

To,



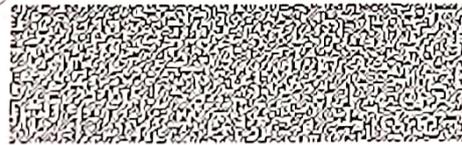
सत्यमेव जयते

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 Description of Document : Article 12 Bond
 Description : AGREEMENT
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 First Party : JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGG SHIMOGA
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MEMORANDUM OF UNDERSTANDING

This memorandum of understanding (MoU) is made and entered as of Dtd. 6th Mar 2019, by and between (Henceforth referred to as "Participating Institute" in this document)

Participating Institute: Jawaharlal Nehru National College of Engineering (JNNCE), Shivamogga-577 204

And

Company : Lekha Wireless Solutions Pvt. Ltd, Roshini Chambers, No.947, 24th Main, J P Nagar II Phase Bangalore - 560 078

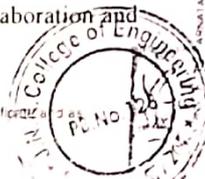
We Department of Department of Telecommunication Engineering and Electronics & Communication Engineering, JNNCE and Lekha Wireless, have come together to collaborate and to make an agreement for MoU. The partners entering the MoU have agreed to form collaboration and agree to the following article and clauses:

Statutory Alert

The authenticity of this Stamp Certificate should be verified at www.snoilestamp.com. Any discrepancy in the details on this Certificate as displayed on the website renders it invalid. Checking the legitimacy is on the users of the certificate. In case of any discrepancy please inform the Competent Authority.

Signature of Participating Institute:

Signature of Company:



To,

Article I) Purpose and Scope:

The article wish to explore a collaboration of mutual interest and benefit (the "Opportunity") and in connection with the opportunity, this document highlights points of general agreement that help establish common understanding.

Article II) Background:

In the continuous pursuit to enhance the value it provides its students; **Participating Institute** deems industry-relevant programs a natural fit.

When delivered by proven industry practitioners, these programs hold great promise at multiple levels. Not only do they deliver the relevant and most contemporary class – room learning, but with a well- implemented Workshop program, they have the potential of quickly setting up dynamic centers of excellence on the campus.

As one of the fast-growing innovators in wireless communication space, company sees great value in working with JNNCE and developing this ecosystem of well trained, practical and innovative Engineering graduates. By bringing in the combined expertise of industry professional from diverse technology streams, as well as a number of interesting real-world projects, Company is well positioned to make this a win-win engagement.

Article III) Roles and responsibilities of Company

As a practicing industry partner, **Company** will contribute in multiple capacities:

- a) By instituting and executing a class–room curriculum program for the UG/PG the relevant streams. The curriculum will include such high-value topics such as signal processing, communication systems, RF systems and components, along with the practical application on wireless technologies with SDR concepts. Details of the specific courses will be published in due course and will be defined from time to time.
- b) By instituting a Research center program that executes industry–relevant projects: This will involve 'live' projects that will give the eligible students an opportunity to apply their classroom learning in a real world scenario.
- c) By providing consulting expertise as and when required.
- d) By sharing Company Office infrastructure to enable industry exposure to the students, where deemed relevant as per mutual agreement.
- e) By providing a Student internship program at Company
- f) By providing screening, interviewing and assessment services for the classroom courses as well as the workshop projects and helping the students with Internships offers through Company contacts. The remuneration for the specific Services for each course shall be determined and agreed upon, by mutual agreement from time to time by the parties hereunto. before the commencement of the course.

Article IV) Roles and Responsibilities of the individual Participating Institute:

Providing the availability of the computer lab infrastructure (where the classes will be conducted) will be the responsibility of JNNCE, who will also provide, subject to personnel and budgetary limitations and as may be mutually agreed upon:

- a. Internet, library facilities and other such requirements which may be necessary for company deputed faculty members, only to carry out their assigned work.



Article IX) MoU extensions:

- a. This MoU may be supplemented by work plans to be developed jointly, which describe more specifically the activities to be carried out under this collaborative program and which set forth the envisaged contribution of each party.
- b. JNNCE, and Company may name members of their respective staff to work out further details for proper and effective implementation of this MoU
- c. Such details as agreed upon, including any other amendments, will be confirmed by exchange of letters between JNNCE and Company and such letters will form part of this MoU.
- d. These work plans will require the approval of both parties for implementation.

Article X): Effective Date and signatures

This MoU will be in effect initially for a period of 1(one) year from the date of signing of this MoU by both parties after which it may be reviewed for possible extension.

Either party may terminate the MoU by written notification signed by the appropriate official of the institution initiating the notice. Such notice must be reviewed by other party six months prior to the effective termination date. However, obligations and commitments already contracted for and involving third parties shall be honored and continued by both parties until such commitments are completed.

Signed and executed on Dtd 6th March 2019 by Department of ECE and Telecommunication Engg of JNNCE and Lekha Wireless Solutions Pvt Ltd for a period of one year, with the signatures from both the parties below

Lekha Wireless Solutions Pvt Ltd

JNNCE, SHIMOGA,

By



Name: RAMU T.S

Title: Director

Date: 06-03-2019

Place: Bangalore

By


Principal

Jawaharlal Nehru National
College of Engineering, Shivamogga,
Name: Dr.H R Mahadevaswamy

Title: Principal

Date: 06-03-2019

Place: Shimogga

- b. Relevant space to company on the online/ offline notice areas of the college for program related communications.
- c. Recognition to company as "Research Partners" for conducting research related to wireless communication and other discipline to be identified from time to time.
- d. Invitation to Company to sponsor/participate in National /International / workshops/ conferences/seminars and other important technology/ business meetings relevant to them.

Article V) communication for the Live Industry Projects:

The details of industry projects and their communications shall be based on mutually agreeable terms, subject of course to such conditions of intellectual protection as may be thought fit.

Article VI) No Obligation:

Each party understands and agrees that nothing herein requires either party

- a) to disclose any confidential information, which shall be disclosed, if at all, solely at the discretion of the disclosing party subject of course to such conditions as may be thought fit.
- b) to proceed with the opportunity or any relationship in connection with which confidential Information may be disclosed, or to refrain from entering into an agreement or negotiation with any other party nothing in this Agreement shall be construed as creating any joint venture, teaming arrangement, partnership, or other formal business organization or agency arrangement between the parties.

As used herein, the party disclosing Confidential Information is the "Disclosing Party" and the party receiving the confidential Information is the "Recipient".

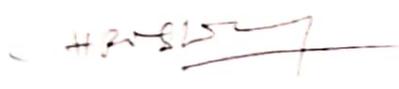
Article VII) No License:

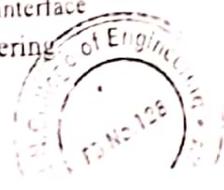
All of the Disclosing Party's Confidential Information shall remain the sole property of the Disclosing Party. Nothing in this MoU is intended to grant any rights to either party under ant patent, copyright, trade secret or other intellectual property right of the other party, nor shall this MoU grant either party any rights in or to other party's Confidential Information except as expressly set forth herein.

Article VIII) Permitted use:

The recipient agrees that it shall use the Disclosing Party's confidential Information solely for the purpose of evaluating the opportunity and shall not reverse engineer, disassemble or decompile any prototypes, software or other tangible objects which embody the Disclosing Party's Confidential Information unless express written consent to such actions is received from the Disclosing party.

If such a prohibition is not permitted pursuant to applicable law, the recipient shall provide the Disclosing Party Written notice prior to undertaking any such reverse engineering and shall give the Disclosing party a reasonable amount of time to provide any interface information required by law prior to commencing such reverse engineering. If such interface Information is provided, then the recipient is prohibited from such reverse engineering.





National Education Society ®
Jawaharlal Nehru National College of Engineering, Shivamogga – 577 204
(Approved by AICTE, New Delhi, Certified by UGC 2f & 12B, Accredited by NAAC, Recognized by Govt. of Karnataka
and Affiliated to VTU, Belagavi)

INTERNAL QUALITY ASSURANCE CELL
Department of Telecommunication Engineering
One Week National Level Workshop on “LTE-Advanced and It's Research Challenges”

Inauguration Invitation

Date: 28th January 2019 **Time:** 09:30am **Venue:** Sir.M.V. Seminar Hall (Civil Dept.)

Chief Guest : **A.T. Kishore** Senior member IEEE,
CEO, Vidhya Sangha, Bengaluru

Honourable Presence

Sri A.S. Vishwanatha
President, NES, Shivamogga

Sri S.N. Nagaraja
Secretary, NES, Shivamogga

Sri C.R. Nagaraja
Treasurer, NES, Shivamogga

Sri T.R. Ashwatha Narayana Setty
Vice President, NES, Shivamogga

Sri D R Amarendra Kireeti
Joint Secretary, NES, Shivamogga

Presided by: **Dr. H. R. Mahadevaswamy**
Principal, JNNCE, Shivamogga

Presence: **Dr. L. K. Sreepathi**
Vice-Principal, JNNCE, Shivamogga

You are cordially invited by

Coordinator: **Dr. Dr. Ushadevi** Professor and Head, TCE. Dept.
Conveners: **Prof. Madhusudhan G.** Asst.Professor, TCE Dept.
Prof. Anand Raj S.N. Asst.Professor, TCE Dept.

HOD & Staff, Dept. of Telecommunication Engineering, JNNCE, Shivamogga





One-Week National Level Workshop on “Long Term Evolution-Advanced and its Research Challenges”

Schedule (28-01-2019 to 01-02-2019)

Venue: Sir. M. V. Seminar Hall (Civil Dept.)

Date & Time	Session I 9:30 am to 11:00am	11.00 am to 11.15 am	Session II 11:15 am to 12:45pm	12:45 pm to 1:55 pm	Session III 2:00pm to 3:30pm	3:30 pm to 3:45 pm	Session IV 3:45pm to 5:15pm
28-01-2019 Monday	Inauguration Program (9-30 to 10-15am) Sri. M.V. Seminar Hall A.T. Kishore Senior member IEEE, CEO, Vidhya Sangha Bengaluru		OFDM Basics 36.21X A.T. Kishore Senior member IEEE, CEO, Vidhya Sangha Bengaluru		OFDM Basics 36.21X A.T. Kishore		OFDM Basics 36.21X A.T. Kishore
29-01-2019 Tuesday	LTE-A Support to IOT Dr. Vijaykumar B.P. Prof. and Head, Dept. ISE MSRIT, Bengaluru		CSI modelling estimation Dr. Yarriswamy Prof. & Head, Dept. of CSE, KLEIT, Hubli		Hands on OFDM Basics 36.331 A.T. Kishore		Hands on OFDM Basics 36.133 A.T. Kishore
30-01-2019 Wednesday	Research Challenges and opportunities in LTE system Dr. Priyatam kumar Prof. School of ECE, KLE Tech University, Hubli	Tea Break	NBIoT and LTE-M exploring machine to machine applications Dr.Ramakrishna joshi Asse. Prof., School of ECE, KLE Tech University, Hubli	Lunch Break	Software Defined Radio Dr. Arun L.K. Prof. School of ECE, KLE Tech University, Hubli	Tea Break	Research Challenges and opportunities in LTE-A system Dr. Priyatam kumar Prof. School of ECE, KLE Tech University, Hubli
31-01-2019 Thursday	Introduction to Lekha and its products & Basics of LTE-A Ashok H.S. Manager Lekha Wireless, Bengaluru		DL and UL Synchronization in LTE Mr. M.S. Veerabhadra Lekha Wireless		Understanding Basics of enhanced MIMO Mr. P.S. Kumaraswamy Lekha Wireless		Basics of Carrier Aggregation and Demo of Lekha's Waveguru Platform Lekha Wireless Team
01-02-2019 Friday	MIMO & its research challenges and Massive MIMO in 5G MIMOI in 5G Dr. Shreedhar Joshi Professor, Department of ECE, SDMCET, Dharwad.		Enhanced MIMO and its features related to LTE Dr. Shreedhar Joshi		Carrier Aggregation in LTE-A Research Challenges Madhusudhan G. Assistant Professor, Department of TCE, JNNCE, Shivamogga.		Valedictory and Certificate Distribution Program

Workshop Coordinators: - Madhusudhan G. Asst. Prof. and Anand Raj S.N. Asst. Prof.

Workshop Chair: Dr. Ushadevi M. B., Prof & Head, Dept. of TCE, JNNCE