KRUPANIDHI COLLEGE OF PHARMACY

(AICTE Approved | ISO 9001-2015 Certified)

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year for the year 2018-2019

Sri Adichunchanagiri College of Pharmacy	CLICK HERE
C.L Media	CLICK HERE
Mallige College of Pharmacy	CLICK HERE

MEMORANDUM OF UNDERSTANDING

BETWEEN

ADICHUNCHANGIRI COLLEGE OF PHARMACY, B G NAGAR-571448,

KARNATAKA

&

KRUPANIDHI COLLEGE OF PHARMACY,

#12/1, Chikkabellandur, Carmelaram post, Varthur Hobli, Bengaluru -560035

MoU for a period of three year starting from August 2017 to July 2020

This memorandum of understanding (the 'MoU') is made and entered into this day of August 2017 between:

1. **Adichunchanagiri College of Pharmacy, BG Nagar, Karnataka**
2. **Krupanidhi College of Pharmacy**, #12/1, Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore – 560035

Whereas Adichunchanagiri College of Pharmacy is an academic institution offering various courses in Pharmacy i.e., D. Pharm, B.Pharm, M.Pharm, Pharm D & Ph D courses.

Whereas Krupanidhi College of Pharmacy, Bangalore is an academic institution offering various courses in Pharmacy. i.e., D. Pharm, B.Pharm, M.Pharm &, Pharm D, Pharm D (Post Baccalaureate) Ph.D (Pharmacy) courses.

This MoU is for providing the training of students & faculty of Adichunchanagiri College of Pharmacy arranging invited guest lectures for a period of 03 years from the date of signing and it may be renewed on mutual consent & agreement.

Now therefore both the parties agree to follow terms and conditions regarding the extension of knowledge to Adichunchanagiri College of Pharmacy for Pharm D, B. Pharm and M. Pharm courses.

Krupanidhi College of Pharmacy ★ IQAC Date:..... ★ Bangalore-35 ★

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

Sri Adichunchanagiri
College of Pharmacy
Approved by PCI, New Delhi
NBA Accredited, ISO 9001 : 2015 Certified

ADICHUNCHANAGIRI
UNIVERSITY

CERTIFICATE OF APPRECIATOION (CONSOLIDATED)

As per the MOU made between Krupanidhi College of Pharmacy and Sri Adichunchanagiri College of Pharmacy, the following Seminars/Training have been undertaken during **2018-2019**.

2018-19

Sl.No.	Date	Name of the Resource Person	Seminars Delivered
1.	10-09-2018	Dr.Rajendra S V	Cell lines in advanced Research
2.	22-12-2018	Prof. Dr. Kuntal Das	Reverse Pharmacognosy
3.	31-01-2019	Dr.Samuel Gidon George	Sample size calculations for clinical studies

Krupanidhi College of Pharmacy IQAC Bangalore-35

Principal
Sri Adichunchanagiri College of P
B.G. Nagara-571448

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

TERMS AND CONDITIONS

1. The Adichunchanagiri College of Pharmacy shall utilize the faculty from Krupanidhi College of Pharmacy in academic knowledge gaining in the form of guest lectures, invited talks or seminars as the case may be.
2. Adichunchanagiri College of Pharmacy can work closely with Krupanidhi college of Pharmacy, Bengaluru on matters of mutual interest in order to achieve and accomplish the academic objectives of the institution.
3. The M. Pharm students shall be permitted to undergo training in Pharmacology, Biostatistics and Research Methodology, Formulations, quality assurance etc related to Pharmacy on periodical basis during their respective academic year as per the University/College Calendar of events.
4. Even along with M. Pharm, B. Pharm and Pharm D students shall be allowed to undergo training in subjects/research as the case may be on periodical basis as per University/College calendar of events.

   The first party shall extend the following facility to the second party;

   a. There is no financial commitment between both the parties and it is left to the discretionary power of both the managements. However, consolidate certificate containing all the resource persons names with topics delivered/training imparted shall be provided for that academic year.
   b. The first party shall provide facilities during Training programme/Seminars/invited guest lectures
   c. This agreement is initially valid for three years and may be continued in future at the discretion of the both the parties.

Signed for and on behalf of
Adichunchanagiri College of Pharmacy
B G Nagara

Principal

Principal
Adichunchanagiri College of Pharmacy
B.G. Nagara-571448

Seal:
Date: **10/08/2017**

Adichunchanagiri College of Pharmacy
B.G. NAGARA
PIN-571448

Signed for and on behalf of
Krupanidhi College of Pharmacy,
Bengaluru

Chairman/Secretary/Principal

Seal:
Date: 10/08/2017

Krupanidhi College of Pharmacy
IQAC
Date:
Bangalore-35

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

3.5.1

सत्यमेव जयते

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Government of Karnataka

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सत्यमेव जयते

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Krupanidhi College of Pharmacy IQAC Date: Bangalore-35

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur
Varthur Hobli, Post,
560 035

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is entered on 29th Day of July 2019.

Between

CL Media Ltd (hereinafter referred to as 'CLM'), a company incorporated under the Indian Companies Act, 1956 having its registered office at **A-45, First Floor, Mohan Cooperative Industrial Area, Main Mathura Road, New Delhi – 110044** and is a 100% subsidiary of CL Educate Limited, and represented by its undersigned of the ONE PART;
And

Krupanidhi Educational Trust (hereinafter referred to as 'KET'), having its campus at **12/1, Chikka Bellandur, Hobli, Carmelaram P.O., Varthur, Bengaluru, Karnataka 560035** represented by undersigned of the OTHER PART;

KRUPANIDHI EDUCATIONAL TRUST Authorised Signatory

Statutory Alert:
1. The authenticity of this Stamp Certificate should be verified at "www.shcilestamp.com". Any discrepancy in the details on this Certificate and as available on the website renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

N. Srichand

The scope of activities agreed upon, would start only after the respective payments are received by CLM as per the above schedule.

In addition to the Professional fee, KET agrees to pay a success fee basis the Research success matrix as defined below over Twenty-Four (24) months:

Type of Papers	No. of Research Papers	Success Fee per Paper (Rs.)	Remarks
IEEE, Scopus, Web-of-Science, Web-of-Social-Science, ABDC Journals, Case Studies, PubMed, SCI, SCIe, etc.,	<50	Rs.0.00	Success Fee will be ZERO, if the number of Papers is less than 50.
	50+	Rs.3,000.00	If the number of Research Papers is 85, Success Fee would be calculated as Rs.3000 x 85 = Rs.2,55,000
	100+	Rs.4,000.00	If the number of Research Papers is 135, Success Fee would be calculated as Rs.4000 x 135 = Rs.5,40,000
	150+	Rs.5,000.00	If the number of Research Papers is 175, Success Fee would be calculated as Rs.5000 x 175 = Rs.8,75,000

The Invoice for success fee would be raised at the end of 24 months basis the actual number of Research papers Communicated till then, in each Type of Research Paper mentioned above.

This shall be payable on a regular basis within Fourteen (14) days of invoices being submitted by CLM with relevant supporting documents.

AKMS shall also deserve a 20% success fee of total grant amount for all successful extramural research funding obtained through projects in which AKMS has significantly contributed to design, development and successful grant of research funding from government, non-government and industrial sources.

INDEMNIFICATION

a) Both the parties agree to indemnify each other with respect to any claims, loss or damage, unless such claims, loss or damage result from the negligence or acts of any of the party or its employees.
b) Each party agrees to assist the other party in taking appropriate action and further agrees to commence such action if legal necessity so requires.

EFFECTIVE DATE:

This MOU will take effect from the date it is signed by representatives of the Parties.

This MOU outlines the Scope of Services and the Professional Fee and Success Fee payable for a period of 24 months for the 400-500 Students who would be in their Second year as on July 2019 in the mentioned programs.

The Scope of Services for next batch of students who will be entering their second year as on July 2020 in the mentioned Programs shall be discussed and finalized separately.

The MOU would provide for all the activities as agreed upon between CLM and KET to be executed in totality, in the eventuality of MOU expiring before the completion of Activities.

Extensions may become effective upon final signature of the appropriate parties.

PRINCIPAL
Krupanidhi College of Pharma
Chikkabellandur, Carmelaram P
Varthur Hobli - 560

GOVERNING LAW AND DISPUTE RESOLUTION:

Any Dispute connected with formation, performance, interpretation, nullification, termination, or invalidation of this Agreement or arising therefrom or related thereto in any manner whatsoever shall be resolved by mutual discussion or conciliation between the Parties.

If the Dispute is not settled between the Parties within 90 days' time, it shall be referred to a sole arbitrator to be jointly appointed by the Parties. In case the Parties do not agree on appointment of a sole arbitrator, then the matter will be referred to a panel of three arbitrators, constituted by one arbitrator each to be appointed by both the Parties and the third arbitrator to be appointed by the two duly appointed arbitrators. The arbitration will be conducted in accordance with the provision set forth in the Indian Arbitration and Conciliation Act, 1996 (the "Act").

The place for holding such arbitration proceedings shall be New Delhi or Bengaluru. Arbitration shall be conducted in English language. The decision of the Arbitrator shall be final and binding upon both the parties.

The parties agree that only the Courts in New Delhi or Bengaluru in the Republic of India shall have jurisdiction to entertain proceedings related to this Agreement whether during pendency or after expiry/termination. No other court shall have jurisdiction.

N. Jindal

Whereas, CLM and KET shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party", the Parties has decided to agree to establish industry-academic collaboration in areas of mutual interest and in accordance with terms and conditions set forth in this Memorandum of Understanding (MOU). CLM *and* KET *agree* on following:

SCOPE OF WORK:

CLM will provide Consultancy, Solutions & Services for setting up and supporting the Krupanidhi Research Incubator Center [KRIC] in the different institutions under KET (Krupanidhi Group of Institutions offering MBA, PGDM & MCA [KGI], Krupanidhi Degree College [KDC], Krupanidhi College of Pharmacy [KCPH], Krupanidhi College of Physiotherapy [KCPY] and Krupanidhi College of Nursing [KCN]) under the Aegis of Accendere (Accendere Knowledge Management Services: A CL Educate group entity, focused on Research, hereinafter referred to as 'AKMS').

About AKMS:

Accendere Knowledge Management Services (AKMS) is focused on Research and help clients like Educational Institutes & Corporates to imbibe a culture of Research, Setup Process and create Research Papers and extend support in publishing it in relevant Journals.

The work would encompass variety of activities Viz. Enabling approximately 400-500 students (from PGDM, MBA, Nursing, Physiotherapy, Pharmacy & Degree programs) through the process of Research. The students would be grouped in Three's (3) with one Faculty from KET being tagged to 2 to 3 Groups of Students.

The Research Mentors along with Faculty of KGI, KDC, KCPH, KCPY and KCN will hand-hold and guide the students to pursue a Research Idea and follow the process of Research (Introductory & Exploratory Lectures, Literature Review, Topic Crystallization, Data Collation & Analysis / Research Assignments, Identification of relevant Conference or a Journal to present/publish the paper, prepare the Research Paper, Communicate the paper and follow-through).

The entire process will be coordinated by Two (2) Full-Time Research Mentors from AKMS. The Research Mentors will be dedicated to KET and will be available in their campus as per their Academic Calendar, for executing the work. This Full-Time Research Mentors would be from the Management area. In addition to these two full-time mentors, Research mentors would be made available over Phone & Video to support the Faculty and Students in other specialized areas.

KET will ensure that a time-slot of 2 to 3 hours per week (During the working hours) is provided to these Students & Faculty Members to undertake the Research Incubation Program.

KET would also be provided Access to AKMS's proprietary "Research Incubator Software" with secured Login provided for all the Research Students and Faculty of KET. The software helps KET Management to keep track of the Progress of Research Incubator services provided by CLM and AKMS.

Each Party shall appoint one nodal officer to periodically review and identify ways to strengthen cooperation between them. AKMS shall set-up an Accendere Innovation Center which shall be the cornerstone of the above activities on campus.

Basis discussions, other aspects of engagement shall include but not limited to the following:

- Student motivation and encouragement sessions.
- Listing of student and faculty Research projects in CL's WAIN platform.

CLAUSE OF CONFIDENTIALITY:

CLM maintains high levels of confidentiality and pledges not to disclose any client specific data, company information or any sensitive information (Including research topics or patent models) that may otherwise prove detrimental to KET. CLM also urges KET not to disclose any service provider data, training materials, handouts, presentations, training tools or any other specific material that may otherwise prove detrimental to the CLM.

EXIT CLAUSE:

The parties may choose to exit this agreement unilaterally by providing 3 (Three) month's notice to the other party or under mutual consideration. All payments due for services provided up to the period where the MoU is in force will have to be paid in full.

NON-COMPETITION CLAUSE:

Under the Non-Competition clause, any of the party cannot hire or take any kind of service from any of other parties associated with the implementation of research incubator for a period of three years after the expiry of the validity of this MOU.

N. Vinaharal

Krupanidhi College of Pharmacy IQAC Date: Bangalore-35

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

SIGNED IN DUPLICATE:

This MOU is executed in duplicate with each copy being an official version of the Agreement and having equal mutual validity.

for Krupanidhi Educational Trust

Dr. Sam Paul
Director

for CL Media Pvt. Ltd.,

Mr. Nikhil Mahajan
Executive Director and Group CEO

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

Krupanidhi College of Pharmacy
IQAC
Date:
Bangalore-35

Journal of Pharmaceutical Sciences and Research
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Self Emulsifying Drug Delivery Systems: Progress till now

A N Kavitha*, G L Aporrva, Gayatri Jayakumar
Krupanidhi College of Pharmacy, 12/1, Chikka Bellandur, Carmelaram post, Varthur Hobli, Off Sarjapur Road, Bangalore- 560035

Abstract

Over 40 % of the new age drugs have poor hydrophilicity. This causes issues in formulation and thereby limiting its dissolution and bioavailability, forcing them to be given intravenously resulting in increased production cost, poor patient compliance, and toxicity in long term therapy. Self Emulsifying Drug Delivery System (SEDDS) is a pharmaceutical formulation aimed at increasing the dissolution of orally administered drugs, mainly BCS II class of drugs in GIT. The approach overcomes the problem of dissolution limited absorption of hydrophobic drugs and therefore minimum effective concentration of drug in plasma is attained. SEDDS consists of different proportions of oil, surfactant, and cosurfactant which modify the solubilising capacity of the drug and thereby varying the drug release profile. The aim of this review is to summarise the potential applications of SEDDS for increasing the oral bioavailability of BCS class II drugs. This review details about the selection of lipid system, surfactants and cosolvents. The review provides the overview of potential application of self emulsified system, and effectively summarizes the progress made till now in this domain.

Key Words: Biosurfactants, Bioavailability, Poorly soluble drug, QbD, SEDDS,

INTRODUCTION

Oral drug delivery systems including tablets and capsules are the most conventional and widely used dosage forms due to their relative safety, stability in storage and ease of production in bulk. They also have better patient compliance and enables self-administration compared to parenteral dosage forms. But recently their formulation has become increasingly difficult as the majority of these drugs have poor aqueous solubility (BCS Class II), which is one of the prerequisite factor to formulate any drug as oral dosage forms, thus leading to poor dissolution and bioavailability.

A number of techniques are used to overcome this problem including micronization, solid dispersions, liposomes etc. Self Emulsifying Drug Delivery System or SEDDS is one such method, which is used to enhance the dissolution and bioavailability of lipophillic drugs (BCS II and IV) [1,2], which have poor aqueous solubility [3]. In SEDDS formulation, drugs are incorporated in soft or hard gelatin capsules with inert liquid vehicles containing oil, surfactant and co-surfactant.

Unlike emulsions, in SEDDS, only the dispersed phase is formulated and administered orally, while the continuous phase is the GI fluid. The GI fluid with mild agitation disperses the drug to form an oil-in -water emulsion, to present the drug in solubilised form thus eliminating dissolution rate limiting processes.

SEDDS is associated with the production of emulsions with a particle size ranging from a few nanometers (nm) to several micrometers (μm). Depending upon the droplet size, SEDDS can be classified as Self Micro Emulsifying Drug Delivery Systems (SMEDDS) and Self-Nano Emulsifying Drug Delivery Systems (SNEDDS) [4]. SMEDDS form transparent microemulsions with oil droplets ranging between 100 - 200 nm, whereas SNEDDS can produce microemulsions with droplet size lesser than 100 nm [5].

Even though the mechanism by which they enhance solubility is not clearly known, as the average droplet size of the emulsion decreases, zeta potential increases; hence the repulsive forces prevents coalescence and stability is attained without phase separation. Also as the droplet size reduces, surface area exposed to the dissolution media increases [6]. In addition, the co-surfactants along with surfactants decrease the interfacial surface tension between oil droplet and aqueous media and thereby increase the solubilisation, hence enhancing the dissolution rate and their ability to enter into lymphatic circulation; thereby bypassing first pass metabolism, enhancing their bioavailability.

FORMULATORY ASPECTS OF SEDDS

SEDDS are the isotropic mixtures of oil, surfactant and cosurfactant, which emulsifies spontaneously in presence of GI fluids under mild agitation to form oil in water (O/W) emulsion (nano/micro).Nano/Micro emulsion region is characterized by the ternary phase diagram. The three major components which represent the ternary phase diagram are oil, surfactant and aqueous phase. If cosurfactant is used, it will represent as single component by mixing at a fixed ratio with surfactant and treated as single pseudo component. The apex of the triangle represents the individual component of the system, and the corresponding volume fraction is 100 %.The loading of drug to SEDDS formulation is very crucial because the drug obstructs with the self-emulsification process. So, the development of an optimal SEDDS formulation proceeds with the preformulation-solubility studies for further screening of excipients to develop ternary phase diagram[7]. The water titration method can be used to investigate concentration range of oil, surfactant and cosurfactant, which could give the boundaries for nano/micro emulsion region in pseudo ternary phase diagram.

The formulation development proceeds with the proper selection of oil, surfactant, and cosurfactant. While formulating, it is necessary to have correct ratio of the drug, oil, surfactant and co-surfactant for better and

The performance of the SEDDS formulation depends upon the stability of the product. SEDDS are thermodynamically stable systems where the capability of SEDDS to withstand various stress conditions can be checked through thermodynamic stability studies. The stressed thermodynamic studies involve subjecting the formulations into freeze thaw cycle, centrifugation and heating cooling cycle [57].

Heating cooling cycle: It involves cooling and heating (six cycles each)at refrigerator temperature (4°C) and at elevated temperature (45°C) with an exposure period of not less than 48 hrs. The stable formulations are further subjected to centrifugation study[39].

Centrifugation test: The SEDDS formulations are subjected to centrifugation test to observe phase separation. The formulations are centrifuged at 3500 rpm for 30 min at different temperatures. The formulations are further subjected to freeze thaw cycle, if there is no phase separation observed after centrifugation [58].

Freeze thaw cycle: The formulations are stored for not less than 48 hrs at the temperature between 21°C and 25°C. The formulations which show no phase separation, cracking and creaming re determined as having good thermodynamic stabilities [32].

Rheological properties

The rheological properties like viscosity and flow of SEDDS has to be checked to characterize the system physically and to control its stability. The SEDDS are filled into either hard gelatine capsules or soft gelatine capsules; hence SEDDS should have good flow characteristics in order to ensure uniform filling into the capsules [59].

Self-emulsification

The self-emulsification property of SEDDS formulation can be checked by subjecting to aqueous dilution under mild agitation. The SEDDS should disperse rapidly and completely. The role of surfactants is to reduce the interfacial tension and facilitate the formation of emulsion [60].

The efficiency of self-emulsification of oral nano or micro emulsion is evaluated by standard USP XXII dissolution apparatus for. Based on the visual appearance and self-emulsification time, self-emulsifying systems can be graded as the following [61].

Grade I: Emulsion formed with in one minute, clear bluish appearance and emulsion with droplets in nano range

Grade II: Emulsion with bluish white appearance, less clarity and formed rapidly.

Grade III: A fine milky white emulsion formed within two minutes

Grade IV: Emulsification takes more than 2 min and dull greyish in appearance.

Droplet size

The droplet size of the emulsion is an important factor to evaluate the stability and release of drugs. Because droplet size governs the intestinal absorption and oral bioavailability of the drug, smaller the droplet size, higher the surface area and this results in better release characteristics [62]. The droplet size will have a profound influence on the permeability of drug through intestinal mucosa. The droplet size can be determined by diffraction technology [63].

Zeta Potential

The charge of the droplet can be determined by checking the zeta potential. The degree of electrostatic repulsion between particles in a dispersion system depends on the value of zeta potential. Zeta potential helps in predicting the stability of emulsion [64]. The stable SEDDS formulations will have zeta potential greater than -30 mV. In conventional SEDDS, the charge of an oil droplet is negative because of the presence of free fatty acids. It was also observed that addition of surfactant led to decrease in the particle size which leads to an increase in the zeta potential value.

CONCLUSION

The progress made till now has made it possible to formulate SEDDS in bulk, thus decreasing the production cost and enhance therapeutic benefits. SEDDS also has been proven to reduce side effects due to less drug accumulation and enhances the therapeutic activity which is beneficial for long term therapy. With the advent of biosurfactants its benefits and application of numerical optimization and DoE methods to SEDDS has far enhanced the capability as an effective drug delivery platform than it was envisioned earlier. Application of these newer concepts in SEDDS as noted, has improved the viability and manufacturability of these formulations, thus offering a potential solution to one of the formulators primary requirement of safety and bioavailability.

Acknowledgement

The authors express their sincere gratitude to The Management, Krupanidhi Group of Institutions for supporting the work through Krupanidhi Research Incubator Centre (K-RIC) program under Krupanidhi College of Pharmacy and Dr. S. Parthasarathi, Accendere: CL Educate Ltd.

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MALLIGE COLLEGE OF PHARMACY

71, SILVEPURA, CHIKKABANAVARA POST, BANGALORE : 560 090.

(Recognized by AICTE, PCI, New Dehli, RGUHS Bangalore)

Web : www.mallige.ac.in, E-mail : mcpbangalore@ymail.com, Phone 080-28446702,

Ref. No.

Date 20.03.2019

APPRECIATION LETER
TO RESOURCE PERSONS (CONSOLIDATED)

2018-19

Sl.No.	Date	Name of the Resource Person	Seminars Delivered
1.	17-10-2018	Dr. Rajendra S V	Cell lines in research
2.	19-11-2018	Dr. Rajendra S V	Flow cytometry-Applications in advanced Research
3.	22-12-2018	Dr. Samuel Gideon George	ADME predictions through *in silico* approaches
4.	12-03-2019	Dr. Samuel Gideon George	Protein Modelling by *ab-initio* threading

PRINCIPAL,
Mallige College of Pharmacy
Bangalore-560 090

Krupanidhi College of Pharmacy IQAC Date: Bangalore-35

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

MALLIGE COLLEGE OF PHARMACY
#71, SILVEPURA, CHIKKABANAVARA POST, BANGALORE : 560 090.
(Recognized by AICTE, PCI, New Dehli, RGUHS Bangalore)
Web: www.mallige.ac.in E-mail: mcpbangalore@ymail.com, Phone: 080-28446702.

17-7-18 Date

MEMORANDUM OF UNDERSTANDING

BETWEEN

MALLIGE COLLEGE OF PHARMACY, BENGALURU

71, Sivepura, Chikkabanavara, Bengaluru-560088

&

KRUPANIDHI COLLEGE OF PHARMACY,

#12/1, Chikkabellandur, Carmelaram post, Varthur Hobli, Bangalore -560035

MoU for a period of three year starting from August 2017 to July 2020

This memorandum of understanding (the 'MoU') is made and entered into this day of August 2017 between:

1. **Mallige College of Pharmacy, Bengaluru**
2. **Krupanidhi College of Pharmacy**, #12/1, Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore – 560035

Whereas Mallige College of Pharmacy, Bengaluru is an academic institution offering various courses in Pharmacy i.e., D. Pharm, B.Pharm, M.Pharm, Pharm D & Ph D courses.

Whereas Krupanidhi College of Pharmacy, Bangalore is an academic institution offering various courses in Pharmacy, i.e., D. Pharm, B.Pharm, M.Pharm &, Pharm D, Pharm D (Post Baccalaureate) Ph.D (Pharmacy) courses.

This MoU is for providing the training of students & faculty of Mallige College of Pharmacy, arranging invited guest lectures for a period of 03 years from the date of signing and it may be renewed on mutual consent & agreement.

Now therefore both the parties agree to follow terms and conditions regarding the extension of knowledge to Mallige College of Pharmacy, Bengaluru for Pharm D, B. Pharm and M. Pharm courses.

PRINCIPAL
Krupanidhi College of Pharmacy
Chikkabellandur, Carmelaram Post,
Varthur Hobli, Bangalore - 560 035

Krupanidhi College of Pharmacy IQAC Date: Bangalore-35