Swami Keshvanand Institute of Technology,
Management & Gramothan, Jaipur

A

Report

on

One Week

Short Term Training Program (STTP)

on

"Emerging Tools and Techniques in VLSI, MEMS & MOEMS"

(ETTVMM-2022)

25th – 29th January 2022

Organized by:

Department of Electronics & Communication Engineering

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

Index

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

1.   Objective and Outcome of the event

Objectives

➢ To keep the faculty and researchers abreast of the new advancements in VLSI, MEMS and MOEMS technology.

➢ To provide the insight of VLSI technology as an emerging application in electronics, photonics and sensing domain.

➢ To provide an exposure to the various VLSI circuits and MEMS device modelling and simulation tools.

Outcomes

The participants of the STTP will be able to understand the advancements and future trends in the field of VLSI technology. This STTP will improve in the knowledge about various aspects of parameter that is used to design a circuit and optimize all the parameter The participant will also able to understand the process for scaling down of technology from micro meter to nanometer and nanometer to picometer. How miniaturization of device is really useful in today life in all aspects.

2. Budget Approval

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Department of Electronics and Communication Engineering

Date: 16 Aug 2021

Note

Following proposals of online Conference/ FDP/ workshops are being submitted for your kind approval.

S.N.	Proposed Title:	Event Type	Name of Coordinator(s)	Tentative dates	Duration	Budget
1	International conference on Advancements in Nano and Communication Technologies	International Conference	Prof. Mukesh Arora/ Dr. PK Jain	24-26 February 2022	3 days	25000
2	Signal processing using Python & MATLAB	Workshop	Dr. Monika Mathur , Ms. Kiran Rathi, Mr. Harshal Nigam , Dr. Shabhi Jain,	17-21 January 2022	1 week	30000
3	Emerging Tools and Techniques in VLSI, MEMS and MOEMS	Workshop	Ms. Manju Choudhary, Namrata Saxena, Dr. Rakhsar Zafar, Dr. Swati Arora	22-27 November, 2021	1 week	30000
4	Student Workshop on IoT with Machine Learning & Artificial Intelligence	Workshop	Dr. Praveen Kumar Jain, Dr. Rakhsar Zafar, Mr. Ankit Agarwal, Ms. Pooja Choudhary	7-17 February 2022	2 week	56000
5	Application of VLSI in artificial intelligence	FDP	Mr. Vikas Pathak, Neera Jain, Rahul Pandey, Abhinandan Jain	13-18 December, 2021	1 week	30000
6	NBA Accreditation and Teaching - Learning Process in Engineering	FDP	Suman Sharma, Rajni Idiwal, Kiran Rathi, Mamta Jain	15-19 November, 2021	1 week	30000
7	Guest Lecture Series	-	-	Monthly	-	-

Prof. Mukesh Arora 16.8.21
HoD, ECE

Principal, SKIT

3. Event Brochure

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

organizing

One Week
Short-Term Training Program
on

EMERGING TOOLS AND TECHNIQUES IN VLSI, MEMS & MOEMS

(ETTVMM-2022)

25–29 JANUARY , 2022

This STTP is intended to enhance the knowledge of students and researchers in the field of VLSI, MEMS, and MOEMS technologies. It is well known that the technologies are continuing to push the boundaries of conventional fabrication techniques for sensors in various applications. The workshop also imparts practical knowledge that will provide a suitable exposure to the participants on the latest advancements in VLSI, MEMS, and MOEMS with specific reference to different fabrication techniques, sensors for various applications relevant to the current state of the art technology, energy harvesting.

CONTENTS OF THE STTP

Basics of Micro Electro Mechanical System (MEMS)
Advancement in current VLSI technology
Energy Harvesting
Opto-electronic devices
Nano-Photonic Devices
Introduction to Semiconductor Device
Fabrication Techniques
MEMS-based sensors
Carbon Nanotubes
Flexible Electronics

RESOURCE PERSONS

The various sessions of this STTP will be taken by the eminent faculty from IITs, NITs, IIITs and research institutions.

REGISTRATION

Registration is open to students, faculty, industry persons, Scientists, Technologists, doctoral and postgraduate students, researchers, and industry personnel across India to augment them with state-of-the-art skills and knowledge in the area of VLSI, MEMS, and MOEMS.

- Participants will be admitted on a first-come-first-served basis. There is no registration fee.
- The registration is to be done by filling the Google form at link: http://t.ly/vV4ih
- After the confirmation of registration, participants need to join the Whatsapp group with this link: https://chat.whatsapp.com/PtsPEsvRHpYC2Va9sTDoVU
- Participants are required to maintain 80% attendance to get the certificate.
- E-certificate will be given to all participants after successful submission of feedback and quiz.

CHIEF PATRON
Sh. Raja Ram Meel, SKIT

PATRON
Sh. Surja Ram Meel, Chairman, SKIT

ADVISORY
Shri Jaipal Meel, Director, SKIT
Prof. S. L. Surana, Director (Academics), SKIT
Mrs. Rachna Meel, Registrar, SKIT
Prof. Ramesh Kumar Pachar, Principal, SKIT
Mrs. Abha Meel, Adviser, SKIT
Prof. R. K. Jain, Dean, SKIT
Prof. Sangeeta Vyas, HOD, OSA, SKIT
Prof. Anil Choudhary, HOD (IT), SKIT
Prof. Mukesh Gupta, HOD (CSE), SKIT
Prof. Dheeraj Joshi, HOD (ME), SKIT
Prof. D. K. Sharma, Head (CE), SKIT
Dr. Dhanraj Chitara, Head (EE), SKIT
Dr. Ona Ladiwal, HOD (DMS), SKIT
Prof. Rohit Mukherjee, Incharge, B.Tech. I Year SKIT
Prof. S. K. Bhatnagar, ECE, SKIT
Prof. Satyan Vijayvurgiya, ECE, SKIT

CONVENER
Prof. Mukesh Arora, Head OFA & ECE, SKIT
Prof. Praveen. K. Jain, ECE, SKIT

Coordinator
Ms. Manju Choudhary, ECE, SKIT
Ms. Namrata Saxena, ECE, SKIT
Dr. Swati Arora, ECE, SKIT
Dr. Rukhsar Zafar, ECE, SKIT
Ms. Pooja Choudhary, ECE, SKIT

Further queries please contact :
Ms. Namrata Saxena (Coordinator)
Mobile: 9352396362, 7014376806
Email: sttpece@skit.ac.in

4. Schedule of the Event

Swami Keshvanand Institute of Technology, Management & Gramothan,
Ramnagaria, Jagatpura, Jaipur-302017, INDIA
Approved by AICTE, Ministry of HRD, Government of India
Recognized by UGC under Section 2(f) of the UGC Act, 1956
Tel. : +91-0141- 5160400Fax: +91-0141-2759555
E-mail: info@skit.ac.in Web: www.skit.ac.in

One Week
Short Term Training Program (STTP)
on
"Emerging Tools and Techniques in VLSI, MEMS & MOEMS" (ETTVMM-2022)
(25th to 29th January 2022)

Tuesday, January 25, 2022	Inaugural Session: 10:00 - 10:30	Expert Session: 10:30 - 12:00 PM
	Chief Guest: Mr. Shanmugaraj V Scientist F CMTI	Mr. Shanmugaraj V Scientist F CMTI **Title:** Smart Sensors and Controls
	Link: https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=ebd6ff07e542545cf21872d88291cd15c	

Date	Morning Session: 10 - 11:30 AM	Evening Session: 12:30 - 2:00 PM
Wednesday, January 26, 2022	Prof. Ajay Agarwal, IIT Jodhpur **Title:** Micro Nanotechnologies Enables Sensors for Healthcare	
	Link: https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=e3790ade62d082c3ecb3fda894daadeb2	
Thursday, January 27, 2022	Dr. Akshdeep Sharma, Scientist, C-MET, Hyderabad **Title:** MEMS/NEMS smart sensors development trends and future prospective	Dr. Vijay Nath, BIT Mesra, Ranchi **Title:** Chip Design for Aerospace Applications
	Link: https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=e54ce0cc946eac75e621f6930a92ae9b4	
Friday, January 28, 2022	Dr. C. Periasamy, MNIT Jaipur **Title:** Design and Development of Electronic Devices for MEMS and Bio-sensing Applications	Dr. Gaurav Kumar Bharti, Chandigarh University **Title:** Modeling and Simulation of Photonic Crystal Based Sensor
	Link: https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=ea7031d32804b28a1606e7f1c54734f0c	
Saturday, January 29, 2022	Dr. Chitrakant Sahu, MNIT Jaipur **Title:** Junction and Doping Free Transistors for Future Computing	Valedictory Session
	Link: https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=ea7031d32804b28a1606e7f1c54734f0c	

COORDINATORS
Ms. Manju Choudhary, ECE, SKIT
Ms. Namrata Saxena, ECE, SKIT
Dr. Swati Arora, ECE, SKIT
Dr. Rukhsar Zafar, ECE, SKIT
Ms. Pooja Choudhary, ECE, SKIT

Further Queries Please Contact

Ms. Namrata Saxena (Coordinator)
Mobile: 9352396362, 7014376506
Email: sttpece@skit.ac.in

Registration Link: http://t.ly/vV4ih
Whatsapp Group Link: https://chat.whatsapp.com/FtsPEsvRHpYC2Va98TD0VU

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

5. List of Invited Guests and Speakers

S. No	Guest/Speakers	Name and Affiliation
1.	Chief guest of Inauguration	**Mr. Shanmugaraj V** Centre for Sensors, Vision Technology and Controls (C-SVTC)
2.	Invited Speaker 1	**Dr. Ajay Agrawal** Professor Indian Institute of Technology, Jodhpur
3.	Invited Speaker 2	**Dr. Akshdeep Sharma** Scientist Centre for Materials for Electronics Technology(C-MET)
4.	Convener of workshop/ Invited Speaker 3	**Dr. Vijay Nath** Associate Professor, Electronics and Communication Engg BIT Mesra, Ranchi
5.	Invited Speaker 4	**Dr. C. Periasamy** Assistant Professor MNIT, Jaipur
6.	Invited Speaker 5	**Dr. Gaurav Bharti** **Assistant Professor** Electrical Engineering Department Chandigarh University
7.	Invited Speaker 6	**Dr. Chitrakant Sahu** Assistant Professor , MNIT, Jaipur

7. Consent of the Speakers

SKIT

STTP- ECE <sttpece@skit.ac.in>

Seeking your consent to be the chief guest of inaugural ceremony of online STTP (SKIT Jaipur) on 25 Jan 2022

4 messages

STTP- ECE <sttpece@skit.ac.in>
To: shanmugaraj@cmti.res.in

Wed, Jan 19, 2022 at 8:56 AM

Dr. V Shanmugaraj
Central Manufacturing Technology Institute

Respected Sir

Greetings from SKIT!!!

We are pleased to inform you that **Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT,M&G)**, Jaipur is organizing an **online Short Term Training Program (STTP) on EMERGING TOOLS AND TECHNIQUES IN VLSI, MEMS & MOEMS (ETTVMM-2022) during January 25-29, 2022.**

Today the institute is recognized as one of the centers of academic excellence in Northern India. The institute is affiliated to Rajasthan Technical University, Kota for offering Postgraduate and Graduate Courses in Engineering and Management and ranked no. 1 Engineering institute by Rajasthan Technical University for 5th year in a row. SKIT M&G inspired from the learnings of Swami Keshvanand, was established in the year 2000 by Technocrats and Managers Society for Advanced Learning.

This STTP on EMERGING TOOLS AND TECHNIQUES IN VLSI, MEMS & MOEMS is being organized to increase the awareness and enhance the knowledge of faculty members and research scholars in the related field.

I feel honored to invite you to be the CHIEF GUEST at the inaugural ceremony of this online STTP program (WEBEX Platform) on 25th Jan, 2022 at 10:00 AM. I also invite you for the keynote session on 25th Jan 2022 at 10:30 am

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

Organizing Team- (ETTVMM-2022)

Shanmugaraj V <shanmugaraj@cmti.res.in>   Wed, Jan 19, 2022 at 9:42 AM
To: sttpece@skit.ac.in

Dear Sir,

I accept the invitation Sir. Thank you for the opportunity given.

The topic for the Key note address could be
1. Smart Sensors & Controls

or

2. Micro Sensors (MEMS) & IoT

Kindly revert back if you have any queries

सादर/Regards,

शन्मुगराज वी./Shanmugaraj V.
वैज्ञानिक - एफ / केंद्र प्रमुख - संवेदक, दृष्टी प्रौद्योगिकी और नियंत्रण केंद्र
Scientist - F / Centre Head - Centre for Sensors, Vision Technology and Controls
केन्द्रीय विनिर्माणकारी प्रौद्योगिकी संस्थान (सीएमटीआई)
Central Manufacturing Technology Institute (CMTI)
भारी उद्योग एवं लोक उद्यम मंत्रालय के अधीन स्वायत्त अनुसंधान एवं विकास संस्थान
An autonomous R&D Institute under the Ministry of Heavy Industries & Public Enterprises
तुमकुर रोड़, बेंगलूरु ५६००२२, कर्नाटक, भारत
Tumkur Road, Bengaluru - 560022, Karnataka, INDIA
वेबसाइट/Website: https://www.cmti-india.net/
कार्यालय फोन/Office Phone- 080-22188349
मोबाईल नं./Mob. – (+91) 9449842688

From: sttpece@skit.ac.in
To: "Shanmugaraj V" <shanmugaraj@cmti.res.in>
Sent: Wednesday, January 19, 2022 8:56:25 AM
Subject: Seeking your consent to be the chief guest of inaugural ceremony of online STTP (SKIT Jaipur) on 25 Jan 2022
[Quoted text hidden]

A R e p o r t o n One Week STTP on ETTVMM-2022

Invitation for expert lecture in ETTVMM 2022 (SKIT Jaipur)

3 messages

STTP- ECE <sttpece@skit.ac.in>   Thu, Jan 20, 2022 at 8:40 AM
To: ajayagarwal@iitj.ac.in

Prof. Ajay Agarwal
Professor,
Department of Electrical Engineering, IIT Jodhpur

Dear Sir,

We are pleased to inform you that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur** is organizing an online one week Short Term Training Program (STTP) on **"Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVMM-2022)"** from 25th to 29th January 2022.

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In this context, we want to extend invitation to you for an expert lecture in online mode. We humbly request you to accept the proposal. Your lecture will be scheduled on **26-01-2022, Wednesday 10:00 am -11:30 am.**

Please spare some time from your busy schedule to enlighten us with your knowledge.

If you accept the invitation please send
(1) your brief bio
(2) your photograph

Thanks and regards,
Organizing Team-ETTVMM-2022

📄 **Invitation Letter Ajay Agarwal Sir.pdf**
76K

Ajay Agarwal <ajayagarwal@iitj.ac.in>   Sat, Jan 22, 2022 at 9:35 AM
To: STTP- ECE <sttpece@skit.ac.in>

Thanks for the invitation to deliver an invited talk at ETTVMM-2022.

The topic of my talk will be "Micro Nanotechnologies Enables Sensors for Healthcare".

My brief CV with a photo is attached herewith.

Thanks,

Prof. Ajay Agarwal
Department of Electrical Engineering
Indian Institute of Technology Jodhpur

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

STTP- ECE <sttpece@skit.ac.in>

Invitation for expert lecture in ETTVMM 2022 (SKIT Jaipur)
3 messages

STTP- ECE <sttpece@skit.ac.in>   Thu, Jan 20, 2022 at 10:09 AM
To: akshdeep.sharma@cmet.gov.in

Dr. Akshdeep Sharma
Scientist
C-MET, Hyderabad

Dear Sir,

We are pleased to inform you that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur** is organizing an online one week Short Term Training Program (STTP) on **"Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVMM-2022)"** from **25th to 29th January 2022.**
Today the institute is recognized as one of the centers of academic excellence in Northern India. The institute is affiliated to Rajasthan Technical University, Kota for offering Postgraduate and Graduate Courses in Engineering and Management and ranked no. 1 Engineering institute by Rajasthan Technical University for the 5th year in a row. SKIT, M&G inspired from the learnings of Swami Keshvanand, was established in the year 2000 by Technocrats and Managers Society for Advanced Learning.

In this context, we want to extend invitation to you for an expert lecture in online mode. We humbly request you to accept the proposal. Your lecture will be scheduled on **27-01-2022, Thursday 10:00 am -11:30 am.**

Please spare some time from your busy schedule to enlighten us with your knowledge.

If you accept the invitation please send
(1) your brief bio
(2) your photograph

Thanks and regards,
Organizing Team-ETTVMM-2022

📄 **Invitation Letter Akshdeep Sir.pdf**
74K

Akshdeep Sharma <akshdeep.sharma@cmet.gov.in>   Fri, Jan 21, 2022 at 10:02 AM
To: sttpece@skit.ac.in

Dear Organisor,

Thanks for considering my candidature for delivering lecture in STTP on ETTVMM 2022. The topic of my talk will be " **MEMS/NEMS smart sensors development trends and future prospective**". Please confirm the time allotted for talk.

Regards
Akshdeep Sharma

STTP- ECE <sttpece@skit.ac.in>

Invitation for expert lecture in ETTVMM 2022 (SKIT Jaipur)

4 messages

STTP- ECE <sttpece@skit.ac.in>　　　　　　　　　　　　　　Thu, Jan 20, 2022 at 8:43 AM
To: vijaynath@bitmesra.ac.in

Dr. Vijay Nath
Department of Electronics & Communication Engineering,
BIT Mesra, Ranchi

Dear Sir,

We are pleased to inform you that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur** is organizing an online one week Short Term Training Program (STTP) on **"Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVMM-2022)"** from 25th to 29th January 2022.

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In this context, we want to extend invitation to you for an expert lecture in online mode. We humbly request you to accept the proposal. Your lecture will be scheduled on **27-01-2022, Wednesday 12:30 pm -02:00 pm.**

Please spare some time from your busy schedule to enlighten us with your knowledge.

If you accept the invitation please send
(1) your brief bio
(2) your photograph

Thanks and regards,
Organizing Team-ETTVMM-2022

📄 **Invitation Letter Vijay Nath sir.pdf**
　76K

Vijay Nath <vijaynath@bitmesra.ac.in>　　　　　　　　　　　Thu, Jan 20, 2022 at 9:41 AM
To: STTP- ECE <sttpece@skit.ac.in>

Dear Sir,
Thanks for your invitation.
I accept the same.
I will provide details soon.
Thanks & Regards
[Quoted text hidden]
—

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

STTP- ECE <sttpece@skit.ac.in>

Invitation for expert lecture in ETTVMM 2022 (SKIT Jaipur)
4 messages

STTP- ECE <sttpece@skit.ac.in>   Thu, Jan 20, 2022 at 9:02 AM
To: cpsamy.ece@mnit.ac.in

Dr. C. Periasamy
MNIT, Jaipur

Dear Sir,

We are pleased to inform you that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur** is organizing an online one week Short Term Training Program (STTP) on **"Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVMM-2022)"** from **25th to 29th January 2022.**
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In this context, we want to extend invitation to you for an expert lecture in online mode. We humbly request you to accept the proposal. Your lecture will be scheduled on **28-01-2022, Friday, 10:00 am -11:30 am.**

Please spare some time from your busy schedule to enlighten us with your knowledge.

If you accept the invitation please send
(1) your brief bio
(2) your photograph

Thanks and regards,
Organizing Team-ETTVMM-2022

C Periasamy <cpsamy.ece@mnit.ac.in>   Fri, Jan 21, 2022 at 12:03 PM
To: STTP- ECE <sttpece@skit.ac.in>

Thank you for your mail.
Title : Design and Development of Electronic Devices for MEMS and Bio-sensing Applications.
With kind regards
cp

[Quoted text hidden]
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Dr.C.Periasamy
Department of Electronics and Communication Engineering
Malaviya National Institute of Technology (MNIT)
Jaipur-302017
Phone:01412713232(Office) 07665814268(M)

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

STTP- ECE <sttpece@skit.ac.in>

Invitation for expert lecture in ETTVMM 2022 (SKIT Jaipur)

2 messages

STTP- ECE <sttpece@skit.ac.in>   Thu, Jan 20, 2022 at 9:13 AM
To: gaurav.e11977@cumail.in

Dr. Gaurav Kumar Bharti
Chandigarh University

Dear Sir,

We are pleased to inform you that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur** is organizing an online one week Short Term Training Program (STTP) on **"Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVMM-2022)"** from 25th to 29th January 2022.

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If you accept the invitation please send
(1) your brief bio
(2) your photograph

Thanks and regards,
Organizing Team-ETTVMM-2022

Gaurav Kumar Bharti <gaurav.e11977@cumail.in>   Thu, Jan 20, 2022 at 7:10 PM
To: STTP- ECE <sttpece@skit.ac.in>

Dear Sir
Thank you for inviting me. I accept your invitation. Please find the attachment and do the needful.
Thanks & Regards,

Dr. Gaurav Kumar Bharti
Assistant Professor (E11977),
University Institute of Engineering, Electrical Engineering Department
Chandigarh University, Gharuan, Mohali, Punjab, 140413, India
IPDF: EEE, IIT Guwahati | PhD: EIE, NIT Agartala | MTech: EE, NITTTR Kolkata
MIEEE | MIE | MSPIE | MOSA

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

Invitation for expert lecture in ETTVMM 2022 (SKIT Jaipur)

Chitrakant Sahu <chitrakant.ece@mnit.ac.in>   Thu, Feb 3, 2022 at 12:39 PM
To: STTP- ECE <sttpece@skit.ac.in>

Dear Sir/Madam,
I will be happy to take a lecture on ETTVMM-2022.
The title of the talk will be "Doping and junction-free transistors for future computing".

On Thu, Jan 20, 2022 at 9:04 AM STTP- ECE <sttpece@skit.ac.in> wrote:

> **Dr. Chitrakant Sahu**
> **MNIT, Jaipur**
>
> Dear Sir,
>
> We are pleased to inform you that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur** is organizing an online one week Short Term Training Program (STTP) on **"Emerging Tools and Techniques in VLSI, MEMS & MOEMS (ETTVMM-2022)"** from **25th to 29th January 2022.**
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>
> In this context, we want to extend invitation to you for an expert lecture in online mode. We humbly request you to accept the proposal. Your lecture will be scheduled on **29-01-2022, Saturday 10:00 am -11:30 am.**
>
> Please spare some time from your busy schedule to enlighten us with your knowledge.
>
> If you accept the invitation please send
> (1) your brief bio
> (2) your photograph
>
> Thanks and regards,
> **Organizing Team-ETTVMM-2022**

--

Dr. Chitrakant Sahu

Assistant Professor

Department of Electronics & Communication Engineering

Malaviya National Institute of Technology Jaipur

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

8. List of Participants (Outside SKIT)

S.N.	Participant Name	Name of Institute	Email ID (Registered)
1.	Vishwas Sharma	AIT	vhsharma.ict@spcevng.ac.in
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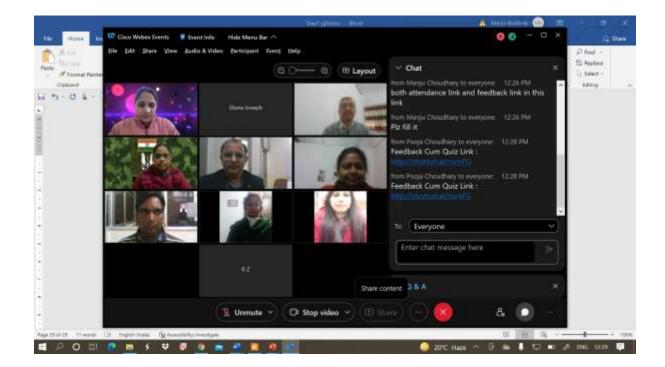Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

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8. Screenshots of the Event

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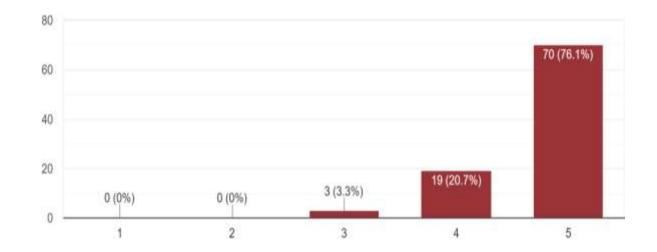Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

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9. Sample Copy of Certificate

Expert Certificate

Swami Keshvanand Institute of Technology Management & Gramothan
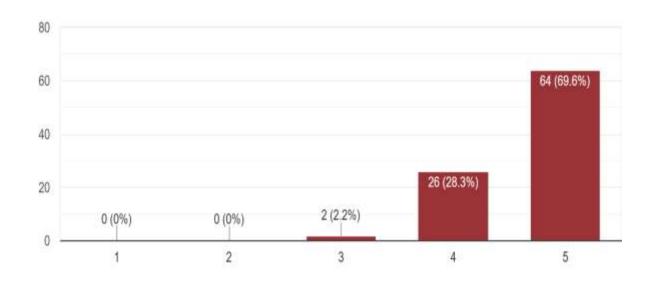Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India
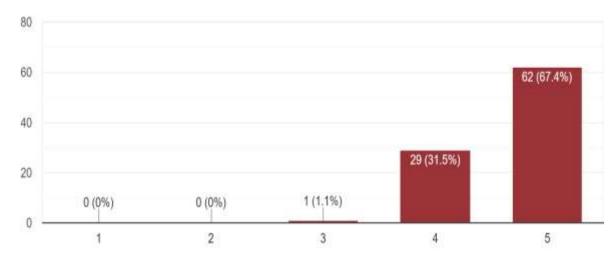
11. Feedback report

1. Your experience about the workshop

2. **Overall, how do you rate the program you attended in terms of usefulness and effectiveness?**

3. How do you rate the content of the STTP?

4. About speaker

Swami Keshvanand Institute of Technology Management & Gramothan
Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

5. Knowledge gained by the course.

Yes

Good

Excellent

great

A lot

yes

MEMS

VERY GOOD

Knowledge about tools and technique in VLSI,MEMS,MOEMS in different fields like medical (early diagnosis) science etc.

Advancements in mems and moems,and tools used in vlsi and smart sensors.

i Learnt about technical knowledge of vlsi designing.

Key points and impacts of modern techniques and electronic gadgets

Very informative

EXCELLENT SPEAKERS AND LATEST TOPIC

Update my knowledge

An exposure to sensor & and its engineering

YES, Specially about MEMS and other sensors.

50 PER

6. Relevancy of topics

13.   Media Coverage

एसकेआईटी मे पांच दिवसीय शार्ट टर्म ट्रेनिंग प्रोग्राम का शुभारम्भ

P3 Police Public Politics

जयपुर ! जगतपुरा स्थित स्वामी केशवानंद इंस्टिट्यूट ऑफ़ टेक्नोलॉजी मे इलेक्ट्रॉनिक्स एंड कम्युनिकेशन डिपार्टमेंट द्वारा इमर्जिंग टूल्स एंड टेक्निक्स इन वीएलएसआई , एमईएमएस , एमओईएमएस + विषय पर ऑनलाइन पांच दिवसीय शार्ट टर्म ट्रेनिंग प्रोग्राम का शुभारम्भ हुआ। इस प्रोग्राम के चीफ गेस्ट मि. शन्मुगराज वी. (साइंटिस्ट (एफ), सेंटर प्रमुख डू सी.एम.टी.आई बेंगलुरु) रहे। कार्यक्रम की शुरुआत मे संस्था के एकेडमिक डायरेक्टर, प्रोफेसर एस.एल.सुराणा ने सभी गणमान्य अतिथियों का स्वागत किया तथा इस कार्यक्रम के विषय वस्तु पर प्रकाश डाला। तत्पश्चात प्रोफेसर पी.के.जैन ने संस्था की उपलब्धियों से सभी को अवगत कराया।

मि. शन्मुगराज ने एसटीटीपी के विषय की महत्ता पर चर्चा की तथा यह बताया कि एमईएमएस और एमओईएमएस तकनीक यांत्रिक, इलेक्ट्रोमैकेनिकल और इलेक्ट्रोकेमिकल उपकरणों को अभूतपूर्व लघु स्तर पर उत्पादन करने का अवसर प्रदान करती है, और आधुनिक तकनीक के साथ बड़े पैमाने पर एकीकृत करने की कार्यक्षमता प्रदान करती है।

एमईएमएस का उपयोग सेंसर, एक्युएटर्स, जनरेटर, ऊर्जा स्रोतों, जैव रासायनिक और बायोमेडिकल सिस्टम और ऑसिलेटर्स की एक विस्तृत श्रृंखला में किया जाता है। एमईएमएस उपकरण भी कम बिजली की खपत और उच्च संवेदनशीलता प्रदान करते हैं जो कि पारंपरिक यांत्रिक समकक्ष उपकरण प्राप्त नहीं कर सकते हैं। प्रोग्राम के कोऑर्डिनेटर मिस मंजू चौधरी ने इस कार्यक्रम मे सम्मिलित होने वाले वक्ताओं तथा विभिन्न सत्रों का संक्षिप्त विवरण प्रस्तुत किया। कार्यक्रम के अंत में विभागाध्यक्ष प्रोफेसर मुकेश अरोड़ा, द्वारा धन्यवाद ज्ञापित किया गया। इस प्रोग्राम के कोऑर्डिनेटर, मिस मंजू चौधरी , मिस नम्रता सक्सेना, डॉ रुखसार जफर, डॉ स्वाति अरोड़ा एंड मिस पूजा चौधरी रहे। प्रोग्राम का संचालन मिस ग्लोरिया जोसफ ने किया।

ऑनलाइन शॉर्ट टर्म ट्रेनिंग प्रोग्राम शुरू

जयपुर | जगतपुरा स्थित स्वामी केशवानंद इंस्टिट्यूट ऑफ टेक्नोलॉजी में इलेक्ट्रॉनिक्स एंड कम्युनिकेशन डिपार्टमेंट की ओर से इमर्जिंग टूल्स एंड टेक्निक्स इन वीएलएसआई, एमईएमएस, एमओईएमएस विषय पर ऑनलाइन पांच दिवसीय शॉर्ट टर्म ट्रेनिंग प्रोग्राम का शुभारंभ किया गया। प्रोग्राम के चीफ गेस्ट मि. शन्मुगराज वी. (साइंटिस्ट (एफ), सेंटर प्रमुख – सी.एम.टी.आई बेंगलुरु) रहे। इस मौके पर संस्था के एकेडमिक डायरेक्टर प्रो. एसएल सुराणा, प्रो. पीके जैन, कोऑर्डिनेटर मंजू चौधरी, विभागाध्यक्ष प्रो. मुकेश अरोड़ा, नम्रता सक्सेना, डॉ. रुखसार जफर, डॉ. स्वाति अरोड़ा, पूजा चौधरी मौजूद रहे। कार्यक्रम का संचालन ग्लोरिया जोसफ ने किया।

जयपुर-आसपास

खबरों की दुनिया

एक नजर

पांच दिवसीय एफडीपी संपन्न

खबरों की दुनिया

जयपुर। स्वामी केशवानंद इंस्टीट्यूट आफ टेक्नोलॉजी में पांच दिवसीय शॉर्ट टर्म ट्रेनिंग प्रोग्राम÷ इमर्जिंग टूल्स एंड टेक्निक्स इन वीएलएसआई एमईएमएस, एमओईएमएस÷ का समापन शनिवार को हुआ। कार्यक्रम में आरटीयू कोटा के मुख्य अतिथि प्रो. रंजन माहेश्वरी रहे। माहेश्वरी ने एफडीपी को सफलतापूर्वक आयोजित करने के लिए ÷ईटीटीवीएमएम-2022÷ के समस्त आयोजकों को बधाई दी।

उन्होंने इस बात पर प्रकाश डाला कि इलेक्ट्रॉनिक्स एवं संचार क्षेत्र में भविष्य फोटोनिक अवयवों पर आधारित होगा और नैनो तकनीक इसे हासिल करने की कुंजी है। कार्यक्रम का समन्वय नम्रता सक्सेना ने किया। प्रोफेसर डॉ. प्रवीण जैन ने धन्यवाद प्रस्ताव रखा। एसटीटीपी के समन्वयक मंजू चौधरी, नम्रता सक्सेना, डॉ रुखसार जफर, डॉ स्वाति अरोड़ा, पूजा चौधरी और ग्लोरिआ जोसेफ ने किया। एचओडी प्रोफेसर मुकेश अरोड़ा ने अतिथियों का स्वागत किया।

Ramnagaria, Jagatpura, Jaipur-302 017, Rajasthan, India

13. Technical Report

The One Week **One Week Short Term Training Program (STTP) on "*Emerging Tools and Techniques in VLSI, MEMS & MOEMS*"** organized by SKIT Jaipur, from 25th - 29th Jan, 2022. This STTP is conducted on Webex online platform.

Mr. Shanmugaraj V, Scientist - F & Centre Head CMTI, Bengaluru was chief guest of STTP. The STTP began with the welcome address by Prof. S.L.Surana (Director Academics) SKIT. The Inauguration ceremony also witnesses the presence of Prof. Mukesh Arora (Head ECE &OFA), Prof. S. K. Bhatnagar, Prof. Praveen K. Jain (Dy.Head, ECE, SKIT), Dr. Rukhsar Zafar, Dr. Swati Arora, Dr. Monika Mathur, Ms. Namrata Saxena, Ms Pooja Choudhary, Ms Manju Choudhary.

Mr. Shanmugaraj V, addresses participants about importance of VLSI, MEMS, MOEMS field in today's life. In his talk he emphasis on Smart sensors and controls**.** He discuss different types of sensors to measure different parameters. Also discussed parameters that are used to measure the sensitivity and responsivity.

Commencement of second day session was with an expert lecture of **Prof. Ajay Agrawal** from IIT Jodhpur. He enlightened the participants about the importance of Nano-technologies for healthcare sensors. He throw light on the significance of markers for early diagnosis of heart attack, cancer, covid, diabetes and other fatal diseases and also about the challenges in diagnosis in early stage like cost, time, concentration, negligence of diseases. He discussed about the designing and testing of biosensors used in detection of diseases.

Day 3 started again with the knowledge enriching session of Dr. Akshdeep Sharma, Senior Scientist, He enlightens with the journey from MEMS to NEMS along with the different domains of MEMS innovation. He also discussed about the manufacturing process of microsystems including FEM simulation on COMSOL or any other multiphysics tools. He explained about the complete fabrication flow related to the MEMS Bionic Sensor for Autonomous Underwater Vehicle.

The next technical session on the third day was taken by **Dr. Vijaynath, Associate Professor, BIT Mesra Ranchi** on **Chip Design for Aerospace Applications.** He discussed about the Impact of Microelectronics, VLSI Design in Human Life. He also explained about the VLSI System Design Flow various applications including CMOS based Temperature Senor, Piezoresistive Pressure Sensor for Aerospace Applications.

The fourth day begins with the Expert talk on **Design and Development of Electronic Devices for MEMS and Bio-sensing Applications** by **Dr. C. Periasamy**. He discussed about the development, characterization of ZnO nanoneedles as a piezoelectric nanogenerators for energy harvesting application. He also discussed about the HEMT For Biosensing Application.

The next technical session's expert was **Dr. Gaurav Bharti, Chandigarh University**. Dr. Bharti enlightened the participants with the applications of photonics in biosensing and chemical sensing. The lecture is followed by the hands on experience on the designing of ring resonators and different photonic structures using FDTD tool.

The last seventh technical session was taken by **Dr. Chitrakant Sahu, from MNIT Jaipur.** He discussed about the saturation of Moore's Law and evolution of new devices like FINFETs, Junction Less Transistors for future computing applications. He delivered knowledge about the TCAD simulation of JLFETs and their characteristics.

This STTP enables the researchers, students, faculties to explore a new realm of technology and to work in this particular field to the next extent.

---Thank You-----