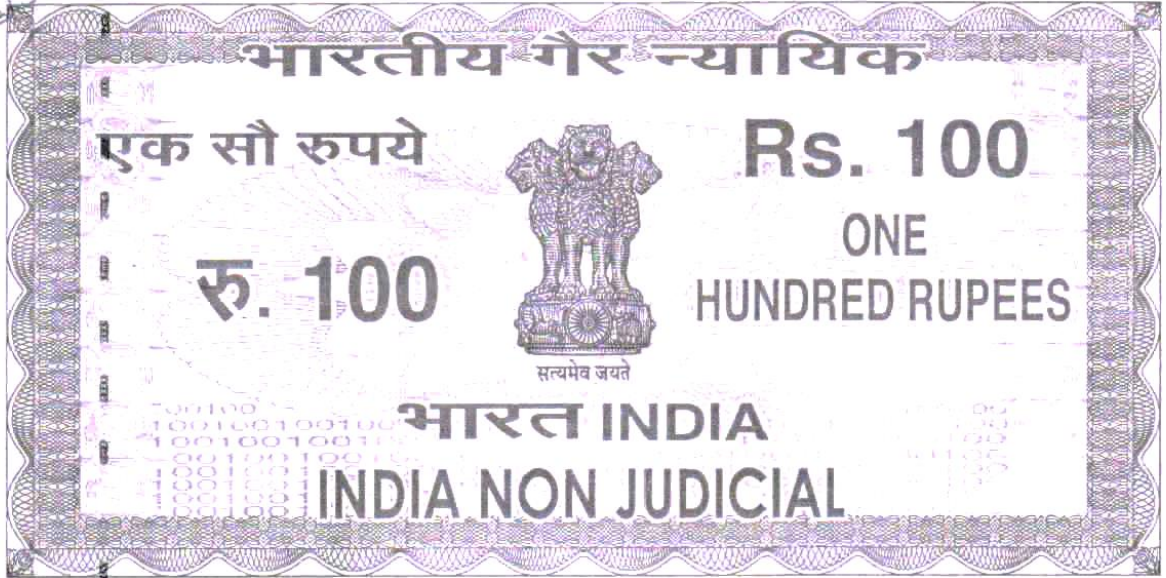
For and on behalf of
Alagappa University

Signature: *[Signature]*
REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI-630 003.

Name: *Prof. V. BALACHANDRAN*
Designation: *REGISTRAR*

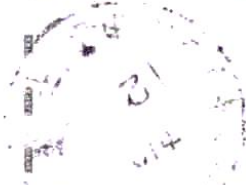
Witness Name: *N. Rajaraman*
Designation: *By. Director
S.O (R&D) Peenya*

SPD laboratory, Japan and Dept. of Energy Science - 2015-2018



தமிழ்நாடு தமில்நாடு TAMILNADU

AY 819975



9668
85/9/2015
THE REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI

S. Jeyaraman
S. Senthil Kumar
L.No: 6/2000 Dt: 31-7-2000
காரைக்கூடு - காரைக்கூடு

MEMORANDUM OF UNDERSTANDING BETWEEN SPD
LABORATORY, JAPAN AND ALAGAPPA UNIVERSITY, KARAIKUDI
FOR THE COLLABORATIVE RESEARCH ACTIVITIES

ON

“SOLAR ENERGY MATERIALS”

This agreement made and entered into force between ALAGAPPA UNIVERSITY, a State University established by the Alagappa University Act 1985, having its registered office in/at Alagappa Nagar, Karaikudi 630 003, Tamil Nadu hereinafter referred to as 'AU' (which expression shall where the context so admits include its successors and permitted assigns) on September 28, 2015 on the one part

AND

株式会社 SPD研究所

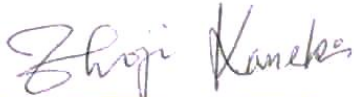

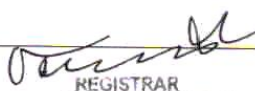
Shuji Kaneko


REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI-630 003.

- e. All disputes arising out of or in connection with this agreement will be subject to the exclusive jurisdiction of the courts at Karaikudi, India.

This MOU is non-exclusive and would become effective on the date of its final signing. The MOU could be renewed every three (3) years upon the mutual written consent of the Parties.

The individuals below sign this MOU on behalf of their respective Parties and represent that they have the requisite authority to bind their respective organizations.

SPD Laboratory	Alagappa University
	
Director SPD Laboratory 2-35-1, Johoku, Naka-ku, Hamamatsu - 432-8011 JAPAN	The Head, Department of Energy Science Alagappa University, Karaikudi 630 003 Tamil Nadu, INDIA Date: 28.09.2015
Date: 28.09.2015	 The Registrar Alagappa University Karaikudi 630 003 Tamilnadu, INDIA REGISTRAR ALAGAPPA UNIVERSITY KARAIKUDI-630 003 Date: 28.09.15



8472
29.5 2015

Tablets India Ltd

AX 247238

K. MAHALAKSHMI
S.V.L No. 3015/2095
New No: 11, Old No: 8, 2nd Street
Mangalapuram, Chelpet,
Chennai-31 Cell: 9382895090

AGREEMENT

This MOU is entered into at Chennai on this the 1st day of July 2015

BETWEEN

M/s Tablets (India) Limited, a Company incorporated under the Companies Act, 1956, having its Registered Office at Jhaver Centre, 72, Marshalls Road, Egmore, Chennai - 600 008, represented by its General Manager - Finance Mr.M.B.Parameswaran (hereinafter called TIL), which term shall mean and include its successors in interest and assigns of ONE PART;

AND

Alagappa University, a State University established by the Alagappa University act 1985, having its registered office at Alagappa Nagar, Karaikudi-630 003, Tamil Nadu represented by Prof. V. Manickavasagam, The Registrar, Alagappa University, (hereinafter referred as AU) which expression shall where the context so admits include its successors and permitted assigns of the OTHER PART;


REGISTRAR
Alagappa University
Karaikudi-630 003,

For TABLETS (INDIA) LIMITED

M.B. PARAMESWARAN
General Manager - Finance

a) It is agreed between the parties hereto that AU shall give a periodical written report to TIL regarding the progress made under the project quarterly i.e. commencing from the end of third month from the date of execution of this MOU and AU shall also make a presentation on the status of the project half yearly i.e. commencing from the end of sixth month, twelfth month and so on reckoning from the date of execution of this MOU, as morefully set out in Schedule-II hereto, which forms part of this agreement. The details regarding the time line for reporting and presentation on the progress of the project is morefully set out in Schedule-II hereunder.

9. TIL in the course of performance under this MOU, may disclose certain proprietary and confidential information to AU, which AU has agreed to maintain the obligation of secrecy and not disclose it to any third party during the term of this MOU and also upto five (5) years thereafter. AU further undertake to ensure that the results obtained in this project sponsored by TIL will be kept confidential and secret during the term of this MOU and also upto Five (5) years thereafter.

SCHEDULE-I

DETAILED BUDGET FOR TWO YEARS

	Particulars	Budget		(In Rupees)	
		I year	II year	Total	
A	Recurring				
	1. Project fellow	1,80,000.00	1,80,000.00	3,60,000.00	
	2. Contingency	Consumables & Travel	5,00,000.00	5,00,000.00	10,00,000.00
		Miscellaneous	1,50,000.00	1,50,000.00	3,00,000.00
B	Equipment	4,00,000.00	---	4,00,000.00	
C	Overhead charge @ 10% (excluding equipment grant)	83,000.00	83,000.00	1,66,000.00	
	Grand Total (including all Statutory levies)	13,13,000.00	9,13,000.00	22,26,000.00	


 REGISTRAR
 Atagappa University
 Karaikudi-630 003.

For TABLETS (INDIA) LIMITED


 M.B. PARAMESWARAN
 General Manager - Finance

AGREEMENT

This Agreement of is made on this 07th day of October 2020 at Bangalore.

By and Between

ITC Limited, an existing company within the meaning of the Companies Act, 2013, having its registered office at 37, Jawaharlal Nehru Road, Kolkata 700071 through its ITC Life Sciences and Technology Centre situated at #3, First Main Road, Peenya Industrial Area, Phase 1, Bangalore 560 058 (hereinafter referred to as the "ITC" which expression shall, unless it be repugnant to the subject or context thereof, include its successors in business and permitted assigns) of the one part

And

Alagappa University a State University established by the Alagappa University Act 1985 (Tamil Nadu Legislature), located at Alagappa Nagar, Karaikudi 630 003, Tamil Nadu (herein after called as '**Alagappa University**' which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors and permitted assigns) of the other part.

WHEREAS ITC is engaged in multifarious businesses which inter alia include tobacco, paper, printing and packaging, hotels, food products and is also in the process of developing various new lines of businesses;

AND WHEREAS Alagappa University is a State University meant for fostering research, development and dissemination of knowledge in various branches of learning and has expertise to undertake a sponsored project in the Department of Biotechnology,

AND WHEREAS ITC and Alagappa University are desirous of carrying out a collaborative project on "**Identification and use of antiviral Natural Actives using *in silico*, *in vitro* & *in vivo* models**".

AND WHEREAS Alagappa University has represented that it has the expertise and capability to carry out the project required by ITC, and has expressed its willingness to do so.

AND WHEREAS based on the representations made by Alagappa University, ITC and Alagappa University hereby agree that both parties shall conduct collaborative research in the areas specified in Annexure A (hereinafter called Activity) as per the terms and conditions contained in this Agreement





Sustainable Hydrogen for Valuable Application SHYVA, France, Dept. of Microbiology
– 2023 onwards



தமிழ்நாடு தமில்நாடு TAMILNADU

18/05/2023

100/



The Registrar
Alagappa University
Karaikudi

DA 745953

S. S. Sathyanarayanan
ச. சத்தியநாராயணன்
L.No.6/2000 Dt.11-7-2000
காரைக்கudi - அலகப்பா

**MEMORANDUM OF UNDERSTANDING
BETWEEN
ALAGAPPA UNIVERSITY, KARAİKUDI
AND SHYVA SAS**

Registered Office: 23 All. Gilbert Bécaud, Pérols- 34470, France

This **Memorandum of Understanding** ("MOU") is entered into on **May 12th 2023** (the "**Effective Date**," which shall be the date this Agreement is fully executed), by and between SHYVA SAS (hereafter referred to as "**SHYVA**"), Registered Office: 23 All. Gilbert Bécaud, Pérols- 34470, France and **Department of Microbiology; office of the Industry and Consultancy (I&C) and University Business Collaboration Centre (UBCC) of Alagappa University** (hereafter referred to as "**AU**"), a State University established by the Alagappa University Act 1985, having its registered office in/at Alagappa Nagar, Karaikudi 630 003, Tamil Nadu, India, to advance the needs of TJU and AU. HU and AU will hereafter be known as the "Parties."

1 / Page

S. S. Sathyanarayanan
REGISTRAR /
ALAGAPPA UNIVERSITY
KARAİKUDI-630 003

SHYVA
SAS au capital de 2 222 €
23 All. Gilbert Bécaud 34370 Pérols
N° SIRET 89163965000011

This MOU is non-exclusive and would become effective on the date of its final signing. The MOU could be renewed Three five (3) years upon the mutual consent of the parties.

This MOU may be amended or further developed by written consent on part of the signatories or their designated representatives. The MOU may be terminated with at least 90 days advance written notice. Notices must be sent to the individuals and addresses indicated below:

For SHYVA	For AU:
<p>SHYVA SAS ad capital de 2 225 € 23 All. Gilbert Bécaud 34370 Pérols N° SIRET 89163965000011</p> <p>Dr. Nicolas Clavel PRESIDENT, 23 All. Gilbert Bécaud, Pérols- 34470, France SHYVA</p>	<p>Prof. S. Rajamohan Registrar i/c Alagappa University Karalkudi-630003 Tamil nadu, India.</p> <p>REGISTRAR ALAGAPPA UNIVERSITY KARALKUDI-630 003</p>

The individuals below sign this MOU on behalf of their respective parties and represent that they have requisite authority to bind their respective institutions.

SHYVA	Alagappa University
<p>SHYVA SAS ad capital de 2 225 € 23 All. Gilbert Bécaud 34370 Pérols N° SIRET 89163965000011</p> <p>Dr. Nicolas Clavel President SHYVA 23 All. Gilbert Bécaud, Pérols- 34470, France</p> <p>Date: 12.05.2023</p>	<p>Dr. A. Arun Professor and Head, Dept. of Microbiology, Dean - Industry and Consultancy, Co-ordinator, Business Collaboration Centre.</p> <p>Date: 12.05.2023</p>

Theevanam additives, IIT research park, Chennai, Dept. of Microbiology – 2023 onwards



தமிழ்நாடு தமில்நாடு TAMILNADU The Registrar
09/03/2023 Alagappa University
Karaikudi

DA 737903
S. K. Srinivasan
ச. கீ. சீரவிசுவாமி
L.No.6/2000 Dt.11-7-2000
காரைக்கூடு - அலகப்பா

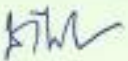

**MEMORANDUM OF UNDERSTANDING
BETWEEN
ALAGAPPA UNIVERSITY, KARAİKUDI
AND**

Theevanam Additives & Nutraceuticals Pvt Ltd

This **Memorandum of Understanding** ("MOU") is entered into on **March 10th 2023** (the "**Effective Date**," which shall be the date this Agreement is fully executed), by and between M/s Theevanam Additives & Nutraceuticals Pvt Ltd, (hereafter referred to as "**Theevanam**"), Registered Office: Module D3-07, 53, III floor, Block D, IITM research park, Chennai- 600036, India and **Department of Microbiology (office of the Industry and Consultancy (I&C) and University Business Collaboration Centre (UBCC)) of Alagappa University**

Srinivasan
REGISTRAR
ALAGAPPA UNIVERSITY
KARAİKUDI-630 003

The individuals below sign this MOU on behalf of their respective parties and represent that they have requisite authority to bind their respective institutions.

Theevanam	Alagappa University
 Dr Mukesh Doble Director THEEVANAM ADDITIVES & NUTRACEUTS PVT LTD, IIT MADRAS RESEARCH PARK CHENNAI Date:10.03.2023	 Dr. A. Arun Professor & Head Professor and Head, Dept. of Microbiology, Dean - Industry and Consultancy, Co-ordinator, Business Collaboration Centre. Date: 10.03.2023

Galaxy Research Technology, Karaikudi and ALU – 2016-2019



தமிழ்நாடு தமிழ்நாடு TAMILNADU

₹.100/-

BG 108119

The Registrar
Alagappa University
Karaikudi

[Handwritten Signature]

404
21.1.16

ச. சிவசுப்பிரமணியன்
சென்னை சட்டமன்றக் கட்டிடம்
சென்னை - 600 009
17/2015

MEMORANDUM OF UNDERSTANDING

BETWEEN

Alagappa University
Karaikudi – 630 003

AND

Galaxy Research Technologies

Registered Office

2/578, Thayagam Street, Thanthai Periyar nagar, Karaikudi- 630 001

MEMORANDUM OF UNDERSTANDING

This agreement made and entered into force between ALAGAPPA UNIVERSITY, a State University established by the Alagappa University Act 1985, having its registered office in/at Alagappa Nagar, Karaikudi 630 003, Tamil Nadu hereinafter referred to as 'AU' (which expression shall where the context so admits include its successors and permitted assigns) on 25/01/2016 on the one part.

[Handwritten Signature]
REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI

For Galaxy Research Technologies
[Handwritten Signature]
Authorised Signatory



தமிழ்நாடு தமிழ்நாடு TAMILNADU

The Registrar, Alagappa University, Karaikudi.

BG 097043

S. Yatheswari

S. YATHESWARI

ச. யாதேஸ்வரி

செயலாளர்

செயலாளர்

செயலாளர்

87342.


2/11/16

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (MOU) is made and entered into this day of November 29th, 2016 between TCP LIMITED, KOVILUR, KARAIKUDI (hereinafter referred as "TCP") and DEPARTMENT OF INDUSTRIAL CHEMISTRY, ALAGAPPA UNIVERSITY, KARAIKUDI, INDIA (hereinafter referred as "ALU")

1. SCOPE OF WORK

1.1 **Services:** TCP has engaged ALU to provide services in connection with their need to carry out detailed ground water study in and around the industry and Kovilur village. ALU will provide consultancy in the detailed ground water study as described in Exhibit A.


TCP LIMITED
Karaikudi-Kundrakudi Road
KOVILUR - 630 397
Sivagangai District



REGISTRAR
ALAGAPPA UNIVERSITY
KARAIKUDI-630 003

Exhibit A

Ground Water Analysis

Site: Fifteen ground water samples (Open wells and Bore wells) shall be collected from fifteen different sites around TCP Ltd., Kovilur.

Time schedule: Middle of every month one set of fifteen samples shall be collected and analysed. Total period is twelve months.

Reports: Twelve monthly reports and one final report

Parameters for analysis:

1.	Colour	2.	Odour
3.	Turbidity	4.	Total Dissolved Solids (TDS)
5.	Total Suspended Solids	6.	Conductivity
7.	pH	8.	Total hardness (Ca & Mg)
9.	Alkalinity (OH^{-1} , CO_3^{2-} & HCO_3)	10.	Sodium and Potassium
11.	Chlorides as CL^{-1}	12.	Sulphates as SO_4^{2-}
13.	Phosphates as PO_4^{3-}	14.	Nitrates
15.	Chemical Oxygen Demand (COD)	16.	Biochemical Oxygen Demand (BOD)
17.	Metals (Cu, Fe and Zn)	18.	Sodium Absorption Ratio (SAR)
19.	Bacteriological examination (Only when BOD is higher than the standard value)		

For TCP	For ALU
 The General Manager (Works) TCP Limited. Koviloor, Karaikudi	 The Registrar Alagappa University Karaikudi 630 003 Tamilnadu, India.

The individuals below shall act as coordinators on behalf of their respective parties and represent that they have the requisite authority to bind their respective industry and institution.

TCP LIMITED
Karaikudi-Kundrakudi Road
KOVILUR - 630 307
Sivagangai District

ITC, Bangalore – 2016-2019- Rs. 71.61L



AGREEMENT

This Agreement of is made on this 29th day of June 2016 at Bangalore.

By and Between

ಉಪ ನಿರ್ದೇಶಕರು
ಕರ್ನಾಟಕ ರಾಜ್ಯ ಸರ್ಕಾರ
ಬೆಂಗಳೂರು

ITC Limited, an existing company within the meaning of the Companies Act, 2013, having its registered office at 37, Jawaharlal Nehru Road, Kolkata 700071 through its ITC Life Sciences and Technology Centre situated at #3, First Main Road, Peenya Industrial Area, Phase 1, Bangalore 560 058 (hereinafter referred to as the "ITC" which expression shall, unless it be repugnant to the subject or context thereof, include its successors in business and permitted assigns) of the one part

And

Alagappa University a State University established by the Alagappa University Act 1985 (Tamil Nadu Legislature), located at Alagappa Nagar, Karaikudi 630 003, Tamil Nnadu (herein after called as 'Alagappa University' which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors and permitted assigns) of the other part.

WHEREAS ITC is engaged in multifarious businesses which inter alia include tobacco, paper, printing and packaging, hotels, food products and is also in the process of developing various new lines of businesses;

AND WHEREAS Alagappa University is a State University meant for fostering research, development and dissemination of knowledge in various branches of learning and has expertise to undertake a sponsored project in the Department of Biotechnology,

AND WHEREAS ITC and Alagappa University are desirous of carrying out a collaborative project on "Natural Actives & In vivo models for Health & Hygiene Applications".

AND WHEREAS Alagappa University has represented that it has the expertise and capability to carry out the project required by ITC, and has expressed its willingness to do so.

AND WHEREAS based on the representations made by Alagappa University, ITC and Alagappa University hereby agree that both parties shall conduct collaborative research in the areas specified in Annexure A (hereinafter called Activity) as per the terms and conditions contained in this Agreement





B. Payment Milestones:

Rs.

Sr.	Particulars	Year 1	Year 2	Year 3	Total
	Non Recurring				
1	Infrastructure	880000	0	0	880000
	Recurring				
2	Staff Salaries	420000	420000	420000	1260000
3	Laboratory Consumables / Hiring & Maintenance Services / Computer & Other Stationery / Travel etc.	1500000	1450000	1500000	4450000
		1920000	1870000	1920000	5710000
4	Overhead Charges @ 10% of Recurring	192000	187000	192000	571000
	Grand Total	2992000	2057000	2112000	71,61,000

- Above amounts payable in advance during July'16, July'17 & July'18. Advance will be adjusted against acceptance of completed work by the ITC Research team annually.
- Service Tax / GST at applicable rate/s extra

Tablets (India) Limited, Bangalore Rs. 22L



கமலாட்சி தமிழ்நாடு TAMILNADU
29.5.2015

Tablets India Ltd

AX 247238
K. MAHALAKSHMI
S.V.L No. 3015/2/95 S.V.L No. 3015/2/95
New No: 11, Old No: 8, 2nd Street Mangalapuram, Chetpet,
Chennai-31 Cell: 9382895090

AGREEMENT

This MOU is entered into at Chennai on this the 1st day of July 2015

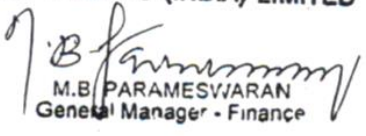
BETWEEN

M/s Tablets (India) Limited, a Company incorporated under the Companies Act, 1956, having its Registered Office at Jhaver Centre, 72, Marshalls Road, Egmore, Chennai - 600 008, represented by its General Manager - Finance Mr.M.B.Parameswaran (hereinafter called TIL), which term shall mean and include its successors in interest and assigns of ONE PART;

AND

Alagappa University, a State University established by the Alagappa University Act 1985, having its registered office at Alagappa Nagar, Karaikudi-630 003, Tamil Nadu represented by Prof. V. Manickavasagam, The Registrar, Alagappa University, (hereinafter referred as AU) which expression shall where the context so admits include its successors and permitted assigns of the OTHER PART;


REGISTRAR
Alagappa University
Karaikudi-630 003,

For TABLETS (INDIA) LIMITED

M.B. PARAMESWARAN
General Manager - Finance

a) It is agreed between the parties hereto that AU shall give a periodical written report to TIL regarding the progress made under the project quarterly i.e. commencing from the end of third month from the date of execution of this MOU and AU shall also make a presentation on the status of the project half yearly i.e. commencing from the end of sixth month, twelfth month and so on reckoning from the date of execution of this MOU, as morefully set out in Schedule-II hereto, which forms part of this agreement. The details regarding the time line for reporting and presentation on the progress of the project is morefully set out in Schedule-II hereunder.

9. TIL in the course of performance under this MOU, may disclose certain proprietary and confidential information to AU, which AU has agreed to maintain the obligation of secrecy and not disclose it to any third party during the term of this MOU and also upto five (5) years thereafter. AU further undertake to ensure that the results obtained in this project sponsored by TIL will be kept confidential and secret during the term of this MOU and also upto Five (5) years thereafter.

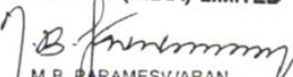
SCHEDULE-I

DETAILED BUDGET FOR TWO YEARS

A	Particulars	Budget		(In Rupees)	
		I year	II year	Total	
	1. Project fellow	1,80,000.00	1,80,000.00	3,60,000.00	
	2. Contingency	Consumables & Travel	5,00,000.00	5,00,000.00	10,00,000.00
		Miscellaneous	1,50,000.00	1,50,000.00	3,00,000.00
B	Equipment	4,00,000.00	---	4,00,000.00	
C	Overhead charge @ 10% (excluding equipment grant)	83,000.00	83,000.00	1,66,000.00	
	Grand Total (including all Statutory levies)	13,13,000.00	9,13,000.00	22,26,000.00	


 REGISTRAR
 Alagappa University
 Karaikudi-630 003.

For TABLETS (INDIA) LIMITED


 M.B. PARAMESWARAN
 General Manager - Finance

Evolva Biotech Private Limited, Chennai, Rs. 30L

2.7 ASSIGNMENT OF THE AGREEMENT

2.7.1 Without the prior written consent of the other party and subject to such terms and conditions as may be mutually agreed upon, neither party may assign this Agreement and its rights and obligations hereunder in whole or in part to any third party.

2.8 ARBITRATION

2.8.1 In the event of any dispute or difference between the parties arising out of or in connection with this Agreement such dispute or differences shall be referred to the sole arbitration of a person nominated by Party 1 and the other nominated by PARTY 2. The award of the Arbitrator shall be final and binding on both the parties. Arbitration proceedings shall be governed by existing law on arbitration matters.

SEAL OF THE PARTIES

In witness whereof the parties hereto have signed this Agreement on the day, month and year mentioned hereinbefore.

Parties
For and on behalf
of Evolva Biotech Pvt. Ltd.,
Signature: _____
Name: _____
Designation: _____
Seal: _____

Parties
For and on behalf
of Alagappa University
Signature: 
Name: Prof. V. Balakrishnan
Designation: _____
Seal: 

Witnesses (Name and Address)
1. A.S. Sivan (Asst. Secy. Govt.)
2. _____
Date: _____

Witnesses (Name and Address)
1. R. [Signature]
2. _____
Date: 06 JULY 2017

Dr. S. Karutha Pandian
Professor & Head
Department of Biotechnology
Alagappa University
Science Campus
Karakudi - 630 003.

2. 
06.07.2017
Dr. A. Veera Ravi
Associate Professor
Department of Biotechnology
Science Campus
Alagappa University
Karakudi - 630 004.

APPENDIX-I

Timeline* and Budget

Milestones*	Achievable targets	Duration	Amount in Rs
1.	Evaluating the <i>in vivo</i> potential of resveratrol on the QS dependent virulence factors and biofilm formation of sea water pathogens	8 Months	6,00,000.00
2.	Evaluating the <i>in vivo</i> potential of resveratrol on the QS dependent virulence factors and biofilm formation of fresh water pathogens	8 Months	6,00,000.00
3.	Assessing the potential of resveratrol on rescuing <i>L. vannamei</i> challenged with sea water pathogens	10 Months	9,00,000.00
4.	Assessing the potential of resveratrol on rescuing Carp fish (<i>Cypru carpio</i>) challenged with fresh water pathogens	10 Months	9,00,000.00

*On need basis Milestones 1 and 2 can be run in parallel. Also Milestones 3 and 4 can be decided based on data from milestones 1 and 2 respectively.

The grant sanctioned by the Party 2 for the Consultancy Research Project will be spent as per the guidelines of Alagappa University Industry and Consultancy cell in the following ratio:

S. No.	Item/Expenditure	Distribution of amount in %
1.	Net amount after deducting all expenditures shall be shared amongst the staff involved in the consultancy. The sharing formula of the consultant's share of 50% shall be as follows depending upon their inclusion in the proposal prior to the approval. (i) Principal Consultant: 25 (ii) Co-consultant: 12* (iii) Technicians/Project fellows: 10 (iv) Administrative staff: 3 *In the absence of co-consultant, 12% of share will be given to Principal Consultant.	50%
2.	Consumables and Contingencies	30%
3.	Net amount accrued with UII Cell	20%
TOTAL		100%


 REGISTRAR
 ALAGAPPA UNIVERSITY
 KARAKUDI-630 003



Ref: GRT/ALU/CON/PROF ARUN/FEB19

Date: 25th Feb 2019

CONSULTANCY PROJECT

To

Prof Dr Arun Alagarsamy
Associate Professor and Head (i/c)
Department of Microbiology, Science Campus
Alagappa University, Karaikudi ,630003

Sub: Looking for a Biopolymer Research Consultant and Research Fellow Reg: -

Dear Prof Arun,

Good Wishes.

In continuation with our tele discussion, I am sending this official request for the Research Consultancy.

In line with the MOU between Galaxy Research Technologies (GRT) and Alagappa University, GRT has been working in the area of producing compostable bio polymer research and development in Karaikudi. We came to know that you are one of the expert working in the field of Polyhydroxyalkanoates (PHA) bio polymer research in Alagappa University, Karaikudi. Hence, we need an expert as a Research Consultant to our biopolymer project for a period of ONE year and advising us for 4 hours / month with a honorable consultancy amount of Rs 15,000/ month payable by GRT, Karaikudi.

Also,we request you to suggest a Research Scholar who is working in the similar field under your guidance to work as a FULL TIME RESEARCH FELLOW under GRT, Karaikudi to execute this project. GRT will offer a remuneration of Rs 15,000/ month for one year with designation as RESEARCH FELLOW. Please let us know if any one of your Master's student is interested to take this opportunity and ask them to contact me through email: swamy@grttech.com.

GRT would like to start this work tentatively from Mid of May 2019 and will pay a sum of Rs 3,60,000/ annum for the biopolymer work to the Research Consultant and Research Fellow.

We are expecting your favorable response. You will be issued a letter of appointment at the time of joining for both after completing the necessary formalities as per our company policy.

We hope you will consider the offer and we are awaiting any communication for you part.

Thanking you

With Regards

A handwritten signature in blue ink, appearing to read 'Swaminathan'.

Dr Swaminathan Viswanathan

CONSULTANCY PROJECT

To

Prof. Dr. A. Arun,
Professor and Head,
Department of Microbiology,
Science Campus,
Alagappa University,
Karaikudi 630003

Dear Prof Arun,

Sub: Looking for a microbial Research Consultant

Good Wishes.

In continuation of our tele discussion, I am sending this official request for the Research Consultancy with you. SHYVA SAS registered in Montpellier, country of France, under the registration number 891 639 650 00011 has been working in the field of bacterial growth for the development of highly efficient electrodes for hydrogen production from water. We are certainly aware that you are one of the experts working in the field of microbial research at Alagappa University, Karaikudi. Hence, we need an expert as a Research Consultant for the fabrication of biochemical electrodes for a period of **5 months** and advising us for **4 hours/month** with an honourable consultancy amount of **Rs 50,000 for 5 months** payable by SHYVA. The total consultancy fees can be divided into Rs. 5000/- month as a fellowship for 5 months and Rs. 25,000/- for Research Consultant for 5 months.

SHYVA would like to start this work tentatively from Mid of November 2022 and will pay a sum of Rs, 50,000/- for the work to the Research Consultant and Research Fellow. Please note that the work is already patented (process for electrode fabrication) thus the patent right of the work will remain as the property of SHYVA.

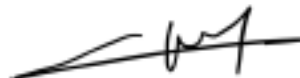
We are expecting your favourable response. You will be issued a letter of appointment at the time of joining for both after completing the necessary formalities as per our company policy.

We hope you will consider the offer and we are awaiting any communication from your part.

Thanking you

With Regards

Nicolas Clavel, Président



**Avis d'opération de virement**

Compte-rendu de votre ordre n° 335358
enregistré le 10/04/2023 à 15:20

Imprimé le 10/04/2023 à 15:21



Montant	600,00 EUR
Date demandée	10/04/2023
Etat	Transmis à la banque

COMPTE A DEBITER

Compte	19029 000206410 02 C/C Contrat Pro Global SHYVA CIC MONTPELLIER COMEDIE
Intitilé	VIR 2304/ALAGAPPAQUOTATION

BENEFICIAIRE A CREDITER

Compte	The Registrar IDIB000A008530793493 BIC : IDIBINBB
Motif	2304/SHYVA/ALAGAPPAQUOTATION

INFORMATIONS COMPLEMENTAIRES

Paiement des frais	A votre charge
--------------------	----------------

Cet ordre de virement sera traité selon vos conditions tarifaires habituelles.

Les informations incluses dans le présent compte-rendu sont de nature confidentielle et sont à l'usage exclusif du donneur d'ordre.

Toute reproduction partielle ou totale de quelque manière ou procédé que ce soit ne saurait engager la responsabilité de la banque.

Bogar Bio Bee Stores Private Limited, Coimbatore. Rs. 7 L



Ref: BBS/CON/PROJ/2023/01

Date:15-May-2023

CONSULTANCY PROJECT

To

- | | |
|---|--|
| 1. Prof. Mukesh Doble,
Director,
THEEVANAM ADDITIVES &
NUTRACEUTS PVT LTD, IIT MADRAS
RESEARCH PARK,
CHENNAI- 600036. | 2. Prof A. Arun,
Professor and Head,
Department of Microbiology,
Science Campus.
Alagappa University,
Karaikudi ,630003. |
|---|--|

Sub: Looking for Bioplastic - PLA product development based on the consultancy project proposed - Reg:

Dear Prof. Mukesh Doble and Prof. Arun,

Good Wishes.

Continuing our telephone discussion, I am sending this official request for the Research Consultancy.

Bogar Bio Bee Stores Private Limited is involved in offering top-quality products that spell excellence. Bogar Bio Bee Stores Pvt Ltd is ISO 9001- 2015, ISO 13485:2016 certified company. Our platform is driven by insightful professionals and Research and Development facility with innovative and inventive products.

Bogar Bio Bee Stores Private Limited wants to do R&D and make products based on your research experience. Hence, we want a consultancy project, especially in Poly Lactic Acid (PLA) product development.

Bogar Bio Bee Stores Private Limited would like to start this consultancy project tentatively from May 2023 and will pay a sum of Rs 7,00,000.00 for six months for doing the PLA work. The instruments at our labs and Alagappa University In-house R&D lab, which will be developed, can be utilized for this consultancy project.

We hope you will consider the offer and await any communication from you.

Thanking you
With Regards



BOGAR BIO BEE STORES PRIVATE LIMITED

TICEL bio park Phase -III, Module No.104, 1st floor, Maruthamalai Road, Coimbatore-641046. Tamil Nadu.

Ph +91 9043755205 Web: www.biobeestore.com Email: info@biobeestore.com

GSTIN:33AAGCB6892G1ZI | Drug Licence No.: TN/CBS/21B/00037 | TN/CBS/20B/00037

Events organized

National Theme Meet on University-Industry Interface-2022

Organized by

Department of Physics

Industry and Consultancy wing

Alagappa University, Karaikudi

Date: 22.03.2022

Venue: Seminar Hall, Department of Physics

- **Guests participated:**
- Prof. G. Ravi, Dean, Industry and Consultancy & Head, Department of Physics
- Dr. R. Swaminathan, Member of Vice-Chancellor's Officiating Committee, Alagappa University
- Prof. C. Sekar, Registrar i/c, Alagappa University
- Dr. K. Devakumaran, Manager, Welding Research Institute, Bharat Heavy Electricals Limited, Tiruchirappalli
- Dr. V. Swaminathan, Founder, Galaxy Group of Companies in Singapore, Malaysia and GRT – Alagappa University
- Participants – 150.



**One-day National level workshop on "Patenting and Collaborations with Industries"
organized by
Industry and Consultancy wing
University Business Collaboration Centre
Alagappa University, Karaikudi
Date: 30.01. 2023 ; Venue: Science Campus Seminar Hall.**

- **Guests participated:**
 - Prof. G. Ravi, Vice-Chancellor, Alagappa University
 - Emirates Professor Mukesh Doble from IIT Madras, Chennai, Founding Director, Start-up Company at IIT Madras Incubation Cell (IITMIC)
 - Mr. Manoj Madhavan, Assistant Controller of Patents & Designs, Patent Office, Ministry of Commerce & Industry- Chennai
 - Mr. G Simiyon, Assistant Director, Head of Office of MSME-Development and facilitation office of Tirunelveli & Madurai
 - Mr. S. Ravi, IPR Consultant, Registered Patent Agent from Hyderabad
 - Prof. A. Arun, Dean, Industry and Consultancy & Head, Department of Microbiology
 - Participants – 130.







ALAGAPPA UNIVERSITY

(Accredited with A+ Grade by NAAC (CGPA: 3.64) in the Third Cycle, Graded as Category I University and Granted Autonomy by MHRD-UGC, 2019: QS India Rank - 20, QS BRICS Rank - 104, QS ASIA Rank - 20)

Karaikudi - 630003. Tamil Nadu, India

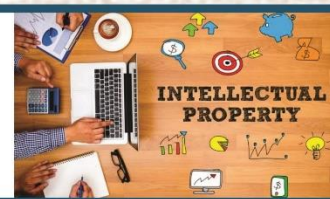
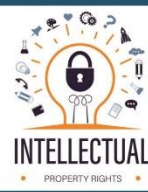
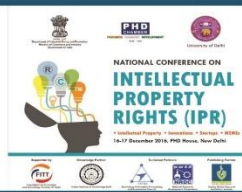
Alagappa University & RUSA 2.0 Sponsored

One-day National Level Workshop on

PATENTING AND COLLABORATIONS WITH INDUSTRIES

Organized by

Industry and Consultancy Wing & University Business Collaboration Centre



Date: 30th January 2023

Venue: Conference Hall, 4th Floor, Science Campus

Dr. A. ARUN

Convener and Organizing Secretary

Prof. S. RAJAMOHAN

Registrar i/c



ALAGAPPA UNIVERSITY

(Accredited with A+ Grade by NAAC (CGPA: 3.64) in the Third Cycle, Graded as Category I University and
Granted Autonomy by MHRD-UGC, 2019; QS India Rank - 20, QS BRICS Rank - 104, QS ASIA Rank - 20)



Karaikudi - 630003, Tamil Nadu, India

*Cordially invite you to the Inauguration of
Alagappa University and RUSA 2.0 Sponsored*

One-day National Level Workshop on PATENTING AND COLLABORATIONS WITH INDUSTRIES

Organized by
Industry and Consultancy Wing & University Business Collaboration Centre
on 30th January 2023 at 10.00 a.m.
in the Conference Hall, 4th Floor, Science Campus, Alagappa University

Dr. A. ARUN

Convener and organizing secretary
Dean-Industry and Consultancy Wing
Coordinator-University Business Collaboration Centre
Delivers Welcome Address

Prof. G. RAVI

Vice-Chancellor, Alagappa University
Delivers Presidential Address

Prof. MUKESH DOBLE

Emeritus Professor, Indian Institute of Technology-Madras, Chennai
Delivers Inaugural Address

Mr. MANOJ MADHAVAN

Assistant Controller of Patents &
Designs Patent Office,
Ministry of Commerce & Industry

Mr. G. SIMIYON

Assistant Director & Head
Micro Small & Medium Enterprises (MSME)
Development Commission, Madurai & Thirunelveli
&

Mr. S. RAVI

IPR Consultant,
Registered Patent Agent
GI Agent/Attorney with IP India
Delivers Felicitation Address

Dr. R. YUVAKKUMAR

Deputy Co-ordinator,
Industry and Consultancy Wing
Proposes Vote of thanks



ALAGAPPA UNIVERSITY

(Accredited with A+ Grade by NAAC (CGPA: 3.64) in the Third Cycle, Graded as Category I University and
Granted Autonomy by MHRD-UGC, 2019; QS India Rank - 20, QS BRICS Rank - 104, QS ASIA Rank - 20)



Karaikudi - 630003, Tamil Nadu, India

Cordially invite you to the Valediction of

Alagappa University and RUSA 2.0 Sponsored

One-day National Level Workshop on

PATENTING AND COLLABORATIONS WITH INDUSTRIES

Organized by

Industry and Consultancy Wing & University Business Collaboration Centre

on 30th January 2023 at 3.00 p.m. Alagappa University

Dr. A. ARUN

Convener and organizing secretary

Dean-Industry and Consultancy Wing

Coordinator-University Business Collaboration Centre

Delivers Welcome Address and Workshop Report

Prof. S. RAJAMOHAN

Registrar, Alagappa University

Delivers Presidential Address

Prof. MUKESH DOBLE

Emeritus Professor, Indian Institute of Technology-Madras, Chennai

&

Mr. MANOJ MADHAVAN

Assistant Controller of Patents & Designs Patent Office,

Ministry of Commerce & Industry- Chennai

Delivers Valedictory Address

Dr. T. KAVITHA

Assistant Professor,

Department of Microbiology

Proposes Vote of thanks

Dr. A. Arun

Convener and Organizing Secretary

Prof. S. RAJAMOHAN

Registrar i/c

One-day National level Symposium on IPR and Industry - Institutional –MSME collaborations
organized by
Industry and Consultancy wing
University Business Collaboration Centre
Alagappa University Institutional Innovation Council (AUIIC)
Tamil Nadu, Ministry of Micro, Small and Medium Enterprises (MSME), Govt. of India
Alagappa University, Karaikudi
Date: 10.04. 2023 ; Venue: Science Campus Seminar Hall.

- **Guests participated:**
 - Prof. G. Ravi, Vice-Chancellor, Alagappa University
 - Emirates Professor Mukesh Doble from IIT Madras, Chennai, Founding Director, Start-up Company at IIT Madras Incubation Cell (IITMIC)
 - Mr. Sathish kumar, Assistant Manager, DC MSME Office, New Delhi
 - Mr. G Simiyon, Assistant Director, Head of Office of MSME-Development and facilitation office of Tirunelveli & Madurai
 - Dr. Mr. Raj Mohan, Chief Mentor of Man2succeed center for Business Excellence, Hosur
 - Mrs. Uma Chandrika, MSME- , Assistant Director, Madurai.
 - Prof. A. Arun, Dean, Industry and Consultancy & Head, Department of Microbiology
 - Participants – 104.







ALAGAPPA UNIVERSITY

(A State University Accredited with A+ Grade by NAAC (CGPA : 3.64) in the Third Cycle and Graded as Category - I University by MHRD - UGC)
Karaikudi - 630003, Tamil Nadu



One-day National level Symposium on IPR and Industry - Institutional - MSME collaborations

Welcomes you all

Jointly Organized by
Industry and Consultancy, University Business Collaboration Centre (UBCC),
Alagappa University Institutional Innovation Council (AUIC), Of Alagappa University, Karaikudi, Tamil Nadu,
Ministry of Micro, Small and Medium Enterprises (MSME), Govt. of India. And
Cell for IPR Promotion and Management (CIPAM), Department for Promotion of Industry and
Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. of India

Date : 10.04.2023 Monday

Venue : Conference Hall, 4th Floor, Science campus

Alagappa University, Karaikudi

Dr. A. Arun

Dr. A.Veera ravi

Dr. S. Rajamohan

Convener & Organizing Secretary,

Co-ordinator-(AUIC)

Registrar i/c



ALAGAPPA UNIVERSITY

(A State University Established in 1985)
Karaikudi - 630003. Tamil Nadu, India



One-day National level Symposium on
IPR AND INDUSTRY - INSTITUTIONAL – MSME COLLABORATIONS

Jointly Organized by

INDUSTRY AND CONSULTANCY,
UNIVERSITY BUSINESS COLLABORATION CENTRE (UBCC),
ALAGAPPA UNIVERSITY INSTITUTIONAL INNOVATION COUNCIL (AIIIC),
OF ALAGAPPA UNIVERSITY, KARAIKUDI, TAMIL NADU,
MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSME), Govt. of India



And

CELL FOR IPR PROMOTION AND MANAGEMENT (CIPAM),
DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE (DPIIT),
MINISTRY OF COMMERCE AND INDUSTRY, Govt. of India

Date: 10th April 2023 - Monday Time: 10.30 a.m.
Venue: Seminar Hall, 4th Floor, Science Campus, Karaikudi

INAUGURAL FUNCTION

Dr. A. ARUN

Convener and Organizing secretary
Dean – Industry and Consultancy
Coordinator- University Business Collaboration Centre (UBCC)
Delivers Welcome and Thematic Address

Prof. G. RAVI

Vice-Chancellor
Alagappa University, Karaikudi
Delivers Presidential Address

Prof. MUKESH DOBLE

Emeritus Professor, Indian Institute of Technology-Madras, Chennai
Founding Director,
Start-up Company at IIT Madras Incubation Cell (IITMIC)
Delivers Inaugural Address

Mr. SATHISH KUMAR

Assistant Director, Office Development Commissioner (MSME)
Ministry of MSME, Government of India, New Delhi
Felicitate

Mr. G. SIMIYON

Assistant Director / Head of Office
Bbranch MSME - DFO, Tirunelveli & Madurai
Felicitate

Dr. A. VEERA RAVI
Co-ordinator
Alagappa University Institutional Innovation Cell (AUIIC)
Proposes Vote of thanks

VALEDICTORY FUNCTION

Dr. A. ARUN
Convener and Organizing secretary
Dean - Industry and Consultancy
Coordinator- University Business Collaboration Centre (UBCC)
Delivers Welcome Address and Report

Prof. S. RAJAMOHAN
Registrar
Alagappa University, Karaikudi
Delivers Presidential Address

Dr. RAJ MOHAN
Chief Mentor of Man2succeed center for Business Excellence
Hosur
Delivers Valedictory Address

Dr. R. YUVAKKUMAR
Deputy Coordinator
Industry and Consultancy Wing
Proposes Vote of thanks

Welcome You All



MSME Host Institution (HI)

- Alagappa University is a recognized Host Institution (HI) by MSME (17(2)/MSMEINNOVATIVE/PMAC/2021-22 Dt. 26.06.2023)
- Under - MSME IDEA HACKATHON 3.0 (Women) – 19 proposals received.

Dept. of Physics and Microbiology along with Memfill Tech. Pvt. Ltd (A Sister concern of GRT- an in-house Industry partner of Alagappa University developed a Sewage Treatment Plant (STP) at Karaikudi Municipality, Sivaganga District, Tamil Nadu.

MEMFILL காரைக்குடி பெருநகராட்சி

கழிவுநீர் சுத்திகரிப்பு நிலையம்

முனிசிபாலிட்டி காலனி, காரைக்குடி

Technology Developed by: MEMFILL TECH PVT. LTD. & ALAGAPPA UNIVERSITY

SEWAGE WATER TANK 1, SEWAGE WATER TANK 2, SLUDGE SETTLED TANK 1, SLUDGE SETTLED TANK 2, BIO CULTURE WITH AERATION TANK, MEMBRANE BIOREACTOR (MBR) WITH AERATION TANK, PERMEATE WATER TANK, 25LPH RO PLANT

FILTERED WATER USAGE FOR
Gardening
Cloth Washing
Vehicle Cleaning
Toilet Flushing

DI WATER PLANT, HYDROGEN ELECTROLYZER, HYDROGEN GAS STOVE, ELECTRIC BULB

Manufactured & Maintaining By: MEMFILL TECH PVT. LTD. Karaikudi ☎ 9444877555

In-house Institutional Industries







**Specialization of H2next Pvt Ltd
H2nextAEM™ membranes**



**Wastewater treatment plant
Around 200 plants**



Microfiltration systems



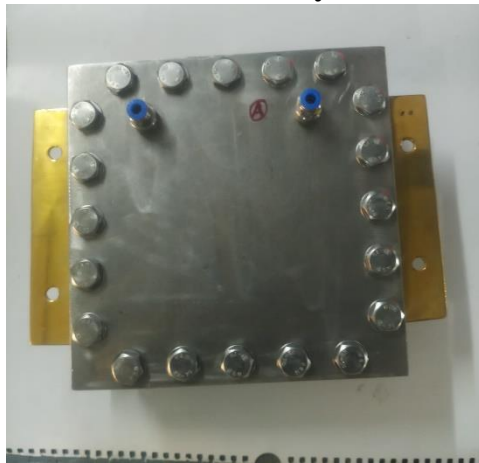
Hollow fibre membranes



PEM Electrolyser



AEM Electrolyser



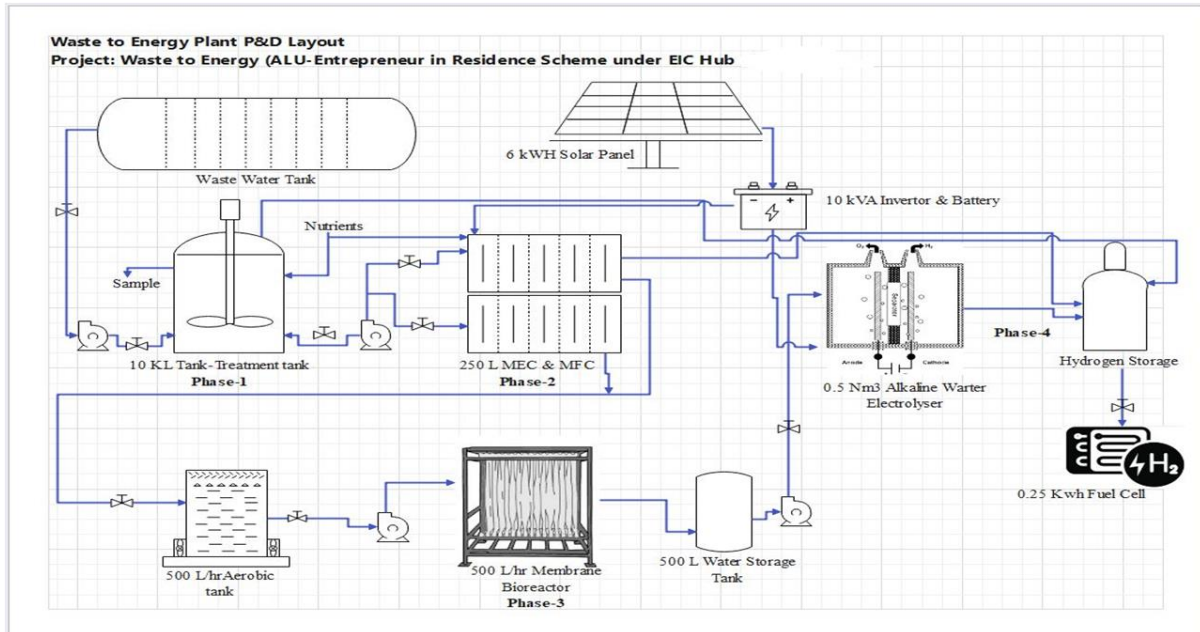
Waste to Energy- RUSA EIR Project- Alagappa University- Industry Project- 10KLD STP

Phase 1: Acidogenic anaerobic wastewater digestive (AAWWD) hydrogen production system.

Phase 2: MEC hydrogen production (Day time) and MFC based treated water electrolysis (Night time).

Phase 3: Hollow fibre membrane-assisted membrane bioreactor 500 L (MBR) System. (GRT-200+ plants implemented)

Phase 4: Hydrogen generation by treated water electrolysis using solar based 5Nm³ electrolyzer (100 L/hr).



New In-house Institutional Industries





Future plan

- ALU- MSME collaboration
- Industry – Faculty members’ active interaction
- MSME exhibitions at our University.
- MaFoi- Facilitator for Industry – Faculty members’ interaction – persistent fund generation for our University.
- Common display room for ALU-Collaborating Industry\ ALU - Prototypes.
- Agam Diagnostics & Yaazh Xenomics - Network labs in TN- want to use our USIC facility by having MoU.

Industry & Consultancy - Revenue Generated



Revenue generated from consultancy and corporate training during the last five years

Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs) Rs. 2,68,67,832

S. No.	Name of the faculty consultant or trainer	Organization to which consultancy or corporate training provided	Dates/duration of consultancy	Amount generated in INR
2018-2019				
1	Dr. S. Karutha Pandian	ITC Limited, Bangalore	29.06.2016/3 Years	83,60,000
2	Dr. A. Veera Ravi	Evolva Biotech Private Limited, Chennai	06.07.2017/3 Years	30,00,000
3	Dr. A. Veera Ravi	Tablets (India) Limited, Chennai	29.08.2018	22,26,000
4	Department of Physics, Alagappa University	Researchers from various institutions	2018-2019/1 Year	16,25,815
5	Department of Women's Studies (Dr. K. Manimekalai)	Rural Training Centre, Amaravathipudur, Karaikudi	13.11.2018	1,15,000
6	Dr. A. Arun	Galaxy Research Technologies, Karaikudi	25.02.2019/1 Year	3,60,000
7	University Science Instrumentation Centre, Alagappa University	Researchers from various institutions	2018-2019/1 Year	4,26,603
2019-2020				
8	Department of Physics, Alagappa University	Researchers from various institutions	2019-2020/1 Year	11,64,483
9	University Science Instrumentation Centre, Alagappa University	Researchers from various institutions	2019-2020/1 Year	8,27,118
10	Dr. RM. Vidhyavathi, Dr. J. Joseph Sahayarayan, Dr. P. Boomi	Avinashilingam Institute for Home Science and Higher Education for Women's	09.05.2019/One month	28,000
11	Dr. J. Jeyakanthan, Dr. Sanjeevkumar Singh, Dr. M. Karthikeyan, Dr. RM. Vidhyavathi, Dr. J. Joseph Sahayarayan	Jeppier Engineering College, Chennai	22.05.2019/One month	25,000
2020-2021				
12	Dr. K. Balamurugan	ITC Limited, Bangalore	07.10.2020/1 Year	46,72,800
13	Department of Physics, Alagappa University	Researchers from various institutions	2020-2021/1 Year	1,90,123
14	University Science Instrumentation Centre, Alagappa University	Researchers from various institutions	2020-2021/1 Year	7,96,494
2021-2022				
15	Department of Physics, Alagappa University	Researchers from various institutions	2021-2022/1 Year	6,66,506

16	University Science Instrumentation Centre, Alagappa University	Researchers from various institutions	2021-2022/1 Year	3,90,226
17	Centre for Women Studies (Dr. K. Manimekalai)	Rural Training Center, Amaravathipudur, Karaikudi	21.02.2022/4 Years	1,25,000
2022-2023				
18	The Director, MIS, Alagappa University	Tamilnadu Teachers Education University	28.06.2022	2,00,000
19	The Director, MIS, Alagappa University	Mother Teresa University	15.09.2022; 07.08.2023	75,000
20	Dr. A. Arun	Sustainable Hydrogen for Valuable Application (SHYVA), France	29.05.2023/5 Months	50,000
21	Department of Physics, Alagappa University	Researchers from various institutions	2022-2023/1Year	11,33,796
22	University Science Instrumentation Centre, Alagappa University	Researchers from various institutions	2022-2023/1 Year	7,80,094
23	Dr. J. Jeyakanthan	Dept. of Bioinformatics, Sri Krishna Arts and Science College, Coimbatore	17.01.2023/4 Months	10,000
24	Dr. J. Jeyakanthan	Dept. of Biotechnology, University College of Engineering, BIT Campus, Anna University, Trichirappalli	30.06.2023/One month	10,000
Total (INR)				2,68,67,832