Lourdes Matha College of Science & Technology

Lourdes Hills, Kuttichal, Thiruvananthapuram, Kerala – 695 574

National Conference

on

Management Innovations: Strategies for Global Business Excellence

3rd February, 2017

Registration form

Name :

Designation :

Department :

Name of the College :

Contact Address :

Mobile :

E-mail :

Title of the Paper :

Registration Category : Industry/ Faculty/ Research Scholar/Student/

Payment Details

Bank :

Amount (Rs.) : DD No. : Dated :

Signature of the Candidate

Conference Committee

Chief Patron

Most Rev. Mar Joseph Perumthotam (Patron, LMCST)

Patrons

Rev. Fr. Dr. Mani Puthiyidom (Director, LMCST)

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Conference Organizing Chair

Dr. V. Syam Prakash (Director, Dept. of Management Studies, LMCST)

Conference Organizing Advisor

Shri. Ignatious C. A. (Administrative Officer, LMCST)

Conference Secretary

Dr. A. Lenin Jothi

(Prof. & Head (Dept. of Management Studies, LMCST)

Conference Coordinator

Dr. K. Kumara Pillai

(Professor, Department of Management Studies)

Conference Committee Members

Mr. Reji John (Assistant Professor, Department of Management Studies)

Mr. Tony Jacob (Assistant Professor, Department of Management Studies)

Ms. Haritha Simon (Assistant Professor, Department of Management Studies)

Mr. Ranjit Thomas (Assistant Professor, Department of Management Studies)

National Conference

on

Management Innovations: Strategies for Global Business Excellence

"NCMISGBE – 17"

3rd February, 2017

Organized by

Department of Management Studies

LMCST TRIVANDRUM

Lourdes Matha College of Science & Technology

(Promoted by Lourdes Matha Catholic Education Society)

Lourdes Hills, Kuttichal, Thiruvananthapuram

Kerala – 695 574

Phone: 0472-2853550, 2853682, 2853643

E-mail: conferencelmcst@lmcst.ac.in

Website: www.lmcst.ac.in

About the Institution

Lourdes Matha College of Science and Technology established by the Lourdes Matha Catholic Educational Society has been approved by the Govt. of Kerala and the All India Council for Technical Education (AICTE) and is affiliated to the University of Kerala and APJ Abdul Kalam Technological University. The vision of the Society is to establish a "Centre of Excellence" in the field of Engineering and Technology to mould world class professionals. The College has a spacious campus of 25 acres at Kattachal, a rustic village in the outskirts of Thiruvananthapuram city, hardly 8 km away from it. The scenic beauty and virgin surroundings of the arduous lush green rubber plantations in the back drop of misty Western ghats and the serene, tranquil hillock provide a perfect environment for harmonious study. The college is known for imparting quality education to society and rendering social service without discrimination and has earned strong academic reputation. It offers 5 UG and 7 PG courses. LMCST is committed to mould world class professionals to meet the present and future needs of global market.

About the Department

The MBA programme of LMCST was started in 2005 with an intake of 60 students. Department has professionally qualified and experienced permanent faculty drawn from various streams of management discipline. A balanced mix of academicians and professionals from various business houses with experience contributes to the department's academic excellence. We are committed to quality management education. The pedagogy of LMCST is enriched with innovative teaching techniques establishing international standards and proven methodology to mould managers most suited to modern business world.

The prime focus of all our teaching and training efforts is the wholesome development of the young management aspirants. The department also invites experts from various industries/organizations for special guest lectures and promotes lively interactions of students with guest speakers. Seminars/ workshops/conferences were conducted with the active students' association of the department. Our students are regularly well placed in reputed organizations in banking, insurance, manufacturing, software, consultancy and financial services sectors.

Aim of the Conference

The objective of this National Conference is to bring together academicians, researchers and practitioners working on different fields of management and management students over the country and abroad and to provide a forum for exchange of information between scholars and practitioners on various issues in contemporary management practices and to bring new contributions to the management discipline. The Conference will bring latest ideas and innovative practices in management development. It also provides the participants an opportunity to present their research papers and conceptual thoughts, and to take part in open discussions. The conference will also consolidate the network among management professionals and initiate future research activities.

Call for Papers

Research Papers and articles based on original work are invited for submission and presentation from academicians, researchers, corporate professionals and students at Conference on innovative management practices and the following sub themes

General Management Practices

- Business, Government and Society
- Corporate Social Responsibility
- Business Communication
- Organisational Behaviour and Leadership
- Corporate Governance and Ethics
- International Business Environment
- Strategic Management

Financial and Accounting Practices

- Modern Accounting Practices
- Banking and Public Finance
- Money and Capital Markets
- Micro Finance System
- Risk Assessment and Management
- Green Finance
- International Accounting Standards

Human Resource Practices

- Strategic Human Resource Practices
- Knowledge Management
- Performance Appraisal
- Total Rewards Management
- Talent Acquisition and Management
- Stress Management

Marketing Management Practices

- Contemporary Marketing Practices
- Retail Marketing
- Services Marketing
- Online and Social Media Marketing
- Customer Relationship Management
- Rural Marketing
- Climate Change and Green Marketing

Operations Management Practices

- Manufacturing Processes
- Service Operations Practices
- Supply Chain Management
- Total Quality Management
- Project Management

The themes are only indicative and the authors may also submit papers on other relevant and contemporary topics of business management discipline.

Important Deadlines

Abstracts Submission	20 December, 2016
Acceptance of Abstracts	24 December, 2016
Full Paper Submission	10 January, 2017
Acceptance of Full Paper	20 January, 2017
Registration	25 January, 2017
Conference date	03 February, 2017

However, author(s) can send full paper along with the abstract, if it is n

Registration Fee

Industry Participants	Rs. 1,500
Academicians / Research Scholars	Rs. 1,000
Students/Participants	Rs. 200

Co-authors desirous of participation certificate and conference proceed are required to pay full registration fee. Registration fee is non-refund under any circumstances. However, changes in nomination woul accepted.

Submission process

Papers should be in 12 font size and Time New Roman and in APA Fo Abstract and papers can be e-mailed at conferenceemba@lmcst.ac.in Kindly visit our website www.lmcst.ac.in/conferenceemba/ for further upd and complete information on the conference.

Publication and Certificate

Papers presented would be published in conference proceedings in the of edited book with ISBN number. All participants will be issued a certi for attending / presenting a paper in the conference.

Papers in Absentia

Papers in absentia for those who cannot come due to some unavoid reasons, but wish to submit a paper are encouraged. Papers submitte absentia are eligible for publication. However, registration fee will remai same for the papers in absentia.

Payment Mode

The registration fee should be paid only through Demand Draft drawn favour of "The Principal, Lourdes Matha College of Science Technology", payable at Thiruvananthapuram.

Registration form along with DD should reach "The Conference Secret Department of Management Studies".

Contact Person

For further information, please feel free to contact

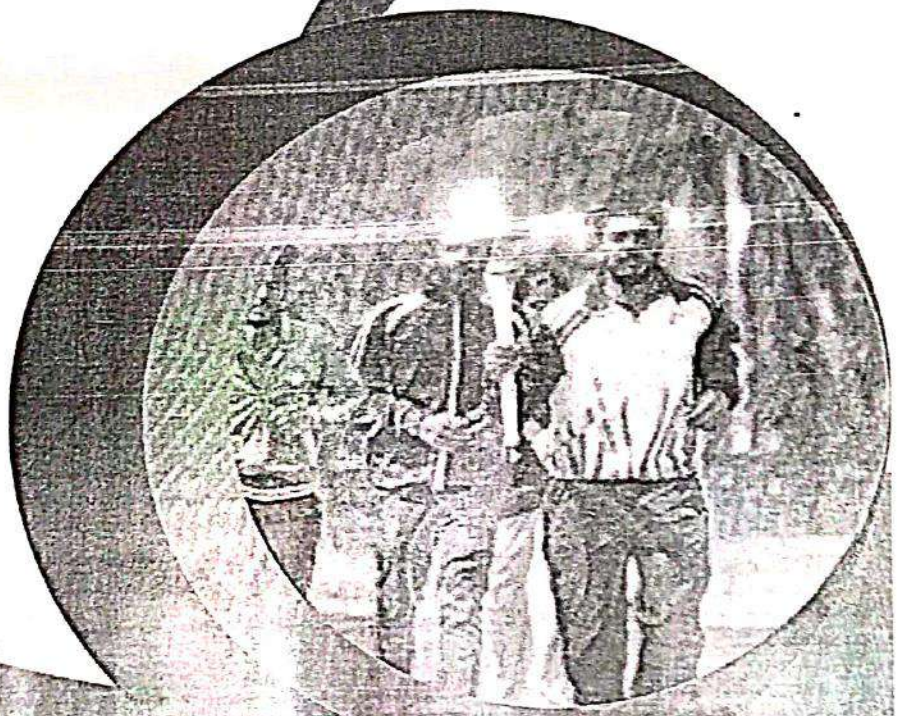
Dr. A. Leran Jothi, Conference Secretary
Professor & Head, Department of Management Studies
Phone Number: + 91 9810941948, 0472 - 2853660
E-mail ids: leran.jothi@lmcst.ac.in, leranjothimba@yahoo.com

The Department of Management Studies, LMCST organized National conference on "Management Innovations: Strategies for Global Business Excellence"- "NCMISGBE – 17" on 3rd February 2017.

VOL.9 ISSUE 1 JAN-JUNE 2017

LMCST NEWS

CELEBRATING 15 YEARS OF EXCELLENCE
(2002 - 2017)



LOURDES MATHA COLLEGE OF SCIENCE & TECHNOLOGY
(An ISO 9001:2008 certified institution)
Approved by AICTE & Affiliated to Kerala University
& APJ Abdul Kalam Technical University

• Chris Susan Varghese of S3 MCA represented LMCST in the Kerala University/A.P.J.Abdul Kalam Technological University Inter Collegiate Badminton Individual Championship during the year 2016-17 held at kollam.

• Chris Susan Varghese of S3 MCA secured first in the Inter-class Shuttle Badminton Girls Doubles Competition and second in the Inter-class Discus Throw Women, Shuttle Badminton Girls Singles and Shotput Throw Girls Competition at LMCST during the academic year 2016-17.

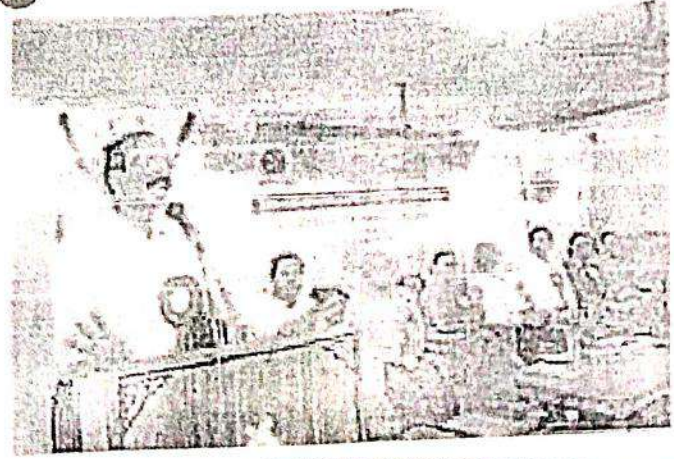
• Gurudath V.G. of S5 MCA has participated in 'Group Song' and 'Folk Song' in the kerala University Youth Festival during the academic year 2016-17.

DEPARTMENT OF MBA

Department News &Activities

• LMCST organized National Conference on "Management Innovations: Strategies for Global Business Excellence"- "NCMISGBE 17" on 3rd February 2017. Dr. K. C. Chandrasekharan Nair, Secretary of INCITE TBI, Bangaluru, Author-The Startup Habit, Ex-CFO Technopark, Ex-MD & Registrar Technopark-TBI (KSUM) inaugurated the event.

• Dr. K. Kumara Pillai, Professor, wasthe chief guest and delivered Key Note address at National Seminar on " Digital Agility - A Peep into the Future" at Wavoo Wajeeba Women's College of Arts and Science, Tamil Nadu on 31.01.2017. He inaugurated the Technical session at the college on the same day.



• Dr. K. Kumara Pillai, Professor, was the Chief guest and delivered a lecture on "Go Cashless Digital Payment"on 23.01.2017 at LMCST organized by ECE department.

• Dr. K. Kumara Pillai , Professor was a Chief Guest at a Seminar on 30th May, 2017 at MSN Management Institute, Kollam. and delivered a talk on Cash less Economy.

• Dr. K.K. Pillai was the ChiefGuest and main speaker in a Programme on Digital Banking and Cashless Economy hosted by Adi Sankara Institute of Science & Technology in association with Vijaya Bank on Saturday, 18.02.2017 at Ernakulam.

• Dr. A. Lenin Jothi, along with Goyal A. K., Yadav, S. K., and Arora, K. published a paper tittled E-Governance and College Choice Decision: A Case of Private Institutions in Delhi" in *International Journal of Science Technology and Management*, Vol.6, No. 2, pp. 808 19. (*ISSN: 2394-1537*).

• Dr.K.Kumara Pillai, Professor, Dept of Management studies has published a research paper on " Go Cashless A Peek into the Future" in International journal of Advanced Research in management, Engg and Technology. Vol 2,Issue 1,Jan 2017.

Student Achievements

Lekshmichithra R., Student of S4 MBA won ' Best model' (The Queen of YASYA) in the fashion show competition conducted as a part of YASYA 2K17- Inter-collegiate cultural fest organized by St.Thomas College of Science and Technology on 17th April 2017.

NATIONAL CONFERENCE ON TECHNOLOGY INNOVATION IN MECHATRONICS, ENERGY MANAGEMENT & INTELLIGENT COMMUNICATION -2017

'NCTIMEMIC - 17'

April 6th - 7th, 2017

LOURDES MATHA COLLEGE OF SCIENCE & TECHNOLOGY

(Promoted by Lourdes Matha Catholic Educational Society)

Lourdes Hills, Kuttichal,
Thiruvananthapuram, Kerala - 695 574
Phone : 0472-2853550, 2853682, 2853546
E-mail : nctimeic@lmcst.ac.in
Website : www.lmcst.ac.in

In association with

Kerala State Council for Science, Technology and Environment

All India Council for Technical Education

About the College

Lourdes Matha College of Science and Technology established by the "Lourdes Matha Catholic Educational Society", is approved by All India Council for Technical Education (AICTE) and affiliated to the University of Kerala and APJ Abdul Kalam Technological University. The College has a spacious campus of 25 acres at Kuttichal, a rustic village in the outskirts of Thiruvananthapuram city, hardly 24 kms away from it. The vision of the Lourdes Matha Educational Society is to establish a "Centre of Excellence" in the field of Engineering and Technology to mould world class professionals.

Objective of Conference

Mechatronics is a synergistic combination of precision engineering, electronic control and mechanic systems. It is an inter disciplinary field of science and technology, dealing with general problems of mechanics, electronics and informatics. It plays a key role in the development of tomorrow's products by being at the forefront of cutting-edge designs.

Call for Papers

Original contributions on Technology Innovation In Mechatronics, Energy Management & Intelligent Communication are invited from researchers, academicians, students and industry experts in the following topics, but not restricted to :

- Aerospace Package
- Mechanical Engineering Design
- CAD/CAM Mechatronics Package
- Finite Element Analysis of Structure
- Networks and Data Security
- MEMS
- Image Processing and Biometrics
- Power Grid Management
- Instrumentation & Biomedical Engg
- Artificial Intelligence
- New Energy Systems
- Robotics
- Mechatronics
- Power Systems
- Signal Processing
- Embedded Systems
- Control Systems
- Communication Electronics

Important Dates

Last date of submission of full paper	: 15/03/2017
Acceptance Notification	: 22/03/2017
Camera ready paper	: 26/03/2017

Submission Guidelines

The original paper should be typed in MS Word with IEEE format(Maximum 3 authors per paper). Registration fee should be paid along with paper submission. The papers will be accepted subject to peer review and the changes should be incorporated as per the feedback. All the papers must be sent to the following email:

nctimeic@lmcst.ac.in

Awards will be presented to the authors of Best Papers.

Journal Publication

All Papers selected (Review & Plagiarism Check) by conference chairperson/reviewers will be published in

1. Proceedings of National conference on Technology Innovation in Mechatronics, Energy Management & Intelligent Communication -2017.
2. International journal of advanced scientific technologies, engineering and management sciences.
   Citied in : Researcherid (Thomson Reuters), Crossref, Mendeley, J-Gate, Citeseer, Google Scholar, ICI.

Participants interested to publish in SCOPUS indexed journals should make special request towards the following Journals:

1. International Journal of Mechanical Engineering & Technology
   Cited in : SCOPUS, Google Scholar, Publicationslist.org, Mendeley, ResearchGATE, J-Gate etc.
2. Indian Journal of Science & Technology
   Cited in : Chemical Abstracts Services (CAS), Indian Science. in, Researcl Bible, DOAJ, Urlich's Periodical Directory, EBSCO Publishing's Electronic Databases, Thomson Reuters, Web of Science, UGC.

Invited Talks

There will be a few invited talks/presentations on advanced topics by eminent experts and practising professionals during the conference.

Chief Patron	**: Mar Joseph Perumthotam** **(President, LMCES)**
Patrons	**: Rev. Dr. Mani Puthiyidom** **(President, LMCES)**
	: Mr.A.T. Thomas **(Vice President, LMCES)**
	: Mr. Philip John **(Secretary, LMCES)**
	: Mr. Sebastian N. A. **(Joint Secretary, LMCES)**
	: Mr. Philip C.T. **(Treasurer, LMCES)**
Conference General Chair	**: Prof. P.M. Hormese** **(Director, LMCST)**
Conference Organizing Chair	**: Dr. Syam Prakash V.** **(Principal, LMCST)**
Convener Organizing Committee	**: Shri. Ignatious C.A.** **(Advisor R&D, LMCST & Former Deputy Director, Systems Reliabilty, VSSC)**
Conference Secretary	**: Prof. Sabarinath A. R.** **(HOD, ME, LMCST)**
	: Prof. Ram Prasad Tripathy **(HOD, ECE, LMCST)**

Registration Fee

- **Participation : Rs. 1,000**
- **Students / Research Scholars with paper : Rs. 2,000**
- **Academicians / Delegates from Industries : Rs. 3,000**

At least one of the authors should register for the paper to appear in the proceedings.

The Registration fee should be paid either by demand draft in favour of *"The Principal", Lourdes Matha College of Science and Technology,* payable at Thiruvananthapuram or through online transfer.

Account Number	**: 1021 5500 0923 19**
Account Holder's Name	**: Lourdes Matha Catholic Education Society**
IFSC Code	**: FDRL0001021**
Bank and Branch	**: Federal Bank, Palayam**

The Remitter should enclose a remark - "Fee to NCTIMEMIC -17" for online transactions

Registration Form - NCTIMEIC

NATIONAL CONFERENCE ON TECHNOLOGY INNOVATION IN MECHATRONICS, ENERGY MANAGEMENT & INTELLIGENT COMMUNICATION

April 6,7 - 2017

Name : Mr/Ms .....

Designation : .....

Institution : .....

Address : .....

.....

.....

Contact No : .....

Email : .....

Accomodation Required : Yes / No

(Can be arranged subject to availability)

Payment Details:

DD NO : ..... **Date** : .....

Name of the Bank : .....

Title of the Paper : .....

.....

Authors : .....

.....

Signature of the applicant

National Level Advisory Committee

Dr. U. Ramesh
(Regional Officer(Additional charge) & Director, South West Regional office of AICTE, CET Campus, Kerala)

Dr. Anuradha Banerjee
(Assistant Professor, Applied Mechanics Department, IIT - Madras)

Dr. Debatosh Guha
(Professor, University of Calcutta, Fellow- IEEE, INAE, IETE)

Dr. B.S. Manoj
(Associate Professor & HOD, IIST, Valiamala, Thiruvananthapuram, Kerala

Dr. V.Madhusudanan Pillai
(Associate Professor, Dept. of Mechanical Engineering, NIT-Calicut)

Dr. G. Ramachandran
(Advisor - Curriculum Development, Kerala Technological University)

Dr. Vrinda V. Nair
(Principal, College of Engineering, Trivandrum)

Dr. Anil Lal S.
(Professor & HOD, Dept. of Mechanical Engineering, GEC Barton Hill)

Dr. Jiji C.V.
(Professor & HOD, Dept. of Electronics & Communication Engineering, CET)

Dr. Krishna Kumar K.
(Professor, Dept. of Mechanical Engineering, CET)

Dr. Jayaraj K.
(Professor & Placement Officer, CET)

Dr. Rini Jones S.B.
(Professor & HOD, College of Engineering, Kidangoor, Kottayam)

Dr. Jesseela S.
(Associate Professor, Dept. of Mechanical Engineering, GEC Kozhikode)

Dr. Lizy Abraham
(Assistant Professor, LBS Institute of Technology for Women, Poojapura, Thiruvananthapuram, Kerala)

Dr. M. Dev Anand
(Research Director, Noorul Islam University, Kumaracoil)

Dr. R. Rajesh
(HOD & Dean, Dept. of Mechanical Engineering and Sciences, Noorul Islam University, Kumaracoil)

Dr. R. Sri Siva
(Professor & HOD, Dept. of Mechanical Engineering, St. Thomas College of Engineering and Technology,Chenganoor, Kerala)

Dr. P.M.C Nair
(Former EMC member, Professor, Department of Mechanical Engineering, Sarabhai Institute of Science and Technology, Thiruvananthapuram, Kerala).

Dr. Vinod Kumar R.S.
(Associate Professor, Dept. of Electronics & Communication Engineering, Noorul Islam University, Kumaracoil)

Dr. Binu.K.Mathew
(Associate Professor,Dept. of Electronics & Communication Engineering, Saintgits College of Engineering, Pathamuttom)

Dr. Ansal K.A.
(Associate Professor,Dept. of Electronics & Communication Engineering, Saintgits College of Engineering, Pathamuttom)

Dr. Bavanish B..
(Assistant Professor,Dept. of Mechanical Engineering, Noorul Islam University, Kumaracoil)

Conference Convenors

Dr. Dinakar Das C. N,
Associate Professor,
Department of ECE,
Mobile : 9946840080

Mr. Jayaram V.
Assistant Professor,
Department of ME
Mobile : 9809816191

Kerala State Council for Science, Technology and Environment

Binuja Thomas M. Tech
Senior Scientist

No. SSW/333/2016/KSCSTE 14.02.2017

Madam,

Sub:- KSCSTE – Scheme for promoting S&T Seminar/ Symposia/ Workshop – reg.

Ref: - i) Your proposal entitled 'National Conference on Technology Innovation in Mechatronics, Energy Management & Intelligent Communication - 2017', dt: 16.01.2017

ii) Minutes of the meeting of SSW Committee, held on 08.02.2017

This is to invite your attention to the reference cited above and inform that KSCSTE is pleased to co sponsor the two day National Conference by extending financial assistance of **Rs. 50,000/-** subject to fulfilling the norms.

1. Programme Brochure/ Invitation should be sent to KSCSTE well in advance
2. The organizers should ensure that the conditions stipulated as per the KSCSTE guidelines are fulfilled
3. As per the guidelines, at least 10% of the delegates and Resource persons shall be from outside the State in the case of National Programme. If this condition is not satisfied, the Programme will be treated as appropriately and the co-sponsorship amount shall be as per rules.
4. The financial assistance may be utilized exclusively to cover the expenditure on Course materials, Publication of proceedings, Honoraria and TA for Resource Persons. TA shall not exceed 25% of co- sponsorship from KSCSTE. Utilization of the grant for any other purpose other than the approved heads shall not be entertained.
5. The financial assistance from the Council shall be in the nature of co- sponsorship and hence KSCSTE should be properly acknowledged as either 'Jointly organized by KSCSTE' or 'Co sponsored by KSCSTE' in all the brochures, banners, proceedings, etc. brought out in connection with the Symposium.
6. The Souvenirs/ Proceedings brought out in connection with the National Symposium should essentially include one page advertisement about KSCSTE and the matter for advertisement shall be made available on request
7. Change of venue or dates of the programme, if any, shall be reported to the undersigned promptly
8. This offer letter is valid for 6 months from this date. In case it fails to organize the programme within the stipulated time frame within 6 months, this offer will be invalid and will automatically stands cancelled.
9. The sanctioned amount will be released on the submission of the following documents after the [illegible]
   a) [illegible] Income and Expenditure statement [illegible]
   b) Audited Utilization Certificate (UC) and Statement of Expenditure (SE) in the format enclosed herewith. In the case of affiliated Colleges and NGOs, the audited SE & UC signed by a registered Chartered Accountant, countersigned by the Head of the Institution only will be accepted.
   c) List of participants – details of both delegates and resource persons- duly certified by the Organizing Secretary/ Head of the Institution
   d) Brief report including photographs, press clippings etc. along with a note on specific recommendations of the programme and also the schedule of each session
   e) Souvenirs/Proceedings (including one page advertisement about KSCSTE) brought out in connection with the programme.
   f) Programme Brochure/ Notice and related publicity materials with due acknowledgment to KSCSTE.
10. The above documents may be submitted <u>within two months</u> after the conduct of the Programme

Please quote the above File No. in all your subsequent correspondences in this regard.

Thanking you,

Yours sincerely,

Binuja Thomas

Dr. Dinakardas
Associate Professor
Department of Electronics and Communication,
Lourdes Matha College of Science and Technology, Kuttichal, Trivandrum – 695 574

List of Participants for conference meeting held on 17/feb/2017

	Name	Dept.	Sign.
1)	Daniel C. Pulu	ME	
2)	Tobin Jose.	EC	
3)	Akhil S. Augustine	ME	
4)	ADARSH. S. J.	M.E	
5)	Binu Chacko	EC	
6)	Sijith Krishnan. R	ME	
7)	Sammil S	M.E	
8.	Indu. R	M.E.	
9.	Anju Mary Thomas	EC	
10	John Philip	ME	
11	Shammy Arun Mathew	EC	
12	Greeji. M.G	EC	
13.	Aaliby Jane.	CS	
14.	Soorya. S.R	EC	
15.	Neeha - George	EC	
16	Krishna Prasanth.K	ME	
17	Resmi V. Prasad	ME	
18.	Rohini G.P	EE	
19	Veena. V.U	EC	
20	Soumya. V S.	EC	
21.	Debarati Ganguly	EC	
22	Bindu MV	ME	
23.	Ramprasad	EE	
24	Dr. O. Sukumaran Nair	CSE	

	Name	Dept	Signature
25	Ignatious	Life.	
26	Bonaventure CN	ECE	
27	Jayaram.V	ME	

17.2

National Conference on Technology Innovation in Mechatronics, Energy Management & Intelligent Communication (NCTIMEMIC'17) a two day National conference on Mechatronics, Energy Management & Intelligent Communication has been th concluded Successfully at LMCST on 7 April 2017. The multidisciplinary conference has facilitated the exchange of ideas in Mechatronics over every broad aspect of Engineering and Technology. The Conference was inaugurated by Padmasree, Dr.Valsa (DD-VSSC) in the presence of Dr.Syam Prakash (Principal, LMCST), Prof. P.M. Hormese (Director, LMCST) and Er. Philip John (Secretary, LMCST). (Very).Rev.Fr. Jose Viruppel presided over the inaugural session.

The Conference had around 75 plus research articles, which were reviewed by experts and are meant to be published in various Scopus Indexed Journals. The sessions handled by communication experts such as Dr. T.J. Apren (DD, VSSC) and Dr.B.SManoj (HOD-Avionics Dept, IIST) received great praise from the spectators. Dr. P.M.C Nair (EMC) gave a meaningful talk on Energy management, while Dr. S. RominusValsalam (Former Asso. Dir. CDAC) elaborated on the relevance of SCADA systems.The whole event was funded by theKerala State Council for Science, Technology & Environment along with AICTE.

Participants List

50.FINGERPRINT SPOOFING DETECTION USING LOCAL BINARY PATTERN AND HOG-Lekshmy. S. Mohan,Joby James

51.Speaker Identification Using K-Nearest Neighbors (k-NN) Classifier Employing MFCC and Formants as Features-Sreelekshmi S Kumar, Syama R

52.Comparison of Various SRR and CSRR based Compact Dual Band Rejection Microwave Filters-Karthika Rajan,Sherin P Elias

53.ARDUINO BASED HAND GESTURE FOR DUMB-Abhishek J., Aneeta Thomas, Anushma P.S., Ganesh B.S,Shamny Arun Mathew K

54.Study on Compressive Sensing and Image Encryption-Rajalakshmi S,Anjaly Krishnan

55.EFFECTIVE PERFORMANCE EVALUATION OF DIFFERENT ABDOMINAL ECG SEPERATION TECHNIQUES-SHAHANA BARVIN M,HEMA S

56.Comparison of Multimodal Low Resolution Face Recognition using SVD and DSR Methods-ROSHNA N. R,NAVEEN S.

57.A COMPARITIVE STUDY OF 10/8 AND 10/6 SWITCHED RELUCTANCE MOTORS IN ANSYS MAXWELL - Ashwin Raj , Prasobh P , Sreekanth P K

58.UAV Photogrammetry And Lidar Mapping -Vaisakh Anand, Karthik R J, Vishnu Dathan, Ram Prasad Tripathy

59.Q factor Comparison of Various Ring Resonator Configurations-Ligin Alphonsa, Resmi R

60.HOME AUTOMATION USING ARTIFICIAL INTELLIGENCE-Abhiram T.S., Arya A.R., Aswin R.S., Jeena John

61.A review On Energy Efficient Resource Allocation in MIMO-OFDMA System Using Different Optimization Algorithm-Krishnasree K,Nandan S

62.Flash Flood Sense Module Implementation Using ANN Algorithm-Athira. S, Nair,Nisha George

63.Recovery of exhaust heat in automotive to enhance its efficiency using TEGs and heat pipes-Jayaram V, Arun S Lal, Joseph Thomas, Naveen S Babu, Sreenath VR

64.Colon Polyp Detection Using SFTA Algorithm- Aarya T S, Athulya L J, Najla Jaleel, Shahanaz Abdul Gafoor, Shamla Mol, Nirmal Adam Sait

34.DESIGN OF GATING SYSTEM FOR FABRICATION OF BUTTERFLY LVE BODY-Anandhu V Raj, Binoy B L, Cyril Thomas, Jibin V Paulose, Ribu C Daniel, Swaroop Rajeev

35.FPGA Implementation of Quadrature sampling Digital IF FM Receiver-Sreekanth A, Renu Agarwal, Sherly Joy, Dr.Apren.T.J

36.Liver Tumor Segmentation and Feature Extraction using Segmentation based Fractal Textural Analysis Method(SFTA)-Anju Krishna M, Deepesh Edwin,Dr. S. Hariharan

37.Space Vector Modulation Algorithm (SVM) for Multilevel Inverters -Krishna P S

38.OC, UV, OV Protected advanced automatic phase selector with inverter support-Sreekanth P K, Ganesh M

39.MATLAB SIMULINK MODEL OF SOLAR WATER PUMPING SYSTEM USING MODIFIED TIBC-Anoop J R ,Ashwin Raj, Reema N

40.PEAK TO AVERAGE POWER REDUCTION TECHNIQUES IN OFDM : A REVIEW-Revathy G Nair,Jismi Babu

41.A REVIEW ON SPATIAL MODULATION -Sherin P Elias , Karthika Rajan,Silpa S Prasad

42.SPECTRUM MONITORING IN COGNITIVE RADIO NETWORKS: A SURVEY-Aswathy Anilkumar,Jismi Babu

43.Relevance of Dam-less power generation-Jayaram.V, Dr.Bavanish.B

44.Enrichment of Calorific Value for low pressure biogas-Jayaram V, Arun J,Basil Benny Jacob, Nikhil GA, Vinay George Abraham, Vivek Sundaram

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Copy-Move Image Forgery Detection Using Expectation Maximization Algorithm

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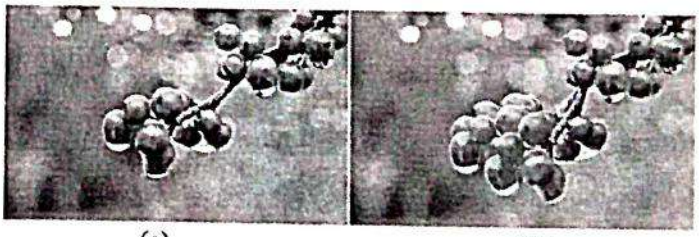
Abstract—This paper propose a novel forgery technique to detect copy move image forgery by using segmentation based method and expectation maximization algorithm. This is mainly based on by extracting the keypoints for comparison from the forged image region. This scheme first segments the forged images into different segments, each segment is independent and they are called patches. For detecting the forgery two stages of matching take places. The first stage of matching consists of feature extraction, patch matching and transform estimation. Second stage of matching consists of obtaining new correspondance,obtaining new transform matrices and finally repeat above two steps for finding identical regions by using expectation maximization algorithm.

Keywords—copy-move forgery,patches,segmentation,keypoints,overlapping,matching.

I. INTRODUCTION

The use of internet become popular nowadays. The internet consists of lots of digital images .The authenticity of digital images need to be ensured because lots of tampering operations can perform on the images.One of most popular tampering operation is copy move forgery(CMF)[1].The copy move digital image forgery means copy a region from the same image and paste it somewhere in the same image region(eg.fig.1).The fig 1(a)[8].shows the original image where fig 1(b)shows tampered image which is not identified by naked eyes. So here is the need for a technology to identify such type of forgery. The digital image forgery is the technology to deal with the way of finding such digital forgeries in images.There exists two main classes of algorithms one is block-wise division algorithm and other is keypoint extraction algorithm. In block-wise division algorithm first divide the image into overlapping blocks then compare each block to find the similarities among them for identifying copy move forgery. The best example of such kind of method[2] is based on DCT (Discrete Cosine Transform),which is used for describing blocks.In DCT matching blocks of tampered image can be find out by comparing the coefficients of individual patches.If two patches has same coefficient then there exist possibility of copy move image forgery. This method use dictionary sort which is used for decreasing the complexities involved for finding the similarities among the matching blocks. In this algorithm descriptor of the block is important. The methods such as discrete wavelet transform(DWT), principal component analysis(PCA) etc where used [3],[4]. In terms of accuracy and detection capability zernike movement is best [4],[5].Same Affine Transformation Selection(SATS)[5] is a post-processing technique which is used for improving the effiency of CMF detection algorithm. The scale invariant features transform SIFT[6] and SURF[7] are most widely used keypoints based algorithms.These two methods are robust to find out forgery with transformations such as rotation,scaling etc,to estimate transform matrixes between copying source regions and pasting target regions[8].To avoid the unwanted outliers RANSAC algorithm[9] is used to improve the effiency of detection algorithms. The gold standard algorithm[10] is used for improving the effiency of RANSAC algorithm.



(a) (b)

fig 1.Shows (a)Original image and (b)Forged image.

This paper propose a new framework for copy move forgery detection.The test image is first segment into independent patches of non-overlapped regions. An extension of the classic registration method iterative closest point (ICP),is used in EM based algorithms for avoiding the problem of transferring partial matches between the obtained patches.This paper propose two stages for finding forgeries in the test image.In first stage find matches and then calculate corresponding transform matrix. The refining of transform matrix help to find out whether there exists copy move forgery or not.The proposed scheme work effectively in block based scheme compared to the keypoint based method.

The following sections is summarized as follows. In Section II deals with overview of the proposed CMFD system. Section III deals first stage of matching and section IV describe second stage of matching.Section V deals with experimental results.Section VI deals with conclusion.

II. OVERVIEW OF THE PROPOSED CMFD SYSTEM AND IMAGE SEGMENTATION

In this section describe about CMFD Revisiting and the Framework of the Proposed Scheme then describe the reason behind why segmentation is used. In CMFD

A. CMFD Revisiting and the Framework of the Proposed Scheme

The detection result accuracy increases if more information is acquired from the forged image. The mission of copy move forgery detection involved both identifying and locating tampered regions.In CMFD scheme a set of image patches is considered and finding the similarity by comparing these patches coordinate values.This is for both block based and keypoint based method.This comparison process is time consuming if the number of patches in the test image is high. So it is better to decrease the number of patches in the test image.In case of keypoint based method number of patches is less compared to block based method.

The problem regarding the keypoint based method is that keypoints which are closed spatially are not compared to each other because they are spatially similar in nature.It is tricky to determine the shortest distance between two comparable keypoints in the forged image.The keypoints are not concentrated together. Due to this it is very difficult to identify from where the image is copied and to where it is pasted in case of keypoint based detection scheme.For avoiding this problem clustering of keypoints based method is introduced. The clustering matched scheme improve the accuracy of CMFD.In case of block based scheme the image is divided into different patches then the similarity can be identified between copied and pasting regions by comparing these patches.

B. Image Segmentation

The image is segmented into different small regions called patches which help to distinguish between copied and pasted regions in forged images.This can be done by experts who are focused in digital image forgery detection. This method use four segmentation methods to detect the forgery but these are not influenced by CMFD detection efficiency. Fig 2 shows the segmentation.In this figure two tower are in CMF region.SLIC algorithm is used for segmentation.In this figure one CMFD region is divided into several different patches. This can be done in manually or automatically. In this method use automatic scheme. In this method the image is

divided into not more than 100 patches. Finally the detection phase find out that two or more patches are similar in nature i.e., copy move forgery exists in that regions. This is shown in fig 3.If use keypoint based method use only less number of keypoints approximately four number is enough. The segmentation time is 15 s for an average sized image.The segmentation process hopefully help to increase the speed of detection process in test image.

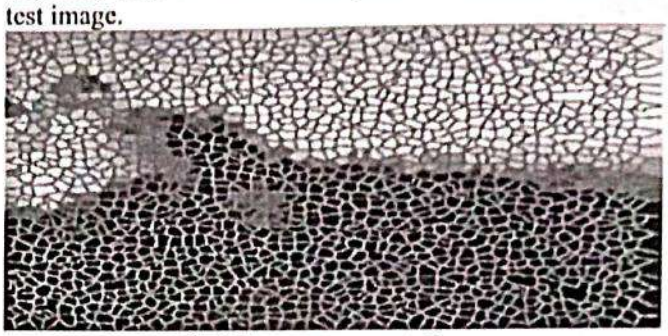


fig 2.Image segmentation

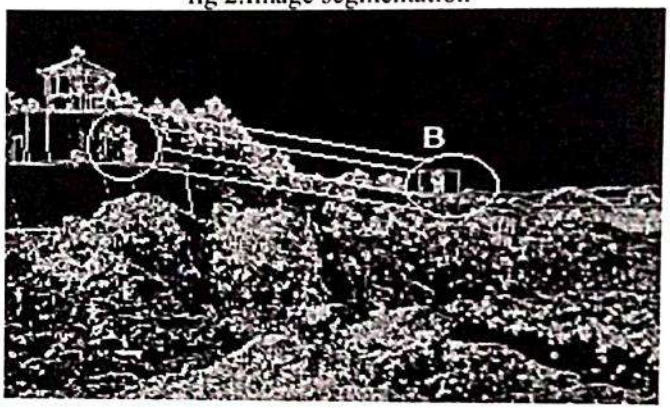


fig 3.Matched keypoint pairs in patch A and patch B are represented by line connecting the points in the patch regions.

III. FIRST STAGE OF MATCHING

The first stage of matching involved three stages of matching.This is shown in fig 4.

A. Keypoint Extraction and Description

In this method use vlFeat3[11] software to detect keypoints. The Difference of Gaussian (DoG),Harris-affine and Hessian-affine etc algorithms are commonly used for keypoint detection and description.The good detection results need more than 2000 keypoints in the test image.

B. Matching Between Patches

In this section the matches between the keypoints is find out by comparing each patch with rest of the patches. Consider the fig 3.The patch A is compared with K nearest neighbors.In this method k value is set as 10.In this implementation if difference is less than threshold say 0.004 then there exists a match between keypoints present in the two different patches.In fig 3 patches A and B are said to be suspicious pair of patches. Because they consists of copy move image regions as result the tampered regions are related to line connecting them in the figure.

C. Affine Transform Estimation

In this method find affine transform matrix after finding the suspicious pair of matched pairs.After that calculate the matrix for that regions.This is for finding the relationship between two identical regions.The relationship between the transform matrix H is find out by the following way.

$$x = H\dot{x}$$

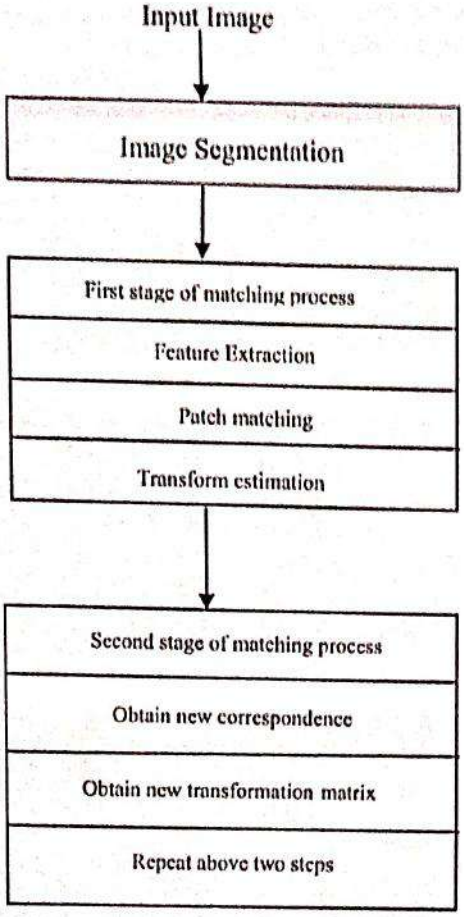


Fig 4.CMFD framework

The x and $\dot{x}$ are coordinates in copying and pasting regions.Todays existing CMFD schemes only focuses on identifying the copying and pasted regions and do not identify the relationship between the two regions.This method identify the relationship between these regions by calculating affine transformation matrix which help to identify which transformation is applied to the regions such rotation, scaling etc.Doing this estimation helps to avoid false detections if forgery is not present in that region.The forgers do not change the location of copying source regions for avoiding the additional forgery traces.The classical method is used for the estimation of transformation between source and target regions. For minimizing the geometrical distance use three random non-collinear matched keypoints.The RANSAC is used for estimating the transformation matrix in case of existence of noise in keypoint detection.In some detection processes small regions with arround 5 keypoints affect the detection accuracy.If size of the forged region is smaller than 32×32 then there exists difficulty in detection accuracy.Because in small regions only limited number of keypoint exists this makes error in keypoint extraction process.Second stage of detection is introduced to improve the accuracy of the result.

IV. SECOND STAGE OF MATCHING

In first stage of matching process find suspicious pair of matching patches and then calculate affine transformation matrix between them to find which transformation is applied to it.For this purpose use RANSAC algorithm. It provides a robust transform estimation but sometimes it is not accurate. It ring false alarm even if no forgery is present in it. So there is a need for second stage of matching.In second stage transform matrix is refined by using EM based algorithm.This helps to avoid false alarms.

A. CMF Determination Based on Probability

In second stage of matching all the pixels in matched patches is used for finding the transformation matrix H.The pixels in the matched regions should be distinguished from the background region.In some test image consists of only small region of forgery in this situation only small amount of keypoint is present.In this case the result of first stage is not convenient due to limited number of keypoints.In second stage of matching pixels the matched patches is used to find out accurate transformation matrix.The pixels in the copying and pasted target regions can be distinguished from each other. This increases the accuracy of the result.The relationship can be written as follows.

$$f(x) = f(H^{-1}\dot{x})$$

The image characteristic function is represented by function
f (·).The SHIFT descriptors are used for robust and efficient estimations.

B. Obtaining the New Correspondences of the Pixels

The H0 denotes the transformation matrix obtained from the first stage of matching .Second stage of matching requires more accurate confirmation regarding the forgery. So there is a need for reestimation of transformation matrix for pixel location at x. The correspondence obtained is more similar to old correspondence at location x then there exist a copy move forgery.The new correspondence estimation of pixels help to confirm forgery and also avoid false alarm.The probability of occurrence of error rate became decreased if
use SHIFT based calculations for keypoint based method.

C. Iterative Re-Estimation of the Transform Matrix

The newly matched pixel pairs are used for re-estimation of transform matrix.The re-estimated transformation matrix which is similar to old transformation matrix in case of copy move forgery exists if not otherwise.In case of smooth region the correspondants are not accurate.For avoiding the situation

RANSAC algorithm is used.The drawback of RANSAC algorithm is that it uses more time for processing.

Each patch consists of two classes of pixels.Here the problem is that distinguishing two pixels is difficult.The EM algorithm is helpful in this situation. The EM algorithm is used for statistical parameter estimation.The algorithm repeat until target value is reached. The algorithm consists of E-step and M-step. That's why it is called EM algorithm.

V. EXPERIMENTAL RESULTS

A. Test Image Databases and Segmentation Settings

To examine the performance of proposed system use the database namely Benchmark database for CMFD evaluation. The database consists of 48 original images and 48 images with CMF. The original size of the image is set as 3264 × 2488.In case of internet and multimedia applications the size of the image should be small. So the images size should be resized to not larger than 800.The resizing need to reduce the number of keypoints in the image. So resizing is not suitable for keypoint based method.The images in the database can be segmented by vlFeat software.The function vl_quickseg with certain parameters is used in case of resized image segmentation process.This function is used because it can implement quick shift image segmentation algorithm.In this algorithm set the value for two control parameters ratio and kernelsize to 0.7 and 1.

B. Error Measures

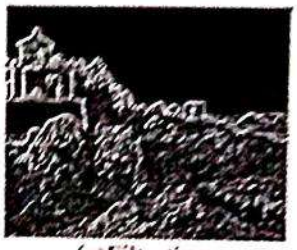
The error in image occured at two levels,image level and pixel level.In image level false negative rate and false positive rate are used for error detection.In false positive rate the ratio of missing detection to forged one give the error detection rate.The false alarm to the original image give error ratio in case of false positive rate.The precision and recall criteria are used in error detection rate at pixel level.

C. Results on the Database

The detection error rate is represented as false negative rate and false positive rate in database.The SURF and SHIFT schemes are used for forgery detection if keypoint based method is used.The snippet from the image is selected and paste it to somewhere in the same image so that it is unnoticable. Then pass this test image as input. In the first stage of process generate corresponding histogram of the test image which is imputed.This is shown in fig 5. Then the input image is passed to next stage of process. The next stage is edge detection phase. The cany edge detector is used for it. After that it is passed to filtration process for smoothing and noise reduction by using Gaussian filter. Then pass the image to segmentation process and pass to transform estimation. Then pass the image to second stage of matching processes for finalizing the image forgery with the help of expectation maximization algorithm. Next stage shows how much forgery is detected.The proposed scheme is good for detecting the tampering operation with smallest false negative rate.The false positive rate is larger in this method.Consider the robustness of the scheme against several attacks such as four attacks 1)JPEG compression2)adding noise3)rotation4)scaling down and up perform effective detection capabilities.The result shows that the computational complexity of this method is low and they also provide accurate results. The method efficiently detect which transformation operation is applied to the forged regions.

Fig 5.(a)Input image

(b)Edge detection



(c)Filtration

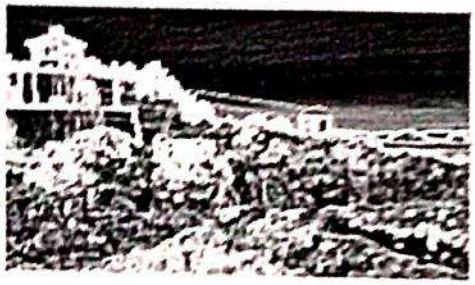


Fig 6.The regions inside the circle are similar in nature and the relationship between the matched regions are connected by the lines connecting between two circles. This regions shows copy move image forgery.

VI. CONCLUSION

In this paper a new method for copy move image forgery detection is proposed. The detection process consists of two stages of matching.First stage of matching consists of feature extraction,patch matching and transform estimation.The transform estimation help to identify which transformation is applied to forged region.Second stage of matching includes obtaining new correspondance,obtaining new transformation matrix. Finally with the help of expectation maximization algorithm forgery can be confirmed. The advantage of using this method is that the chance of occurring false alarm if copy move forgery is present can be eliminated. Because here checking take place twice.This method also detect which transaction is applied to the forged region.

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APPLICATION FORM

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Lourdes Matha College of Science and Technology established in the year 2002, is a premier institution affiliated to the University of Kerala and APJ Abdul Kalam Technological University. The College offers undergraduate programs in five major streams and five post graduate courses.

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Intimation of selection (By mail) : 11/01/2017

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Lourdes Matha College of Science & Technology,
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For any queries:

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Submitted for Approval

I am pleased to inform you that we (Electrical & Electronics Engineering Department) are planning to conduct a two-day Faculty Development Program on LaBVIEW in our institute from 16 Jan 2017 to 17 Jan 2017.This workshop would benefit our faculty to build real-time projects by making productive use of this software. The participants for the course will be the faculty from Electrical & Electronics and Elèctronics & communication Departments. We are also inviting participants from other institutions affiliated to APJ Abdul Kalam Technological University. This hands-on workshop will be conducted by Tyrannus Innovative Engineering & Research Academy, a start-up company under Technology Business Incubator at College of Engineering,Trivandrum. The total cost of FDP is Rs.6500/- per day, ie. Rs 13,000/- for two days.The price quoted is inclusive of TA and taxes. Enclosed is the brochure of the FDP program.

Co-ordinator

Priya.P.S. Amma Anna

Asst.Professor

Electrical & Electronics Engineering

SWAPNA M

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November 30th, 2016

To

The Principal
Lourdes Matha college of science and technology
Lourdes Hills, Kuttichal P.O,
Thiruvananthapuram, Kerala – 695 574

Kind attention of: HOD, Dept. of EEE, LMCST.

Sir

Sub: Faculty Development Program on "LabVIEW for teaching and research"

First of all, we would like to thank the dignitaries for giving us this wonderful opportunity to work with LMCST, which is one among the best engineering colleges in Trivandrum. We are enclosing a brief description about the FDP, as well about our company, for your kind reference.

The need for skill and knowledge based education demands the academicians to refine their teaching methodology. The recent theme of National Instruments on "Do Engineering" facilitates the teaching community to deliver their lectures through experimentation. This greatly improves the learning level of the students and subsequently motivates them to become practicing engineers. This workshop will facilitate the academicians to understand the importance of activity based learning using Graphical System Design software called LabVIEW. Virtual Instrumentation combines mainstream commercial technologies with flexible software and a wide variety of measurement and control hardware. Engineers use Virtual Instrumentation to bring out the power of flexible software on test, control and design applications to make accurate measurements. Virtual Instrumentation uses highly productive software, modular I/O and commercial platforms. National Instrument's LabVIEW, a premier virtual instrumentation graphical development environment, uses symbolic or graphical representations to speed up the development. It is optimized in Instrument Control and Automation with Test and Measurement Devices. This hands-on workshop will give an insight

TYRANNUS INNOVATIVE ENGINEERING & RESEARCH ACADEMY PVT LTD
TIERA
CIN U72900KL2016PTC045843
Enlightening Engineering, Research & Technology

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www.tieraonline.in
tieraonlineacademy India
+91 9495838031
+91 9495510106
Branch office
1st Floor, PG Mech Block,
College of Engineering Trivandrum-16
Regd office
1st Floor, Sneha, TC 11/1151(1),
Nalanchira P.O., Trivandrum-15

into the basic functionalities of LabVIEW with a focus on control system applications. Also, it will help the participants to build real-time projects exploiting the benefit of these software tools. A hands-on demo will be made using NI hardware.

Who should attend?

Faculty members from EEE/ECE. PG students and research scholars may also attend the workshop.

Terms and conditions

- The FDP will be conducted at your college. (Probable dates: December 16th and 17th , 2016)
- Total cost of FDP is 6500/- per day, ie. **Rs. 13,000/- for two days**. The price quoted is inclusive of TA and taxes.
- The payment can be made to the account of:
  M/s Tyrannus Innovative Engineering & Research Academy PVT. LIMITED,
  Sneha, PRA 176C
  Parottukonam, Nalanchira P.O
  Trivandrum 695015

  Bank details
  Account number: 35782418064
  State bank of India, kesavadasapuram
  STATE BANK OF INDIA - PBB THIRUVANANTHAPURAM
  The IFSC Code is SBIN0004182

About us

A briefing about our company and its activities is given below for your kind reference. Tyrannus Innovative Engineering & Research Academy (T.I.E.R.A Pvt. Ltd.), having its office in room number 203, first floor of PG Mechanical block, College Of Engineering Trivandrum was started as a Technology Business Incubator (TBI) based company. We operate in two main domains viz. Academic Research Solutions and Industrial solutions.

We offer engineering services and consultancies in the fields of: machine design, precision fabrication, assembly, system integration, testing, control system design, vibration testing, CAD/CAM, data acquisition, Finite element/CFD analysis, NDT and fluid dynamics. We also conduct technical skill development programs (TSEP) that help fresher's to attain

FACULTY DEVELOPMENT PROGRAMME ON LabVIEW at LMCST,

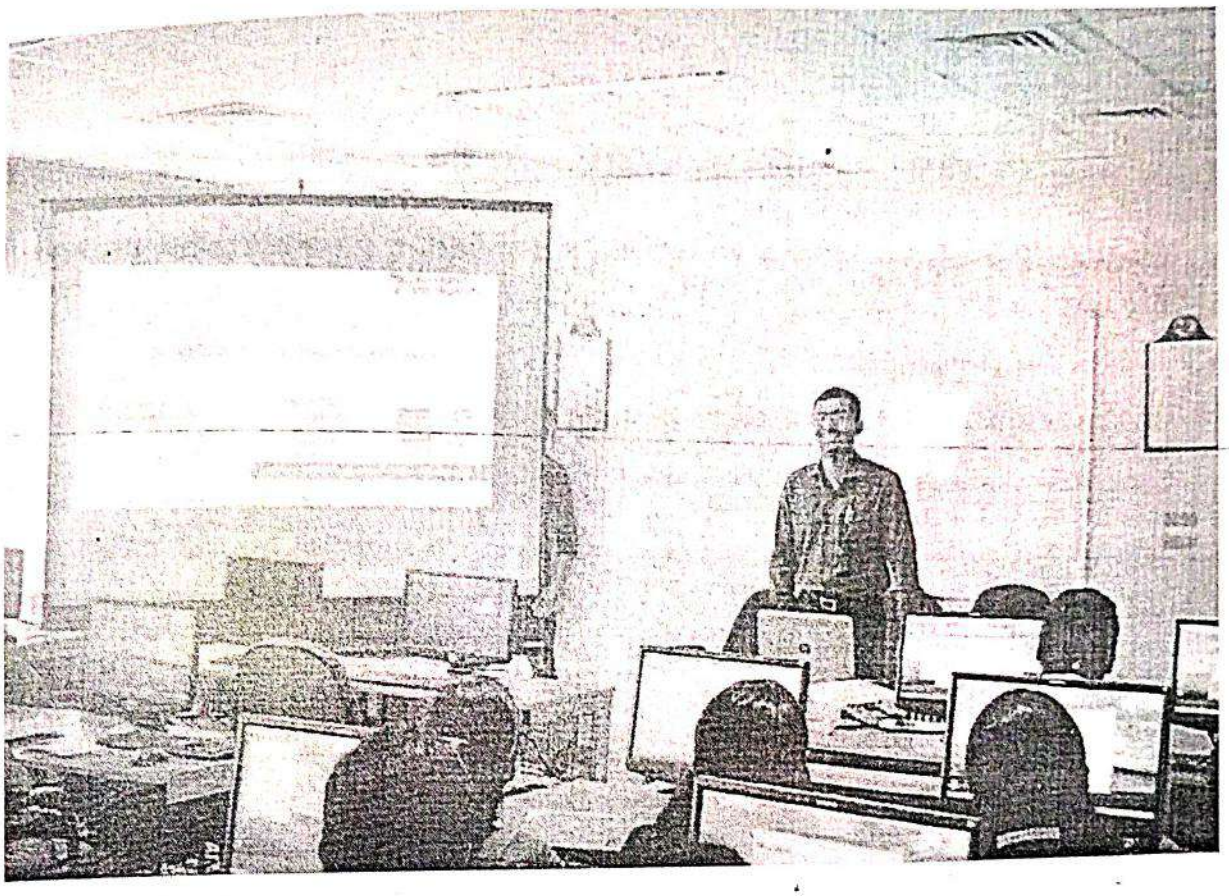
from Jan. 16 to 17, 2017.

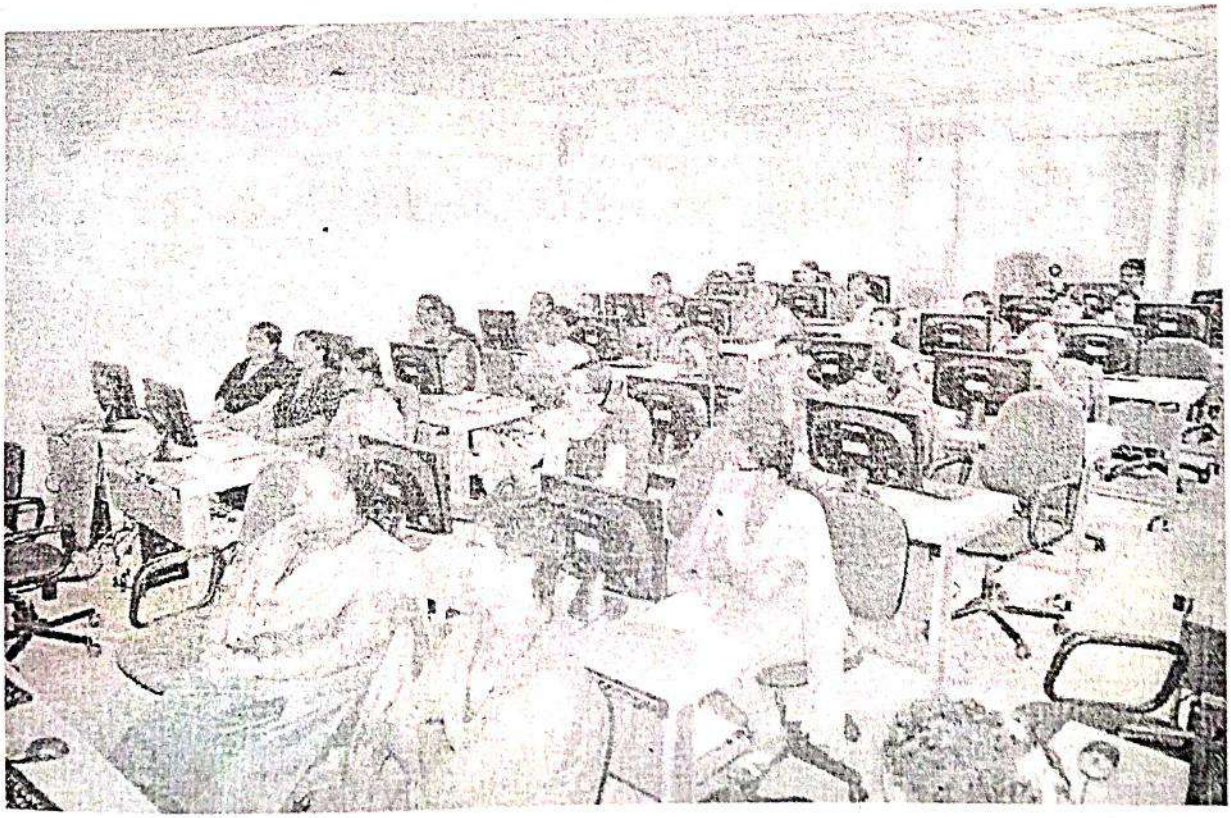
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

DAY	TIME	SESSION	TOPICS
DAY 1 16/01/2017	9:00 to 9:15 AM	Inaugural Function	
	9:15 to 10:45 AM	Session I	Introduction to LabVIEW for teaching
	10:45 to 11:00 AM	Tea Break	
	11:00 to 12:30 PM	Session II	Modular Programming
	12:30 to 1:30 PM	Lunch Break	
	1:30 to 2:45 PM	Session III	Implementing structures in LabVIEW
	2:45 to 3:00 PM	Tea Break	
	3:00 to 3:55 PM	Session IV	Implementing structures in LabVIEW
DAY 2 17/01/2017	9:00 to 10:45 AM	Session V	Implementing loops in LabVIEW
	10:45 to 11:00 AM	Tea Break	
	11:00 to 12:30 PM	Session VI	Implementing loops in LabVIEW
	12:30 to 1:30 PM	Lunch Break	
	1:30 to 2:45 PM	Session VII	Training on control system module in LabVIEW & demo on LabVIEW Hardware
	2:45 to 3:00 PM	Tea Break	
	3:00 to 3:55 PM	Session VIII	Training on control system module in LabVIEW & demo on LabVIEW Hardware

FDP on "Labview for teaching and research"

The department organized a two day FDP on "Labview for teaching and research" on 16th and 17th January2017.





LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY

Lourdes Hills, Kuttichal, Thiruvananthapuram - 695 574, Kerala.

Certificate of Participation

This is to certify that Ms. Swapna M. of Lourdes Matha College of Science and Technology, Thiruvananthapuram has participated in the Faculty Development Programme on LabVIEW for Teaching and Research organized by Department of Electrical and Electronics Engineering held at Lourdes Matha College of Science and Technology, Kuttichal, Thiruvananthapuram on 16th and 17th January 2017.

Prof. Priya P.S.
Coordinator

Prof. Swapna. M
Convener

Dr. V. Syam Prakash
Principal

FACULTY DEVELOPMENT PROGRAMME ON LabVIEW - Attendance Statement

Sl.No.	Name of participant	Signature			
		DAY 1 (16/1/2017)		DAY 2 (17/01/2017)	
		FN	AN	FN	AN
1	Sreeragi G.R				
2	Liji Ramesan Santhi				
3	Nikitha V.P				
4	Nural Hidaya S				
5	Anju Maria Martin				
6	Preetha S.L.				
7	Monisha Menon				
8	Mary Sunitha				
9	Dhanya Mathew				
10	Shilpa Das				
11	Sabna M				
12	Robin Roy				
13	Lineesh A.S				
14	Dr. V.R. Jisha				

Sl.No.	Name of participant	Signature			
		DAY 1 (16/1/2017)		DAY 2 (16/1/2017)	
		FN	AN	FN	
15	Sujith Kumar A·S				
16	Deepu R.S				
17	Simi M.S.				
18	Prasanth R.				
19	Revathy M.B.				
20	Lekshmi S.				
21	Lekshmi Nair · K·13				
22	Mr. Ram Prasad Tripathy				
23	Ms.Nisha George				
24	Dr. Dinakardas C.N				
25	Ms. Soorya S.R				
26	Ms. Veena V.U				
27	Ms. Bincy Louis				
28	Mr. Binu Chacko				
29	Ms. Soumya V.S				

Sl.No.	Name of participant	Signature			
		DAY 1 (16/1/2017)		DAY 2 (17/1/2017)	
		FN	AN	FN	
30	Mr Greejith M.G				
31	Mr. Shammy Arun Mathew K.				
32	Ms. Manju M.S.			—	—
33	Ms. Athira A.P			—	—
34	Ms. Debarati Ganguly				
35	Mr. Jobin Jose				
36	Ms. Swapna M			—	—
37	Ms. Sreekala Devi K				
38	Ms. Priya P.S				
39	Ms. Revathy Sasidharan				
40	Ms. Renu V				
41	Ms. Rohini G.P				

Sl.No.	Name of participant	Signature			
		DAY 1 (16/1/2017)		DAY 2 (17/1/2017)	
		FN	AN	FN	AN
42	Ms. Jean Dickson			—	—
43	Ms. Cibumol B. Babu				
44	Ms. Jiffin Das	Jiffin Das	Jiffin Das	Jiffin Das	Jiffin Das
45	Ms. Ammu Anna Mathew	Ammu	Ammu	Ammu	Ammu
46	Ms. Arya Vijayan				
47	Ms. Sreedevi R.C			—	—
48	Ms. Priyanka C.P				
49	Ms. Ashima C.R				

Agenda

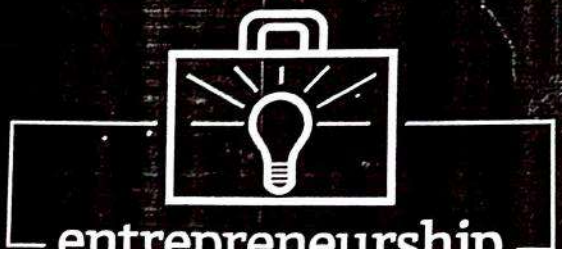
Venue: LOMAA hall
Date: 22/02/17
Time:2pm

- INAUGURAL
- TECHNICAL SESSION
  by team Scrolls Tech

Scrolls

Praveen P (CEO)
Raaj Muthu (Training Co-ordinator)
Vipin MS (Project Manager)

- ACTIVITY

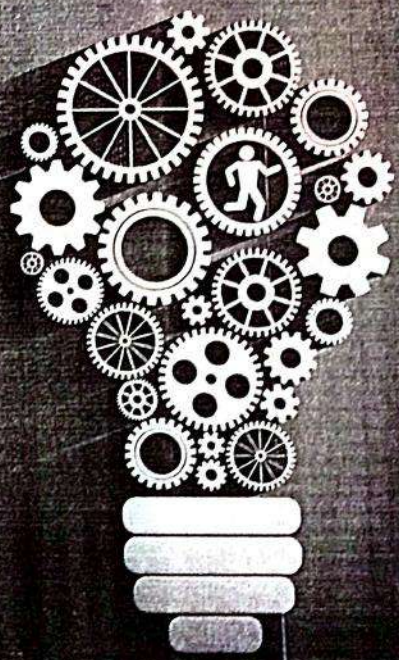


entrepreneurship

VIDYARTHAN

Changing the Culture Of Innovation

Dept. of Electronics And Communication,
Lourdes Matha College



entrepreneurship WORKSHOP

On 22.02.17
Venue: L.O.M.A.A hall

Do You have what it takes to be an Entrepreneur?

Innovation distinguishes between a leader and a follower"

Be Your Own

Let's Have it from one among the most successfull startups in India. A startup who pitched themselves here in Trivandrum

FUNDING ENTREPRENEUR ORGANIZATION COMPANY

CAPITAL ENTREPRENEURSHIP

FINANCE

INVESTOR

Scrolls

Scrolls Tech INDIA

A hardcore data analytics company having corporate centre in Trivandrum, India. Carrying out authentic and concrete business intelligence (BI) solutions

Signature sheets

Entrepreneurship Klorkshop.

on 22.02.17.

1. Soorya. S. R.
2. Soumya V. S. Soumya VS
3. Binu chacko.
4. Shammy Aran Mathew
5. Binuy Louis. Binuy
6. Veena V. U Veena
7. Manya M. S. Manya MS.
8. Debasathy Ganguly. Debanguly
9. Jobin Jose. Jobin

Lourdes Matha College of Science & Technology
Lourdes Hills, Kuttichal, Thiruvananthapuram, Kerala – 695 574

REGISTRATION FORM

FACULTY DEVELOPMENT PROGRAMME ON
PYTHON PROGRAMMING

Name	: Mr/Ms .....
Designation	: .....
Department	: .....
Institution	: .....
Gender	: Male / Female
Date of Birth & Age	: .....
Educational Qualification	: .....
Mobile No.	: .....
Email	: .....
Accomodation Needed	: Yes / No
Food preferred	: Veg / Non-Veg
Place	: .....
Date	: .....

Signature

SPONSORSHIP

Mr. /Ms. /Dr. ..... is an employee of our institution and is hereby sponsored for attending the Faculty Development Programme on Python Programming from 23/01/2017 to 24/01/2017 at Lourdes Matha College of Science and Technology. He/She will be permitted to attend the course, if selected.

Place :
Date :

Signature of the Sponsoring authority with seal

ORGANISING COMMITTEE :

Chairman :

Dr. Syam Prakash V.
Principal

Vice - Chairman :

Prof. Beshiba Wilson
Head of the Department,
Department of Computer Science & Engineering

Convenor :

Prof. Neethu Mohan
Head of the Department,
Department of Computer Applications

Coordinator :

Mr. Prasanth Kumar V.S.
Assistant Professor
Department of Computer Applications

Venue:

Lourdes Matha College of Science & Technology

Faculty Development Programmme
on
PYTHON PROGRAMMING

python

23rd and 24th January 2017

Organized by
Department of Computer Applications

LOURDES MATHA COLLEGE OF SCIENCE & TECHNOLOGY

(Promoted by Lourdes Matha Catholic Educational Society)
Lourdes Hills, Kuttichal,
Thiruvananthapuram, Kerala - 695 574
Phone : 0472-2853580, 2853682, 2853546
Website : www.lmcst.ac.in

ABOUT THE INSTITUTION

Lourdes Matha College of Science and Technology established in the year 2002, is a premier institution affiliated to the University of Kerala and APJ Abdul Kalam Technological University. The College Offers undergraduate programs in five major streams and five post graduate courses.

DEPARTMENT OF COMPUTER APPLICATIONS

Department of Computer Applications was established in the year of 2005. The department is committed to develop quality IT professionals by providing concept oriented subject knowledge through high quality teaching supplemented with practical knowlegde and skills.

OBJECTIVES OF THE COURSE :

To help the participants to create and execute Python programs. The presentations are designed to provide knowledge and experience to participants that serve as a foundation for continued learning of presented areas.

COURSE CONTENT :

- Introduction to Python Programming
- Object-oriented programming with Python
- Hands-on training in Python Programming

HOW TO APPLY

The applications duly filled in the prescribed format should reach the coordinators on or before 19/01/2017. Selection is based on first-come-first-serve basis.

ELIGIBILITY

The Course is open to faculty members with background in Computer Science /Computer Applications.

The registration fee is Rs. 750/- for faculty. Registration fee shall be paid through demand draft drawn in favour of Lourdes Matha College of Science and Technology payable at Thiruvananthapuram.

IMPORTANT DATES :

Last date for Submission of registration form : 19/01/2017

Filled in registration forms should be sent to the address given below:

The Coordinator,
FDP-Python Programming,
Department of Computer Applications,
Lourdes Matha College of Science & Technology,
Kuttichal,
Thiruvananthapuram -695 574

For any queries:

Mr. Prasanth Kumar V.S.
Assistant Professor,
Department of Computer Applications,
LMCST.
Ph : +91-9447332469
Email : prasanthkumarvs@lmcst.ac.in

FDP PYTHON- Programme Schedule

23rd Jan 2017(Day 1):

9am	Inauguration	Venue: Conference Hall
9.15am - 10.45am	**Problem Solving in Python** Dr. C G Sukumaran Nair(*Prof. CSE Department*)	Venue: Conference Hall
10.45am – 11.00am	Coffee Break	
11.00am – 12.15pm	**Problem Solving in Python** Dr. C G Sukumaran Nair(*Prof. CSE Department*)	Venue: Conference Hall
12.15pm – 1.00pm	Lunch Break	
1.00pm – 3.45pm	**Introduction to PYTHON Programming.** Prof. Beshiba Wilson (*HOD, CSE Department)*	Venue: Lab A

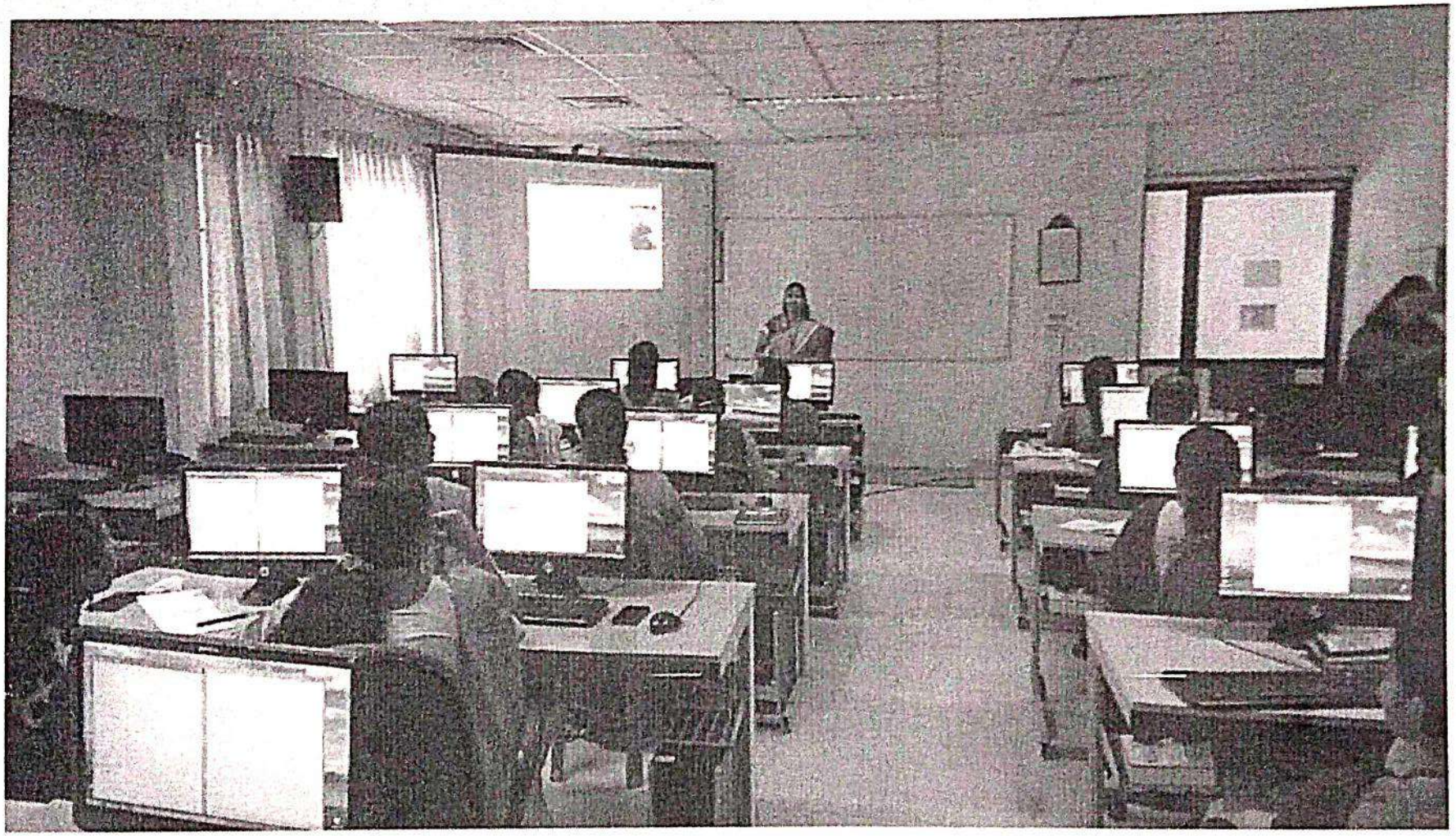
24th Jan 2017(Day 2):

9.30am - 10.45am	**PYTHON programming Hands-on** Prof. Beshiba Wilson (*HOD, CSE Department)*	Venue : Lab A
10.45am – 11.00am	Coffee Break	
11.00am – 12.15pm	**PYTHON programming Hands-on** Prof. Beshiba Wilson (*HOD, CSE Department)*	Venue: Lab A
12.15pm – 1.00pm	Lunch Break	
1.00pm – 3.45pm	**Object Oriented Programming in PYTHON.** Prof. Renetha J B *(CSE Department)*	Venue: Lab A

FDP- PYTHON PROGRAMMING

	NAME	DEPARTMENT	23/01/2017 FN	23/01/2017 AN	24/01/2017 FN	24/01/2017 AN
1	Justin G. Russel	MCA	[signature]	[signature]	[signature]	[signature]
2	Priya S A	MCA	[signature]	[signature]	[signature]	[signature]
3	Shooja Beevi S	CS	[signature]	[signature]	[signature]	[signature]
4	Anjana Thampy S	CS	[signature]	[signature]	[signature]	[signature]
5	J Aswin I Chandran	CS	[signature]	[signature]	[signature]	[signature]
6	SHERIN JOSEPH	MCA	[signature]	[signature]	[signature]	[signature]
7	Divya Christopher	CS/IT	[signature]	[signature]	[signature]	[signature]
8	Sowmya B S	CS/IT	[signature]	[signature]	[signature]	[signature]
9	Neethu Mohan	MCA	[signature]	[signature]	[signature]	[signature]
10	Asha A S	CS	[signature]	[signature]	[signature]	[signature]
11	Smitha J C	CSE	[signature]	[signature]	[signature]	[signature]
12	Ambily Jane	CS/IT	[signature]	[signature]	[signature]	[signature]
13	Sonia George	CSE	[signature]	[signature]	[signature]	[signature]
14	Lekshmi Chandran	CS/IT	[signature]			
15	Chithira Rekshmi G	CS/IT	[signature]	[signature]		
16	BESHIBA WILSON	CS/IT	[signature]	[signature]	[signature]	
17	RENETHA JR	CS/IT	[signature]	[signature]	[signature]	[signature]
18	ASHITHA - S S	CS/IT	[signature]	[signature]	[signature]	[signature]
19	PRASANTH KUMAR. V.S	MCA	[signature]	[signature]	[signature]	[signature]
20	Bizai K. Chacko	MCA	[signature]	[signature]	[signature]	[signature]
21	Sunu Thomas	CS	[signature]	[signature]	[signature]	
~~22~~	~~Sonia George~~	~~CS~~	~~[signature]~~	~~[signature]~~		
22	ANJANA J	MCA			[signature]	[signature]
23	Chithra A S	CS/IT			[signature]	[signature]
24.	Christy Joju	CS/IT			[signature]	[signature]
25.	Priya Sekhar S	CS/IT			[signature]	[signature]
26	Ramya Krishnan S	MCA			[signature]	[signature]

FDP on "Python Programming" organized by Department of Computer Applications on 23 and 24 January 2017.



Lourdes Matha College of Science & Technology

REGISTRATION FORM

FACULTY DEVELOPMENT PROGRAMME ON

VLSI &MIXED SIGNAL DESIGN

Name : Mr/Ms _____

Designation : _____

Department : _____

Institution : _____

Gender : Male / Female

Date of Birth & Age : _____

Educational Qualifications : _____

Mobile No : _____

Email : _____

Accommodation Needed : Yes / No

Place : _____

Date : _____

Signature

SPONSORSHIP

Mr. /Ms. /Mrs. _____ is an employee of our institution and is hereby sponsored for attending the Faculty Development Programme on VLSI & Mixed Signal Design on 24.01.2017 and 25.01.2017 at Lourdes Matha College of Science and Technology. He/She will be permitted to attend the course, if selected.

Place :
Date :

Signature of the Sponsoring authority with seal

ORGANISING COMMITTEE

Patron :

Prof. P.M. Hormese
Director

Chairman :

Dr. Syam Prakash V.
Principal

Advisory Committee :

Shri. Ignatious C. A.
Advisor, R & D, LMCST

Convenor :

Prof. Ram Prasad Thripathy
Head of the Department,
Department of Electronics & Communication Engineering

Coordinators :

Mrs. Soorya S.R.
Assistant Professor
Department of Electronics & Communication Engineering

Mrs. Debarati Ganguly
Assistant Professor
Department of Electronics & Communication Engineering

VENUE:

Lourdes Matha College of Science and Technology

Faculty Development Programme
on

VLSI & MIXED SIGNAL DESIGN

24.01.2017 and 25.01.2017

Organized by
Department of Electronics & Communication Engineering

LOURDES MATHA COLLEGE OF SCIENCE & TECHNOLOGY

(Promoted by Lourdes Matha Catholic Educational Society)
Lourdes Hills, Kunnickal,
Thiruvananthapuram, Kerala - 695 574
Phone : 0472-2553550, 2553642, 2553546
Website : www.lmcst.ac.in

[illegible] THE INSTITUTION

[illegible] College of Science and Technology established [illegible] is a premier institution affiliated to the University of [illegible] and APJ Abdul Kalam Technological University. The institute [illegible] undergraduate programmes in five major streams and five post [illegible] streams.

[illegible] OF ELECTRONICS & COMMUNICATION ENGINEERING

Department of Electronics and Communication Engineering established in the year of 2002. The department is committed to [illegible] quality [illegible] by providing concept oriented subject [illegible] through high quality teaching supplemented with practical [illegible] skills.

[illegible]ECTIVES OF THE COURSE :

[illegible] the participants to gain in-depth knowledge in VLSI. The [illegible] are designed to provide knowledge and experience in [illegible] that serve as a foundation for continued learning of [illegible].

COURSE CONTENT :

The FDP will focus on the following topics

- Fundamentals of Analog VLSI
- Basics of Digital VLSI
- Concepts of Mixed Signals Design

HOW TO APPLY

The applications duly filled in the prescribed format should reach the coordinators on or before 20/01/2017. Selection is based on first-come-first-serve basis.

ELIGIBILITY

The Course is open to faculty members with background in Electronics and Communication Engineering / Electrical and Electronics Engineering.

REGISTRATION FEES

The registration fee is Rs 500/- for faculty. Registration fee shall be paid through demand draft drawn in favour of Lourdes Matha College of Science and Technology payable at Trivandrum.

IMPORTANT DATES :

Last date for submission of registration form : 20.01.2017

Filled-in registration forms along with demand draft should be sent to the address given below:

The Coordinator,
FDP - VLSI & Mixed Signal Design,
Department of Electronics & Communication Engineering,
Lourdes Matha College of Science & Technology,
Kuttichal,
Thiruvananthapuram - 695 574

For any queries :

Mrs. Soorya S R	Mrs. Debarati Ganguly
Assistant Professor	Assistant Professor
Dept. of ECE	Dept. of ECE
Ph: +91-[illegible]	Ph: +91-9567571285
[illegible]@lmcst.ac.in	[illegible]ganguly@yahoo.co[illegible]

FDP ON VLSI &MIXED SIGNAL DESIGN on 24.1.17 -25.1.17

ATTENDANCE STATEMENT

SLNO	NAME	24.1.17 FN	24.1.17 AN	25.1.17 FN	25.1.17 AN
1	Ms. Swapna M				
2	Ms. Priya P.S				
3	Ms. Revathy Sasidharan				
4	Ms. Renu .V				
6	Ms. Jean Dickson				
7	Ms. Cibumol B. Babu				
8	Ms. Ammu Anna Mathew				
9	Ms. Arya Vijayan				
10	Ms. Sreedevi R.C				
11	Mr.Ram Prasad Thripathy				
14	Ms. Nisha George				
15	Dr. Dinakardas C.N				
16	Ms. Soorya S.R				
17	Ms. Veena V.U				
19	Ms. Bincy Louis				
20	Mr. Binu Chacko				
21	Mr. Greejith M.G				

22	Mr. Shammy Arun Mathew				
23	Ms. Manju M.S				
24	Ms. Athira A.P				
25	Ms. Debarati Ganguly				
26	Mr. Jobin Jose				
27	Ms. Soumya V S				
28	Mrs. Resmimol. T.S				
29					

LOURDES MATHA COLLEGE OF SCIENCE &TECHNOLOGY KUTTICHAL
DEPARTMENT OF ELECTRONICS &COMMUNICATION ENGINEERING
FDP ON VLSI AND MIXED SIGNAL DESIGN
24.17-25.1.17
REGISTRATION SHEET

SL NO	NAME OF PARTICIPANT	NAME OF THE INSTITUTION	DEPARTMENT	SIGNATURE
1	PROF SWAPNA M	LMCST	EEE	
2	PROF PRIYA P S	LMCST	EEE	
3	PROF REVATHY SASIDHARAN	LMCST	EEE	
4	PROF RENU V	LMCST	EEE	
5	PROF JEAN DICKSON	LMCST	EEE	
6	PROF CIBUMOL B BABU	LMCST	EEE	
7	PROF AMMU ANNA MATHEW	LMCST	EEE	
8	PROF ARYA VIJAYAN	LMCST	EEE	
9	PROF SREEDEVI R C	LMCST	EEE	
10	PROF RAM PRASAD THRIPATHY	LMCST	ECE	
11	PROF NISHA GEORGE	LMCST	ECE	
12	DR.DINAKARDAS C N	LMCST	ECE	
13	PROF SOORYA S R	LMCST	ECE	
14	PROF VEENA V U	LMCST	ECE	
15	PROF BINCY LOUIS	LMCST	ECE	
16	PROF BINU CHACKO	LMCST	ECE	
17	PROF GREEJITH M G	LMCST	ECE	
18	PROF SHAMMY ARUN MATHEW	LMCST	ECE	
19	PROF MANJU M S	LMCST	ECE	
20	PROF ATHIRA A P	LMCST	ECE	
21	PROF DEBARATI GANGULY	LMCST	ECE	
22	PROF JOBIN JOSE	LMCST	ECE	
23	PROF SOUMYA V S	LMCST	ECE	
24	PROF RESMIMOL T S	TRINITY COLLEGE OF ENGG	ECE	Resmimol TS

Lourdes Matha College of Science & Technology

REGISTRATION FORM

FACULTY DEVELOPMENT PROGRAMME ON
BIG DATA & ANALYTICS

Name : Mr/Ms .....

Designation : .....

Department : .....

Institution : .....

Gender : Male / Female

Date of Birth & Age : .....

Educational Qualification : .....

Mobile No. : .....

Email : .....

Accomodation Needed : Yes / No

Place : .....

Date : .....

Signature

SPONSORSHIP

Mr. /Ms. /Dr. ..... is an employee of our institution and is hereby sponsored for attending the Faculty Development Programme on Big Data and Analytics from 30/01/2017 to 01/02/2017 at Lourdes Matha College of Science and Technology. He/She will be permitted to attend the course, if selected.

Place :
Date :

Signature of the Sponsoring authority with seal

ORGANISING COMMITTEE :

Patron :

Prof. P.M. Hormese
Director

Chairman :

Dr. Syam Prakash V.
Principal

Advisory Committee :

Dr. C.G. Sukumaran Nair
Professor,
Department of Computer Science & Engineering

Shri. Ignatious C. A.
Advisor, R & D, LMCST

Convenor :

Prof. Beshiba Wilson
Head of the Department,
Department of Computer Science & Engineering

Coordinators :

Prof. Sunu Thomas
Assistant Professor
Department of Computer Science & Engineering

Prof. Anjana Thampy
Assistant Professor
Department of Computer Science & Engineering

LOURDES MATHA COLLEGE OF SCIENCE & TECHNOLOGY
KUTTICHAL THIRUVANANTHAPURAM 695 574

03/2/17 Sunu Thomas

PRINCIPAL
LOURDES MATHA COLLEGE OF
SCIENCE & TECHNOLOGY
Lourde Hills, Kuttichal P.O.
Thiruvananthapuram Dist. 695 574

Faculty Development Programmme
on
BIG DATA & ANALYTICS

30.01.2017 to 01.02.2017

Organized by
Department of Computer Science & Engineering

in association with

Indian Society for Technical Education

LOURDES MATHA COLLEGE OF
SCIENCE & TECHNOLOGY
(Promoted by Lourdes Matha Catholic Educational Society)
Lourdes Hills, Kuttichal,
Thiruvananthapuram, Kerala - 695 574
Phone : 0472-2853550, 2853682, 2853546
Website : www.lmcst.ac.in

ABOUT THE INSTITUTION

Lourdes Matha College of Science and Technology established in the year 2002, is a premier institution affiliated to the University of Kerala and APJ Abdul Kalam Technological University. The institute offers five undergraduate and five post graduate programmes in Engineering and Technology, including MBA. The institute is ISO 9001:2008 certified for its quality education and has active IEEE, ISTE and CSI chapters.

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Department of Computer Science and Engineering was established in the year of 2002. The department imparts quality education in the field of Computer Science, keeping in the mind the requirements of the dynamic, innovative and highly global environment of the present era. The department offers M.Tech with specialization in Computer Science and Engineering since 2012.

OBJECTIVES OF THE COURSE :

- Establishing Centres of Excellence for focused applicable research in Big Data.
- Training of the faculty for effective Teaching and Enhancing Institutional and System Management effectiveness.

COURSE CONTENT :

The FDP will focus on the following topics :

- Big Data Landscape.
- Storing and processing Big Data using different techniques.
- Research applications of Big Data

PARTICIPANTS

Faculty from CSE / IT/ MCA branches who wish to improve their research horizons in the field of Big Data and Analytics, can attend this programme.

REGISTRATION FEES

A maximum of 40 participants are permissible on first-come-first serve basis.

The registration fee is Rs. 1200/- for faculty and shall be paid through demand draft drawn in favour of "Lourdes Matha College of Science and Technology" payable at Thiruvananthapuram.

RESOURCE PERSONS

Faculty team consists of eminent academicians and industry experts.

IMPORTANT DATES :

Filled-in registration forms along with demand draft should should be sent to the Coordinator on or before 25.01.2017.

ADDRESS FOR COMMUNICATION :

Prof. Sunu Thomas,
Assistant Professor,
Department of Computer Science & Engineering,
Lourdes Matha College of Science & Technology,
Kuttichal,
Thiruvananthapuram - 695 574
Ph : +91-9447158231, +91-9447729207
Email : sunu.thomas@lmcst.ac.in

VENUE :

Lourdes Matha College of Science & Technology

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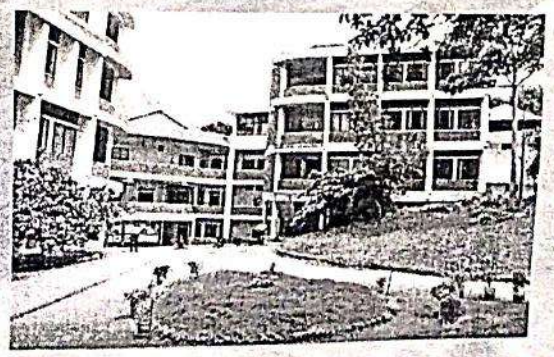
VENUE :

Lourdes Matha College of Science & Technology



Three day FDP on Big Data & Anaytics

30.1.2017 to 01.02.2017

Budget

Sl. No	Expenditure	Amount
1	Resource Person 1	12000
2	Resource Person 2	4000
3	Tea for 40 participants for 3 days (24x3 for 40 participants)	2880
4	Lunch (in case of 10 participants)	450
5	Travelling Expenses	1000
6	Banner [1no (8x4 size), 1no (5x4 size)]	1100
	Total	21430

Sl. No	Income Expected	
1	ISTE Sponsorship	10000
2	Registration Fees (expecting 10 outside participants)	
	Total	10000

Advance Amount Required from College — Rs 10000/-

forwarded to Principal

23/1/17
(HOD, CSE)

23/1/17
FDP Coordinator
(Dept of CSE)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY, KUTTICHAL

FACULTY DEVELOPMENT PROGRAMME

ON

BIG DATA & ANALYTICS

(30th January to 1st February ,2017)

*in association with **ISTE***

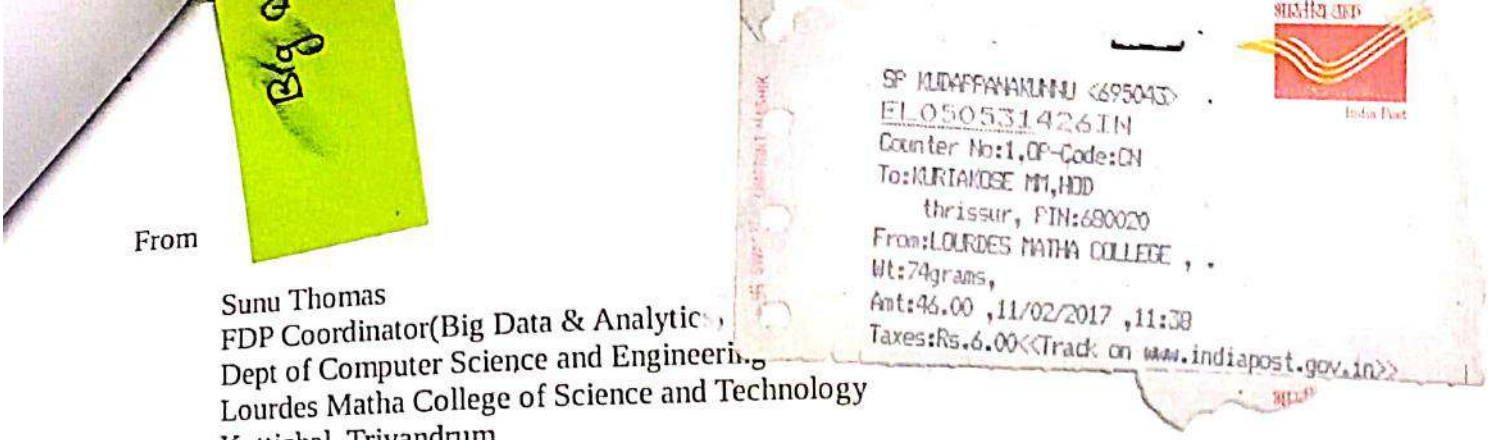
INAUGURATION

Venue: Conference Hall **Date & Time: 30/01/2017 at 9:00 am**

PROGRAMME SCHEDULE

Prayer Song	: Ms. Divya Christopher (Asst Professor, Dept of CSE)
Welcome Speech	: Ms. Beshiba Wilson (HOD, Dept of CSE)
Address By	: Prof. P.M. Hormese (Director, LMCST)
	: Dr. V. Syam Prakash (Principal, LMCST)
	: Mr. Ignatious C.A (Advisor, R&D)
Vote of Thanks	: Ms. Sunu Thomas (Asst Prof, Dept of CSE)

All are cordinally invited



From

Sunu Thomas
FDP Coordinator(Big Data & Analytics)
Dept of Computer Science and Engineering
Lourdes Matha College of Science and Technology
Kuttichal, Trivandrum

To

Prof Kuriakose M M
HOD
Dept Of Mechanical Engineering
Maharaja's Technological Institute
Thrissur-20

February 4th 2017

Sub: Sponsorship for three day FDP on Big Data & Analytics

Sir,

We have successfully conducted three day Faculty Development Programme on Big Data & Analytics on 30.01.2017, 31.01.2017 & 02.02.2017 at Lourdes Matha College of Science & Technology, Trivandrum. I attach here with the budget and original bills of our expenses.

Kindly grant the sponsorship for the same.

Thanking You

Yours Faithfully

Sunu Thomas

Forwarded by:

HOD
(BESHIBA WILSON)

Dr. V. SYAMALA
Principal
Lourdes Matha College of Science & Technology
Kuttichal
Nanthapuram - 695

Lourdes Matha College of Science and Technology

Department of Computer Science and Engineering

Three day FDP on Big Data & Analytics

30.1.2017, 31.1.2017 & 02.02.2017

Sl. No	Expenditure	Amount
1	Resource Person 1	10000
2	Resource Person 2	10000
3	Memento	1208
4	Tea & Snacks (3days)	2220
5	Lunch (3 days)	720
6	Travelling Expenses	250
7	Banner [1no (8x4 size), 1no (5x4 size)]	1250
8	Miscellaneous	594
	Total	26242

Sl No	Income	Amount
1	Registration fees(600x3, 800x1)	2600

Total Expense **26242**

FDP Coordinator
(Sumi Thomas)

HOD
(BESHIBA WILSON)

Principal

Dr. V. SHAM PRAKASH
Principal
Lourdes Matha College of
Science and Technology
Lourdes Hills, Kuttichal
Thiruvananthapuram - 695 5..

Department of Computer Science and Engineering

Faculty Development Programme on

BIG DATA & ANALYTICS

Signature sheet

Sl .No	Name	30.01.2017 FN	30.01.2017 AN	31.01.2017 FN	31.01.2017 AN	02.02.2017 FN	02.02.2017 AN
1	Sethu Parvathi C						
2	Aiswarya. V						
3	Minu Mariyam						
4	Asha. A S						
5	Bisni R. Charlys						
6	Neethu Mohan						
7	Priya S A						
8	Sonia George						
9	AMBILY JANE						
10	Roopa S kumar						
11	Subhami Mohan						
12	Smitha. J. C						
13	Sheeja Beevi.S.						
14	Sruthilekshmi R						
15	Beshiba Wilson						
16	Afis Moossa. P						
17	Hamil Stanly						
18	Sumi Thomas						
19	Anjana Thampy S						
20	ANSAR. A						
21	ARUN N.A						
22	Saranya B S						
23	Divy Christophes						
24	~~Ansar~~						
25	Chithra A.S						
26	Aswin P Chandran						
27	Chithira Rakshmi G						
28	~~RESHMA K~~						
29	Priya Sekhar.S						
30							

Sumi Thomas

(FDP Coordinator)


LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY
BIG DATA & ANALYTICS
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Department of Computer Science and Engineering

Three day FDP on Big Data & Analytics

30.1.2017, 31.1.2017 & 02.02.2017

Revised Budget

Sl. No	Expenditure	Amount
1	Resource Person 1	10000
2	Resource Person 2	10000
3	Memento	1208
4	Tea & Snacks (3days)	2220
5	Lunch (3 days)	720
6	Travelling Expenses	250
7	Banner [1no (8x4 size), 1no (5x4 size)]	1250
8	Miscellaneous	594
	Total	26242

Sl No	Income	Amount
1	Registration fees(600x3, 800x1)	2600

Advance from College 30000

Total Expense 23642

Refund amount to College 6358

25/5/17 Sunu Thomas

(FDP Coordinator)

HOD, C&E

Submitted for Approval

I am pleased to inform that we, **Department of Computer Science and Engineering** ~~Department~~ are planning to conduct a three-day faculty Development Programme on **"Big Data & Analytics" in association with ISTE** in our institution from 30th January to 1st February 2017. This FDP would be beneficial for our faculties. Participants from other institution are also invited.

The three day session will be handled by eminent academician from IIST and industry experts. The total cost of FDP is Rs 25000/-The price quoted in inclusive of TA and taxes. Enclosed is the broucher of the FDP program.

forwarded to Principal
23/1/17
(HOD, CSE)

Coordinator

Sunu Thomas

Asst. Professor

Dept of CSE

LMCST

Submitted for Approval

I am pleased to inform that we, Department of Computer Science and Engineering are conducting a three-day faculty Development Programme on "Big Data & Analytics" in association with ISTE in our institution from 30th January to 1st February 2017.

We submitted a request of Rs 25000/- for our FDP, out of which Rs. 20000/- has been already sanctioned on 23/01/2017.In addition to this amount we need Rs 10,000/- to meet our FDP expenses. After receiving the sanctioned amount from ISTE , the entire amount received from the college will be settled back at the earliest.

Pl. pay

31-1-17.

Coordinator

Sunu Thomas

Asst. Professor

Dept of CSE

LMCST

Okay

31/1/17

pay Rs. 15000/- (out of this Advance Rs. 10000)

31/1/2017

Department of Computer Science and Engineering

Three day FDP on Big Data & Anaytics

30.1.2017 to 01.02.2017

Revised Budget

Sl. No	Expenditure	Amount
1	Resource Person 1	10000
2	Resource Person 2	10000
3	Resource Person 3	4000
4	Memento	700
5	Tea for 30 participants for 3 days (24x3 for 30 participants)	2160
6	Lunch (6 participants)	480
7	Travelling Expenses	1000
8	Banner [1no (8x4 size), 1no (5x4 size)]	1250
9	Miscellaneous(Cup)	590
	Total	30180

Sl No	Income	Amount
1	Registration fees(600x3, 800x1)	2600
2	ISTE Sponsorship(full amount anticipated)	10,000

TWO WEEK ISTE STTP ON

"CMOS, MIXED SIGNAL & RADIO FREQUENCY VLSI DESIGN"

30th JANUARY 2017 to 04th FEBRUARY 2017

LOURDES MATHA
COLLEGE OF SCIENCE & TECHNOLOGY

Indian Institute of Technology
Kharagpur

Two-Week ISTE STTP on CMOS Mixed Signal and Radio Frequency VLSI Design sponsored by National Mission on Education through ICT (NMEICT), funded by MHR

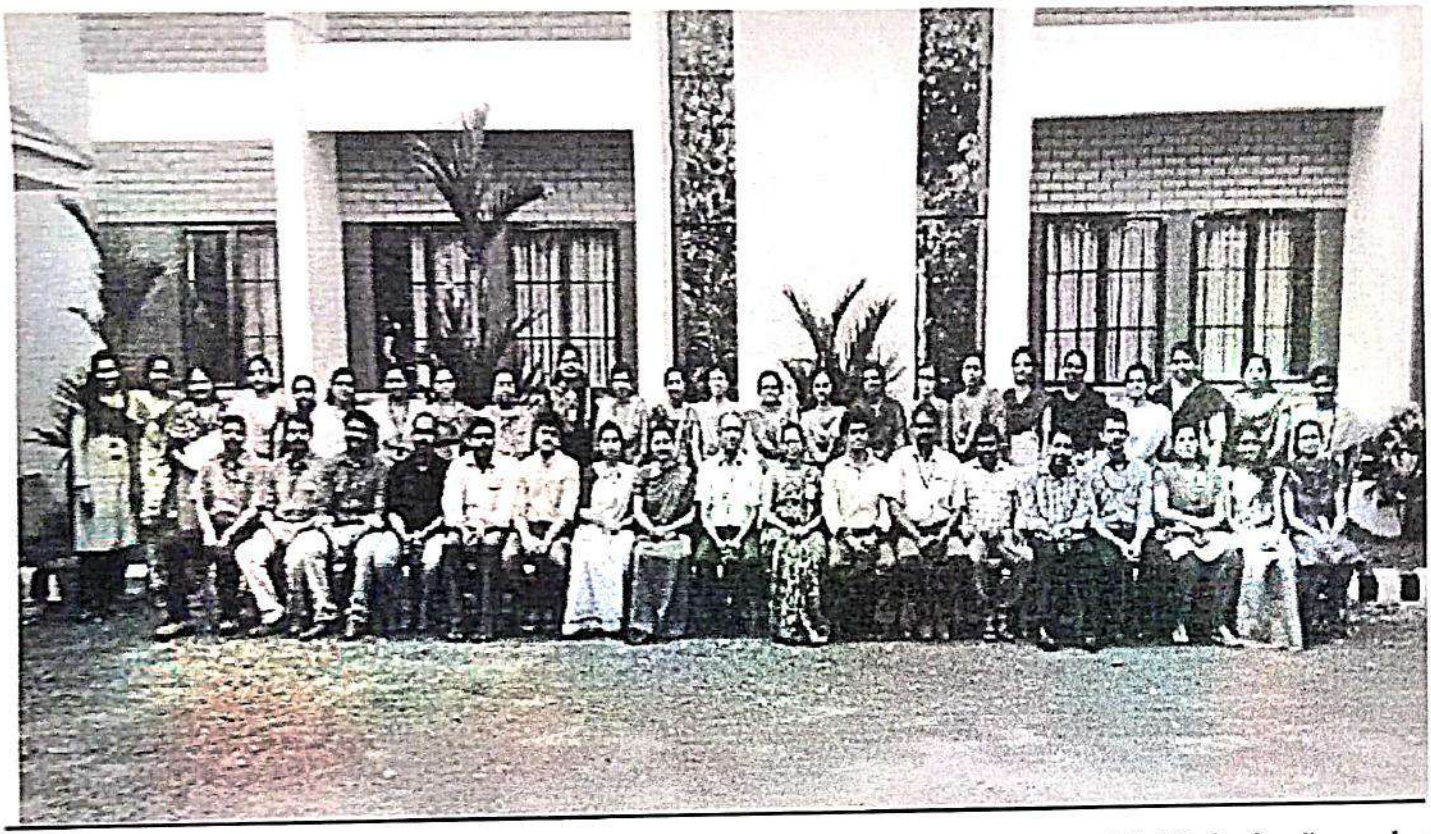
30th January to 04th February 2017

A report on the "Two-Week ISTE STTP on CMOS Mixed Signal and Radio Frequency VLSI Design" conducted from 30th January to 04th February 2017. The event was sponsored by National Mission on Education through ICT (NMEICT), funded by MHRD and was inaugurated at Lourdes Matha College of Science and Technology which is a remote center of IIT Bombay.

The inaugural session witnessed the presence of Dr.Syam Prakash V., Principal, Prof.Chithira R.G (Remote Centre Coordinator) and 41 faculties of various Engineering Colleges of Kerala. Dr.Syam Prakash V, while addressing the gathering informed that mission of MHRD, Govt. of India is to trained teachers so that they are strong enough towards the fundamental of CMOS and Mixed Signal Processing and become capable enough to deliver to the students in the class. The Remote Centre Coordinator informed that during two week from 30th January to 04th February 2017, the course content of the workshop will provide training to faculties on teaching pedagogy to make extensive use of Technology. She briefed that during 1 week following topics of subject VLSI Design will be covered as follows:

Module 1 Radio Frequency Integrated Circuits (RFIC): Module-A: Fundamental of RFIC design, How RF design alters from traditional analog design. Various commercial protocols, basic TxRx Architecture, Module-B: Various performance parameters, Noise and Module-C: Design of LNA, VCO, Mixer and frequency synthesizer, Power amplifier, High speed I/O (SERDES), layout of RF circuit design.

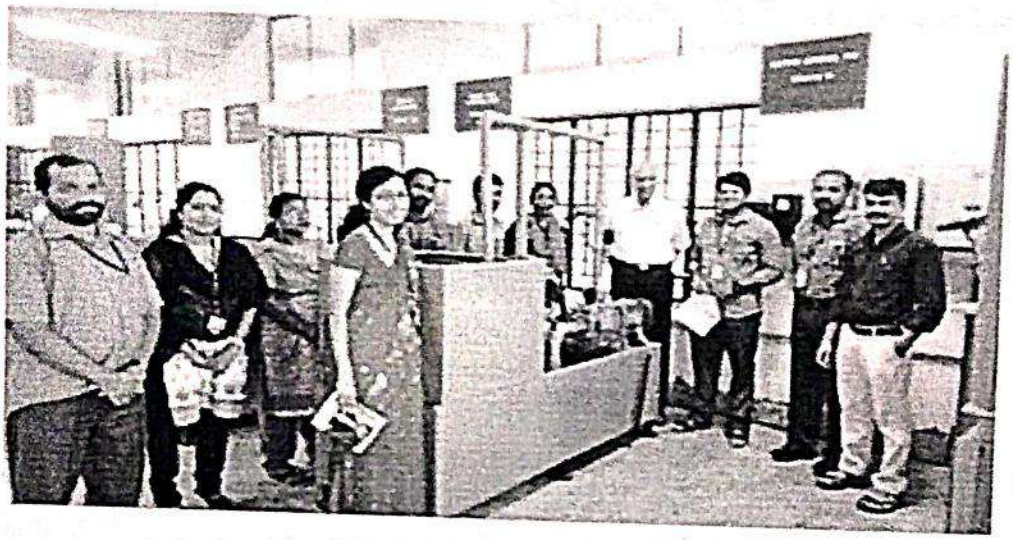
Module 2 Mixed signal Blocks:Digital VLSI Design: -Algorithmic level b) Architectural level of video processing and Analog Design: Analog front-end electronics (AFE), SAR ADC, Pipelined ADC. Lourdes Matha College of Science and Technology has been operating as remote centre for IIT MHRD Mission and organizing various activities as directed by IIT BOMBAY and IIT Kharagpur. The lecture transmission and live interaction takes place through distance mode using the AVIEW technology on the Internet to various coordinating remote centers across the country. The two week program will be live transmitted from IIT Kharagpur. The faculties involved in the teaching are: Prof. T. K. Bhattacharya, Prof. Indrajit Chakrabarti, and Dr. Mrigank Sharad. The Principal appealed all the faculties to be regular and active throughout the session. 41 Faculty members from various Engineering Colleges of Kerala have registered themselves as participants.



Two week ISTE STTP on "CMOS mixed signal and radio frequency VLSI design" conducted by IIT Kharagpur from 30th January to 4th February through IIT B remote centre, LMCST.

Two day seminar on "FLUID MECHANICS AND MACHINES LAB" from 20th to 21st Decemeber 2016 – conducted by the Department of Mechanical Engineering.

- Faculty of ME Dept. attended a two day seminar by Director, Prof. P.M. Hormese on the topic "Fluid Mechanics and Machines Lab" from 20th to 21st December 2016.



DEPARTMENT OF MECHANICAL ENGINEERING			
LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY			
Fluid Mechanics and Machines Lab			
ATTENDANCE SHEET			
Sl No.	Name of partcipant	20-12-2016	21-12-2016
1	Sabarinath A R		
2	Resmi V Prasad		
3	Franklin P Joshua		
4	Deeja Milner		
5	Krishnaprasanth		
6	Akhil S Augustine		
7	Ankur A		
8	Sajith Krishnan R		
9	Vishnu C S		

FACULTY DEVELOPMENT PROGRAMME IN CONCEPTS COACHING CONDUCTED BY ICT ACADEMY OF KERALA AT

LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY

DATE : 07.07.2016 to 11.07.2016

As part of the MOU between ICT Academy of Kerala and LMCST, a three day FDP was arranged on CONCEPTS COACHING from 07.07.2016 to 11.07.2016. Twenty eight faculty members from various departments attended the FDP. The sessions were handled by Mr. Pradeep, Consultant Trainer. The sessions were designed to develop the state of the art teaching techniques of faculty for overall improvement. The details of the topics covered are introduction to Concept Coaching , Conventional Teaching versus Modern approach , Importance of VAK in Teaching, Effective Presentation Skills, Memory techniques, Micro presentations by faculty ,Learning Styles, Blooms Taxonomy, Micro Presentations by Faculty followed by evaluation. All the sessions were accomplished with Simulations, Exercises, Games, Case Studies and Role Plays.

CONTENTS OF FDP :

Introduction to Concept Coaching

Significance of Concept Coaching

Conventional Teaching versus Modern approach

Change Management

VAK Introduction

Importance of VAK in Teaching

Memory techniques

Micro presentations by faculty

The following faculty members participated in the FDP,

Sl.No.	Name of Participants	07/07/2016	08/07/2016	11/07/2016
1	Reji John (MBA)			
2	Tony Jacob (MBA)			
3	Haritha Simon (MBA)			
4	Bismi K Charley (MCA)			
5	Priya S A (MCA)			
6	Prasanth Kumar V S (MCA)			
7	Renu V (EEE)			
8	Jifflin Das (EEE)			
9	Ammu Anna Mathew (EEE)			
10	Arya Vijayan (EEE)			
11	Sreedevi R C (EEE)			
12	Priyanka C P (EEE)			
13	Lekshmi Chandran (CSE)			
14	Ashitha S S (CSE)			
15	Saranya B S (CSE)			
16	Anagha V (CE)			
17	Indu Rajan (CE)			
18	Kiran Padiyara (CE)			
19	Prajisha J P (CE)			
20	Sarika S (CE)			
21	Geethu Jose (ASH)			
22	Ancy S (ASH)			
23	Nisha R S (ASH)			
24	Divya S Nair (ASH)			
25	Jayaram V (ME)			
26	Akhil S Augustine (ME)			
27	Sajith Krishnan R (ME)			

NATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING & TECHNOLOGY

'NCETET - 16'

August 9th - 10th, 2016

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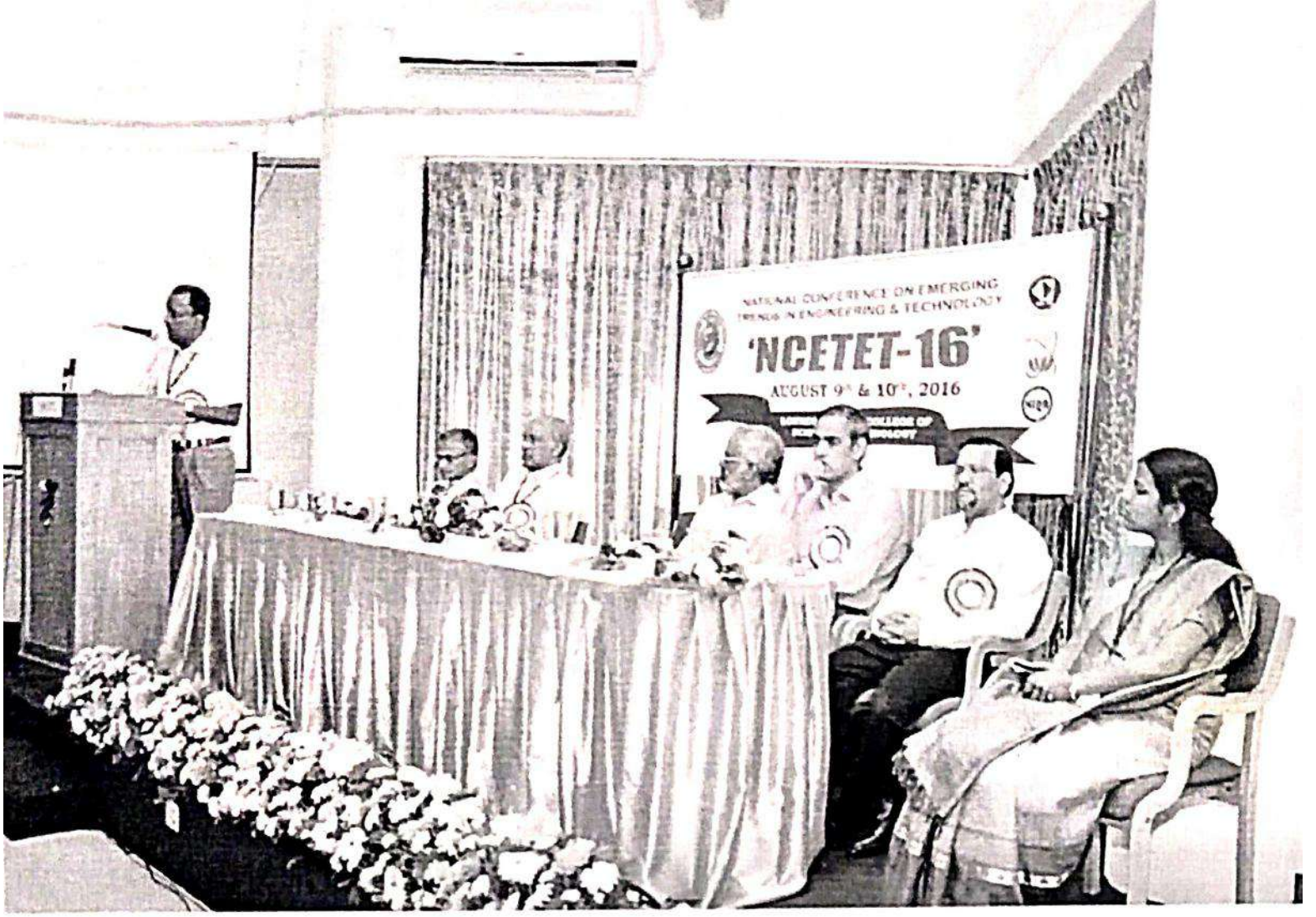
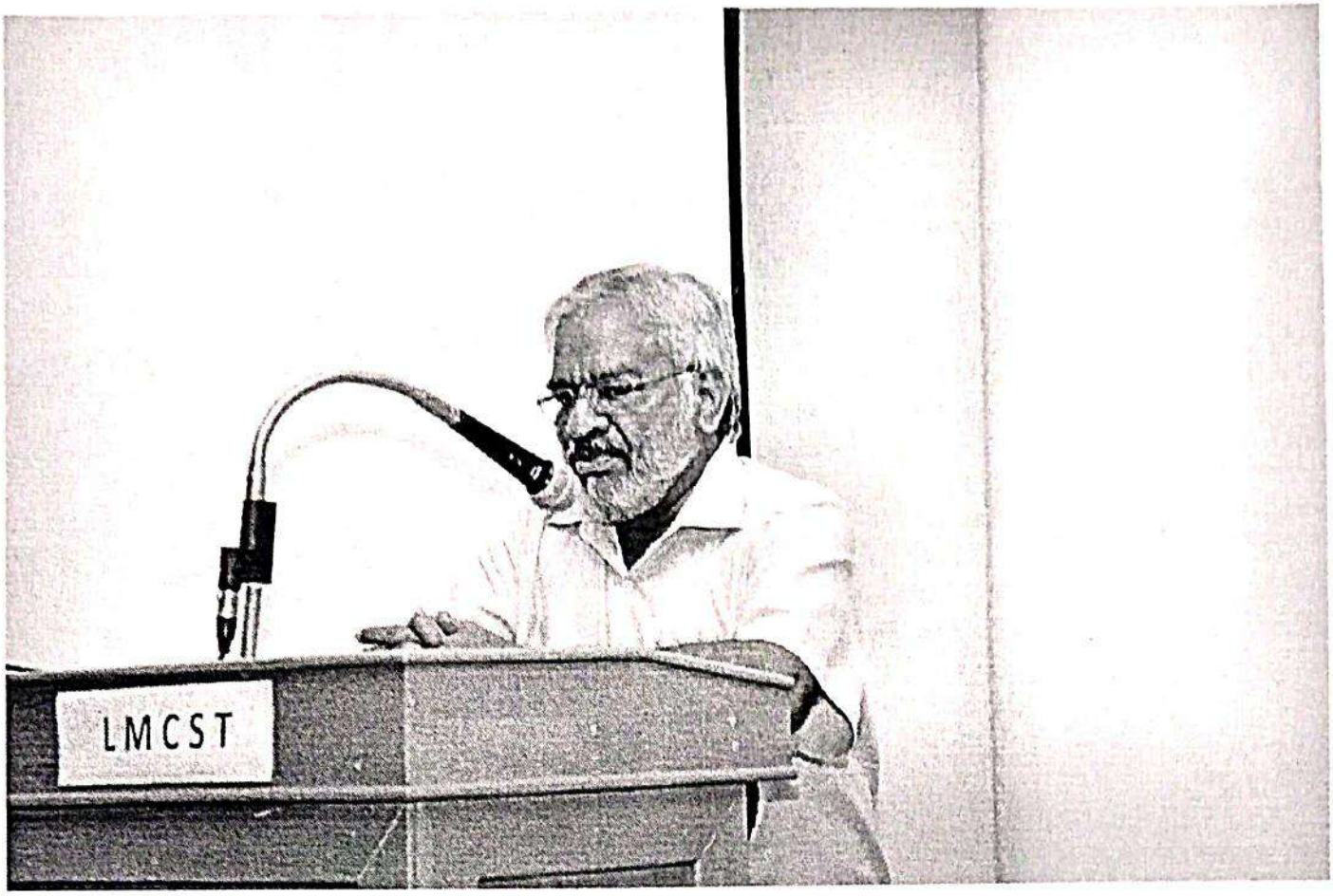
Website : www.lmcst.ac.in

National Conference on Emerging Trends in Engineering and Technology (NCETET'16)

The National Conference on Emerging Trends in Engineering and Technology (NCETET'16) was organized by Lourdes Matha College of Science & Technology in association with Computer Society of India (CSI), National Institution for Quality and Reliability (NIQR) and International Advanced Research Journal in Science, Engineering and Technology (IARJSET) on 9th and 10th of August 2016 at LMCST. The presidential address was delivered by Dr.V. Syam Prakash, Principal, LMCST. The conference was inaugurated by Shri. M. Chandra Dathan, Advisor to Chief Minister and Former Director, VSSC, Trivandrum. Er.Philip John, Secretary, LMCES and Prof.P.M. Hormese, Director, LMCST felicitated the gathering. Shri. B.Ramani, Executive Director, C-DAC delivered the keynote address. Dr. Anil Bharadwaj, Director of Space Physics Laboratory, VSSC, Trivandrum and Mr.Ajith Gopi, ANERT delivered invited talk. Out of 110 papers, 69 papers were presented in the conference and published in IARJSET journal. Best paper awards were distributed in the five major areas during the valedictory function on 10.08.16.


NATIONAL CONFERENCE ON EMERGING
TRENDS IN ENGINEERING & TECHNOLOGY
'NCETET-16'
AUGUST 9 & 10, 2016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NCETET'16

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Lourdes Matha College of Science & Technology, Thiruvananthapuram

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NCETET'16

National Conference on Emerging Trends in Engineering and Technology

Lourdes Matha College of Science & Technology, Thiruvananthapuram

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ACKNOWLEDGEMENT

IARJSET wishes to offer the possibility of permanent contact with prestigious universities, research centres, economic and industrial companies from around the world, which should facilitate the initiation of research and development projects, technology and know-how transfer in the area of Science, Engineering, and Technology. The Journal is therefore an enthusiastic newcomer that aims to establish the benchmark in the field.

Impact Factor is 3.943

Member of 

Indexed by **Google Scholar, Directory of Science, Google, CiteFactor**

This journal publication would not have been possible without the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of journal. First and foremost, my utmost gratitude to executive editor, managing editor, editorial board members and reviewers whose sincerity and encouragement. IARJSET is strongly supported by a dedicated international editorial board consisting of renowned scientists. Thus, we need to ensure the highest quality standards of the journal and provide prompt, detailed, rigorous assessments that allow rapid editorial decisions and result in significantly improved manuscripts. Also we wish for the editorial board members' further support, by providing the editors with advice and suggestions and by submitting some of the best work of their own activity.

Wish you all the best!

IARJSET

Frequency : 12 Issues per year

Subject Category : Science, Engineering and Technology

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India : Monthly INR 400 or Annual INR 4000

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NATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING & TECHNOLOGY

'NCETET - 16'

August 9th - 10th, 2016

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About the College

Lourdes Matha College of Science and Technology established by the "Lourdes Matha Catholic Educational Society", is approved by All India Council for Technical Education (AICTE) and affiliated to the University of Kerala and APJ Abdul Kalam Technological University. The College has a spacious campus of 25 acres at Kuttichal, a rustic village in the outskirts of Thiruvananthapuram city, hardly 24 kms away from it. The vision of the Lourdes Matha Educational Society is to establish a "Centre of Excellence" in the field of Engineering and Technology to mould world class professionals.

Objective of Conference

The National Conference on Emerging Trends in Engineering & Technology "NCETET - 16" will act as a forum for researchers and academicians interested in the advancements of Engineering to present and observe the latest research, results and ideas. The conference will also provide the participants a platform to interact and share their knowledge

Call for Papers

Original contributions on Emerging Trends in Engineering & Technology are invited from researchers, academicians and industry experts to be presented in the conference. The major areas to be covered are as below :

- Structural Engineering
- Mechanical Engineering Design
- Composites and Smart Materials
- Finite Element Analysis of Structure
- Networks and Data Security
- Construction Technology
- Image Processing and Biometrics
- 3D Printing Technology
- Power Systems
- Electrical Machines
- Artificial Intelligence
- New Energy Systems
- Robotics
- Mechatronics
- Cloud Computing
- Big Data
- Embedded Systems
- Control Systems
- Communication Electronics
- Power Electronics

Papers from other topics of Engineering and Technology are also welcome.

Registration Form - NCETET - 16

NATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING & TECHNOLOGY

August 9,10 - 2016

Name : Mr/Ms .....

Designation : .....

Institution : .....

Address : .....

.....

.....

Contact No : .....

Email : .....

Accomodation Required : Yes / No

(Can be arranged subject to availability)

Payment Details:

DD NO : ..... **Date** : .....

Name of the Bank : .....

Title of the Paper : .....

.....

Authors : .....

.....

Signature of the applicant

Members Organising Committee

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Ms. Chithra A.S., CSE
Ms. Bindu M.V., ME
Ms. Anjana J., MCA
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Address For Communication

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LMCST

LOURDES MATHA COLLEGE OF SCIENCE & TECHNOLOGY

(Approved by AICTE and Affiliated to the University of Kerala)
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Lourdes Hills, Kuttichal,Trivandrum - 695 574

Ph : 0472 - 2853550
2853682
2853546
Fax : 0472 - 2853846

Ref No:.....

Date: .....

Kuttichal

13th June 2016

Dear Sir/Madam,

Sub: Invitation to participate in the National Conference on Emerging Trends in Engineering&Technology (NCETET'16).

It gives me immense pleasure to inform you that Lourdes Matha College of Science and Technology is organizing a National Conference on Emerging Trends in Engineering and Technology (NCETET'16) on 9th and 10th of August 2016.

This multidisciplinary conference will facilitate the exchange of ideas in topics of all aspects of Engineering and Technology. This conference invites original contributed papers in emerging trends in Engineering and Technology. There will be invited talks on advanced topics by eminent experts and practicing professionals during the conference. Authors are requested to send research papers to **ncetet16@lmcst.ac.in.**

We are privileged to invite faculty, research scholars and students from your esteemed institution to attend and actively participate in the program.

With warm regards,

Yours faithfully,

Principal

PRINCIPAL
LOURDES MATHA COLLEGE OF
SCIENCE & TECHNOLOGY
Lourde Hills, Kuttichal P.O.
Thiruvananthapuram Dist. 695 574

LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY

NCETET '16

AUGUST 9TH & 10TH, 2016

08:30 am : Registration
09:30 am : Invocation
09:35 am : Welcome Speech
09:40 am : About the Conference
Prof. Beshiba Wilson,
Conference Secretary, NCETET '16
09:45 am : Presidential Address
Dr. V. Syam Prakash, Principal, LMCST
10:00 am : Lighting of the Lamp
10:05 am : Inaugural Address
Shri. M. Chandra Dathan,
Advisor to The Chief Minister & Former Director,
VSSC, Trivandrum
10:30 am : Felicitation
Er. Philip John, Secretary, LMCES
10:35 am : Felicitation
Prof. P. M. Hormese, Director, LMCST
10:40 am : Vote of Thanks
10:45 am : Keynote Address
Shri. B. Ramani, Executive Director, C-DAC
11:30 am : Tea Break
11.45 am : Invited Talk
Dr. Anil Bharadwaj,
Director of Space Physics Laboratory,
VSSC, Trivandrum
12.30 pm : Lunch Break

LOURDES MATHA COLLEGE OF SCIENCE AND TECHNOLOGY

NCETET '16
August 9th& 10th, 2016

Valedictory Function

(LOMAA Hall)

(03:00 PM - 04:00 PM)

- Invocation
- Welcome Speech
- Conference Report

  Prof. Bindu M. V.,

  Asso. Professor, Mechanical Engineering, LMCST
- Presidential Address

  Er. Philip John,

  Secretary, LMCES
- Feedback from Delegates
- Address

  Shri. Ignatius C. A.,

  Advisor R&D, LMCST &

  Former Deputy Director, Systems Reliability, VSSC
- Address

  Dr. V. Syam Prakash,

  Principal, LMCST
- Book Release
- Best Paper Awards Distribution
- Vote of Thanks

  Prof. Beshiba Wilson,

  Conference Secretary, NCETET '16
- National Anthem