## 3.5.1. Number of MoUs, collaborations / linkages for Faculty exchange, Student exchange, internship, field trip, on-the-job training, research and other academic activities during the last five years.

SI. No.	Name of the MoU / Collaboration / linkage	Name of the collaborating agency / institution / industry / corporate house with whom the MoU / collaboration / linkage is made, with contact details	Year of signing MoU / collaboration / linkage	Duration of MoU / collaboration / linkage	List the actual activities under each MOU and web -links year-wise	Link to the relevant document
			2017 - 18			
1	Intership	Agriculture College, Navale, Shivamogga	2017	120 Days		
	moromp	Sinvanogga	2018-19			
		KS Hegde Medcial College,		1	1	
1	Collaboration	Nitte University, Deralakatte, Mangalore	2018	03 years		
2	Faculty Exchange	College of Food Science and Engineering, Oceana University of China, China	2018	1 Year		
3	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
4	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
5	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
6	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
7	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
8	Intership	Central Research Laboratory, KS Hegde Medical Academy, Mangalore	2018	120 Days		
9	Intership	Central Research Laboratory, KS Hegde Medical Academy, Mangalore	2018	120 Days		
,	mersnip	Ivialigatore	2019 - 20			
			Nill 2020 -21			
			2020 -21 Nill			
			2021-22			
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3 er Dr. Vittal Rao. K.S Dept. of Chemistry Sahyadri Science College, Shimoga.

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PRINCIPAL SAHYADRI SCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnataka State.



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Certificate Issued Date	:	25-Aug-2016 10:47 AM
Account Reference	:	SHCIL (FI)/ ka-shcil/ SHIMOGA/ KA-SM
Unique Doc. Reference	:	SUBIN-KAKA-SHCIL495293015690110
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Description of Document	;	Article 12 Bond
Description	:	MoU
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First Party	:	SAHYADRI SCIENCE COLLEGE
Second Party	:	MANGALORE INSTITUTE OF ONCOLOGY
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Stamp Duty Amount(Rs.)	:	100 (One Hundrad only)

For Stock Holding Consecution of India Ltd.,

rised Signatory

(Constituent College of Kuvempu University)

SHIMOGA, Karnataka State.



......Please write or type below this line .....

This memorandum of understanding (herein after referred to as "Agreement ") is made and executed on this 14" Oct 2016. BETWEEN PROMOTION OF CONTRACTOR

Sahyadri Science College (SSC), Kuvempu University, Shivamogga 577203, Karnataka, India, Represented by its Principal, Sahyadri Science College (SSC), Kuvempu University, Shivamogga 577203. Hereinafter called as First Party;

#### AND

Mangatore Institute of Oneology, Pumpwell, Kankanady, Mangatore.575002, a cancer hospital under the management of M/s Mangalore Institute of Oncology Private Limited incorporated under the Companies Act, 1956 having its registered office at No.225/16(5), Pumpwell, Mangalore-575002 and represented by its Director Dr. Suresh Rao, Herein referred to as A(10 (2\* Party),

#### (Collectively referred to as Parties)

### Whereas

First Party is an Autonomous college affiliated to Kuvempu University and is involved in teaching and percent. I" party vas on lookout for a collaboration with a cancer hospital for research and approached party II for the same MIX having agreed to SAHYADRI SCIENCE COLLEGE 🥐

19. Victol Rev. K.S Dept of Chemistry

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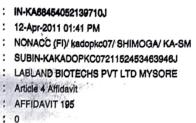
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Certificate No. Certificate Issued Date Account Reference Unique Doc. Reférence Purchased by Description of Document Description Consideration Price (Rs.)

First Party Second Party Stamp Duty Paid By Stamp Duty Amount(Rs.)





#### (Zero)

- : LABLAND BIOTECHS PVT LTD MYSORE
- : REGISTRAR KUVEMPU UNIVERSITY SHANKARAGHATTA
- : LABLAND BIOTECHS PVT LTD MYSORE

: 100

(One Hundred only)

SHI ANULGA-HPO 577 201

#### 1. The Parties

Dr

Dept Sahyak This Memorandum of Understanding has been entered into on this 19<sup>th</sup> day of April, 2011. The parties to this Memorandum of Understanding shall be the following:

Please write or type below this line

 Kuvempu University, here-in-after referred to as KU, with its office at Jnane. Sahyadri, Shankaragiatta, Shimoga, Karnataka State, India,

and

Registrar Kuvempu University 9/4/1 Shankaroghatta-577 451

Shimoga. (Constituent College of Kuvempu University)

SHIMOGA, Karnataka State.



(2) Labland Biotech Private Limited, here-in-after referred to as Labland, a private limited Company registered under the Indian Companies Act 1956, with its Registered and Administrative Office located at 8<sup>th</sup> K. M., K. R. S. Main Road, Mysore 570 016, Karnataka State, India

Labland has been recognized by National institutions as well as Universities as a Plant Science and Plant Biotech Company. Labland is a Mysore Universityrecognized research centre; the research and development unit of the company is recognized by the DSIR, Ministry of Science and Technology, Government India; the tissue culture production facility of the company is recognized by the National Accreditation Agency for Tissue Culture, DBT, Ministry of Science and Technology, Government India; Labland has a number of Government supported R & D projects on Jatropha.

#### 2. Intentions

- i. Kuvempu University, being Kamataka State University wishes to explore collaborative research opportunities in the field of interest to both the parties
- II. Labland, being a Company registered in India under Company Number 08/16040/09.08.1994 is engaged in research and commercial activities on Plant Science and Plant Biotechnology. Labland wishes to explore collaborative research with the KU in the field of Bio-energy, Plant Science and Plant Biotechnology including Jatropha plant science, Jatropha-based Biodiesel production and by-product research.

#### 3. Purpose

The purpose of this Memorandum of Understanding, hereinafter referred to as the "Memorandum", is to confirm the willingness of both the parties to jointly establish a bio-energy park in the land identified by the KU.

Dr. Vittal Rao. K.S Dept. of Chemistry Sahyadri Science College, Shimoga.

Registrar

Kuvempu University Shankaraghatta-577 451

SAHYADRI SCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnatakara

## for the series of Government of Karnataka

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#### 4. Agreements

In order to facilitate the successful closure of this Memorandum, the Parties agree as follows:

- A Bio Energy Park will be established at the college premises of Sahyadri Science College, which is a constituent college of KU, Shimoga in association with Kuvempu University and Labland Biotech Private Limited, Mysore.
- 2. Jatropha curcas plants will be cultivated in 2 Acres land allocated by the Kuvempu University in the above said premises.
- 3. In this context, the concerned activities such as land preparation, planting, harvesting, seed processing eto will be carried out by the Department of Botany and Seed Technology of the Sahyadri Science College, Shimoga in association with Labland Biotech Private Limited, Mysore. The expenses to implement and manage the project will be borne by the Kuvenpu University, Shimoga.
- 4. This project shall be complementary to academic development. The bio-energy park will serve as a source of information on bio-energy Project works, cultivation of *Jaropha curcas*, maintenance of plantation, various stages of pre- and post harvest management. Market and Research related to bio-energy project for the student community.
- Labland Bioteoh Private Limited; Mysore will buy-back the seeds produced in the above said premises at a price of Rs. 10,000 per tonne of dry seeds on at a prevailing price whichever is higher.
- 6. Department of Botany and Seed Technology in association with Labland shall write/submit response to obtain research grants from various funding agencies such the Department of Biotechnology, the Department of Science and Technology, the UGC, and such other national and international agencies or from the state government agencies.

Dr. Vittal@Banks K.S DebtijoofsGleingianekues Sahvadei Scienge (College () S. N.Shimebartu (), 1/()

Registrar Kuvempu University Shankaraghatta-577 451

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(Constituent College of Kuvempu University SHIMOGA, Karnataka State.



- Labland shall assist in designing a P.G. Diploma course in the topic related to Jatropha curcas and Bio Energy in association with the Department of Botany and Seed Technology. In addition, Labland will also assist in designing the syllabus for the P. G. course with an elective paper.
- Department of Botany and Seed Technology in association with Labland shall hold workshops/farmer friendly programmes at local and state levels in the related matter to popularize *Jatropha curcas* cultivation in wasted land.
- Labland shall provide revenue generation model to the Kuvempu University, and also provide training on *Jatropha curcas* cultivation to one or two staff members of the Department of Botany and Seed Technology, Shimoga.
- 10. All decisions regarding the project implementation, management or cancellation of any matters will vest with the Vice-Chancellor, Kuvempu University, Shimoga.
- Both the parties agree that the Director, Bio-energy park centre is authorized to decide and take suitable action on the expenditure and income related parameters.
- 12. The Jatropha plantation jointly developed by both the parties would serve as an R & D plot, and demonstration plot of the University, and also would be presented as the Jatropha-based Bio-energy Park of the University.
- Effective Date: This Memorandum shall come into force on the date when both the parties affix their signatures.

Dr. Vittal Rao. K.S Dept. of Chemistry Sahyadri Science College, Shimoga.

Registrat

Kuvempu University Shankaraghatta-577 451

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14. Period of Memorandum of Understanding: This memorandum shall last for 5 years from the date of signing this Memorandum and can be extended on a mutually agreeable basis.

#### Signatures

Signed for and on behalf of Kuvempu University, Shimoga

Prof. M. Krishmappatrar

Registrar Kuvempu University . Shankaraghatta-577 451

Place: 19-04- 2011 Date: stantardute

Witnesses

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1. nance Officer Ruvempu University ankaisgattia 877

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Ker MAINROAD BOTH L.N., MUSORE IL

Signed for and on behalf of Labland Blotech Private Limited, Mysore

li.s.f

Dr. Geetaa Singh Managing Director



SAHYADRISCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnataka State.



Dr. Vittal Reo. K.S Dept. of Chemistry Sahyadri Science College, Shimoga.

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### ಅಧಿಸೂಚನ

## ವಿಷಯ: Bio-enrgy park ಕಂದ್ರದ ಸಲಹಾ ಸಮಿತಿಯನ್ನು ರಚಿಸುವ ಕುರಿತು. ಉಲ್ಲೇಖ: ಮಾನ್ಯ ಕುಲಪತಿಗಳ ಅನುಮೋದನೆ ದಿನಾಂಕ: 11-01-2011

ದಿನಾಂಕ: 04-09-2010 ರಂದು ಚರುಗಿದ ಸಿಂಡಿಕೇಟ್ ಸಭೆಯಲ್ಲಿನ ತೀರ್ಮಾನದಂತೆ ಹಾಗೂ ಮಾನ. ಕುಲಪತಿಗಳ ಅನುಮೋದನ ಮೇರೆಗೆ, ಸಹ್ಯಾದ್ರಿ ವಿಜ್ಞಾನ ಕಾಲೇಜಿನ ಆವರಣದಲ್ಲಿ Bio-Energy Park ಕೇಂದ್ರವನ್ನು ಸ್ಥಾಪಿಸಲು ಉದ್ಯೇಶಿಸಲಾಗಿದ್ದು, ಈ ಸಂಬಧ ಸದರಿ ಕೇಂದ್ರದ ಸ್ಥಾಪನ ಮತ್ತು ನಿರ್ವಹಣೆ ಕಾರ್ಯ, ಅದಕ್ಕೆ ತಗಲಬಹುದಾದ ಖರ್ಚು ವೆಚ್ಚದ ಬಗ್ಗೆ ಹಾಗೂ ಇತರೆ ಸಂಬಂಧಿತ ಕೆಲಸ ಕಾರ್ಯಗಳ ರೂಮರೇಶಗಳನ್ನು ಸಿದ್ಧಪಡಿಸುವ ಸಂಬಂಧ ಈ ಕೆಳಕಾಣಿಸಿದ ಸದಸ್ಯರನ್ನೊಳಗೊಂಡ ಸಲಹಾ ಸಮಿತಿಯನ್ನು ರಚಿಸಲಾಗಿದೆ.

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2	ಅಧ್ಯಕ್ಷರು, ಸ್ನಾತಕೋತ್ವರ ಸಸ್ಯಶಾಸ್ತ್ರ ಅಧ್ಯಯನ ವಿಭಾಗ, ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಶಂಕರಘಟ್ಟ	ಅಧ್ಯಕ್ಷರು
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1. ಕುಲಸಚಿವರು, ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಶಂಕರನಟ್ಟ

2. ಹಣಕಾಸು ಅಧಿಕಾರಿಗಳು, ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಶಂಕರಘಟ್ಟ

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Ittal Rao. K.S Dr. Dept of Chemistry Sahyadri Science College, Shimoga,

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## KUVEMPU

UNIVERSITY

## DEPARTMENT OF POST GRADUATE STUDIES AND **RESEARCH IN BIOTECHNOLOGY** SAHYADRI SCIENCE COLLEGE SHIMOGA

## **CERTIFICATE**

This is to certify that the thesis entitled "IMPACT OF MICROBIAL INOCULANTS ON GROWTH AND YIELD OF SORGHUM" submitted by Ms. SYEDA MISBA FATHIMA, for the degree of "Master of Science" from Kuvempu University, is the result of the project work carried out by under the Guidance of Mrs. Banumathi R L, Lecturer, . Department of Biotechnology, Sahyadri Science College, Kuvempu University, Shimoga and Dr. S. PRADEEP Co- ordinator, organic farming Research Centre, UAHS, Navile, Shimoga During the period of 2018.

I further declare that results of this investigation have not been previously submitted for any degree or fellowship. Co-ordine.or P.G. Bepartment of Biotechnology Saturadai Science Cellege (14Tonomous)

VALUED Date: 2814.19 aminas

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shinwar 513 costs moneta Dr. Pradeep K Assistant Professor and PG Coordinator Department of Biotechnology Sahyadri Science College Kuvempu University

Shivamogga

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of Chemist Dept Sahyada Place: Shimoga Shimoda.

Dates.

SAHYADRI CIEN CE COLLEGE Constituent College of Kuvempu University SHILLOGA, Karnataka State.



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## **Government of Karnataka**

### e-Stamp

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<b>Description of Document</b>	: Article 12 Bond
Description	: MEMORANDUM OF UNDERSTANDING
Consideration Price (Rs.)	: 0 (Zero)
First Party	: DEPT OF BIOTECHNOLOGY SAHYADRI SCIENCE COLLEGE
Second Party	K S HEGDE MEDICAL ACADEMY NITTE UNIVERSITY
Stamp Duty Paid By	: DEPT OF BIOTECHNOLOGY SAHYADRI SCIENCE COLLEGE
Stamp Duty Amount(Rs.)	: 100 (One Hundred only)

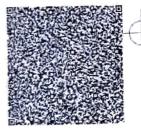


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MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (Mole) in price in the as agreement) is made and executed on-.....

Between Sahyadri Science College, Department of Biotechnology, a constituent college under Kuvempu University, having its Principal place of operations at NH 206, Vidya Nagar, Shivamogga, Karnataka, India 577203 herein after referred as SSC . represented by it's Dr. H.S. Bhojya Naik , REGISTRAR, Kuvempu University, herein after called as First part.

K.S. Hegde Medical Academy, P.O Deralakatte, Mangalore - 575018 which is a constituent college of NITTE (Deemed to be University) hereinafter referred as KSHEMA with DEAN Dr. P.S Prakash S/o Suryanarayana Upadhya aged about 62 years as the authorized signatory or its authorized representative as the Second Part

SAHVADR Registrar> (Constituent Co Dr. Vittal ReRUVEMPU UNIVERSITY, SHIMOGA, Dept. of Chemistry a Sahyadri, h-adem) Sahyadri Scienshankaraghatta-577 451. Hegde Mert E. POST HITHMANNIN AAUAA GATORE DOAL UNE Computer and an Statistical Alignment of the Statistic Control in Statistical Control in Statistical Control in Statistical Statistics of the ventiled at "www.strelestan DER available on the statistical and statistical Control in Statistical Con KARNATAKA

## Whereas

- 2. First Party-SSC is a Autonomous and constituent college under Kuvempu University localed at Shivamogga and is involved in teaching, research and also recognized as research center 1° party was on lookout for collaboration with KSHEMA, and approached Second party KSHEMA for the same. Second Party having agreed to the same, and, after mutual discussions both parties have agreed to enter into this MoU by defining the objectives, the extent and the limits of the relationship. The terms and conditions of this MoU are as follows,
- 3. KSHEMA will help SSC with their proposed research endeverous with a condition that the study project will be initiated only after the approval of the Institutional Ethics Committee of K.S.Hegde Medical Academy. The study will be conducted by the designated students, staff only after they are trained to handle ethical issues and aware of the hospital rules.
- 4. KSHEMA will provide a working place for the designated student in their laboratory with permission to use the existing facility. The expenses related to the same will be borne by the actual Principal Investigator involved in the research work from their research grants from both the sides. The financial arrangement relating each such project agreement and programs of cooperations shall be in accordance with the specific agreement and programs of cooperations covering all areas in each project.
- 5. Both the institutions agree to seek financial support for the collaborative research programs from appropriate funding agencies (DST SERB, DBT, UGC, ICMR, BRNS) as equal or partially collaborators in the field of translation and investigative molecular biology after a defailed intellectual input from both the parties. When the applied grants are sanctioned and to be initiated, both the institutes will appropriately share the resources and manpower and take equal responsibility to take the study alread as per the guidelines received by the funding agency
  - 6. Information on research results and specific materials (reports, article and books) related to joint study will be exchanged freely keeping in mind the mutually agreed provision of Intellectual Property Rights. All intellectual property solely conceived and or developed by SSC during the course of this agreement shall be owned by the SSC. All intellectual property solely conceived and or developed by KSHEMA during the course of this agreement shall be owned by KSHEMA. The SSC and KSHEMA agree to collaborate towards the protection. if appropriate and application of such intellectuall property for commercial or other purpose on mutual acceptable terms to be negotiated in good faith between the parties.
  - 7. Research publications, if any out of collaborative research work shall be in the name of the investigators from both the parties with prior mutual consent of both the parties. When the authors have contributed equally, the 1st and corresponding authorship will be shared in accordance to the guidelines specified by committee on publications ethics (COPE). Publication will be suitably acknowledged that work has been carried out jointly under action of corresponding funding ageneics.

Continued ... Dr. Vittal Rao. K.S SAHVAD Dept. of Chemistry onstituent Col Sahyadri Science College Registran SHIMOG KUVEMPU UNIVERSITY, Shimoga. Inana Sahyadri, POST NITHYA MANGALORE - 575 UIN Shankaraghatta-577 15 ... KARNATAKA Shivamogga District

the same and after mutual discussions both parties having come to a mutual understanding to the terms and conditions of which are as follows:

- MIO will help SSC with their proposed research endeavors as collaborators with a condition that the study project will be 1) initiated only after the approval of the Ethics committee. The study will be conducted by the designated students/staff only after they are trained to handle ethical issues and aware of hospital rules.
- MIO will provide a working place for the designated student in their laboratory with permission to use the existing facility. The 2) SSC staff/student will also be provided access to selected patient information with a faith that they will adhere to the ethics of patient confidentiality especially with regard to sensitive information. If the benefactor misuses any of the facilities provided, MIO will withdraw the services offered and inform the head of the institution.
- Both institutions agree to seek financial support for collaborative research programs from appropriate funding agencies (DB) 3) UGC, ICMR, BRNS) as equal collaborators in the field of translational and investigative molecular biology after a detailed intellectual input from both the parties. When the applied grant is sanctioned and to be initiated, both the institutes will appropriately share the resources and manpower and take equal responsibility to take the study ahead.
- Information on research results and scientific materials (reports, articles, books) will be exchanged freely keeping in mind the mutually agreed provision of Intellectual Property Rights. All intellectual property solely conceived and/or developed by SSC 4) during the course of this agreement shall be owned by the college. All intellectual property solely conceived and/or developed by MIO during the course of this agreement shall be owned by Mangalore Institute of Oncology. Intellectual property jointly conceived and/or developed by SSC and MIO will be jointly owned by SSC and MIO. SSC and MIO agree to collaborate towards the protection, if appropriate, and application of such intellectual property for commercial or other purposes on mutually acceptable terms to be negotiated in good faith between the parties.
- Research publications, if any out of collaborative research work shall be in the names of the investigators from both parties, with prior mutual consent of both parties. When the authors have contributed equally, the 1<sup>st</sup> and the corresponding authorships 5) will be shared in accordance to the guidelines specified by Committee on Publication Ethics (COPE). Publication will be suitably acknowledged that the work has been carried out jointly under the aegis of corresponding funding agencies.
- MIO is active in spreading knowledge on cancer awareness to the general public and students on aspects like cancer habits and symptoms under the acgis of cancer education wing. When MIO proposes any cancer awareness program in the Shimoga region 6)
- it will expect help from the institution in providing the college venue and intellectual support for the program. MIO is strongly in support to have interested student's visit their hospital for neademic study tours and also permit a couple of designated master's students for their project work. MIO also gives full permission to SSC to place this MOU to academic 7)
- bodies like UGC, NAAC and other affiliates for advancing the service to its students and society at large. In case of any dispute or difference in relation to this Agreement between the party the same shall be resolved by mutual negotiations or conciliation initially and if that fails the same may be got resolved by referring to arbitration in accordance with the provisions of Indian Arbitration & Conciliation Act 1996 by appointing a sole arbitrator by mutual consent failing which by S)
- the competent court and the award of the Arbitrator shall be binding on both the parties. The Arbitrator so appointed shall pass a reasoned award within 6 months or such extended period by mutual consent. The cost of arbitration shall be borne equally. The venue of arbitration shall be at Mangalore or any other place by mutual consent.

This MoU is made in two originals (each party retaining one original) and comes in to force on the day when both parties have signed

In witness whereof the parties hereto have executed this MoU through their authorized representatives.

For and on behalf of Sahyadri Science College (A) 0 Name: Smt. G. Shankunthala Designation: Principal hyadn Science College (Autonomous) Seal: ine of Kovempo Daiversity) 1841 trattie Stat Witness 1 Signature: VAGDE M. Name: Chairman Designation Department of Chemistry adri Science College (Autonomous) Scal: SHIVAMOGGA - 577 203 Witness 2 Signature: Dr. Prabhakar. B.T.Ph.D. Name: Assistant Professor Designation: Bept. of Bisterlinology Place: Sabyadri Science Collinge (Auto) Seal: Shimoga 577 203. Date: Dr. Vittal Rabi Mos 2016 . Dept. of Chemistry Sahyadri Science College, Shimoga.

For and on behalf of Mangalore Institute of Oncology

DR. SURES Reg. 10: 271

Name: Dr Suresh Rao Designation: Executive Director Scal:

Witness 1 Signature: Name: Designation: Seal:

No. Reg

Witness 2 Signalute: Name: Designation: Seal:

physic medical

MANGALORE INSTITUTE OF ONCOLOG (A Unit of Mangalore Oncology Group Pumpwell Circle, Mangalore - 575002

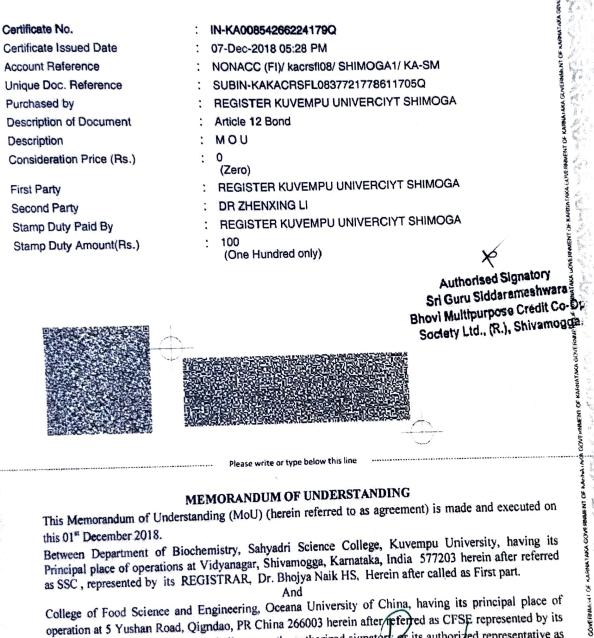
SAHYADRI SCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnataka State.



### INDIA NON JUDICIAL

## **Government of Karnataka**

#### e-Stamp



operation at 5 Yushan Road, Qigndao, PR China 266003 herein after referend as CF3E represented by its Dr. Zhenxing Li, Professor of Food allergy, as the authorized signatory or its authorized representative as the Second Part. 1 PRINCIPAL

Dr. Vittel Rao. K.S Dept: of Steutory, Heftry Dept: of 1 The authenicity of this Stamo Certificate should be ventied at www.shclessumptum on Science College Sahyadri Science of any discrepancy please inform the Competent Authority ShiPtionae of any discrepancy please inform the Competent Authority

#### Whereas

First Party- SSC is a constituent college of Kuvempu University located at Shivamogga and is involved in teaching, research and also recognized as research center. Ist party was on lookout for collaboration with CFSE and approached Second party –CFSE for the same. Second Party having agreed to the same and, after mutual discussions both parties have agreed to enter into this MoU by defining the objectives, the extent and the limits of the relationship. The terms and conditions of this MoU are as follows.

Food allergy lab of CFSE will help Department of Biochemistry SSC with their proposed research endeverous and support to use the facilities for research during the visit after approval. Dr. Siddanakoppalu N. Pramod from SSC was offered a visiting faculty fellowship for three months starting from 20<sup>th</sup> December 2018 to 20<sup>th</sup> March 2019 to do a collaborative work and to explore the possibility of further research cooperation mainly concerning sea food allergy at Oceana University China. The study will be conducted by the designated staff only after they are trained to handle ethical issues and aware of the rules and guidelines of the hoist institution. CFSE will provide a working place for the designated faculty/student in their laboratory with permission to use the existing facility. The expenses related to the same will be borne by the actual Principal Investigator involved in the research work from their research grants from both the sides. The financial arrangement relating each such project agreement and programs of cooperations shall be in accordance with the specific agreement and programs of cooperations covering all areas in each project.

Both the institutions agree to seek financial support for the collaborative research programs from appropriate funding agencies of the host countries as equal or partially collaborators in the field of translation and investigative in the area of food allergy after a detailed intellectual input from both the parties. Information on research results and specific materials (reports, article and books) related to joint study will be exchanged freely keeping in mind the mutually agreed provision of Intellectual Property Rights. All intellectual property solely conceived and or developed by SSC during the course of this agreement shall be owned by the SSC. All intellectual property solely conceived and or developed by CFSE during the course of this agreement shall be owned by CFSE.

The SSC and CFSE agree to collaborate towards the protection, if appropriate and application of such intellectual property for commercial or other purpose on mutual acceptable terms to be negotiated in good faith between the parties. Research publications, if any out of collaborative research work shall be in the name of the investigators from both the parties with prior mutual consent of both the parties. When the authors have contributed equally, the 1st and corresponding authorship will be shared in accordance to the guidelines specified by committee on publications ethics (COPE). Publication will be suitably acknowledged that work has been carried out jointly under aegis of corresponding funding agencies. Both the institutions hereby agree to facilitate institute visit for the interested Faculty /student's during their academic study tours upon prior written approval from both parties and also agree to permit designated masters students for their project work upon prior written approval from both parties or place this MOU to academic bodies like UGC, NAAC and other affiliates for advancing the services to its students and society at large.

Continued...

Dr. Vittal Reo. K.S Dept. of Chemistry Sahyadri Science Collage, Shimoga.

2 SAHYADRI SCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnataka State.

- 14. This MoU represents the entire agreement as to the subject matter hereof and supercedes and cancels any & all prior agreements undertakings between the parties on the said aspect.
- 15. This MOU is made in two original (each party retaining one original) and comes in to force on the day when both parties have signed it. In witness where of the parties here to have executed this MOU through their authorized representatives.

for and on behalf of

Sahyadri Science College-(SSC) Kuvempu University

Name: Dr. H.S. BEIO Reals

Designation: OTHERECISTRARY Seal: Jeans Schwadri Shord 21 (Sister Astronoge) (Lister Karnatska (State)

Witness 1

Dr. Shashirekha K.R. Principal Witness 2 Sabyadri Science Collogo Charge artCollege of Kevempri

- P

Jr. Prabhakar. B. T. Ph. J. Assistant Professor Dept. of Biotechnology Sahyadri Science College (Auto) Shimoga-577 203.

> Dr. Vittal Rao. K.S Dept. of Chemistry Sahyadri Science College, Shimoga.

For and on behalf of

K.S Hegde Medical Academy -(KSHEMA) Nitte University

DR. P.S PRAKASH 10108118

Dean Design Kics: Hooder Medical Academy Design Kics: Hooder Medical Academy Seal: DERALAKATTE, POST NITHYANANDA NAGAR Seal: MANGALORE - 575 018 KARNATAKA

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Witness 2 ingapoznan 20/

Vice Dean K. S. Hegde Medical Academy DERALAKATTE, POST NITHYANANDA NAGA MANGALORE - 675 018 KARNATAKA

SAHYADRI SCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnataka State.



## CERTIFICATE

This is to certify that the dissertation entitled" A Pilot Study: Association of Vitamin D Receptor gene polymorphism FokI(rs10735810) in epithelial ovarian cancer women" submitted by Ms. Chaitra H R., II MSc, Department of Biotechnology, Kuvempu University, Sahyadri Science College, Shimoga, has been carried by her in the Central Research Laboratory, K.S. Hegde Medical Academy, Deralakatte, under my guidance for the partial fulfilment for the award of Degree of Master of Science in Biotechnology and no part thereof has been presented for any other degree.

16/07/2018 Mangalore.

Dr. Vittel Rao. K.S. Daut. of Chemietry Salvedn Scierke Collaide Shurking, Scierke

Constituent College of Revenue Union a Constituent College of Revenue Union a College of Revenue Union a College Medical Academy, Deralakatte

Dr. SUCHETHA KUMARI N. Professor Department of Blochemistry K.S. Hegde Medical Academy Deralakatte, MANGALUKU 575 018 KARNATAKA, INDIA

Dr. Suchetha Kumari. N. Principal Scientific Officer Molecular Genetic Lab. KUVEMPU

PG Department and Research Studies in Biotechnology

Sahyadri Science College

Shimoga- 577203

## **CERTIFICATE**

This is to certify that the topic entitled "Loranthus micranthus mediated silver nanoparticle, characterization and biological activity" submitted by SIDDESH B M for the degree of "Master of Science" from Kuvempu University is the result of the project work carried out by them under the guidance during the period 2018-19.

I further declare that results of this investigation have not been previously submitted for any degree or fellowship.

Mrs. PALLAVI.M Lecture Dept. of biotechnology Sahyadri Science College Kuvempu University Shimoga

Date: 03/05/19

Place: Shimoga

Dr. Vittal Rao. K.S Dept. of Chemistry Sahyadri Science College, Shimoga.

SAHY VPRISCIPNCF COLLIGE (Constitution College of Nuversity) SHIMOGA, Karnaraka State.

# KUVEMPU UNIVERSITY DEPARTMENT OF P.G. STUDIES AND RESEARCH IN BIOTECHNOLOGY SAHYADRI SCIENCE COLLEGE, SHIMOGGA - 577203

## CERTIFICATE

is to certify that the project "POLYMORPHISM IN THE VDR GENE (Apal) AND RISK OF EPITHELIAL OVARIAN CANCER" submitted to the Kuvempu university for the award of master of science in biotechnology by Ms. Pooja T R. is the result of bonafide project work carried out by me in Central Research Laboratory K S Hegde Medical Academy Deralakatte, Mangalore, under the guidance of Dr. Shashi kumar R. Lecturer, Department of P G Studies and Research in Biotechnology, Sahyadri science college Shimogga during the period 2019.

I further certify that the work have not been previously formed the basis of any degree, associate ships fellowship etc, of any other university or institution.

103 2019 K.S Date: 20 emistry Sabyadri Science College, Place: Shimpgeda.

This

(Dr. Shashi Kumar. R.)

Project guide

SAHYADRI SCIENCE COLLEGE (Constituent College of kuvempu University) SHIMOGA, Karnataka State.



## DAYANANDA SAGAR COLLEGE OF ENGINEERING Department of Biotechnology

ps. Govindappa M. Associate Professor

Shaving Mailestwara Hills A consumments Lancout Dengalara 360038 draxidate/a07 segmail.com

## Certificate

This is to certify that the theses entitled "ANTIBACTERIAL AND ANTIOXIDANT PROPERTIES OF THE ENDOPHYTIC FENGAL EXTRACTS ISOLATED FROM FRUITS" submanal for the partial fulfilment of swand of degree of Masters in Science in Biotechnology, Sahvadri College of science, Kuvempu University, and Shimuga, Embedies the original research work carried out by SINDHE S and PRIVA V under my guidance.

We further certify that, this research work or part of it has not previously formed the basis for the award of any degree or diploma, associate ship and fellowship etc., of any University or Institute

[Dr. M. GOVINDAPPA] Research Co-Guide

Date De OS Place B

Dr. Vittal Rao. K.S Dept. of Chemistry

Sahyadri Science College, Shimoga.

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## DAYANANDA SAGAR COLLEGE OF ENGINEERING Department of Biotechnology

Dr. Govindappa M. Associate Professor

Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru-560078 draviidateja07@gmail.com

<u>Certíficate</u>

This is to certify that the thesis entitled "In-Silico and In-vitro Studies on Systemic Resistance Induced by Endophytic Fungi In "Solanum Lycopersicum" submitted for the partial fulfilment of award of degree of Masters in Science in Biotechnology, Sahyadri College of Science, Kuvempu University, and Shimoga. Embodies the original research work carried out by S V NAVARATNA AND MAMATHA N under my guidance.

I further certify that, this research work or part of it has not previously formed the basis for the award of any degree or diploma, associate ship and fellowship etc., of any University or Institute.

[Dr. M. GOVINDAPPA] Research Co-Guide

NUIPAT

SAHVADHI SCIENCE COLLEGE (Constituent College of Kuvempu University) SHIMOGA, Karnataka State.

Date: 08/05/2019 Place: Bengalum Dr. Vittal Reo. K.S Dept. of Chemistry Sahyadri Sciance College. Shinkoub.

4<sup>588204-26588662-26589620</sup>

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भारतीय आयुर्विज्ञान अनुसंधान परिषद INDIAN COUNCIL OF MEDICAL RESEARCH

# , No. 58/34/2020/PHA/BMS

वी. रामलिंगस्वाभी भवन, अन्सारी जगर, पोस्ट बॉक्स 4911, नई विल्ली - 110 029 V. RAMALINGASWAMI BHAWAN, ANSARI NAGAR POST BOX 4911, नइ विल्ला - 110 020 Defension of the second se

Date: 20/12/20

The Finance Officer VKuvempu Universitv Inanasahyadri, Shankaraghatta (P) Bhadravathi (Taluk) SHIMOGA, Karnataka State

Subject - Sanction of budget allotment for project entitled, "Repositioning HIF-1 alpha inhibitor BP-1B for DNA Damage Response (DDR) to induce BRCA ness in Ovarian Cancer under Dr. B.T. Prabhakar, Assistant Professor, Department of Biotechnology, Sahyadri Science College, Kuvempu University, Shivamogga

### Sir.

The Director General of the ICMR sanctions the above mentioned research scheme initially for a period of One Year with effect from 13/01/2022 subject to extension up to the total duration as specified in para 5

- The Director General of the Council also sanctions the budget allotment of Rs. 12,66,645/- as detailed in the 1. attached statement for the period from 13/01/2022 to 12/01/2023 The grant-in-aid will be given subject to the
- 2. The payment of the grant will be made in lump-sum to the Head of the Institute. The first instalment of the grant will be paid generally as soon as report regarding appointment of the staff is received by the Council. The Staff appointed on the project should be paid as indicated in the budget statement.
- The staff on the project will be recruited as per the rules and procedure of the host institute and second part of 3 the undertaking be obtained from the employees of the project. The staff grant will not be released unless the required undertaking [part-II] from Head of the Institute is received in this office.
- The Host Institute shall utilize the grant after following the provisions laid down in the GFRs 2017 and TA rules. 4.
- The demand for payment of the subsequent instalment of the grant should be placed with the Council in the 5 prescribed Performa. The approved duration of the scheme is Three Years. The annual extension will be given after review of the work done on the scheme during the previous year.
- Five copies of the annual progress report in the attached prescribed Performa should be submitted to the ICMR 6. every year after completion of ten months of the project giving complete actual details of the research work done. Failure to submit the report in time may lead to termination of project.
  - Subject to the condition that the grant will be utilize after following the provisions laid down in the GFRs-2017 & 7. TA Rules. Please keep the fund in a separate Saving Bank Account opened for ICMR funded Research Projects so that interest earned thereon is credited in to this account.

The receipt of this letter may please be acknowledged.

Vittal Rao. K.S

SAHYAD

Yours faithful

(I.P.Singh) Admn. Officer for Director General

- Copy together with a copy of the budget statement forwarded to information to sense University 1. Dr. B.T. Prabhakar, Assistant Professor, Department of Biotechnology, Sahyadri Science College, Kuvempu 2. Accounts - V for information.
- 3. Copy together with the budget forwarded to Budget Section [Finance Section] for compilation of the Council Budget.

Admn. Officer for Director General

Metric	Ney Indicators 3.5 – Collaboration (20)	Weightage
3.5.1. QnM	The number of MoUs, collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the-job training, research and other academic activities during the last five years	20
	3.5.1.1 Number of MoUs, collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research and other academic activities during the last five years: 12	
	<ul> <li>File Description (Upload)</li> <li>Institutional data in the prescribed format</li> <li>Upload supporting document</li> </ul>	Con Car



3.5.1. Number of MoUs, collaborations / linkages for Faculty exchange, Student exchange, internship, field trip, on-the-job training, research and other academic activities during the last five years

SI. No.	Name of the MoU / Collaboration / linkage	Name of the collaborating agency / institution / industry / corporate house with whom the MoU / collaboration / linkage is made, with contact details	Year of signing MoU / collaboration / linkage	Duration of MoU / collaboration / linkage	List the actual activities under each MOU and web -links year- wise	Link to the relevant document
		2016 - 17				
1	Collaboration	Mangalore Institute of Oncology, Manglore.	2016	03 years		
2	Collaboration	Labland Biotechs Private limited	2016	05 Years		
	1	2017 - 18				1
1	Intership	Agriculture College, Navale, Shivamogga	2017	120 Days		
		2018 - 19		24/3		
1	Collaboration	KS Hegde Medcial College, Nitte University, Deralakatte, Mangalore	2018	03 years		
2	Faculty Exchange	College of Food Science and Engineering, Oceana University of China, China	2018	1 Year		
3	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		-
4	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
5	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
6	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
7	Intership	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bangalore	2018	120 Days		
8	Intership	Central Research Laboratory, KS Hegde Medical Academy, Mangalore	2018	120 Days		
9	Intership	Central Research Laboratory, KS Hegde Medical Academy, Mangalore	2018	120 Days		
		2019 - 20	11 20		4	
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	es.	2020 - 21				
-	20 C	Nill				