

Call for Papers

Theme: Chips to Startup for Sustainable Development

Advisory Committee

Vishwani Agarwal, Auburn University, USA
Jaswinder Ahuja, Cadence, India
Satya Gupta, Seedeys Innovations, India
Virendra Singh, IIT Bombay
Devesh Dwivedi, Global Foundaries, India

Organizing Committee

General Co-Chairs

Manoj Singh Gaur, IIT Jammu
Rajendra Patrikar, VNIT Nagpur

Program Co-Chairs

Sudeb Dasgupta, IIT Roorkee
Anand Darjee, SVNIT Surat

Vice Program Chair

Jaynarayan Tudu, IIT Tirupati

Tutorial Co-Chairs

Anand Bulusu, IIT Roorkee
Satyadev Ahlawat, IIT Jammu

Publication Co-Chairs

Ambika Prasad Shah, IIT Jammu
Sonal Yadav, NIT Raipur

Finance Co-Chairs

Sudhakar Modem, IIT Jammu
Biswanath Chakraborty, IIT Jammu

Local Organization Co-Chairs

Ankit Dubey, IIT Jammu
Anup Shukla, IIT Jammu

Registration Chair

Kushmanda Saurav, IIT Jammu

Publicity Co-Chairs

Santosh Vishvakarma, IIT Indore
Usha Mehta, Nirma Univ.
Bhupendra Vishwakarma, Cadence

Student Research Forum Co-Chairs

Subhasis Bhattacharjee, IIT Jammu
Amit Joshi, MNIT Jaipur

Exhibition & Design Contest Co-Chairs

Kankat Ghosh, IIT Jammu
Bhupendra Reniwal, IIITDM Chennai

Start-up Co-Chairs

Sudeb Dasgupta, IIT Roorkee
Santosh Vishvakarma, IIT Indore
Ambika Prasad Shah, IIT Jammu

Sponsorship Co-Chairs

Preet Yadav, NXP Semiconductors
Navin Bishnoi, Marvell Semiconductors
Hitesh Shrimali, IIT Mandi

Fellowship Chair

Shree Prakash Tiwari, IIT Jodhpur

Website Chair

Vinit Jakhethiya, IIT Jammu

Woman in Engineering Co-Chairs

Chitra Hariharan, Intel
Joycee Mekie, IIT Gandhinagar

About VDAT

VDAT began as a small workshop in the year 1998. In 2005, it acquired the status of a Symposium. The purpose of the Symposium is to promote the advancement of all aspects of VLSI. The 26th International Symposium on VLSI Design and Test (VDAT-2022) is being held in Indian institute of Technology Jammu, India. The aim of this symposium is to bring academics, researchers, startups and industrial practitioners together to exchange their ideas in the area of VLSI design, test and system design.

Call for Papers

Researchers, academicians and professionals are invited to submit papers in the following topics (but not limited to):

Emerging Devices and Material Technologies

MOS Device Modeling and Simulation; Si-Photonics and Optoelectronics devices; Organic electronics; 2D and advanced material electronics; Flash Memory, Emerging technologies: ReRAM, PCM, STTRAM etc.

VLSI Circuit and System Design

Low power, High-performance and robust design; Semiconductor memories; Analog and digital circuits; ADC's and DAC's

IC Reliability and Hardware Security

Radiation effect and Soft-error; Reliability and Fault tolerance; Electro migration, ESD, HCI, BTI, TDD; Hardware-based security primitives; PUF, TRNG, SCA, etc

CAD for VLSI, Testing and Verification

Design verification and Test; Logic synthesis; Placement, Routing and Floor planning; CAD tools and Design automation; Design for manufacturability and yield analysis

FPGA based Design and Embedded Systems

Hardware/Software co-design and verification; Hardware accelerators for ML and deep learning algorithms; Audio, Image and video processing; Artificial intelligence and ML based systems; Cyber-Physical Systems

Forums

Student Research Forum

Students, including bachelors, masters and PhDs may participate in this forum through presenting their work for better technical inputs to improve the quality of work. This forum may also provide an opportunity to the students to establish the network with industry players for job perspective.

Start-up Forum

This forum will provide the opportunities to participants to aware the various schemes/ initiatives taken by several states and central government in Chip Fabrication, Electronics Manufacturing Clusters (EMC), IoT, ML, AI etc.

Women in Engineering Forum

The forum will provide the opportunities to the participants to accelerate the present engagement in the area of chip design and autonomous embedded systems

Important Dates:

Regular Paper	Submission: 30 th April 2022 15th May 2022 Notification of Acceptance: 15 th June 2022
Tutorial	Proposal Submission: 30 th May 2022 Tutorial Announcement: 15 th June 2022
SRF	Full Paper Submission: 30 th May 2022 Acceptance Notification: 15 th June 2022
Design Contest	Submission of Design: 30 th May 2022 Notification of Acceptance: 15 th June 2022
Start-up Forum	Submission of Design: 30 th May 2022 Notification of Acceptance: 15 th June 2022

Takeaway

Tutorial: Tutorials are invited on the cutting edge research and technology in the area of advanced materials/devices, circuit and systems.

Design Contest: The forum will provide opportunities to the participants to learn hands on practice for chip to system design (C2SD) and embedded system design using sensors and advanced interface devices.

Start-up: Funding support to the selected start-up.

Fellowship: The scheme provides an opportunity to applicants to attend the symposium to enhance technical knowledge. The fellowship covers the travel & registration grant. To avail the fellowship, please keep an eye on symposium website.

Submission Instructions

Regular Paper submission:

Soft copies of the **regular papers** should be submitted in .pdf as per the IEEE conference paper format not exceeding **six A4 size pages** and paper should be uploaded through online portal. There will be double blind review of the paper. Therefore, **do not include authors' name in submitted paper**. A paper with authors' details will not be considered for review.

All papers must be submitted through easychair at: <https://easychair.org/conferences/?conf=vdat2022>

For Tutorial, Student Research Forum, Design Contest, and Start-up Forum:

Please visit conference website and respective pages for submission instructions.

Journal Publications



Extended version of selected papers from VDAT-2022 will be invited in the special issue of **Springer Analog Integrated Circuits and Signal Processing**, SCI Journal with **IF 1.337**.

Approval of other SCI Journals are in process.

Contact

Dr. Ambika Prasad Shah
Email: vdat2022@iitjammu.ac.in



www.vlsidat.org
or
<https://iitjammu.ac.in/vdat2022/>