



**InTEC**  
Innovative Technology Enabling Centre



A  
Report  
on  
**3<sup>rd</sup> International Conference**  
**On**

**Advancements in Nanoelectronics and  
Communication Technologies**  
**(ICANCT-2022)**

**24<sup>th</sup> -26<sup>th</sup> February, 2022**

**Jointly Organized by**

**Swami Keshvanand Institute of Technology,  
Management & Gramothan, Jaipur**

**&**

**Institution of Engineers (India), Rajasthan State  
Center, Jaipur**

**in Association with**

**CSIR-IMMT: InTEC, Bhubaneswar**



## CONVENERS

**Prof. Mukesh Arora**  
**Head OFA & ECE, SKIT**

**Prof. Praveen K. Jain**  
**Dy. HoD, ECE, SKIT**

## CO-CONVENERS

**Dr. Rukhsar Zafar**

**Ms. Pooja Choudhary**

**Mr. Ankit Agarwal**

## ORGANIZING SECRETARY

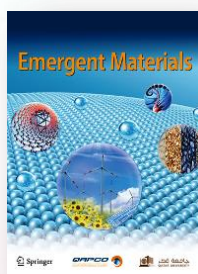
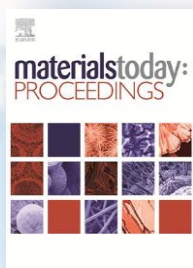
**Ms. Gloria Josphe**

**Mr. Lalit Kumar Lata**

**Mr. Neeraj Jain**

**Ms. Suman Sharma**

## PUBLISHING PARTNERS



## TECHNICAL SUPPORT



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## Approval Letter



**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. Shubhi 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. Rukhsar 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. Rukhsar 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 Idiwai, Kiran Rathi, Mamta Jain	15-19 November, 2021	1 week	30000
7	Guest Lecture Series	-	-	Monthly	-	-

Principal, SKIT

*Mukeshy.*  
Prof. Mukesh Arora 16.8.21  
HoD, ECE



## Collaboration Documents



ICANCT 2022 <icanct2022@skit.ac.in>

### Proposal for jointly organizing International Conference on "Advancements in Nano-electronics and Communication Technologies" (ICANCT-2022)

4 messages

ICANCT 2022 <icanct2022@skit.ac.in>

Fri, Dec 10, 2021 at 2:28 PM

To: intec.immt@immt.res.in, pavantogapur@immt.res.in

T. Pavan Kumar  
Senior Scientist & Coordinator-MAITRI  
CSIR-IMMT  
Bhubaneswar

Dear Sir,  
Greetings from SKIT!!

It gives me immense pleasure to inform you that Department of ECE, Swami Keshvanand Institute of Technology, Management & Gramothan Jaipur, India is going to organize third International Conference on "Advancements in Nano-electronics and Communication Technologies" (ICANCT-2022) to be held on 24-26 February 2022.

This conference aims at presenting current research being carried out in the areas of Communication, Nanoelectronics, Photonics, Wireless Communication, Mobile Communications, Internet of Things, Machine learning and Artificial Intelligence, Antenna and Wave Propagation and VLSI Technology. This scientific dialogue aims to provide a platform where scientists, researchers, academicians, industry experts, new aspirants, as well as students of science and technology can come together and engage in fruitful exchange of views and ideas to pave way in the field of "Nano electronics and Communication Technologies" to find global partners for future collaboration.

The main objective of the conference is to provide a platform to exchange information and new advancements of the concerning fields among different groups. The conference will be organized in online mode.

Therefore, we request you to give your consent to organize the conference in association with CSIR-IMMT:InTEC-MAITRI.

In this regard, we are seeking your permission.

Thank you in advance for any comment, idea or suggestion that you can offer towards the success of the conference.

Waiting for your positive response

Thanks and Regards

Pooja Choudhary  
(Co-Convener, ICANCT-2022)  
Assist. Professor, ECE Department  
SKIT,M&G Jaipur

Togapur Pavan Kumar <pavantogapur@immt.res.in>  
To: icanct2022@skit.ac.in

Fri, Dec 10, 2021 at 5:23 PM

Dear Pooja Choudhary,

Appreciate your interest to associate with us through MAITRI in organizing this joint program. We will be happy to associate in conduct of this online event, kindly goahead with the program plan/design and update us for possible support in making it a grand success.

We can also discuss as and when required.

Best wishes,  
Pavan

Dr T Pavan Kumar, PhD, PGDPL (Patents Law-NALSAR)  
Senior Scientist - Chemistry & IP  
PME / Strategy Planning & Business Development-SPBD  
Coordinator- Intellectual Property & Convener - Business Development  
Convener & Manager - Innovative Technology Enabling Center (InTEC)  
Ethics Officer & Secretary - Standing Ethics Committee-SEC  
Coordinator-MAITRI; Coordinator -Monthly Dir-Staff Meeting  
CSIR-Institute of Minerals and Materials Technology (IMMT)  
Sachivalaya Marg, Bhubaneswar - 751013  
Mobile: 8008105781; Office: 0674-2379294  
Email: pavantogapur@immt.res.in / pavantogapur@gmail.com

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



Dr. Praveen K Jain &lt;pkjain@skit.ac.in&gt;

## Proposal for Jointly organize International Conference and Publishing Partner (Journal: The Institution of Engineers (India): Series B)

1 message

Dr. Praveen K Jain &lt;pkjain@skit.ac.in&gt;

Sat, Dec 4, 2021 at 12:11 PM

To: rajasthan@ieindia.org

Cc: icanct2022@skit.ac.in, saxenagunjan@yahoo.com

Bcc: Rukhsar Zafar &lt;Rzafar@skit.ac.in&gt;, Pooja Choudhary &lt;pooja.choudhary@skit.ac.in&gt;

**Chairman**  
**The Institution of Engineers (India)**  
**Rajasthan State Centre**  
**Jaipur**

Dear Sir,  
 Greetings from SKIT!!

It gives me immense pleasure to inform you that Department of ECE, Swami Keshvanand Institute of Technology, Management & Gramothan Jaipur, India is going to organize third International Conference on "Advancements in Nano-electronics and Communication Technologies" (ICANCT-2022) to be held on 24-26 February 2022.

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The main objective of the conference is to provide a platform to exchange information and new advancements of the concerning fields among different groups. The conference will be organized in online mode.

Therefore, we request you to give your consent to jointly organize the conference under IE(I), Rajasthan center. It's also requested to be publishing partner for the conference.

In this regard, we are seeking your permission to publish the accepted and presented papers (within the limits of plagiarism) in Journal, The Institution of Engineers (India): Series B

Thank you in advance for any comment, idea or suggestion that you can offer towards the success of the conference.

Waiting for your positive response

Thanks and Regards

Dr. Praveen K Jain  
 M.Tech. (IT Roorkee), Ph.D. (MNIT, Jaipur)  
 NET-JRF, GATE  
 Professor & Deputy Head  
 Department of Electronics and Communication Engineering  
 (Accredited by NBA)  
 Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur  
 +91-9928652224, praveenjain.spsl@gmail.com

# Brochure





**INTERNATIONAL CONFERENCE ON  
ADVANCEMENT IN NANO-ELECTRONICS & COMMUNICATION TECHNOLOGIES (ICANCT-2022)**  
(Feb 24-26, 2022)  
Jointly Organized by  
**Department of Electronics and Communication Engineering**  
**Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur**  
&  
**Institution of Engineers (India), Rajasthan State Center, Jaipur**  
in Association with  
**CSIR-IMMT: InTEC-MAITRI, Bhubaneswar**

**CHIEF PATRON**  
Shri Rajaram Meel

**PATRON**  
Shri Surja Ram Meel, Chairman SKIT  
Shri Jaipal Meel, Director SKIT

**LOCAL ADVISORY COMMITTEE**  
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Smt. Rachna Meel, Registrar, SKIT  
Prof. Ramesh Kr. Panchar, Principal, SKIT  
Smt. Abba Meel, Advisor, SKIT  
Prof. R.K. Jain, Dean, SKIT  
Prof. Sangeeta Vyas, Head Student Affairs, SKIT  
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Prof. Dheeraj Joshi, HOD (ME), SKIT  
Dr. D.R. Chitara, HOD (EE), SKIT  
Dr. Ona Ladiwal, HOD (DMS), SKIT  
Prof. Rohit Mukharjee, Incharge-1st Year, SKIT  
Prof. S.K. Bhatnagar, ECE, SKIT  
Prof. Satyan Vijayvargiya, ECE, SKIT

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

**CO-CONVENERS**  
Dr. Rukhsar Zafar, ECE, SKIT  
Mr. Ankit Agarwal, ECE, SKIT  
Ms. Pooja Choudhary, ECE, SKIT

**ORGANIZING SECRETARY**  
Ms. Gloria Joseph, ECE, SKIT  
Mr. Lalit Kumar Lata, ECE, SKIT  
Mr. Neeraj Jain, ECE, SKIT  
Ms. Suman Sharma, ECE, SKIT

**INTERNATIONAL ADVISORY COMMITTEE**  
Dr. Kishore Kumar Sadasivuni, Qatar University, Qatar  
Dr. Monia Najjar, University of Tunis El Manar, Tunis  
Dr. Yaseera Ismail, University of KwaZulu-Natal, SA  
Dr. Tawfik Ismail, Nile University, Giza, Egypt  
Dr. Mohammad Shariq, Jazan University, Jazan  
Dr. Dayanand Kumar, NTU Singapore  
Dr. Umesh Chand, NUS Singapore

**NATIONAL ADVISORY COMMITTEE**  
Mr. Gunjan Saxena, Hony. Chairman, IE RSC  
Mr. Sudesh Roop Rai, Hony Secretary, IE RSC  
Mr. Rajesh Sonania, Member-EC, IE RSC  
Prof. Virendra Singh, IIT Bombay  
Dr. T. Pavan Kumar, CSIR & Coordinator, MAITRI  
Prof. Vijay Janyani, NIT Jaipur  
Prof. Upena Dalal, NIT Surat  
Prof. Lava Bhargava, NIT Jaipur  
Dr. Mukesh Kumar, IIT, Indore  
Dr. Jai Narayan Tripathi, IIT Jodhpur  
Dr. Sanjeev Kumar Matya, NIT AP  
Dr. Shashikant Sharma, IIT Ranchi

**About ICANCT 2022**

International Conference on Advancement in Nano-electronics and Communication Technologies (ICANCT- 2022) is a three-day conference that aims at presenting current researches being carried out in the areas of Communication, Nanoelectronics, Photonics, Wireless Communication, Mobile Communications, Antenna, and Wave Propagation, Optical Communication, Image Processing, Internet of Things, Machine Learning, Artificial Intelligence, Embedded System and VLSI technology for scientists, scholars, engineers students from the universities, technologists, entrepreneurs and policymakers all around the World. Thus the conference intends to bring together the best minds from around the world to cover literally all aspects of energy technology from a multi-disciplinary perspective.

**Scope of the Conference**

Mobile & Wireless Networks	Embedded Systems & VLSI Design
Communication Engineering	Optical Devices & Photonics
Signal and Image Processing	IoT & Machine Learning
Photonics Communication	Nano Electronic Devices
Communication Networks	Nano-Medical Devices
Optical Signal Processing	Integrated Photonics
Wireless Communication	Nano Composites
Artificial Intelligence	Image Processing
Antennas	Nano Structures

**IMPORTANT DATES**

**Deadline for Abstract Submission:** 15-01-2022  
**Notification of Acceptance:** 20-01-2022  
**Camera Ready Paper Submission:** 10-02-2022  
**Registration Close:** 15-02-2022  
**Conference Dates:** Feb 24-26, 2022

**PAPER SUBMISSION**

Authors can submit abstracts of original research work through easy chair conference management system by using the following link:  
<https://EasyChair.org/cfp/ICANCT2022>

**Template for abstract can be accessed through this link:**  
<https://icanct.skit.ac.in/authorguidelines.php>

**All the accepted and registered Papers will be published in Materials Today: Proceedings, indexed in Scopus (Elsevier). Selected papers will be published in the journal (Emergent materials) after peer review process of publisher.**

**FEE DETAILS**

**For PhD / MTech / BTech Students**  
Indian INR 3500/- Foreigners USD \$50

**For PhD / MTech / BTech Students (IE/ISTE/OSA/IETE Member)**  
Indian INR 3000/- Foreigners USD \$40

**Academicians**  
Indian INR 5000/- Foreigners USD \$70

**Industry Person**  
Indian INR 7000/- Foreigners USD \$120

**PUBLISHING PARTNERS**




For More Information visit:  
[www.icanct.skit.ac.in](http://www.icanct.skit.ac.in)  
or scan

for further query, mail at  
[icanct2022@skit.ac.in](mailto:icanct2022@skit.ac.in)



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



## Schedule



**3<sup>rd</sup> International Conference on  
Advancements in Nanoelectronics and Communication Technologies  
(ICANCT-2022)**

**Jointly Organized by**  
Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur  
&  
Institution of Engineers (India), Rajasthan State Center, Jaipur

**in Association with**  
CSIR-IMMT: InTEC, Bhubaneswar

**Schedule of the Conference**

Day 1: February 24, 2022 (Thursday)	
9:30 am-10:30 am	<b>Inauguration of Program</b> <b>Chief Guest: Dr. Deep Jariwala</b> Principal Investigator, Device Research and Engineering Laboratory, University of Pennsylvania, Philadelphia, United States <b>Guest of Honor: Dr. Kishore Kumar Sadasivuni</b> Professor, Center for Advanced Materials, Qatar University & Managing Director, Journal of Emergent Materials (Springer)
10:30 am- 11:15 am	<b>Keynote Talk-1</b> <b>Dr. Kishore Kumar Sadasivuni</b> Professor, Center for Advanced Materials, Qatar University Qatar
11:30 am- 12:15 pm	<b>Keynote Talk-2</b> <b>Dr. Aysegül Uygun Öksüz</b> Professor, Suleyman Demirel University, Turkey
12:15 pm-1:00 pm	<b>Lunch Break</b>
1:00 pm-3:30 pm	<b>Paper Presentation Session-1</b> <b>Session Chair: Dr. Pooja Sharma</b> CFUM-UP, University of Minho CEMMPRE, University of Coimbra, Portugal <b>Paper Presentation ID: 5, 6, 56, 57, 60, 63, 71, 85, 99, 117</b>



Day 2: February 25, 2022 (Friday)	
09:00 am – 12:00 pm	<b>Invited Talk: Dr. Ghanshyam Singh</b> Professor, Department of Electrical and Electronic Engineering, University of Johannesburg, South Africa <u>Paper Presentation Session-2</u> <b>Session Chair: Dr. Bosky Sharma</b> EPFL, Swiss Federal Institute of Technology Lausanne, Switzerland <b>Paper Presentation ID: 11, 14, 22, 26, 33, 44, 45, 77, 108, 114</b>
12:00 pm - 12:30 pm	<b>Break</b>
12:30 pm – 3:30 pm	<b>Invited Talk: Dr. Ankit Goyal</b> University of Amsterdam, Netherland <u>Paper Presentation Session-3</u> <b>Session Chair: Dr. Neha Sharma</b> University Engineering College, Sarguja University, Chhattisgarh, India <b>Paper Presentation ID: 21, 25, 30, 66, 67, 75, 79, 81, 82, 96, 116</b>
Day 3: February 26, 2022 (Saturday)	
9:00 am – 12:00 pm	<b>Invited Talk: Dr. Tawfik Ismail</b> Director of WINC Research Center, Director of Wireless Technology Master Program, Nile University, Egypt <u>Paper Presentation Session-4</u> <b>Session Chair: Dr. Manoj Jangid</b> University of Michigan, United State <b>Paper Presentation ID: 42, 50, 52, 51, 58, 68, 97, 103, 106, 109, 115</b>
12:00 pm - 12:30 pm	<b>Lunch Break</b>
12.30 pm – 3:00 pm	<b>Invited Talk: Dr. Umesh Chand</b> Scientist II, Institute of Microelectronics, Agency for Science, Technology and Research (A STAR), Singapore <u>Paper Presentation Session-5</u> <b>Session Chair: Dr. Amit Singhal</b> Ulster University, United Kingdom <b>Paper Presentation ID: 19, 28, 32, 35, 36, 78, 86, 89, 91, 100</b>
3.00 pm – 3:30 pm	<b>Valedictory Session</b>

## Invitation Letter



**3<sup>rd</sup> International Conference on  
Advancements in Nanoelectronics and Communication Technologies  
(ICANCT-2022)**

**Jointly Organized by**  
Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur  
&  
Institution of Engineers (India), Rajasthan State Center, Jaipur

**in Association with**  
CSIR-IMMT: InTEC, Bhubaneswar

**Inaugural Ceremony**  
(Feb 24, 2022 from 09:30 AM Onwards)

**Chief Guest**  
**Dr. Deep Jariwala**  
Principal Investigator, Device Research and Engineering Laboratory, University  
of Pennsylvania, Philadelphia, United States

**Guest of Honor**  
**Dr. Kishore Kumar Sadasivuni**  
Professor, Center for Advanced Materials, Qatar University & Managing  
Director, Journal of Emergent Materials (Springer)

You are cordially invited to join the inaugural ceremony of International  
Conference on “*Advancements in Nanoelectronics and Communication  
Technologies (ICANCT-2022)*”.

Please grace the event by your benign presence.

The link to join the event is provided below: [shorturl.at/epnuU](https://shorturl.at/epnuU) (Password for  
Webex Meeting is “12345”) You are requested to please join the event 15  
minutes before the scheduled time (i.e. at 9:15 am).

**With Regards**  
**Organizing Team**  
**ICANCT-2022**

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





**3<sup>rd</sup> International Conference on  
Advancements in Nanoelectronics and Communication Technologies  
(ICANCT-2022)**

**Jointly Organized by**  
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&  
Institution of Engineers (India), Rajasthan State Center, Jaipur  
**in Association with**  
CSIR-IMMT: InTEC, Bhubaneswar

**Minute to Minute Program**

<b>Inaugural Ceremony</b>	
9:30 am - 9:35 am	<b>Introduction of Event</b>
9:35 am - 9:40 am	<b>Welcome Note</b> Prof. S. L. Surana, Director (Academics), SKIT, Jaipur
9:40 am - 9:45 am	<b>About IE(I), Rajasthan State Centre</b> Mr. Gunjan Saxena, Chairman IE(I), Rajasthan State Centre
9:45 am - 9:50 am	<b>About CSIR-IMMT: InTEC</b> Prof. T Pavan Kumar, Senior Scientist, CSIR-IMMT: InTEC
9:50 am - 10:00 am	<b>Motivational Speech by Guest of Honor</b> Dr. Kishore Kumar Sadasivuni, Professor, Center for Advanced Materials, Qatar University & Managing Director, Journal of Emergent Materials (Springer)
10:00 am - 10:20 am	<b>Words of Wisdom by Chief Guest</b> Dr. Deep Jariwala, Principal Investigator Device Research and Engineering Laboratory, University of Pennsylvania, Philadelphia, United States
10:20 am - 10:25 am	<b>Vote of Thanks</b> Prof Mukesh Arora Head-ECE &OFA, SKIT
10:25 am - 10:30 am	<b>Group Photograph</b>

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

## List of Invited Guests and Speakers

S. No	Guest/Speakers	Name and Affiliation
1.	Chief guest of Program	<b>Dr. Deep Jariwala</b> Principal Investigator, Device Research and Engineering Laboratory, University of Pennsylvania, Philadelphia, United States
2.	Guest of Honor & Invited Speaker 1	<b>Dr. Kishore Kumar Sadasivuni</b> Professor, Center for Advanced Materials, Qatar University & Managing Director, Journal of Emergent Materials (Springer)
3.	Invited Speaker 2	<b>Dr. Ayşegül Uygün Öksüz</b> Professor, Suleyman Demirel University, Turkey
4.	Invited Speaker 3	<b>Dr. Ghanshyam Singh</b> Professor, Department of Electrical and Electronic Engineering, University of Johannesburg, South Africa
5.	Invited Speaker 4	<b>Dr. Ankit Goyal</b> University of Amsterdam, Netherland
6.	Invited Speaker 5	<b>Dr. Tawfik Ismail</b> Director of WINC Research Center, Director of Wireless Technology Master Program, Nile University, Egypt
7.	Invited Speaker 6	<b>Dr. Umesh Chand</b> Scientist II, Institute of Microelectronics, Agency for Science, Technology and Research (A STAR), Singapore
8.	Session Chair 1	<b>Dr. Pooja Sharma</b> CFUM-UP, University of Minho CEMMPRE, University of Coimbra, Portugal
9.	Session Chair 2	<b>Dr. Bosky Sharma</b> EPFL, Swiss Federal Institute of Technology Lausanne, Switzerland
10	Session Chair 3	<b>Dr. Neha Sharma</b> University Engineering College, Sarguja University, Chhattisgarh, India
11.	Session Chair 4	<b>Dr. Manoj Jangid</b> University of Michigan, United State
12.	Session Chair 5	<b>Dr. Amit Singhal</b> Ulster University, United Kingdom



## Consent of the Speakers



Dr. Praveen K Jain &lt;pkjain@skit.ac.in&gt;

Invitation to be the "Guest of Honour" to grace the inaugural ceremony of International Conference on "Advancements in Nano-Electronics and Communication Technologies" (ICANCT-2022) on 24th February, 2022 at 9:30 AM (IST) (online Mode: Cisco-Webex Platform)

4 messages

Dr. Praveen K Jain <pkjain@skit.ac.in>  
To: dmj@seas.upenn.edu

Thu, Feb 10, 2022 at 8:15 PM

Prof. Deep Jariwala  
Principal Investigator  
Electrical and System Engineering  
University of Pennsylvania

Greetings from SKIT, Jaipur!!!

Reference Prof. Praveen Kumar-IACS Kolkata

It gives us immense pleasure to inform you that the Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT,M&G), Jaipur, India is going to organize a 3rd International Conference on "Advancements in Nano-Electronics and Communication Technologies" (ICANCT-2022) on 24th -26th February, 2022.

Weblink of Conference: [www.icanct2022.skit.ac.in](http://www.icanct2022.skit.ac.in)

**About Institute:** Our institute, Swami Keshvanand Institute of Technology, Management & Gramothan has been ranked as No. 1 Engineering college of Rajasthan by RTU, Kota. It was established in the year 2000. SKIT is putting in efforts for making industry-ready engineers and managers through effective Industry-Institute Interface. Apart from University curriculum SKIT also pursues activities for research and development in various fields.  
Web-link: [www.skit.ac.in](http://www.skit.ac.in)

I feel honored to invite you to be the **GUEST of HONOUR** at the inaugural ceremony of ICANCT 2022 (Webex Platform) on 24<sup>th</sup> February 2022 at 9:30 AM to 10:30 AM (IST).

I request you to accept our invitation and motivate the participants as the **Guest of Honour (15-20 Minute)**

Thanks and regards

Deep Jariwala <dmj@seas.upenn.edu>  
To: "Dr. Praveen K Jain" <pkjain@skit.ac.in>

Mon, Feb 14, 2022 at 6:19 PM

Dr. Jain,

I confirm and accept the invitation.

Do I need to present with powerpoint slides or just an oral speech ? Please let me know what is required of me.

Deep

<https://mail.google.com/mail/u/0/?ik=fb0eee7a8a&view=pt&search=all&permthid=thread-a%3Ar8084177808088774154&simpl=msg-a%3Ar91948...> 1/2

3/3/22, 1:24 PM Swami Keshvanand Institute of Technology Mail - Invitation to be the "Guest of Honour" to grace the inaugural ceremony of Int...

Deep Jariwala  
Assistant Professor  
Department of Electrical and Systems Engineering  
University of Pennsylvania  
Office: 360, Levine Hall  
847-708-4755 (MY 215-745-4380 (O))  
Skype: deep.jariwala. Zoom ID: 780-756-2373  
<https://jariwala.seas.upenn.edu/>

[Quoted text hidden]

Dr. Praveen K Jain <pkjain@skit.ac.in>  
To: Deep Jariwala <dmj@seas.upenn.edu>

Mon, Feb 14, 2022 at 6:53 PM

Thank you sir  
As you will be an honoured guest of the inaugural ceremony, so it is not necessary that you have to use PPT. You have to just brief the theme of the conference and current aspects. But if you want to share something with participants using ppt, then it's not a problem. I mean it is upto you how you brief the content (15-20 minutes).  
I also want to share with you that Dr. Kishore Kumar Sadasivuni, Professor, Center for Advanced Materials, Qatar University, Qatar and Managing Director, Journal of Emergent Materials (Springer) will also be a guest of the program. He will speak for (5-10 minutes).  
I will share a minute to minute schedule of the program and link to join the session 2 days before the event.

Thanking you



Dr. Praveen K Jain <pkjain@skit.ac.in>

---

## Link for Joining Session (ICANCT 2022)

2 messages

Dr. Praveen K Jain <pkjain@skit.ac.in>  
To: kishorkumars@qu.edu.qa

Tue, Feb 22, 2022 at 9:37 AM

Prof. Kishore Kumar

Greetings from SKIT Jaipur.

Thanking you for accepting our request to be Guest of Honor in the Inaugural ceremony of the International Conference ICANCT-2022.

Please find attached herewith the links for joining the session and minute to minute program.

Date: 24th February 2022

Time: 9:30 AM (Indian Standard Time)

Link for joining session as Panelist:

<https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=ee62fdfff97a3ac14ac608df4f710010>

Password: 123456

Mail ID: kishorkumars@qu.edu.qa

Please join 10 minutes before the scheduled time for checking audio and video quality.

If any technical issue occurs then join as attendee, host will make you panelist.

Link for attendee:

<https://skitjaipur.webex.com/skitjaipur/onstage/g.php?MTID=e86b4c7e297658123cc801a1e49984147>

Password: 12345

Thanks and regards

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## Invitation for expert lecture in ICANCT 2022

Aysegul Uygun <aysegul.uygun@yahoo.com>

Wed, Jan 19, 2022 at 1:48 AM

To: "ayseguluygun@sdu.edu.tr" <ayseguluygun@sdu.edu.tr>, ICANCT 2022 <icanct2022@skit.ac.in>

Dear Organizing Team

thank you very much for your kind invitation.

Plese could you find attached abstract and bio docs.

Kind regards

Aysegul Uygun Oksuz

Dr Aysegul Uygun Oksuz

Suleyman Demirel University

Faculty of Arts and Science

Department of Chemistry

32260 Isparta/TURKEY

[ayseguluygun@sdu.edu.tr](mailto:ayseguluygun@sdu.edu.tr)

[aysegul.uygun@yahoo.com](mailto:aysegul.uygun@yahoo.com)

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

Amit Singhal <amit9460@gmail.com>  
To: "Dr. Praveen K Jain" <pkjain@skit.ac.in>

Thu, Feb 24, 2022 at 5:44 PM

Dear sir,

Thank you very much for the invitation. I am honoured to be a session chair.

Best regards  
Amit



Dr. Amit Kumar Singhal  
Research Associate  
Tel: +447570664290  
E: singhal-a@ulster.ac.uk  
Twitter: @vish\_amitks

[Quoted text hidden]



Dr. Praveen K Jain <pkjain@skit.ac.in>

### Link for Joining Session and Abstract Details (For Session Chair)

1 message

Dr. Praveen K Jain <pkjain@skit.ac.in>  
To: boskiisharma@gmail.com

Tue, Feb 22, 2022 at 12:29 PM

Dr. Bosky Sharma

Dear Madam  
Greetings from SKIT Jaipur.

Thanking you for accepting our request to be session chair in the conference ICANCT-2022. Please find attached herewith the links for joining the sessions and schedule of the conference. I am also attaching the abstract of the [paper presentation session-2](#) in which you are the session chair.

Please join as panelist link, if any technical issue occurs then join as attendee, host will make you panelist.

Thanks and regards

### Link for Joining Session and Abstract Details (For Session Chair)

9 messages

Dr. Praveen K Jain <pkjain@skit.ac.in>  
To: manojcct@gmail.com, manojj@umich.edu

Tue, Feb 22, 2022 at 12:36 PM

Dr. Manoj Jangid

Dear Sir  
Greetings from SKIT Jaipur.

Thanking you for accepting our request to be session chair in the conference ICANCT-2022. Please find attached herewith the links for joining the sessions and schedule of the conference. I am also attaching the abstract of the [paper presentation session-4](#) in which you are the session chair.

Please join as panelist link, if any technical issue occurs then join as attendee, host will make you panelist.

Thanks and regards

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

Manoj Jangid <manojj@umich.edu>  
 To: "Dr. Praveen K Jain" <pkjain@skit.ac.in>  
 Cc: manoj google account <manojcct@gmail.com>

Wed, Feb 23, 2022 at 5:26 AM

Dear Praveen,

Thank you for inviting me to chair the session and your sharing the details of the conference programs.

I would need a small information about the my session. Do I need to evaluate the presentations? It would nice if you share the details of the presenters, their topics and biosketch (if that really needed). Moreover, if any other special instructions from your side, please let me know.

Looking forward.

Best,  
 Manoj

[Quoted text hidden]



ICANCT 2022 <icanct2022@skit.ac.in>

## Invitation for expert lecture in ICANCT 2022

Singh, Ghanshyam <ghanshyams@uj.ac.za>  
 To: ICANCT 2022 <icanct2022@skit.ac.in>

Sat, Jan 22, 2022 at 4:21 PM

Dear Dr Rukhsar,

Thank for the email. Please find the attached my brief biograph. However, the graphical Abstract will share soon with you.

The topic of my keynote is: 6G Communication Systems: Potential Key Driver and Open Research Challenges

With best regards,

Prof. Ghanshyam Singh, (Ph D, IIT BHU)  
 Professor,  
 Department of Electrical and Electronics Engineering Science  
 Faculty of Engineering and the Built Environment  
 Auckland Park Kingsway Campus, University of Johannesburg,  
 PO Box 524, Johannesburg 2006, South Africa

B2 Lab 27

Tel.: +27 11 559 3879

Email: ghanshyams@uj.ac.za

<https://www.uj.ac.za/contact/Pages/Prof.%20Ghanshyam%20Singh.aspx>

*The great teacher is not the man who supplies the most facts, but the one in whose presence we become different people. - Ralph Waldo Emerson*

**Prof. Ghanshyam Singh**

Professor: Electronics and Communication Engineering & Director: Center for Smart  
 Information and Communication Systems  
 Electrical and Electronic Engineering Science  
 PhD (IIT BHU)

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



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### Link for Joining Session and Abstract Details (For Session Chair)

4 messages

Dr. Praveen K Jain <pkjain@skit.ac.in>  
To: poojamnit2014@gmail.com

Tue, Feb 22, 2022 at 12:12 PM

Dear Madam  
Greetings from SKIT Jaipur.

Thanking you for accepting our request to be session chair in the conference ICANCT-2022. Please find attached herewith the links for joining the sessions and schedule of the conference. I am also attaching the abstract of the [paper presentation session-1](#) in which you are the session chair.

Please join as panelist link, if any technical issue occurs then join as attendee, host will make you panelist.

Thanks and regards

—

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### Invitation for expert lecture in ICANCT 2022 (SKIT Jaipur)

Tawfik Ismail <tismail@cu.edu.eg>  
To: ICANCT 2022 <icanct2022@skit.ac.in>

Tue, Jan 18, 2022 at 3:12 PM

Dear Sir,

This is my bio with recent photo. The graphical abstract will send you soon.

Dr. ISMAIL (Senior Member, IEEE) had postdoctoral research in optical and wireless communications with the Technical Institute of microwave and Photonic Engineering, University of Graz, Austria, in 2015. In 2018, he joined the Optical Wireless Communication research group, Department of Engineering and Sciences, University of Oxford, U.K., to work in the research of quantum communication in free space. In addition, he has established and led a research group for optical and wireless communications at Cairo University, Egypt. He is currently the Director of Wireless Intelligent Networks Research Center (WINC), Nile University. He also holds an associate professor position with the National Institute of Laser Enhanced Sciences, Cairo University. Since 2014, he has been with several research projects funded nationally by NTRA, ASRT, STDF, and ITIDA, Egypt, and internationally by InnoveUK, U.K. In addition, he has research stays at the Technical Institute of Microwave and Photonic Engineering, University of Graz; The American University in Cairo, Egypt; Cairo University; and Malaviya National Institute of Technology, India. Dr. ISMAIL is an author or co-author of over 90 publications (Scopus indexed), he maintains an active research agenda in the areas of optical wireless communication, quantum key distribution, millimeter-wave, mobile edge computing, integrated LTE/LTE-M for IoT applications, and tracking system.

Kind Regards,

---

**Tawfik Ismail, PhD, SMIEEE**

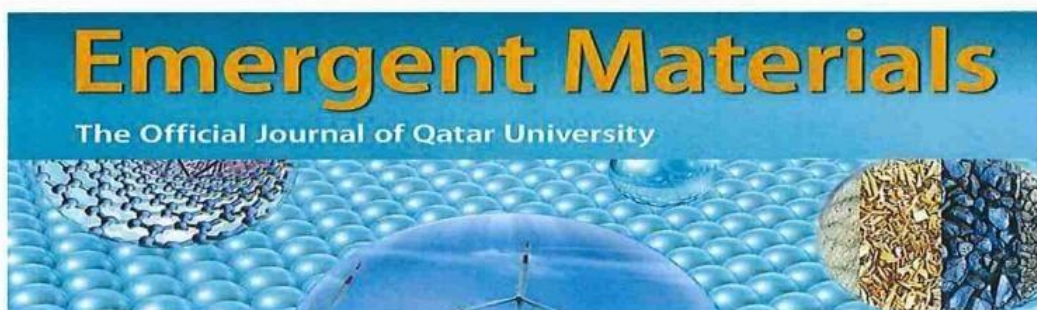
Associate Professor, School of Engineering and Applied Sciences, Nile University, Egypt.

Email: [tismail@nu.edu.eg](mailto:tismail@nu.edu.eg)

<https://www.scopus.com/authid/detail.uri?authorid=36009912100>

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

## Consent from Publication Partner



**Greetings!!**

On behalf of the **Emergent Materials Journal, Springer**, we would like to appreciate and extend kind regards towards organizing committee of **International Conference on Advancement in Nanoelectronics and Communication Technologies (ICANCT2022)** to be held between **24th-26th February, 2022** for conferring us with the chance of this gratifying association. We would also like to thanks all the participants for submitting and sharing their significant work & findings. This association has successfully brought together innovative ideas, multidisciplinary sciences and some creative collaborations.

**The organizing committee has done a great job in hosting the International Conference ICANCT 2022 and thank you for the high level, and professional service.**

Warm regards,

Dr. Kishor Kumar Sadasivuni,

Managing Editor, Emergent Materials, Springer.

SmartNanoSolutions Group Leader,

<http://www.smartnanosolutions.qa/>

Center for Advanced Materials,

Building H10, Zone 6, Room E133, Qatar University, Qatar.

M: +97450580237 T: +97444036686

Email: kishorkumars@qu.edu.qa

----- Forwarded message -----

From: **Materials Today Proceedings Editorial** <mtproceedings@elsevier.com>  
Date: Mon, Dec 20, 2021, 9:40 PM  
Subject: MATPR - Proposal Accepted - ICANCT 2022  
To: Dr. Praveen K Jain <praveenjain.spsl@gmail.com>, pkjain@skit.ac.in <pkjain@skit.ac.in>  
Cc: Conference Proceedings (ELS) <conferenceproceedings@elsevier.com>

@Erna:

Conference dates: 24-26 Feb 2022

Portal opening earliest: 15 April 2022

Close: 30<sup>th</sup> June 2022

Dear Dr Jain,

Thank you very much for sending your proposal for a proceedings issue to MT Proceedings. We are pleased to accept your proposal. Please note that publication of your conference proceedings remains conditional upon meeting the requirements set out below.

For all correspondence going forward, please quote the short conference name in the subject line.

**Conditions of publication:**

We only open the Editorial Manager portal after the conference has concluded (we no longer publish conference proceedings ahead of the conference taking place). Guest editors must also provide:

1. A copy of the conference programme;
2. A list of accepted abstracts.

Copies of these documents should be sent to [mtproceedings@elsevier.com](mailto:mtproceedings@elsevier.com) with the conference short name in the subject line. Once approved, the portal will be opened according to the initially agreed timeline.

## List of Paper Accepted

S. No.	Paper Id	Title of Paper
1	5	A Brief Account of Man, Material and Manufacturing: On The Timeline.
2	6	Implementation of Cognitive Radio Networks for Optimum Spectrum Utilization Through Feed Forward Backpropagation Artificial Neural Network
3	11	Vehicle Antitheft Mechanism Using IOT
4	14	Printable Perovskite Based Solar Cell With Optimum Electrical and Optical Properties
5	19	Color Quantization Using Partition Based Clustering Techniques: A Comparative Study
6	21	A Pentagonal-Shaped Slot Two Port MIMO Antenna for Sub 6 GHz 5G Wireless Applications
7	22	Human Face Recognition and Age Estimation with Machine Learning: A Critical Review and Future Perspective
8	25	Review on Miniaturized Flexible Wearable Antenna with SAR Measurement for Body Area Network
9	26	Wireless EMG Controlled Prosthetic Hand
10	28	A Smart Sensor using MEMS Technology for Artificial Environmental Monitoring
11	30	An Insight of Polymer Based Flexible Patch Antenna for Wireless and IOT Applications
12	32	Key Facial Points Recognition using RESNET
13	33	A Comparative Study of Different Materials used for Solar Photovoltaics Technology
14	35	Estimation of Optimized Window Size for Hybridized KNN-Random Forest Algorithm Based Image Demosaicing
15	36	When UAV and Ad-Hoc NOMA-BS Meets in Disaster: A Scheduling and Mode Selection Approach



16	42	Energy Management System for DC Microgrids
17	44	Impact of Natural Dye from Leaf of Plectranthus Amboinicus on the Recitation of Dye Sensitized Solar Cell
18	45	Thermal Potential Porous Materials and Challenges of Improving Solar Still using Tio2/Jackfruit Peel - Enhanced Energy Storage Material
19	50	Localizing Mobile Nodes in WSNS using Neural Network Algorithm
20	52	Design, Simulation and Analysis of Nanostructures for Low Power Devices
21	56	Dielectric and Ferroelectric Behaviour of MWCNT/Poly Urethane Composite
22	57	Fabrication and Characterization of Homogenous and Functionally Graded Glass Fiber Reinforced Polymer Composites
23	58	Supervised Classification Model for Estimation of Wear in Sisal Fibre-Epoxy Composites
24	60	Supercapacitive Behavior of Polypyrrole Thin Film Prepared by Electrodeposition Technique and Characterization
25	63	Performance Analysis of Saliency Detection in Images
26	66	Giuseppe Peano Fractal Loaded Multiband Antenna using Parasitic Strips for Thz Applications
27	67	Fractal Segmented Lotus Shape Planar Monopole Antenna for Multiband Applications
28	68	Effect of Dielectric Thickness on MgZnO Thin Film Transistor Characteristics
29	71	A 30uw Low Power and High Speed of Hardware Accelerator for Wireless Body Sensor Network (WBSN) in 28nm Stacked Silicon Technology
30	75	A Paper on Microstrip Patch MIMO Antenna for 5G Applications
31	77	Marine Predators Algorithm for Performance Optimization of Nanoscale FINFET

32	78	Applications of Graph Coloring in Various Fields
33	79	Low Pass Filter Using Metamaterial
34	81	A Cavity Model Microwave Patch Antenna For Lubricating Oil Sensor Applications
35	82	Design of Two Element MIMO Antenna for ISM Band Application
36	85	Tailoring the Dielectric Properties of PVDF/PMMA Blends
37	86	Quantum Dot Cellular Automata using A One-Bit Comparator for QCA Gates
38	89	Design of Quaternary MIN and MAX Circuits using Graphene Nanoribbon Field Effect Transistors
39	91	Square Ring Resonator based Refractive Index Plasmonic Sensor
40	96	Product Based Sentiment Analysis Using Logistic Regression
41	97	Optical Gain Analysis and Process Sequence Optimization for the Gaas Based Nanoscale Quantum Well Structure
42	99	Electrical Properties of SnO <sub>2</sub> Doped PVDF/PMMA Polymer Blend
43	100	Parametric Data-Driven Optimization Approach on Plasmonic Based Ring Resonator
44	101	A Novel Selection Method Based on LUT For Approximating Adder Circuits.
45	103	Low Power Voltage Differencing Transconductance Amplifier using Carbon Nano Tube Field Effect Technology.
46	106	Influence of High-K Dielectric Material on the Electrical Performance of A-IGZO Thin Film Transistor
47	107	Effects of Channel Length and Gate Dielectric Material on Electrical Properties of an IGZO TFT

48	108	Efficient Designs of High Speed Combinational Circuits and Optimal Solutions using 45-Degree Cell Orientation in QCA Nanotechnology
49	109	Engineering of Unique Co/Co <sub>3</sub> O <sub>4</sub> Core/Shell Nanostructures for High Performance Supercapacitors
50	114	Investigation of Photocurrent Efficiency of Cs <sub>2</sub> TiBr <sub>6</sub> Double Pervoskite Solar Cell
51	115	Effect of Tiw Blocking Layer and Temperature Annealing on Resistive Switching Parameters of Hafnium Oxide Based CBRAM Device

## Objective and Outcome of the event

### Objective of the Conference:

- Provide a good learning platform to the students, research scholars and faculty to exchange views and share information with National and International experts who are deeply involved in research in the field of Nanoelectronics and Communication technologies.
- Encompasses latest research outcomes in the form of theoretical models, environmental impact, security and defense technology, innovative designs, enhancements and improvements in existing frameworks, sustainable technological advancement, societal welfare etc.
- Intends to bring together the best minds from around the world to cover literally all aspects of energy technology from a multi-disciplinary perspective
- The scientific event will comprise of key-note talks, oral presentations, and a session for special research outcomes.

### Outcomes:

The conference was an initiative to provide a common platform for researchers working in the field of nanotechnology and communication to share knowledge and ideas for technological advancements. The participants were able to understand the need of today to combine different ideas of researchers working in different domains to develop cost-effective and reliable technology for day-to-day life. This conference brought a positive transformation in the participant's attitude about their research work and get them more focused as well as result oriented. Conference provided an ideal environment to develop new collaborations and meet experts on the fundamentals, applications, and products of the mentioned fields.

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



## Technical Report

International Conference on Advancement in Nano-electronics and Communication Technologies (ICANCT-2022) is a three day conference that aims at presenting current researches being carried out in the areas of Communication, Nanoelectronics, Photonics, Wireless Communication, Mobile Communications, Antenna and Wave Propagation, Optical Communication, Image Processing, Internet of Things, Machine Learning, Artificial Intelligence, Embedded System and VLSI technology for scientists, scholars, engineer students from the universities, technologists, entrepreneurs and policymakers all around the World. Thus the conference intends to bring together the best minds from around the World to cover literally all aspects of energy technology from a multi-disciplinary perspective.

The Inaugural ceremony of three day International Conference on Advancements in Nano electronics and Communication Technologies was held in online mode at Swami Keshvanand Institute of Technology, Management & Gramothan Jaipur. The conference was jointly organized by Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur & Institution of Engineers (India), Rajasthan State Center, Jaipur in Association with CSIR-IMMT: InTEC, Bhubaneswar. The inaugural ceremony was graced by the benign presence of the chief guest Dr. Deep Jariwala, Principal Investigator, Device Research and Engineering Laboratory, University of Pennsylvania, Philadelphia, United States, the guest of honour Dr. Kishore Kumar Sadasivuni Professor, Centre for Advanced Materials, Qatar University, Dr. Ayşegül UYGUN ÖKSÜZ, Professor, Suleyman Demirel University, Turkey, Mr. Gunjan Saxena, Chairman, IE(I) Rajasthan state centre and Prof. T. Pavan Kumar, Senior Scientist, CSIR-IMMT.

Dr. S. L. Surana, Director (Academics) welcomed all the guests and briefed the theme of conference. He also emphasized about the importance and relevance of the theme in current scenario. Mr. Gunjan Saxena, highlighted the core objectives of the conference and schemes offered by IE(I). Prof. T Pavan Kumar put light on the initiative of MAITRI program. Dr. Jariwala enlightened the audience with the emerging research and technique in the related field and highlighted that how nanoelectronics is making the life of human being very comfortable and communication technologies is leading the world with ultra-fast data transfer in few milliseconds. Dr. Kishore Kumar Sadasivuni shed light on different type of nanosensors. He discussed about the recent work being done in his lab. He exemplified exhaled breath biomarker for diagnosis of diabetes and wearable skin patch for glucose detection from the sweat. At the end of inaugural ceremony, Dr. Mukesh Arora, Head-ECE proposed the vote of thanks. Dr. Ayşegül presented the design methods of chemical micro-motors. The first session of oral presentation was chaired by Dr. Pooja Sharma, CFUM-UP, University of Minho, CEMMPRE, University of Coimbra, Portugal. Total 10 papers were presented in the first day of this conference. Ms. Gloria Joseph hosted the inaugural session.

Commencement of second day was enthusiastic and informative. On the second day Dr. Ghanshyam Singh, Professor, Department of Electrical and Electronic Engineering, University of Johannesburg, South Africa delivered the expert talk on 6G Communication Systems: Potential key driver and open research challenges. He talked about 6G communication systems basics, performance metrics, and application scenarios. He described the 6G vision in near future and market dynamics. At last he focused on driving factors for 6G industry, Key features and research initiative into 6G Communication. Dr. Praveen Kumar Jain Dy. HOD, ECE SKIT and Dr. Rukhsar Zafar chaired the session under which 10 papers were presented.

After the break Dr. Ankit Goyal, University of Amsterdam, Netherland shared his knowledge on Photophysical properties of Inorganic Perovskite Nanocrystals. He started his expert talk by introducing basics of Blue PL Emission, Halides, Photoluminescence Quantum Yield (PLQY) and their synthesis methods. He described the PL Spectroscopy, Photoluminescence Quantum Yield measurements of Green emitting large  $\text{CsPbBr}_3$  nanocrystals and Blue green emitting small sized  $\text{CsPbBr}_3$  nanocrystals. He also focused on the synthesis process and Micro-Raman-PL Spectroscopy. Lanthanide doping especially  $\text{Yb}^{3+}$  in Lead Halide Perovskites are under intense research due to enhanced optical properties like photoluminescence quantum yield >100 % in near-infrared region. It suggests that more Yb could lead to even higher quantum yield. Creation of more defects in the lead halide perovskites during synthesis could lead to higher Yb doping. In the subsequent session of day 2 session was chaired by Dr. Neha Sharma, University Engineering College, Sarguja University, Chhattisgarh, India under which 10 papers were presented.

The last day of the conference was opened up with the much awaited session of Prof. Tawfik Ismail, Director of WINC Research Center, Nile University, Egypt. Dr. Ismail enlightened about RF/Optical Wireless Telemetry for Active Implantable Neural Platform with Data Compression. Moving along the day, a total of 11 papers presented under the session was chaired by Dr. Manoj Jangid, University of Michigan, United State.

The last session of the conference was quite knowledge enriching and was taken by Dr. Umesh Chand, Scientist II, Institute of Microelectronics, Agency for Science, Technology and Research (A STAR), Singapore who shed light on what is beyond the smart – Advance technologies. He discussed about smart health platform and neural interfaces. He also highlighted the ways to achieve both the miniaturization and diversification.

The last session was chaired by Dr. Amit Singhal, Ulster University, United Kingdom under which total 11 papers were presented.

The valedictory function was graced by benign presence of the honored guests Dr. Umesh Chand Scientist II, Institute of Microelectronics Agency for Science, Technology and Research (A STAR), Singapore. Dr. Chand also congratulated the team-ICANCT 2022 for successfully organizing the conference and highlighted the importance of the theme of ICANCT 2022 in present context.

Prof. Mukesh Arora, Head, ECE (SKIT) welcome the guest and enthused the gathering with his motivational words.

Total six knowledge boosting invited sessions were organized in the conference. The speakers were Dr. Kishore Kumar Sadasivuni, Professor, Center for Advanced Materials, Qatar University Qatar, Dr. Ayşegül Uygün Öksüz Professor, Suleyman Demirel University, Turkey, Dr. Ghanshyam Singh, Professor, Department of Electrical and Electronic Engineering, University of Johannesburg, South Africa, Dr. Ankit Goyal University of Amsterdam, Netherland, Dr. Tawfik Ismail Director of WINC Research Center, Nile University, Egypt and Dr. Umesh Chand Scientist II, Institute of Microelectronics, Agency for Science, Technology and Research (A STAR), Singapore.

Total 52 research papers were presented during this 3 day international conference.

Dr. Praveen K. Jain, Convener, ICANCT 2022 presented a brief report of conference and Mr. Ankit Agarwal, Assistant Professor-SKIT thanked all the participants and experts for the resounding success. He extended thanks to Management of SKIT for their enormous cooperation in the organization of this event. Then he thanked Conveners - Dr. Mukesh Arora, Dr. Praveen Kr. Jain, Co-conveners: Dr. Rukhsar Zafar, Ms. Pooja Choudhary, Mr. Ankit Agarwal, Secretary: Ms. Gloria Jospeh, Mr. Lalit Kr. Lata, Ms. Suman Sharma, Mr. Meeraj Jain, National and International advisory Committee and the technical committee who started rolling the wheels weeks ago.

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

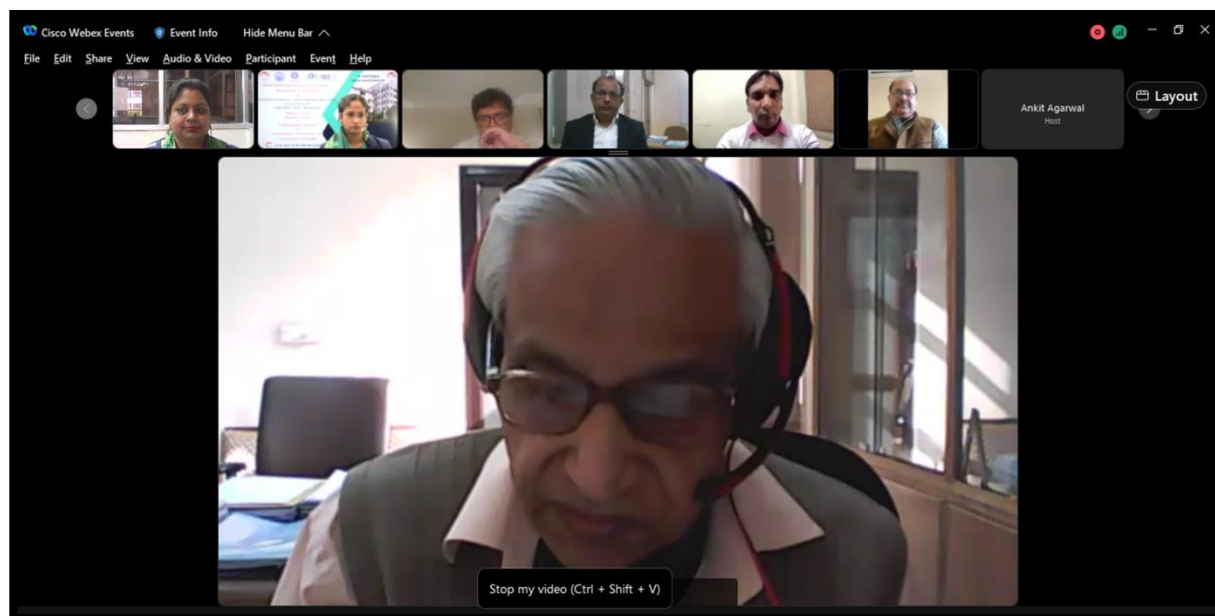


They have shown that, faith can move mountains. It requires planning and a bird's eye for details. We have been fortunate enough to be backed by a team of very motivated and dedicated colleagues of electronics and communication department, SKIT who know their job and are result oriented.

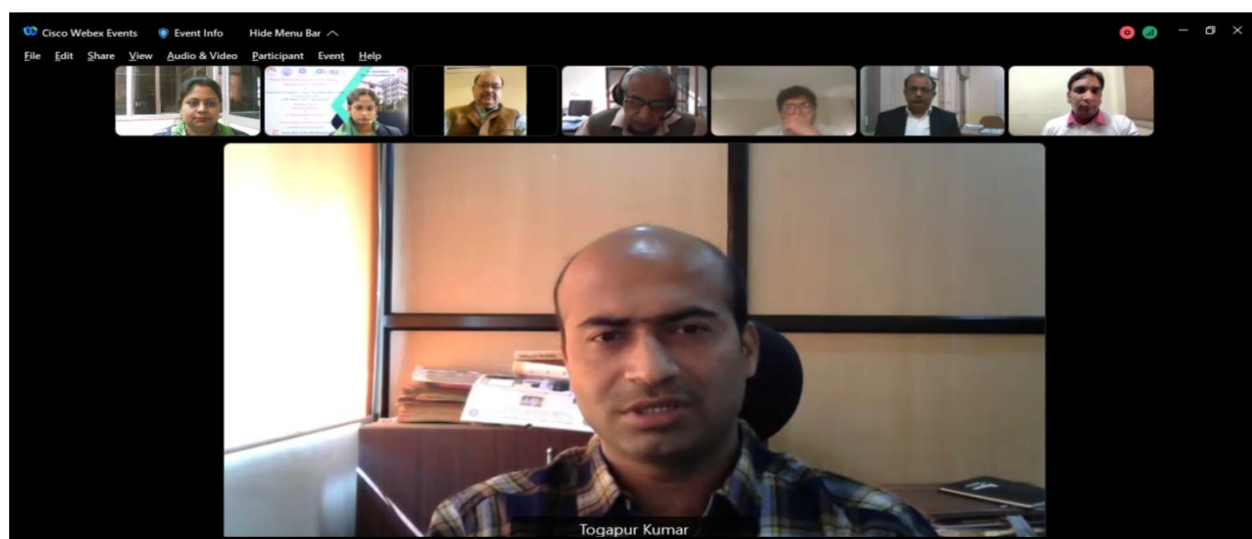
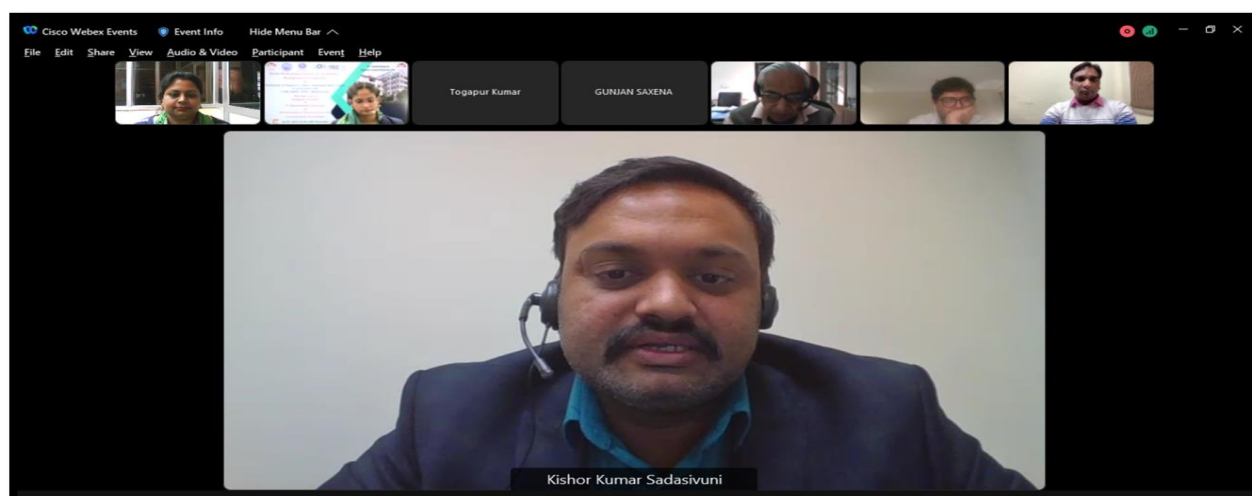
He emphasized that it was a it was a life-long learning for all participants. The ICANCT 2022 is proved as a great beneficial exposure for the participants as they are enlightened with the most widely used advanced tools, strategies and techniques.

---Thank You-----

## Screenshots of the Event



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



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

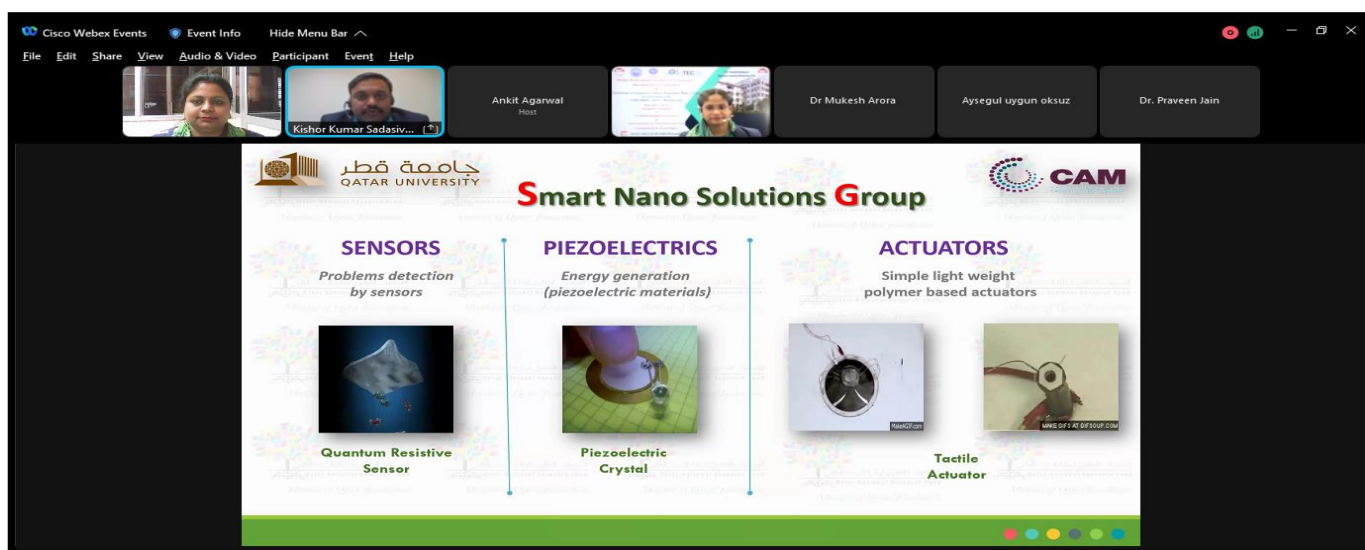
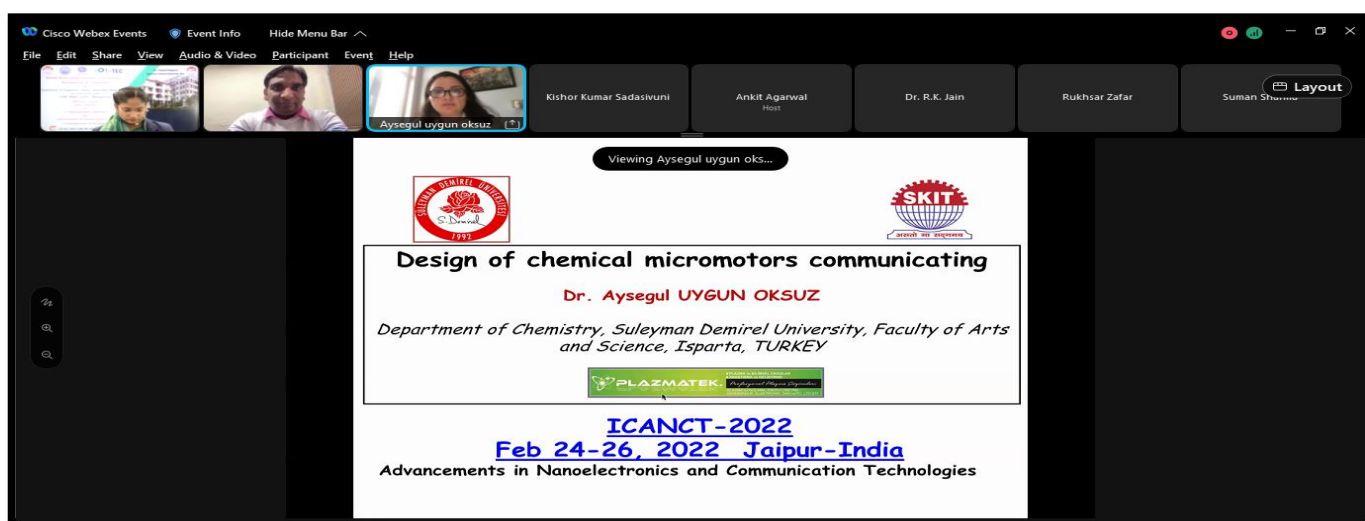
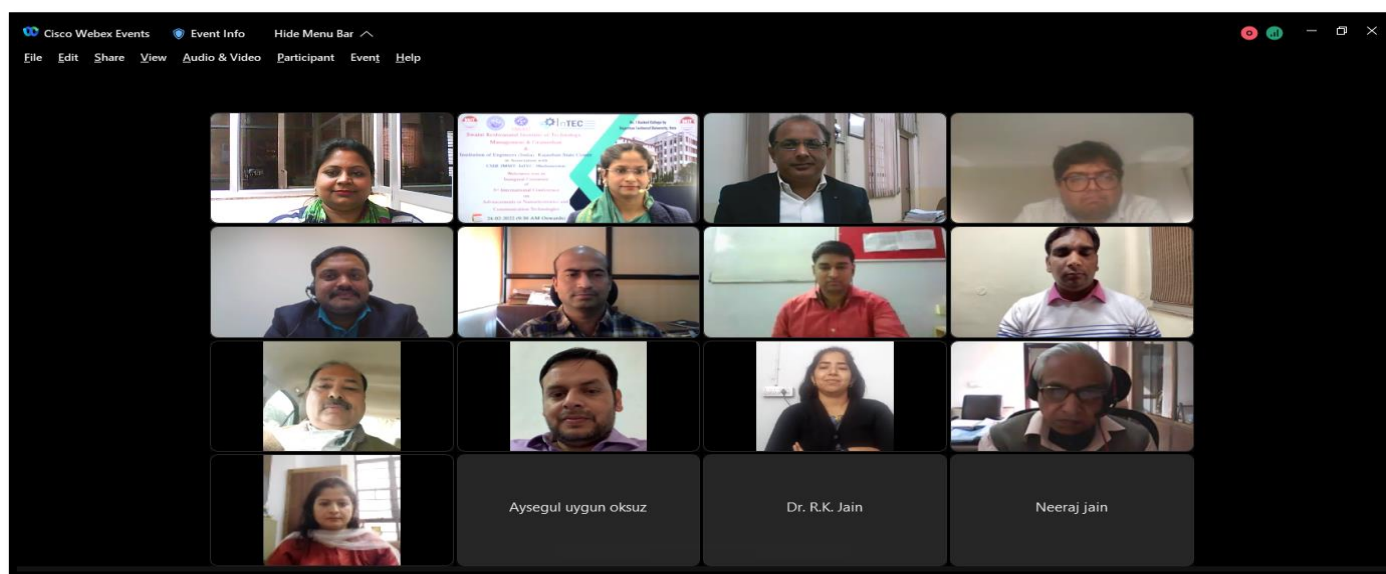


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Ramnagar, Jagatpura, Jaipur-302 017, Rajasthan, India

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Viewing Kishor Kumar Sada...

35

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Aysegul uygun oksuz Kishor Kumar Sadasiv... Ankit Agarwal Host Gloria Joseph Dr. Praveen Jain Dr. R.K. Jain Rukhsar Zafar Layout

Viewing Kishor Kumar Sada...

## PROTOCOL SENSITIVITY

250USD

The  $\text{KMnO}_4$  solution was used to determine the acetone content. We have used  $300\mu\text{M}$  concentration of  $\text{KMnO}_4$  as a solution with  $0.5\text{M}$   $\text{NaOH}$  solution.

Time (sec)

Concentration (ppm)

Concentration of Acetone (ppm)

Person 1 Person 2 Person 3 Person 4 Person 5

18

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Aysegul uygun oksuz Kishor Kumar Sadasiv... Ankit Agarwal Host Gloria Joseph Dr. Praveen Jain Dr. R.K. Jain Rukhsar Zafar Layout

Viewing Kishor Kumar Sada...

# COVID-19

## CORONAVIRUS DISEASE

Body oxidative stress,  
Reactive Oxygen  
Species  $\text{H}_2\text{O}_2$  and  $\text{NO}$   
(COVID-19)



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Aysegul uygun oksuz Kishor Kumar Sadasivuni Ankit Agarwal Host Gloria Joseph Dr. Praveen Jain Dr. R.K. Jain Rukhsar Zafar Layout

Viewing Kishor Kumar Sadasivuni's presentation: **State researchers testing breathalyzer to detect COVID-19**

Federal grant supports "potentially transformative" idea

Chris Booker  
Ohio State News  
booker.1@osu.edu  
614.292.7276

One of the most common COVID-19 tests involves a long swab pressed deep into the nasal cavity – and while the test can be administered quickly, it has been described as unpleasant and uncomfortable.

Now researchers at The Ohio State University are working on a testing system that would require a simple exhaled breath. Rhema Ghouse is the primary investigator of a team developing a breathalyzer device that will sample breath for key biomarkers of the infection. She says it would serve as an alternative to current tests that are expensive, can take a long time to get results and require specialized personnel to do the sampling and to analyze the results.

Ghouse, director of the **Advanced Ceramics Research Laboratory** and professor in the **College of Engineering**, is working with co-investigator **Archie Bismark**, assistant professor of **entomology and arthropod science**. The project was awarded a nearly \$200,000 National Science Foundation EAGER grant this month under a program supporting exploratory, early-stage research on untested, but potentially transformative, ideas or approaches.

"Breath analysis is not really a technique that is used widely in the medical field yet, so it is considered early stage work," Ghouse said. "[We] have a sensor device that detects **nitric oxide and hydrogen peroxide** (volatile organic compounds) in breath and can be used to tell you about the onset of an infectious disease."

In addition to nitric oxide, the device examines two other metabolites that could specifically indicate the presence of a COVID-19 infection even in asymptomatic patients. Exhaling once in the breathalyzer may help with earlier detection of the onset of the disease, as well as with

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Dr. Praveen Jain (Host) Gloria Joseph Ankit Agarwal Dr. R.K. Jain Kishor Kumar Sadasivuni Layout

Aysegul uygun oksuz

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Ankit Agarwal Aysegul uygun oksuz Dr. Praveen Jain Host Dr. R.K. Jain Gloria Joseph Kishor Kumar Sadasivuni Rukhsar Zafar Suman Sharma Layout

Viewing Aysegul uygun oksuz's presentation: **RF plasma-enhanced conducting Polymer/W<sub>5</sub>O<sub>14</sub> based self-propelled micromotors for miRNA detection**

2020

Analytica Chimica Acta  
journal homepage: [www.elsevier.com/locate/ata](http://www.elsevier.com/locate/ata)

Camre Celik Cagat<sup>a,1</sup>, Goede Yundabak Karaca<sup>a,b,1</sup>, Emre Uygun<sup>c</sup>, Filiz Kuralay<sup>d</sup>, Lutfi Oksuz<sup>e</sup>, Maja Remskar<sup>f</sup>, Aysegul Uygun Oksuz<sup>a,h</sup>

<sup>a</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>b</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>c</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>d</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>e</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>f</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>g</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey  
<sup>h</sup>Department of Chemistry, Faculty of Science, Istanbul Kültür University, Istanbul, Turkey

Abstract: A self-propelled micromotor based on a conducting polymer (CP) and W<sub>5</sub>O<sub>14</sub> was developed for the detection of miRNA. The micromotor was fabricated by the RF plasma-enhanced chemical vapor deposition (PECVD) method. The micromotor was used for the detection of miRNA. The micromotor was used for the detection of miRNA. The micromotor was used for the detection of miRNA.

Keywords: Self-propelled micromotor, miRNA detection, RF plasma-enhanced PECVD, W<sub>5</sub>O<sub>14</sub>, CP.

1. Introduction

2. Materials and Methods

3. Results and Discussion

4. Conclusion

5. Acknowledgements

6. References

7. Supplementary Information

8. Appendix

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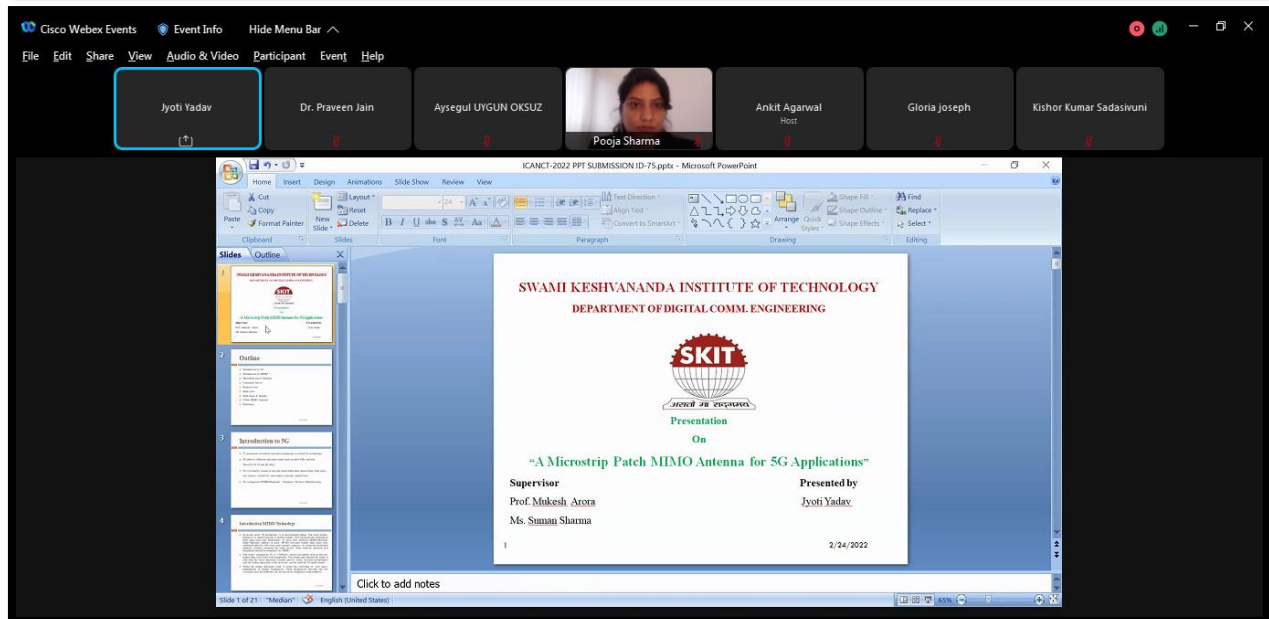
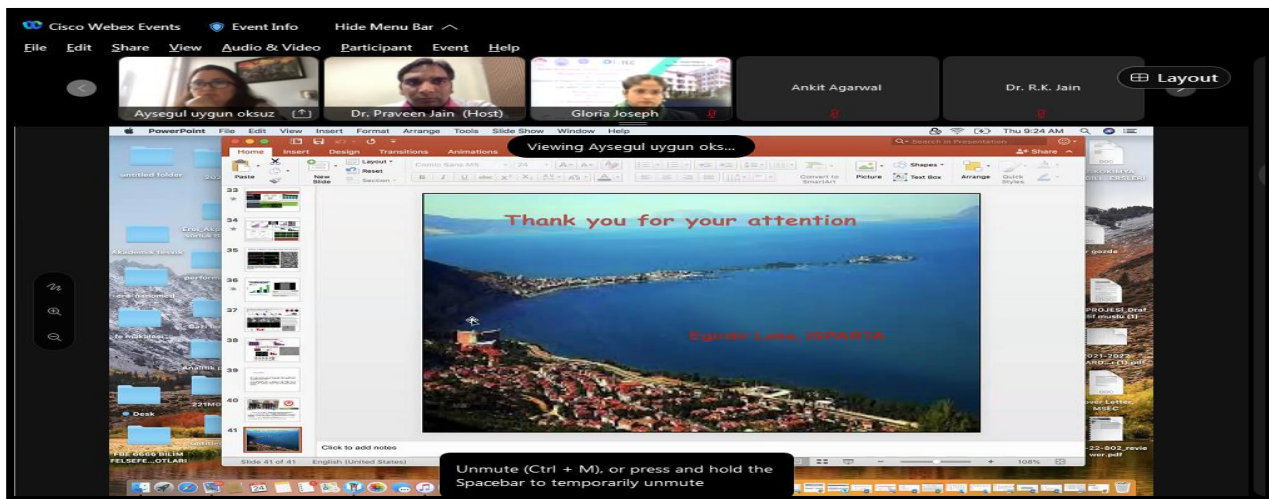
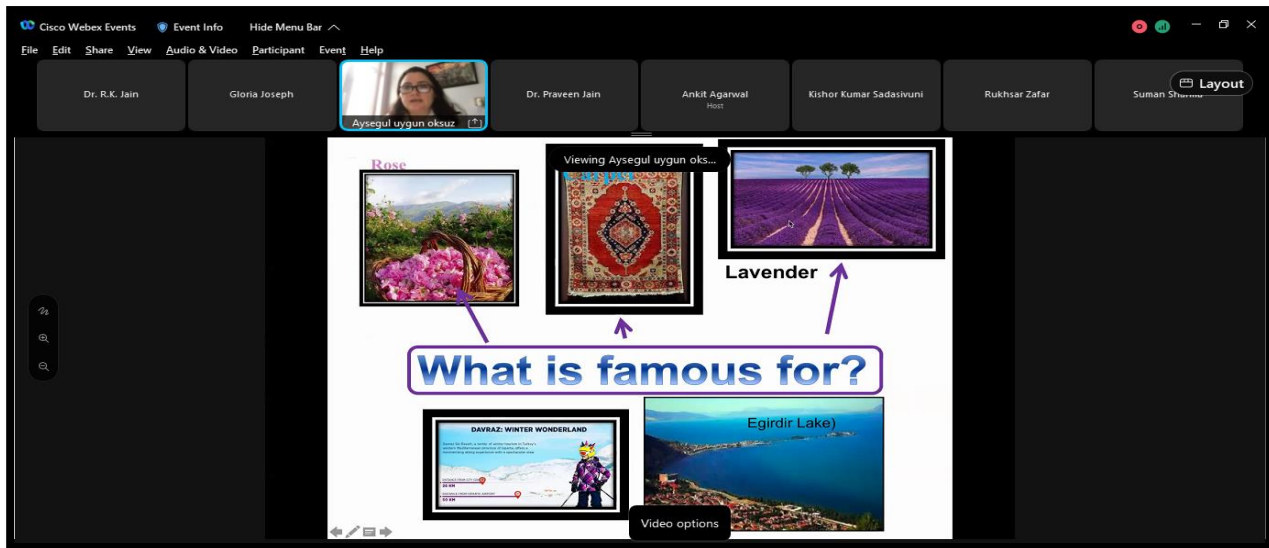
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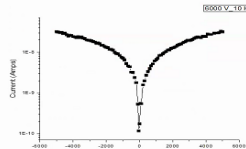
Amit Chaurasia  
Dr. Praveen Jain  
Pooja Sharma  
Ankit Agarwal Host  
Suman Sharma  
Aysegul UYGUN OKSUZ  
Gloria Joseph

Layout

Viewing Amit Chaurasia's a...

## RESULT & DISCUSSION

### I-V CHARACTERISTICS



In leakage current behavior we observe that the current was  $2.53 \times 10^{-10} \text{A}$  and  $6.53 \times 10^{-10} \text{A}$  respectively. This kink represents the polarization switching near the coercive field and the dominant effect of displacement current over the leakage current.

More options

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## RESULT & DISCUSSION

### DIELECTRIC CONSTANT

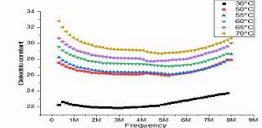


Fig 3: Dielectric behaviour with variation in temp.

- Dielectric constants initially decreased slightly but after a certain value of the frequency, it starts increasing gradually
- dielectric constants initially decreased slightly but after a certain value of the frequency, it starts increasing gradually

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Gloria Joseph  
Aysegul uygun oksuz  
Ankit Agarwal  
Kishor Kumar Sadasivuni  
Rukhsar Zafar  
Suman Sharma

Our research TOPICS

- ELECTROCHROMIC MATERIALS
- NANO/MICROMOTORS AND DIAGNOSIS
- ELECTROSPINNING PROCESS
- DRUG DELIVERY SYSTEMS
- NANOFIBERS
- PLASMA POLYMERIZATION
- MAGNETRON SPUTTERING COATING
- RF ROTATING PLASMA PROCESS (SURFACE MODIFICATION, POLYMERIZATION)
- BIOSENSORS
- BIOFILM FORMATION USING QUARTZ CRYSTAL MICROBALANCE TECHNIQUE
- DSSC AND PEROVSKITE SOLAR CELLS
- ML WORKS

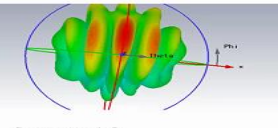
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Jyoti Yadav Dr. Praveen Jain Aysegul UYGUN OKSUZ Pooja Sharma Ankit Agarwal Host

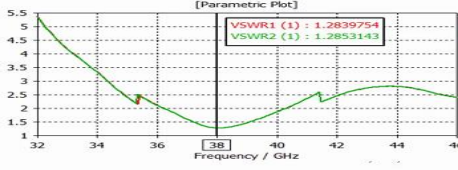
## Results

2-MIMO Antenna provides overall gain 9.22dBi with efficiency about 70% at 38 GHz. S11 Parameter is about -18.10db and VSWR of both antennas is 1.28.



[Parametric Plot]

VSWR1 (1) : 1.2839754  
VSWR2 (1) : 1.2853143



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Ajeet Kumar Ankit Agarwal Host Dr. Praveen Jain Aysegul UYGUN OKSUZ Pooja Sharma Gloria Joseph Neeraj Jain Layout

## Literature review on FGMs composite

Reference	Type of composite fabricated	Name of test done	Key findings
Jang and Han 1999[84]	Functionally graded glass fiber PMMA composites.	Tensile test, Flexural test and impact absorption energy test.	Flexural modulus increase with the increment of fiber content and impact absorption energy of FGM composite were almost same.
Stabik et al 2010[85]	Graphite powder copper powder and ferrite powder functionally graded composites.	Wear analysis, magnetic induction test etc.	Wear and magnetic properties are dependent on initial and final filler particles concentration.
Jang and lee 1998[82]	Carbon fiber and glass fiber functionally graded composites.	Flexural test and impact test.	Flexural strength of GF/CF composites increased with the addition of CF relative volume ratio and impact strength of GF/CF composites decreased with the addition of CF relative volume ratio.
Fadhil et al 2017[70]	Barium ferrite and lithium ferrite functionally graded composites	Dielectric and magnetic properties test	The magnetic properties was increased with the increasing the number of layer due to increase in the average grain size and dielectric constant increase with the increasing the number of layer.

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Dr. Praveen Jain RAHUL GUPTA Suman Sharma Aysegul UYGUN OKSUZ Ankit Agarwal Host

## OUTPUT OF CRN SIMULATION USING LAYER RECURRENT ANN

- The SU send energy, decision parameter and the bias as the input to the CRN simulation model, which generates final decision parameter (fd), as the output.
- The CRN simulation model generates the final decision parameter (fd) as an output using feed Forward ANN with Levenberg-Marquardt (LM) training function the equation would be:

$$fd = (\text{sim}(\text{nnrcnml1}, [\text{er}(j,k) \text{ dc}(j,k) \text{ b}(j,k)]^T) - N) * (1 - \text{pfd})$$

- Here layerrecnml1 is the name of Feed Forward Back Propagation ANN trained using LM training function, N is the number of nodes and pfd is probability of false alarm calculated as
- $\text{pfd} = \text{qfunc}((\text{threshold} - 1) * \text{sqrt}(N)).$



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Ajeet Kumar Ankit Agarwal Host Dr. Praveen Jain RAHUL GUPTA Pooja Sharma

## International Conference on Advancements in Nano electronics and Communication Technologies (ICANCT2022)

**Paper Id : 57**

**Title:** Fabrication and characterization of homogenous and functionally graded glass fiber reinforced polymer composites

**Authors:** Manoj Kumar Sain, Praveen Saraswat, Ajeet Kumar, Anandmohan Vemula

**Presented By:**  
Ajeet Kumar  
Assistant Professor  
Guru nanak Institutions Technical campus, Hyderabad

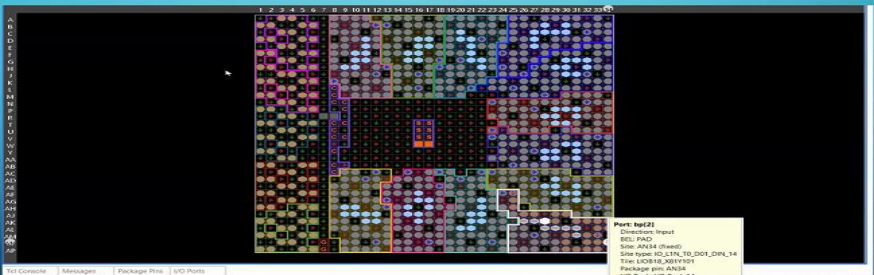
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### PACKAGE PIN ASSIGNMENT



Pin: J14  
Direction: Input  
BEL: PAD  
Size: J14x14 (0.0001)  
Site: Type: ID: L1N1\_T0\_D09\_D0N\_14  
File: L1N1\_T0\_D09\_D0N\_14  
Package pin: J14  
UD: Baud: 100 Baud: 14

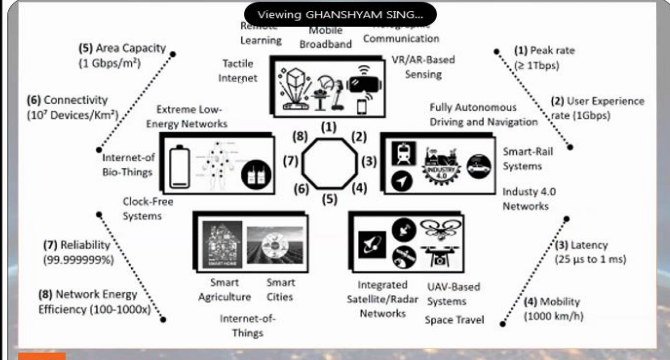
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GHANSHYAM SINGH Pooja Choudhary Gloria Joseph Ankit Agarwal Dr. Praveen Jain Gloria Joseph Lalit Lata Layout

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(5) Area Capacity (1 Gbps/m<sup>2</sup>)

(6) Connectivity (10<sup>7</sup> Devices/Km<sup>2</sup>)

(7) Reliability (99.999999%)

(8) Network Energy Efficiency (100-1000x)

(1) Peak rate (2 1Tbps)

(2) User Experience rate (1Gbps)

(3) Latency (25 μs to 1 ms)

(4) Mobility (1000 km/h)

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2/25/2022

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Farah Deebea Dr. Praveen Jain .Priti Jadhav Ankit Agarwal Host Pooja Sharma Gloria Joseph Jayanti Rout Layout

### Experimental Procedure

Viewing Farah Deebea's screen...

PVDF ( $M_w=25000$ ) & PMMA ( $M_w=12000$ ) – Sigma Aldrich, India And Dichloro methane – MERCK

0.54 gm of granular PMMA in Dichloro methane and spirit

PVDF powder (0%, 10%, 30%, 50% by weight)

Solution

Stirring for 6 hours

Filter then pour in petri dish to leave it to dry

Nanocomposite Polymer film

Petri dish

Wooden Stand

Activate Windows Go to Settings to activate Windows.

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GHANSHYAM SINGH Pooja Choudhary Gloria Joseph Ankit Agarwal PRAVEEN JAIN

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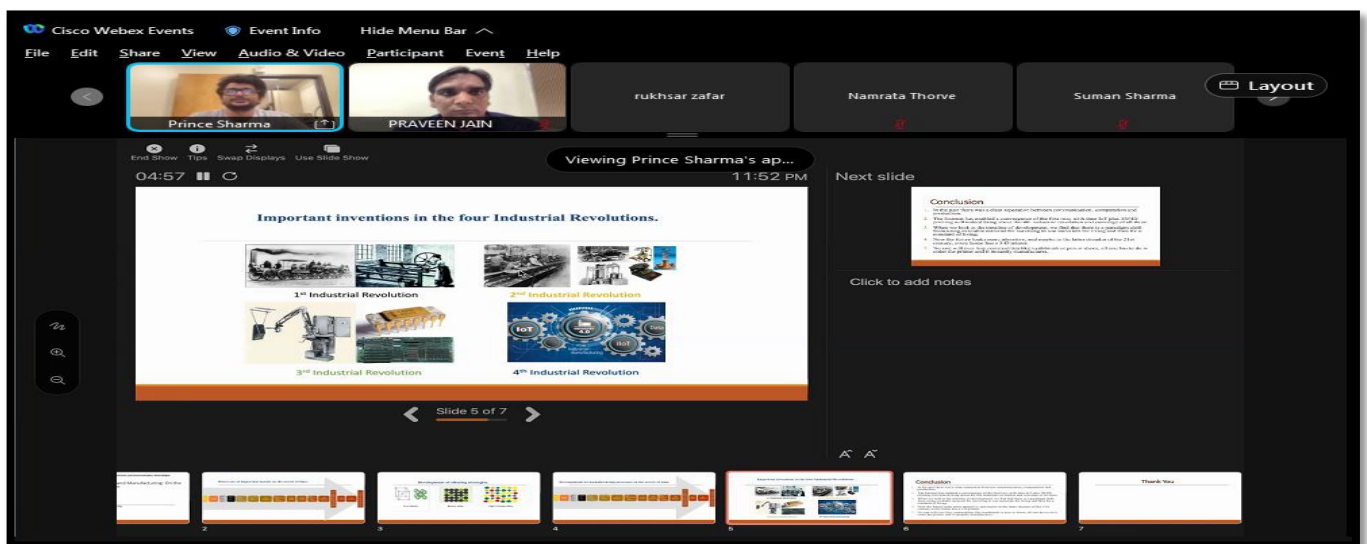
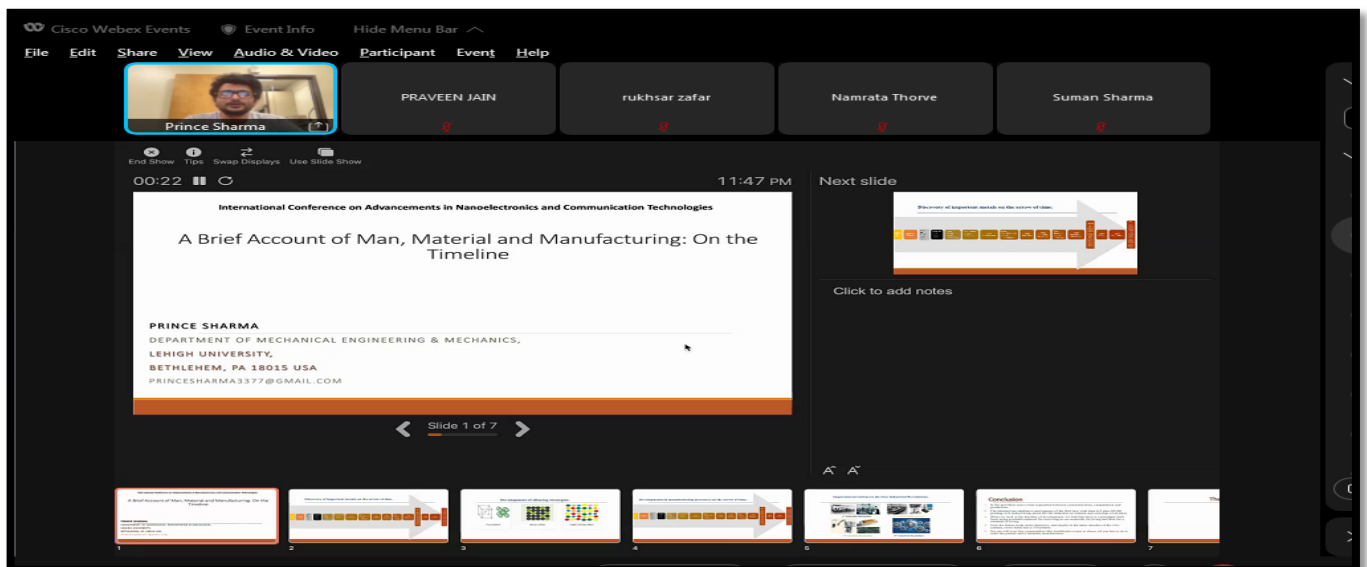
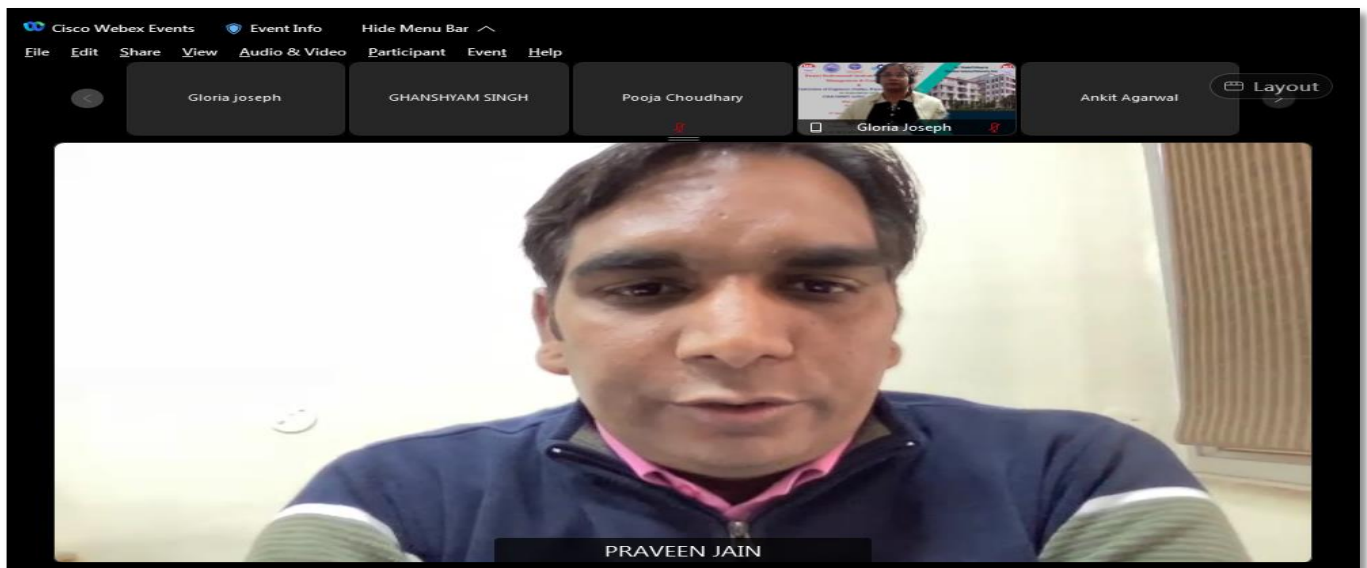
University of Johannesburg, S Africa

2/25/2022

The slide displays three interconnected spheres: a purple sphere labeled 'AI', a green sphere labeled 'Photonics', and a blue sphere labeled 'Holography'. The central theme is 'Photonics and Photonic-Integration Technologies'. Below the spheres, two bullet points are listed: 'Intelligent and Cognitive System' (under AI) and 'RF Holography and Computational Holography' (under Holography). The slide footer includes the University of Johannesburg logo and the text 'University of Johannesburg, S Africa' and '2/25/2022'.

The slide is titled 'Conclusions' and features a large '6G' graphic in the background. It contains two bullet points: '✓ During the worldwide deployment of 5G networks, industrial and academia synergy have commenced to conceptualize the next generation of wireless communication systems (6G) to address the coming challenges of the drastic increase in wireless data traffic.' and '✓ 6G technology allows bitrates of up to Tbps with a latency less than 1 ms, apart from introducing a group of new services.' The slide footer includes the University of Johannesburg logo and the text 'University of Johannesburg, S Africa' and '2/25/2022'.

The slide is titled 'Key Features of' and features a large '6G' graphic in the background. It contains two main bullet points: '• Extremely Large Bandwidth/Multiband Ultrafast Speed' and '• Energy-Efficient Communication'. Under the first bullet point, there are two sub-bullets: '✓ THz Waves (0.1 to 10THz)' and '✓ Visible Light Communication'. Under the second bullet point, there are four sub-bullets: '✓ Energy harvest from ambient RF signal', '✓ Energy harvest from micro-vibration', '✓ Energy harvest from Sun Light', and '✓ Energy harvest from wireless Power Charger'. The slide footer includes the University of Johannesburg logo and the text 'University of Johannesburg, S Africa' and '2/25/2022'.



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PRAVEEN JAIN Namrata Thorve Suman Sharma Gloria Joseph Pooja Choudhary Layout

Viewing Namrata Thorve's ...

### Website MVC Architecture

```

graph TD
    Google[Google] -- "1. Request from the browser" --> Routing[Routing]
    Routing -- "2. Route to appropriate Controller" --> Controller[Controller]
    Controller -- "3. Interact with Data Model" --> Model[Model]
    Model -- "4. Controller renders view" --> View[View]
    View -- "5. Renders View" --> Google
    Database[(Database)] <--> Model
  
```

Figure: 1 - Website Architecture

Prepared by Namrata R. Thorve Date: Aug 05, 2021 12/21

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Prince Sharma PRAVEEN JAIN rukhsar zafar Namrata Thorve Suman Sharma Layout

Viewing Prince Sharma's ap... 11:51 PM

### Important inventions in the four Industrial Revolutions.

1<sup>st</sup> Industrial Revolution 2<sup>nd</sup> Industrial Revolution 3<sup>rd</sup> Industrial Revolution 4<sup>th</sup> Industrial Revolution

Slide 5 of 7

Next slide

Conclusion

Click to add notes

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Farah Deebea PRAVEEN JAIN Suman Sharma rukhsar zafar Ankit Agarwal Layout

Viewing Farah Deebea's scre...

PVDF  $\left[ \begin{array}{c} \text{H} \quad \text{F} \\ | \quad | \\ -\text{C}-\text{C}- \\ | \quad | \\ \text{H} \quad \text{F} \end{array} \right]_n$  PMMA  $\left[ \begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_2-\text{C} \\ | \\ \text{C}=\text{O} \\ | \\ \text{CH}_3 \end{array} \right]_n$

PVAc PMMA

Silica Silica

Surface Bonding Is Stronger for Poly(methyl methacrylate) than for Poly(vinyl acetate) Hamid Mortazavian, Christopher J. Fennell, and Frank D. Blum, Macromolecules, 2016, 49 (11), pp 4211–4219

International Conference on Advancements in Nano electronics and Communication Technologies 2022

SURESH VIKAS GYAN VIKAS



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rukhsar zafar A Sangeetha Rukhsar Zafar Host Ankit Agarwal Arpita Tiwari Layout

AutoSave Deepu + Viewing A Sangeetha's scre...

File Home Insert Draw Design Transitions Animations Slide

From Beginning From Current Slide Custom Slide Show Rehearse with Coach Rehearse Set Up Slide Show Hide Slide Rehearse Record Play Narrations Use Timings Show Media Controls

Monitor Automatic Always Use Subtitles Subtitle Settings Use Presenter View Captions & Subtitles

FTIR Spectroscopy (APE)

Alcohol

Transmittance (%)

Wavelength (Cm<sup>-1</sup>)

Friday, February 25, 2022

Click to add notes

Slide 8 of 12 English (India) Accessibility: Investigate

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rukhsar zafar Navneet Kaur Dr. Praveen Jain Pooja Choudhary Ankit Agarwal Layout

Introduction.. Contd. Viewing Navneet Kaur's ap...

New Transistor Structures

Gate Source Drain Buried Oxide Substrate

SOI MOSFET (a)

Gate Source Drain Buried Oxide Substrate

UTB MOSFET (b)

Gate Source Drain Buried Oxide Substrate

DG-MOSFET (c)

Gate Source Drain Buried Oxide Substrate

FinFET (d)

Figure 2(a) SOI MOSFET (b) UTB MOSFET (c) DG-MOSFET (d) FinFET (Chang et al., 2003; Kathawala et al., 2003; Hisamoto et al., 2000)

ICANCT, 2022 2/25/2022

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Dr. Mohammad Asif Iqbal PRAVEEN JAIN rukhsar zafar Suman Sharma Ankit Agarwal Layout

Viewing Dr. Mohammad Asi...

LUMO PCBM e<sup>-</sup>

h<sub>v</sub>

HOMO PPV h<sup>+</sup>

V<sub>a</sub>

Schematic of the energy levels, Process electron donating and electron accepting materials.

5

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Dr. Mohammad Asif Iqbal (+) PRAVEEN JAIN rukhsar zafar Suman Sharma Ankit Agarwal Layout

### PROCEDURE FOR FINFET DESIGN

```

graph TD
    A[Structure Specification] --> B[Define Mesh Structure (x-y coordinate of device structure)]
    A --> C[Define Region]
    A --> D[Define Electrodes]
    E[Material Model Specification] --> F[Define Material Properties]
    E --> G[Finalization of Coping type and Properties]
    E --> H[Define Contact and its Properties]
    I[Numerical Method Selection] --> J[Simulation Process]
    K[Solution Specification] --> L[Selection of Numerical Method]
    M[Result Analysis] --> N[Display of Graphical Output]
    M --> O[Extraction of output in form of Numerical Value]
  
```

7

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rukhsar zafar Navneet Kaur (+) Dr. Praveen Jain Pooja Choudhary Ankit Agarwal Layout

### Viewing Navneet Kaur's application

Figure 3 Top view of designed FinFET and Fin Structure

20 ICANCT, 2022 2/25/2022

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Pooja Choudhary rukhsar zafar Asha S (+) Ankit Agarwal Rukhsar Zafar Layout

### Viewing Asha S's application

## Synthesis of JPT

Friday, February 25, 2022 3

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Sangeeta Shekhawat VIVEK BHOJAK Neha Sharma Dr. Praveen Jain Suman Sharma

AMITY UNIVERSITY JAIPUR Amity School of Engineering & Technology

Figure 2. Flexible Electronic System applications in Wireless Body Area Networks(WBAN)

25-02-2022 ICANCT-2022

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Dr. Praveen Jain Arpita Tiwari rukhsar zafar Pooja Choudhary Ankit Agarwal Layout

Viewing Arpita Tiwari's appl...

### Quantum-dot Cellular Automata (QCA)

5

- The QCA cell is composed of four quantum dots. It's positioned at the corners of a square. It has 2-possible stable configuration, as shown in Fig. 1.
- The quantum dots are used in various applications such as Quantum computing, LED, Sensors and Photo detectors.

Fig. 1: QCA Cell

25-Feb-22

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Dr. Praveen Jain Arpita Tiwari rukhsar zafar Pooja Choudhary Ankit Agarwal Layout

Viewing Arpita Tiwari's appl...

### Geometrical Logical System for QCA (QCA Wires)

6

- In a QCA wire, the binary signal propagates from input to output because of the electrostatic interactions between cells.

➤ QCA Wire:-

Fig. 2: Layout of "QCA Wire" for 90-Degree

Fig. 3: Layout of "QCA inverter chain" for 45Degree

25-Feb-22

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Farah Deebe PRAVEEN JAIN Suman Sharma rukhsar zafar Ankit Agarwal

Microsoft PowerPoint - [PowerPoint Slide Show - ICANCT ID 99, SnO<sub>2</sub> doped polymer PPT-24-02-2022]

### Methods and Techniques:-

(a) Schematic (b) Actual Setup

Fig.1: Preparation of Pure PMMA homogeneous solution using Ultrasonic Probe Sonicator

Fig.2: Schematic diagram of solution cast method for preparing the nanocomposites polymer film.

International Conference on Advancements in Nano electronics and Communication Technologies 2022

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Sangeeta Shekhawat VIVEK BHOJAK Neha Sharma Dr. Praveen Jain Host Suman Sharma

AMITY UNIVERSITY JAIPUR Various Materials Viewing Sangeeta Shekhawat

Amity School of Engineering & Technology

(a) (b) (c) (d)

Figure 5. (a) Various conductive Textiles (b) and (c) Polymers (d) Jeans/Fabrics as the substrate of patch antenna

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Farah Deebe PRAVEEN JAIN Suman Sharma rukhsar zafar Ankit Agarwal

Microsoft PowerPoint - [PowerPoint Slide Show - ICANCT ID 99, SnO<sub>2</sub> doped polymer PPT-24-02-2022]

### Results: Dielectric Characterization

Fig.5 : Frequency dependent real part  $\epsilon'$ , loss tangent ( $\tan\delta$ ) and complex dielectric permittivity  $\epsilon''$  of PVDF/PMMA x wt% SnO<sub>2</sub> PNC film varies with frequency at room temperature

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NAINERI SUGUNA Dr. Praveen Jain Neha Sharma VIVEK BHOJAK Suman Sharma Layout

### Proposed Antenna Design

Viewing NAINERI SUGUNA's...

(a) (b) (c)

Fig.1. Design configurations of proposed THz multiband antenna  
(a) Conventional (b) GP Fractal loaded (c) Parasitics elements influence

Ls	20	Wf	2.5	S1	2.85	W1	1
Ws	20	Lp	10	S2	1	L2	7.5
Lf	3.5	Wp	15	L1	15	W2	1

Table 1. Geometrical dimensions

More options

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rukhsar zafar A Sangeetha Rukhsar Zafar Ankit Agarwal Dr. Praveen Jain Layout

### Dye-Sensitized Solar Cell Fabrication

Viewing A Sangeetha's screen...

0.1g of TiO<sub>2</sub> nanopowder

20 drops of Acetic Acid + Concentrated HNO<sub>3</sub> solution

TiO<sub>2</sub> Paste

TiO<sub>2</sub> paste coated on FTO substrate (Photoanode)

Friday, February 25, 2022

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Murali Krishna CH Ankit Agarwal Dr. Praveen Jain Neha Sharma aysegul uygun oksuz Layout

### Proposed Lotus Shaped Multiband Antenna

Viewing Murali Krishna CH's...

(a) Conventional (b) Leaf shape (c) Lotus shape

Fig.1. Design evaluations of proposed multiband antenna

➤ For an efficient radiation, the width of the microstrip patch antenna can be expressed as

$$w_p = \frac{c}{2f_r} \sqrt{\frac{2}{\epsilon_r + 1}}$$

Where  $c$  = free space velocity of light =  $3 \times 10^8$  m/s.  
 $f_r$  = resonant frequency, GHz  
 $\epsilon_r$  = dielectric constant = 0.02

➤ Effective dielectric constant ( $\epsilon_{eff}$ ) is considered to account fringing and is given by

$$\epsilon_{eff} = \frac{\epsilon_r + 1}{2} + \frac{\epsilon_r - 1}{2} \left[ 1 + 12 \frac{h}{w} \right]^{-1/2}$$

L <sub>sub</sub>	35mm
W <sub>sub</sub>	28mm
L <sub>f</sub>	10mm
W <sub>f</sub>	3mm
L <sub>p</sub>	20mm
W <sub>p</sub>	25mm

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Vinisha Chandnani Dr. Praveen Jain Neha Sharma Ankit Agarwal Suman Sharma Layout

Viewing Vinisha Chandnani's presentation...

Product Sentiment Analysis - Phase 1

EXPLORATORY DATA ANALYSIS

Click to add speaker notes

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Dr. Praveen Jain Ankit Goyal Gloria Joseph Ankit Agarwal Suman Sharma Layout

Viewing Ankit Goyal's application...

PL-Abso troscopy

a.goyal@uva.nl 10 Jphys Materials (Under review)

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shubhi Jain Neha Sharma Dr. Praveen Jain Ankit Agarwal aysegul uygun oksuz

Surface current distribution

The objective of the following study is to prove the dependence of the equivalent circuit elements (capacitance and inductance) on the surface current distribution. As shown in Fig. The current is distributed throughout the whole structure. Therefore any change in the length of the meander arm strongly affects the magnetic field distribution and hence the surface current.

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Dr. Praveen Jain Ankit Goyal Gloria Joseph Neha Sharma Suman Sharma Layout

Viewing Ankit Goyal's applic...

# Photophysical Properties of Inorganic Perovskite Nanocrystals

Ankit Goyal, Peter Schall, Katerina Newell

a.goyal@uva.nl 1

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Dr. Praveen Jain Ankit Goyal Gloria Joseph Ankit Agarwal Suman Sharma Layout

PL Viewing Ankit Goyal's applic... eld

Photoluminescence quantum yield measurements of a) Green emitting large  $\text{CsPbBr}_3$  nanocrystals b) Blue-green emitting small sized  $\text{CsPbBr}_3$  nanocrystals

a.goyal@uva.nl 11 Jphys Materials (Under review)

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KUNDE SANTHOSH K... Ankit Agarwal Dr. Praveen Jain Gloria Joseph Layout

Viewing KUNDE SANTHOSH...

## Simulation result for 10000 km travelled engine oil

Oil Volume	S11 (dB)
20% Engine Oil (10000 km)	(3.0039, -48.411)
40% Engine Oil (10000 km)	(2.952, -39.418)
60% Engine Oil (10000 km)	(2.8957, -32.03)
80% Engine Oil (10000 km)	(2.832, -28.133)
100% Engine Oil (10000 km)	(2.762, -24.759)
Air Medium	(3.166, -28.842)

Fig.5: S11 of the different oil volumes in a cavity (10000 km)

ICANCT-2022 20

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Murali Krishna CH Ankit Agarwal Dr. Praveen Jain Neha Sharma aysegul uygun oksuz Layout

ICANCT.67.pdf - Adobe Reader

Viewing Murali Krishna CH's...

Electromagnetic characteristics

Fig.2. Reflection coefficient characteristics summary of proposed monopole antenna with fractal segmented lotus structure

Fig.3. VSWR characteristics summary of proposed monopole antenna with fractal segmented lotus structure

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Dr. Praveen Jain Ankit Goyal Gloria Joseph Ankit Agarwal Suman Sharma

### Micro-Raman-PL Spectroscopy

Integrated PL at 670 nm

Unpublished Data a.goyal@uva.nl Manuscript in preparation

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Dr. Praveen Jain Ankit Goyal Gloria Joseph Ankit Agarwal Suman Sharma Layout

### Acknowledgments

Viewing Ankit Goyal's applications

ARC NL  
ADVANCED RESEARCH CENTER FOR NANOLITHOGRAPHY

UNIVERSITY OF TWENTE.

大阪大学  
OSAKA UNIVERSITY



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Priyanka Sharma (↑)

Manoj Jangid

Suman Sharma

Ankit Agarwal

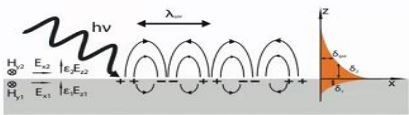
Dr. Praveen Jain

Layout

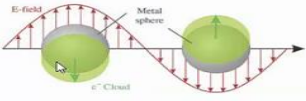
WPS Office ICANCT.pptx

Viewing Priyanka Sharma's ...

### PSPPs and LSPs



Surface Plasmons propagating at the interface between dielectric and metal when light is incident at the interface.



Schematic of Plasmon oscillation for a sphere, showing the displacement of the conduction electron charge cloud relative to the nuclei.

Ref: Han, Zhanghua, and Sergey I. Bozhevolnyi. Reports on Progress in Physics 76, no. 1 (2012): 016402.

Ref: Kelly KL, et.al. J Phys Chem B 2003;107:668-77.

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neeraj jain (↑)

Manoj Jangid

Gloria Joseph

Suman Sharma

Dr. Praveen Jain

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Viewing neeraj jain's ap...

### Schematic

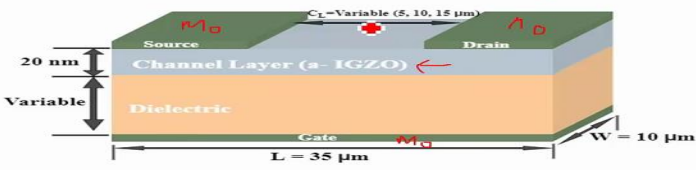


Fig. 1 Schematic of the 2D cross sectional a-IGZO TFT

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Manoj Jangid

Ankit Agarwal

Suman Sharma (↑)

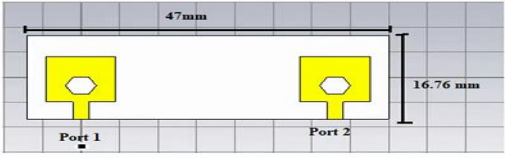
Dr. Praveen Jain

Dr. Praveen Jain

Layout

Viewing Suman Sharma's ...

### PROPOSED TWO ELEMENT ANTENNA



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neeraj Jain (\*) Manoj Jangid Gloria Joseph Suman Sharma Dr. Praveen Jain

Fig. 5 Parallel Plate Capacitor representation

$$EOT = \frac{\epsilon_0 \cdot k_{SiO_2} \cdot A}{\epsilon_0 \cdot \text{high-}k \cdot A} \cdot \frac{k_{SiO_2} \cdot T_{\text{high-}k}}{\text{high-}k}$$

26/02/2022 ICANCT 2022 Ref: - doi:10.1039/c9nr03395e

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Priyanka Sharma (\*) Manoj Jangid Suman Sharma Ankit Agarwal Dr. Praveen Jain

WPS Office ICANCT.pptx

## Plasmonics based resonating structures

The contour profiles of the average field  $H_y$  at different wavelengths

An ultra compact surface Plasmon (SP) sensor based on 'ring resonator coupled metal-insulator-metal (MIM) waveguide' is theoretically studied and numerically simulated by finite difference time domain (FDTD) method

Slide 5 / 19

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Dr. Praveen Jain Manoj Jangid Sumi Kumari Suman Sharma Abhinandan Jain Layout

Viewing Sumi Kumari's screen...

## Need is the mother of invention

Energy storage is one of the key challenges we face in the 21<sup>st</sup> century

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Dr. Praveen Jain Manoj Jangid Sumi Kumari Suman Sharma Abhinandan Jain Layout

**Energy density** **Power density** **to work** **how fast the energy is delivered**

**Expectation ...**

Why can't we just invent a giant energy storage device to solve the storage problem?

Magic Storage Device would have:

- ✓ Maximum power capabilities
- ✓ Maximum energy storage capabilities
- ✓ Instant response
- ✓ No internal impedance
- ✓ Long life without degradation of properties
- ✓ Portable
- ✓ Lightweight
- ✓ Small size

Obviously we cannot get all of these things in a single device



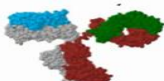





But we can make tradeoffs to optimize performance for a given application and we can continue to make innovative breakthroughs

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Umesh Chand Dr. Praveen Jain Amit Singhal Manoj Jangid Ankit Agarwal Layout

**From Technology to Biology** **A question of scale**



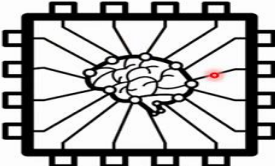

<b>Red blood cell: 8um</b>	<b>E-coli: 2um</b>	<b>Antibody: 12nm</b>	<b>DNA: 2nm</b>
			
<b>Micromirror: 8um</b>	<b>Micropillars: 2um</b>	<b>Finfet: 12nm</b>	<b>Nanopore: 5nm</b>
			

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Umesh Chand Dr. Praveen Jain Amit Singhal Manoj Jangid Ankit Agarwal Layout

**Smart Health Platform** **Neural Interfaces**

➤ Chips that interface directly with the nervous system will enable:

- Understanding of the brain
- Next generation of medical devices
- Brain machine interfaces

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Umesh Chand Dr. Praveen Jain Amit Singhal Manoj Jangid Ankit Agarwal

### Monolithic Three Dimensional Integration (M3D)

*A Way to Achieve both **Miniaturization** and **Diversification***

**Current : 2D Chips-Array**

**Future : M3D Stacking**

- Smallest footprint
- Low power consumption
- Low cost
- High speed

Source: www.monolithic3d.com

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Umesh Chand Dr. Praveen Jain Amit Singhal Manoj Jangid Ankit Agarwal

### Oxide FET based M3D system:

- Small SS of 64mV/Decade and 69mV/Decade
- Highest  $\mu_{eff}$  of 57cm<sup>2</sup>/V s and 52 cm<sup>2</sup>/V s
- Successfully demonstrated the functionality of novel analog memory circuit
- There is perfect matching between experimental and simulation result of memory circuit

U Chand, ... A. Thean et al, VLSI, 2021

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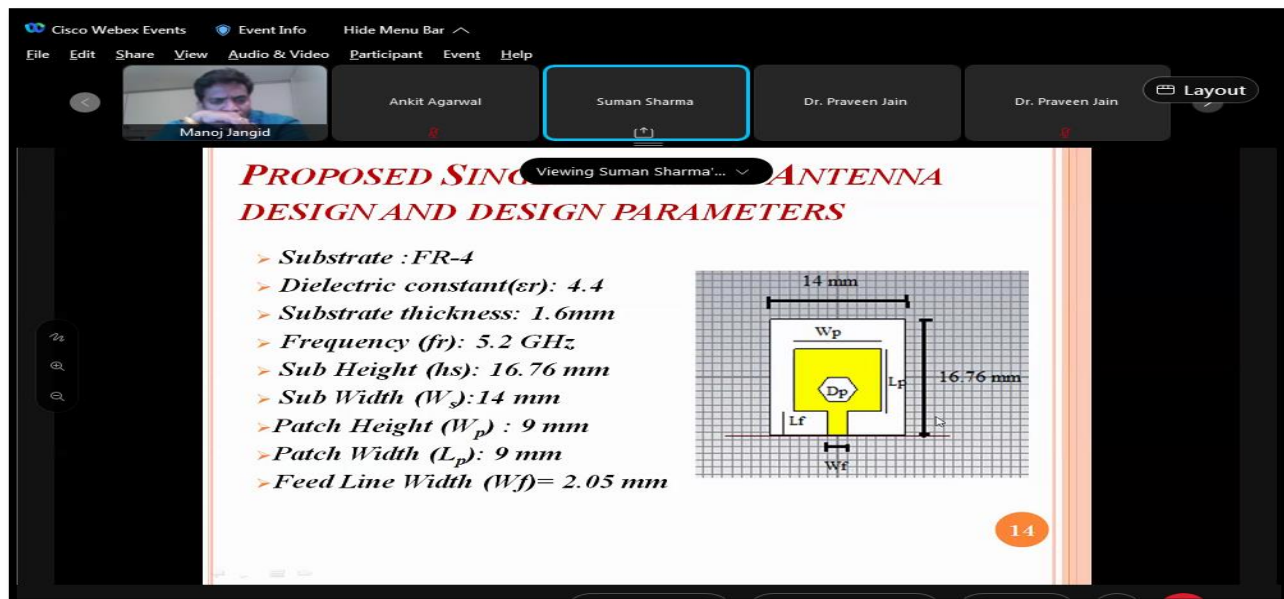
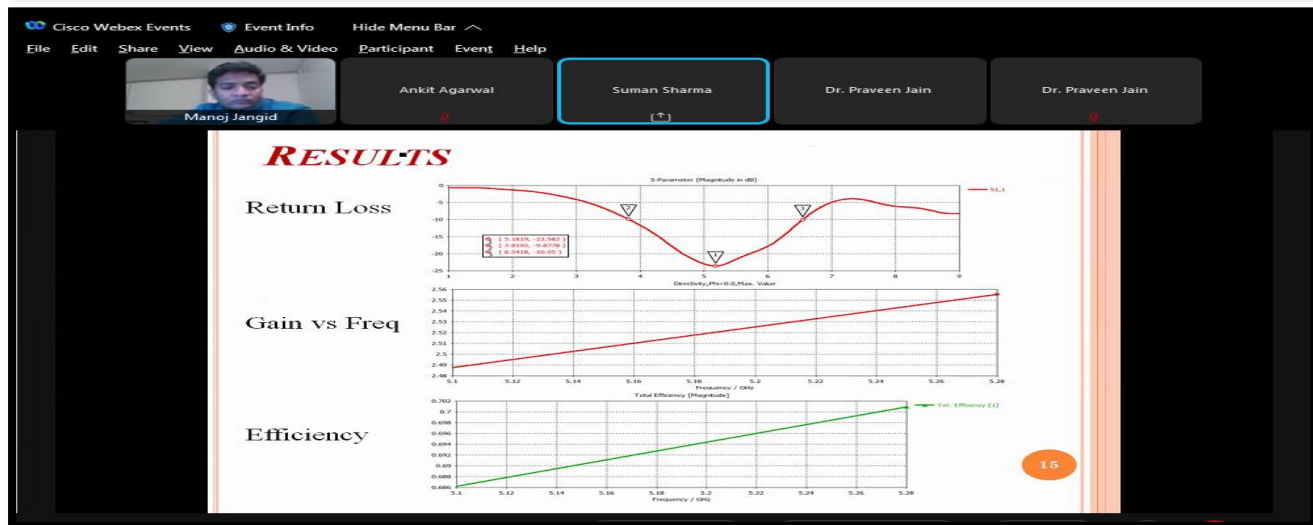
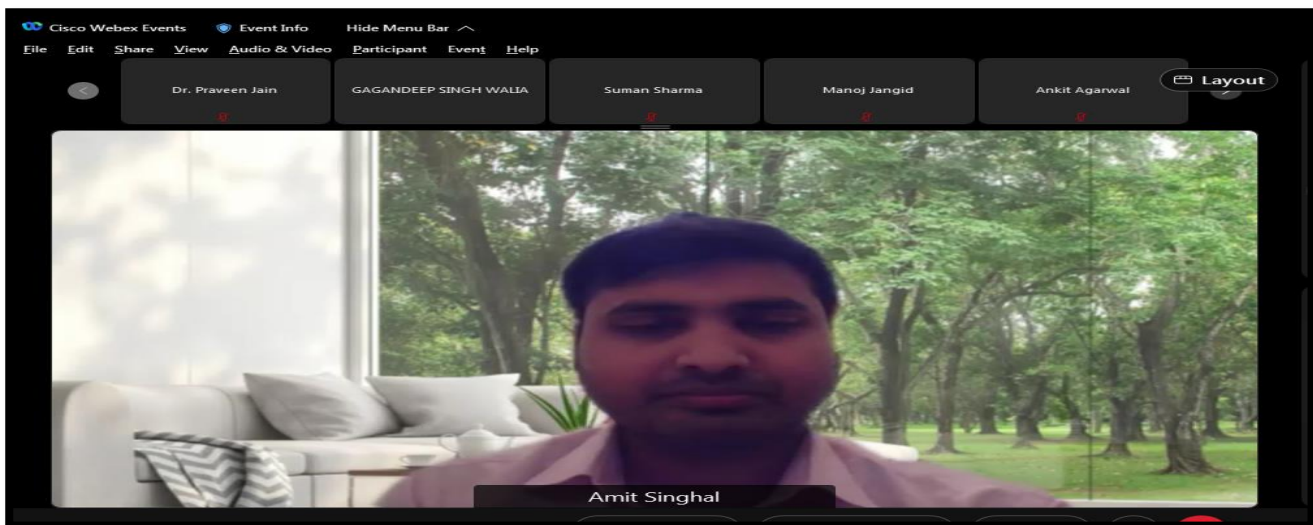
R B R Prakash Manoj Jangid Manju Choudhary Ankit Agarwal Dr. Praveen Jain

Layout

Viewing R B R Prakash's ap...

- $P_{slack} = -20kW$ ;  $P_{demand} = -20kW$ ;  $P_{pv} = 40kW$ ,  $P_{bus2} = 0$





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Umesh Chand
Dr. Praveen Jain
Amit Singhal
Manoj Jangid
Ankit Agarwal
Layout

Complex Story of Micro

Viewing Umesh Chand's ap...aling

Scaling

The graph illustrates the exponential growth of transistor density over time, categorized into different scaling eras and technological milestones.

Year	Node Size (nm)	Technology / Feature
1997	250 nm	Geometric (classical) scaling era
1999	180 nm	Geometric (classical) scaling era
2001	130 nm	Geometric (classical) scaling era
2003	90 nm	Strain
2005	65 nm	High-k/metal gate
2007	45 nm	High-k/metal gate
2009	32 nm	High-k/metal gate
2011	22 nm	High-k/metal gate
2013	14 nm	Equivalent (effective) scaling era
2015	10 nm	Equivalent (effective) scaling era
2017	7 nm	Equivalent (effective) scaling era
2019	5 nm	Hyper-scaling era
2021	3 nm	Hyper-scaling era
2023	2 nm	Hyper-scaling era
2025	1.8 nm	Hyper-scaling era
2027	1.4 nm	Hyper-scaling era

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## Monolithic Three Dimensional Integration (M3D)

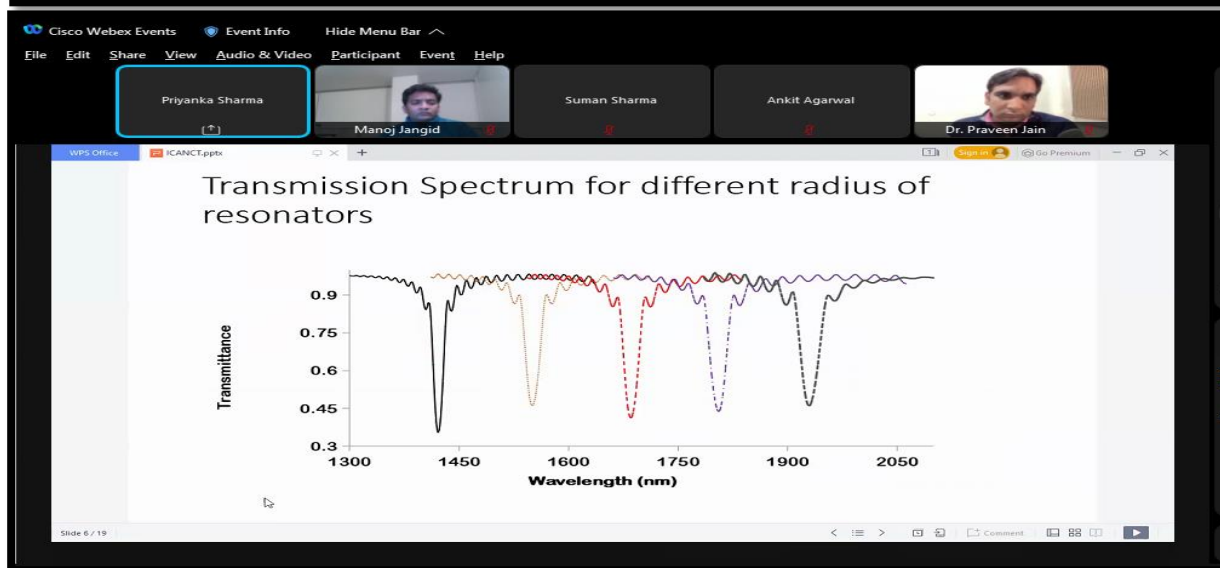
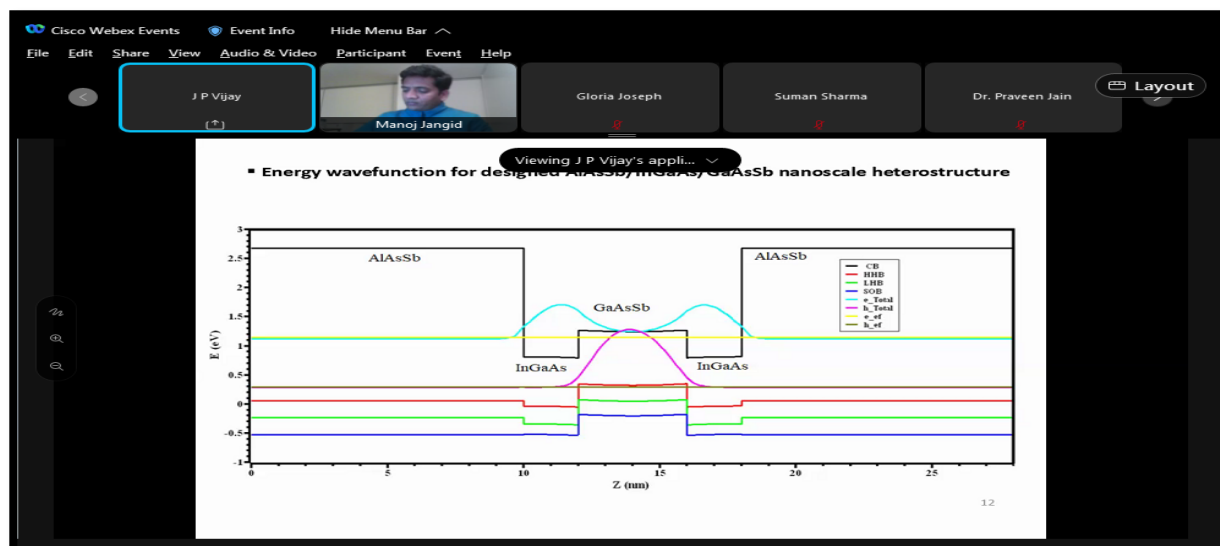
### A Way to Achieve both Miniaturization and Diversification

**Current : 2D Chips-Array**

**Future : M3D Stacking**

- Smallest footprint
- Low power consumption
- Low cost
- High speed

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



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Manju Choudhary (+)

Manoj Jangid

Preeti Gupta

Ankit Agarwal

Dr. Praveen Jain

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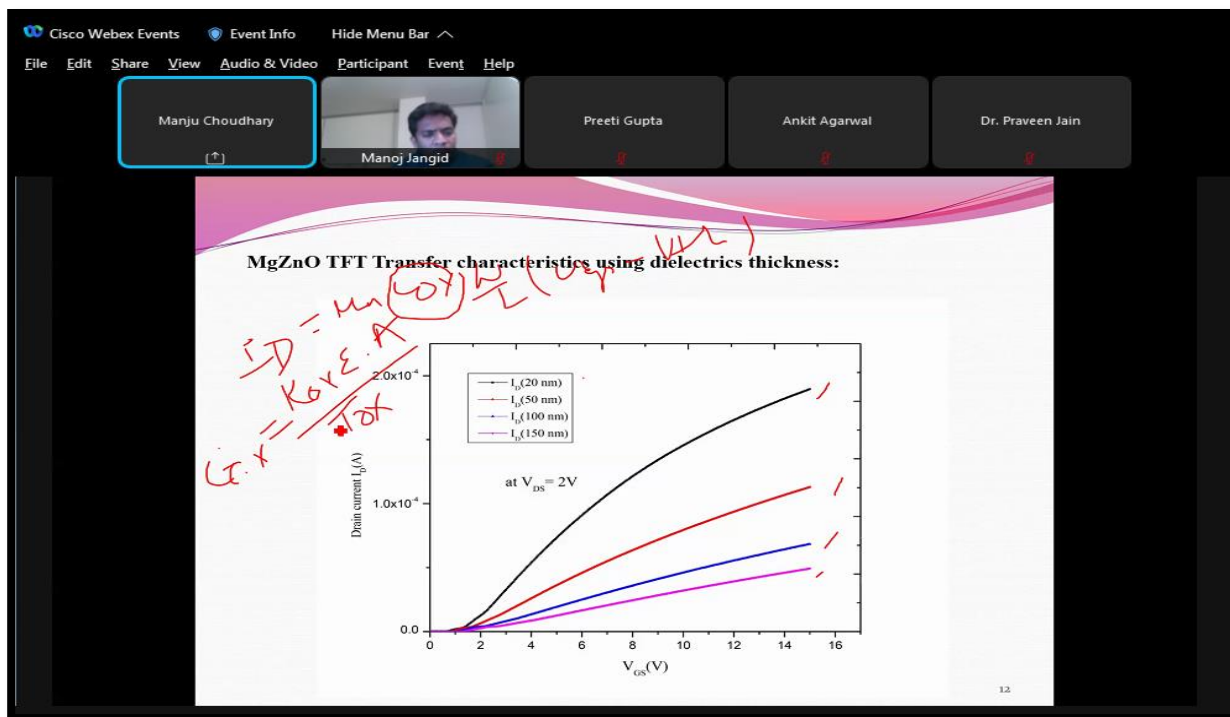
Viewing Manju Choudhary's...

**Results: 30 nm Active channel layer thickness with different dielectric  $\text{Al}_2\text{O}_3$  ( $\kappa \sim 9$ ) thickness**

Dielectric	$V_T$	SS(mV/dec)	$g_m$	$\mu_{\text{sat}}(\text{cm}^2/\text{V.s})$	On/Off ratio
20 nm	0.590642	0.065779	2.20E-05	9.619	3.69E+10
50 nm	0.685992	0.067629	1.06E-05	5.65527	3.73E+09
100 nm	0.828731	0.073916	5.87E-06	2.81287	1.45E+08
150 nm	0.952486	0.0920752	4.12E-06	1.61789	9.09E+06

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Dr. Praveen Jain

Ankit Goyal

Gloria Joseph

Ankit Agarwal

Suman Sharma

- Lanthanide doping especially  $Yb^{3+}$  in Lead Halide Perovskites are under intense research due to enhanced optical properties like photoluminescence quantum yield > 100 % in near-infrared region.
- It has been suggested that:
  - More Yb could lead to even higher quantum yield.
  - Creation of more defects in the lead halide perovskites during the synthesis could lead to higher Yb doping.
- There is no information available on the Yb saturation in lead halide perovskites.
- High energy ball milling is known for creating defects and synthesizing super saturated solid solutions.

1. ACS Appl. Energy Mater. 2019, 2, 6, 4560–4565.  
 2. J. Phys. Chem. Lett. 2019, 10, 487–492.  
 3. J. Mater. Chem. C, 2019, 7, 3037–3048

QC

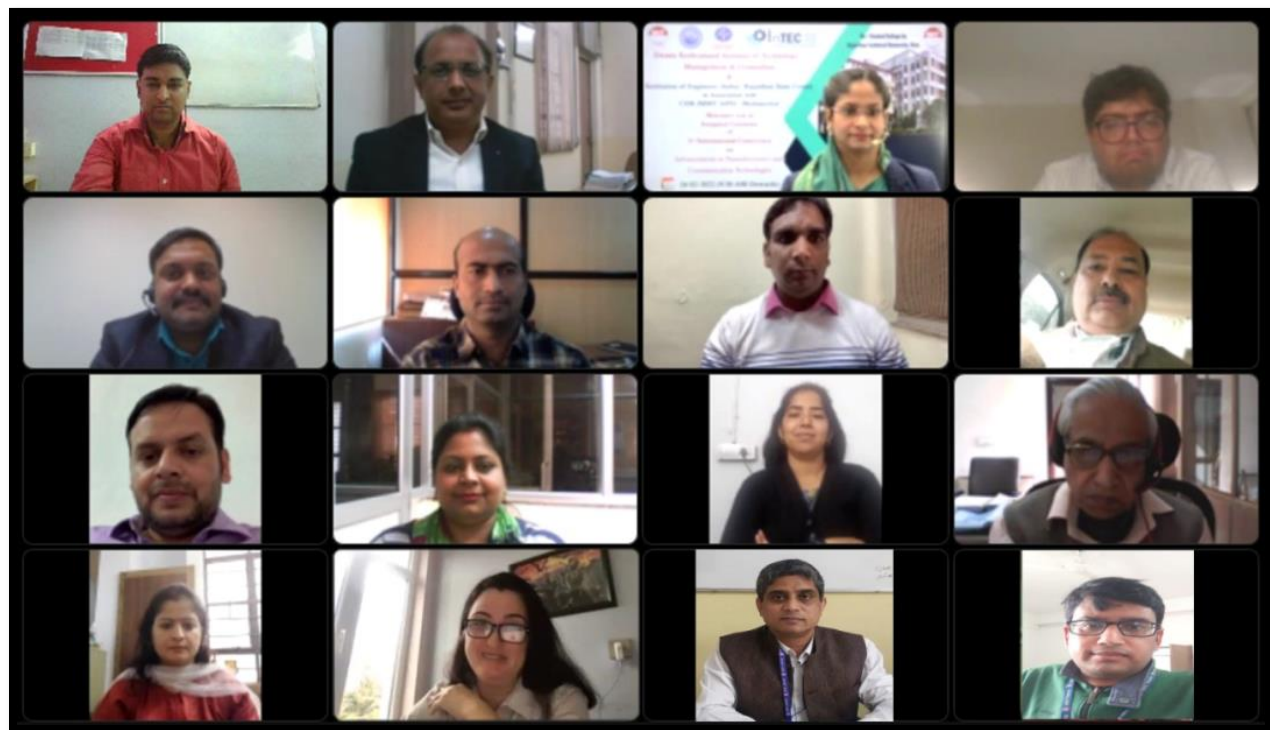
Reaction Time

Legend: Cs, Pb, Cl, Yb, Defect

a.goyal@uva.nl

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

## Sample Copy of Certificate

### Best Paper Presentation Certificate

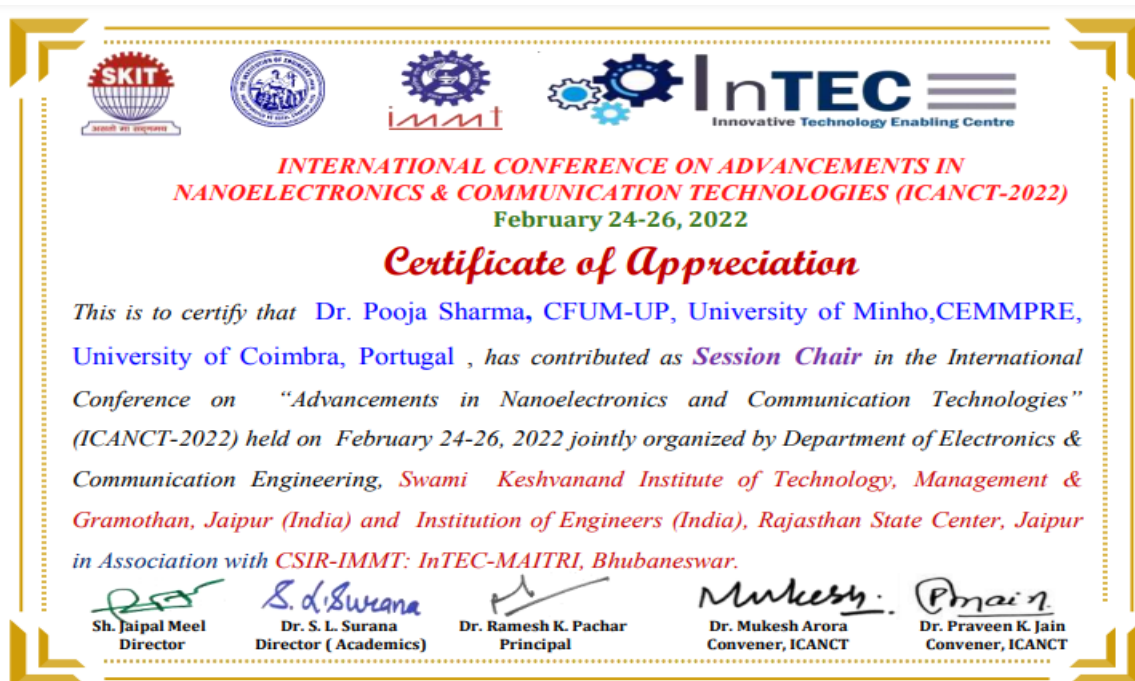


### Participation Certificate



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## Session Chair Certificate



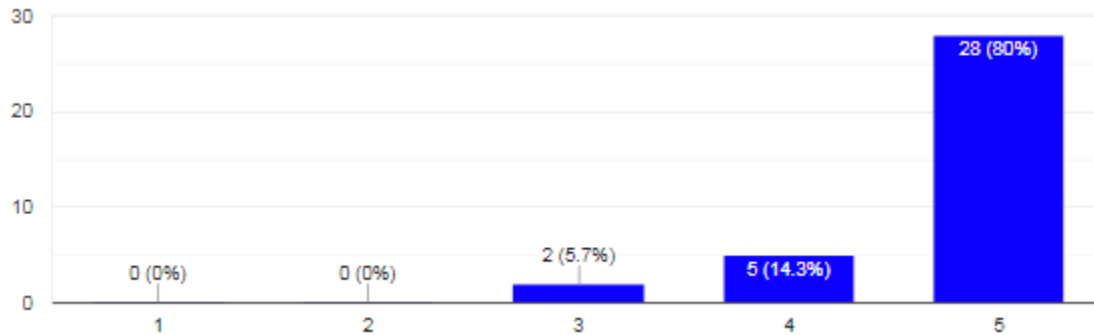
## Invited Talk Certificate



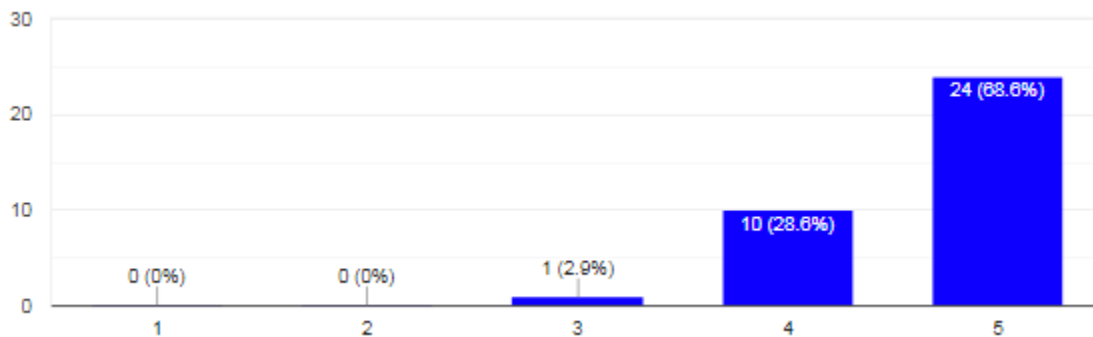
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## Feedback report

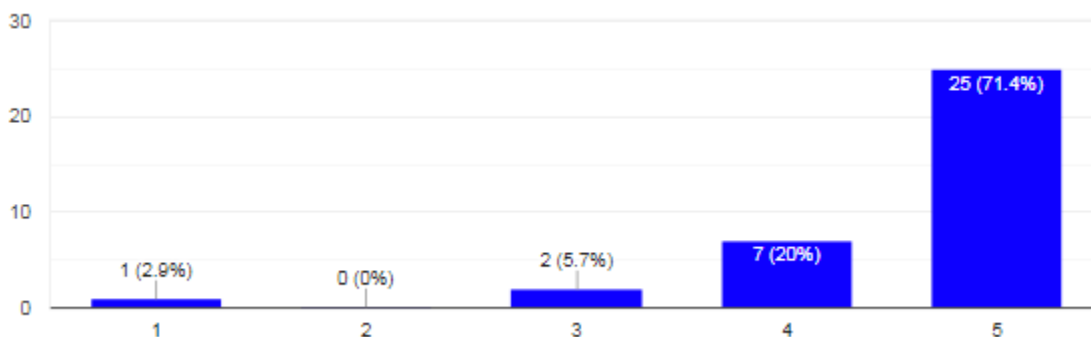
### 1. Your experience about the International Conference.



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

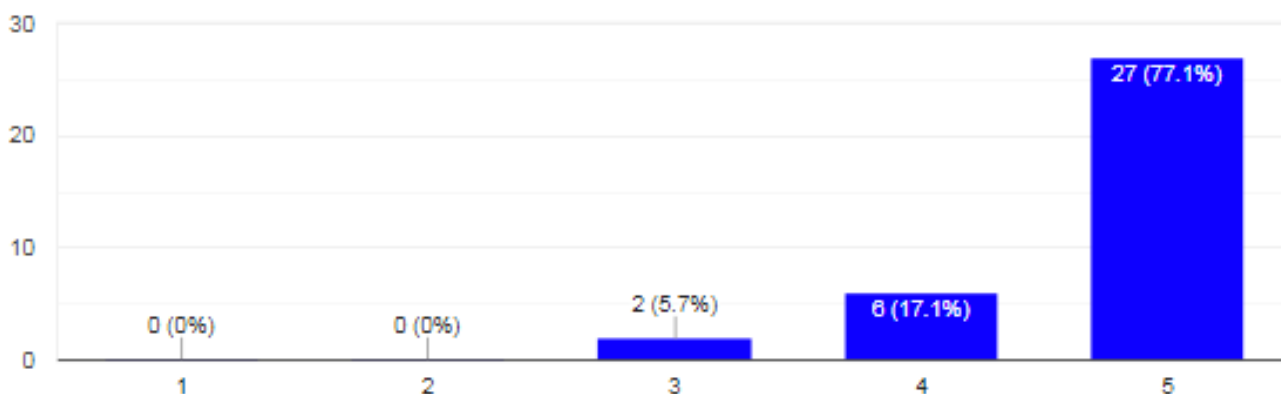


### 3. How do you rate the content of the Conference?





#### 4. About speakers of Conference



#### 5. Knowledge gained by the conference

good

How to do next level of my work related to Research

new research work in materials technology

Very knowledgeable and well systematic

Different research areas

Motivate to research more.

Invited talks given by experts

Various other multidisciplinary application of nano-Science is exposed.

Recent Advancements in the domain

## 6. Topic that can be covered in the next conference?

Ternary Logic, GNR/FET, CNT/FET, On-chip Interconnects, and Through Silicon Vias

MVL logics

Nano Antennas

Automation

VLSI signal processing

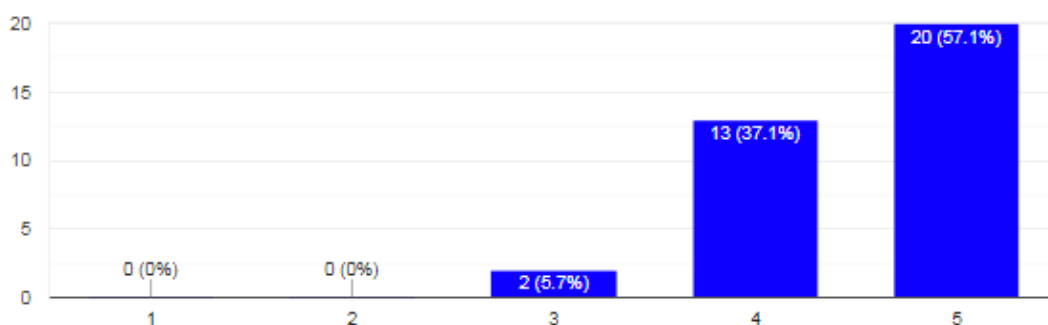
Application of nano Technology in Communication System

IoT and Machine Learning

Nano Electronics

Solar Energy

## 7. Relevancy of topics



## 8. How do you plan to share the gained knowledge/skill with your colleagues who did not attend the program?

I will communicate the material proceedings of my paper and ask them to submit for next conference

We can use it in our research work

By conducting internal fdp

Give them a seminar

good

By sharing the details of conference

I can share my experience how the lectures are go a head and how the participants gave their presentations which topics the presentations are take place

By telling them

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

## 9. The most liked Session is:

1st day session

Umesh sir

2nd day session-2

Umesh chand

Dr. Tawfik Ismail

Speaker

Invited Talk Dr. Ankit Goel

Session 2 of day 2

Dr Umesh CHand, Singapore

## 10. Suggestions

offline conference

Excellent conference

excellent

Organize an international conference based on cyber security

share the ppt and contact details of all speakers at my mail id viveksec@gmail.com

Organise in future such conference as well

Very good conference in future i want to join this conference in offline mode

## Media Coverage

**एसकेआइटी में तीन दिवसीय कॉन्फ्रेंस शुरू**  
**देशभर के विशेषज्ञों ने**  
**कॉन्फ्रेंस में रखे विचार**



**पत्रिका plus रिपोर्टर**

जयपुर. स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी में एडवांसमेंट्स इन नैनो इलेक्ट्रॉनिक्स एंड कम्युनिकेशन टेक्नोलॉजी पर तीन दिवसीय इंटरनेशनल कॉन्फ्रेंस का उद्घाटन ऑनलाइन मोड में आयोजित किया गया। यह एसकेआइटी और इंस्टीट्यूशन ऑफ इंजीनियर्स (इंडिया) राजस्थान स्टेट सेंटर की ओर से सीएसआइआर - आइएमएमटी: इनटेक भुवनेश्वर के सहयोग से किया गया। उद्घाटन समारोह में मुख्य अतिथि दीप जरीवाला, विशिष्ट अतिथि किशोर कुमार सदाशिवुनी, आयसेगुल, गुंजन सक्सेना और प्रो. टी पवन कुमार उपस्थित रहे। शुरुआत में संस्था के एकेडमिक डायरेक्टर एस.एल. सुराणा ने सभी अतिथियों का स्वागत किया।



## नैनो इलेक्ट्रॉनिक्स पर कांफ्रेंस शुरू



### खबरों की दुनिया

जयपुर। स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी में एडवांसमेंट्स इन नैनो इलेक्ट्रॉनिक्स एंड कम्युनिकेशन टेक्नोलॉजी बीबीजी पर तीन दिवसीय अंतर्राष्ट्रीय कॉन्फ्रेंस का उद्घाटन समारोह ऑनलाइन मोड में आयोजित किया गया। सम्मेलन का आयोजन संयुक्त रूप से एस.के.आई.टी.जयपुर और इंस्टीट्यूशन ऑफ इंजीनियर्स (इंडिया) राजस्थान स्टेट सेंटर, जयपुर द्वारा सीएसआईआर - आईएमएमटी: इनटेक भुवनेश्वर के सहयोग से किया जा रहा है। कार्यक्रम के उद्घाटन समारोह में मुख्य अतिथि डॉ. दीप जरीवाला, विशिष्ट अतिथि डॉ. किशोर कुमार सदाशिवुनी, डॉ. आयसेगुल, गुंजन सक्सेना, और प्रो टी पवन कुमार उपस्थित रहे। कार्यक्रम की शुरुआत में संस्था के एकेडमिक डायरेक्टर डॉ. एस.एल. सुराणा ने सभी

अतिथियों का स्वागत किया और सम्मेलन की विषय वस्तु के बारे में जानकारी दी। उन्होंने वर्तमान परिदृश्य में नैनो इलेक्ट्रॉनिक्स के महत्व और प्रासंगिकता पर जोर दिया। गुंजन सक्सेना ने सम्मेलन के मुख्य उद्देश्यों द्वारा प्रस्तावित योजनाओं पर प्रकाश डाला। प्रो. टी. पवन कुमार ने मैत्री प्रोग्राम की पहल पर प्रकाश डाला। डॉ. जरीवाला ने संबंधित क्षेत्र में उभरते अनुसंधान और तकनीक के साथ पार्टिसिपेंट्स को प्रबुद्ध किया और इस बात पर प्रकाश डाला कि कैसे नैनोइलेक्ट्रॉनिक्स मानव जीवन को आरामदायक बना रहा है और संचार प्रौद्योगिकियां कुछ मिलीसेकंड में अल्ट्रा-फास्ट डेटा ट्रांसफर के साथ दुनिया का नेतृत्व कर रही हैं। डॉ. किशोर कुमार सदाशिवुनी ने विभिन्न प्रकार के नैनो सेंसर पर प्रकाश डाला। उन्होंने हाल ही में अपनी लैब में किए जा रहे कार्यों के बारे में चर्चा की।



# एसकेआईटी मे तीन दिवसीय अंतर्राष्ट्रीय कॉन्फ्रेंस का उद्घाटन समारोह

## P3 Police Public Politics

जयपुर ! स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी, मैनेजमेंट एंड ग्रामोथन जयपुर में एडवांसमेंट्स इन नैनो इलेक्ट्रॉनिक्स एंड कम्युनिकेशन टेक्नोलॉजी पर तीन दिवसीय अंतर्राष्ट्रीय कॉन्फ्रेंस का उद्घाटन समारोह ऑनलाइन मोड में आयोजित किया गया। सम्मेलन का आयोजन संयुक्त रूप से एस.के.आई.टी.जयपुर और इंस्टीट्यूशन ऑफ इंजीनियर्स (इंडिया), राजस्थान स्टेट सेंटर, जयपुर द्वारा सीएसआईआर - आईएमएमटी- इनटेक भुवनेश्वर के सहयोग से किया जा रहा है। कार्यक्रम के उद्घाटन समारोह में मुख्य अतिथि डॉ. दीप जरीवाला, (प्रिंसिपल इन्वेस्टिगेटर, डिवाइस रिसर्च एंड इंजीनियरिंग लेबोरेटरी, यूनिवर्सिटी ऑफ पेनसिल्वेनिया, फिलाडेल्फिया, संयुक्त राज्य अमेरिका), विशिष्ट अतिथि डॉ. किशोर कुमार सदाशिवुनी (प्रोफेसर, सेंटर फॉर एडवांस्ड मटेरियल कटर यूनिवर्सिटी), डॉ. आयसेगुल उयगुन ह्युस्ली, (प्रोफेसर, सुलेमान डेमिरल विश्वविद्यालय, तुर्की), श्री गुंजन सक्सेना, (अध्यक्ष, आईई (आई) राजस्थान राज्य केंद्र) और प्रो टी पवन कुमार, (वरिष्ठ वैज्ञानिक, सीएसआईआर-आईएमएमटी) उपस्थित रहे। कार्यक्रम की शुरुआत में संस्था के एकेडमिक डायरेक्टर डॉ. एस.एल. सुराणा ने सभी अतिथियों का स्वागत



किया और सम्मेलन की विषय वस्तु के बारे में जानकारी दी। उन्होंने वर्तमान परिदृश्य में नैनो इलेक्ट्रॉनिक्स के महत्व और प्रासंगिकता पर जोर दिया। श्री गुंजन सक्सेना ने सम्मेलन के मुख्य उद्देश्यों और दृष्टि (दृ) द्वारा प्रस्तावित योजनाओं पर प्रकाश डाला।

प्रो. टी. पवन कुमार ने MAITRI प्रोग्राम की पहल पर प्रकाश डाला। डॉ. जरीवाला ने संबंधित क्षेत्र में उभरते अनुसंधान और तकनीक के साथ पार्टिसिपेंट्स को प्रबुद्ध किया और इस बात पर प्रकाश डाला कि कैसे नैनोइलेक्ट्रॉनिक्स मानव जीवन को आरामदायक बना रहा है

और संचार प्रौद्योगिकियां कुछ मिलीसेकंड में अल्ट्रा-फास्ट डेटा ट्रांसफर के साथ दुनिया का नेतृत्व कर रही हैं। डॉ. किशोर कुमार सदाशिवुनी ने विभिन्न

प्रकार के नैनो सेंसर पर प्रकाश डाला। उन्होंने हाल ही में अपनी लैब में किए जा रहे कार्यों के बारे में चर्चा की। उन्होंने मधुमेह के निदान के लिए एक्सहेल्ड ब्रीथ बायोमार्कर और पसीने से ग्लूकोज का पता लगाने के लिए पहनने योग्य त्वचा पैच का उदाहरण दिया। उद्घाटन समारोह के अंत में, विभागाध्यक्ष डॉ. मुकेश अरोड़ा ने धन्यवाद ज्ञापित किया। डॉ. आयसेगुल ने रासायनिक माइक्रो-मोटर्स के डिजाइन विधियों को प्रस्तुत किया। रिसर्च पेपर प्रस्तुति के पहले सत्र की सेशन चेयर डॉ. पूजा शर्मा, सीएफयूएम-यूपी, मिन्हो विश्वविद्यालय, सीईएमएमपीआरई, कोयमबरा विश्वविद्यालय, पुर्तगाल ने की। इस सम्मेलन के पहले दिन कुल 10 शोधपत्र प्रस्तुत किए गए। उद्घाटन सत्र का संचालन ग्लोरिया जोसेफ ने किया