

Recent Developments in Computer and Communication Technologies

29 – 30, July 2021 | Mangalore, Karnataka, India | www.gc-rdct.com



GC-RDCT 2021

The scope of the 2021 Global Conference on Recent Developments in Computer and Communication Technologies (GC-RDCT 2021) is to provide a forum for researchers, scientists, academicians, scholars and practitioners around the world to present papers on recent developments in the broad fields of Computers and Communication technologies. The GC-RDCT 2021 aims to bring together leading academic scientists, researchers and research scholars to exchange innovative and novel ideas, share field trial experiences in sustainability issues and to open a new window on the circumstances of the classical energy sources and their harmful impact on people, society and environment. We invite industrial and academic professionals from across the world in the fields of computer and communication technologies to discuss and exchange ideas in the areas of world's great importance such as computer, electronics, information and communication technologies. The conference also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the above fields.

Call for papers

GC-RDCT 2021 invites full length original research contributions from engineering professionals from industries, R&D organisations, academic institutions, government departments and research scholars from across the world. Full length original research contributions and review articles in the single column format shall be submitted. There is NO PAGE LIMIT. The manuscript template shall be found in the downloads section. The manuscript should contribute original research ideas, developmental ideas, analysis, findings, results, etc. The manuscript should not have been published in any journals/magazines or conference proceedings and not under review in any of them. Further the manuscript should contain the name of the corresponding author with e-mail id and affiliation of all authors.

Soft copy of the full length manuscripts (in .doc and .pdf) shall be submitted to gc-rdct@ajiet.edu.in.

Topics (but NOT limited to)

Track 1 - Electronics and Communication Engineering

Broad Band Communication | Computer and Intelligent Communication | Mobile and Optical Communication | Wireless Communication | Mobile and Optical Networks | Wireless Sensor Networks | Network Security | Advanced VLSI Systems | Embedded Wireless Systems | Medical Informatics | Hardware Engineering | Mechatronics | Automation

Track 2 - Computer Science and Engineering

Geo-informative Systems | Grid Computing | Pervasive Computing | Digital Image and Video Processing Computer Vision and Image Analysis | Data Mining and Cloud Computing | Computer Architecture | Computer Networks | Distributed Computing | Artificial Intelligence & Soft Computing | Optimization Techniques | Human-Computer Interaction | Theoretical Computer Science | Computer Applications | Expert Systems

Track 3 - Electrical Engineering

Electrical and Electronic Materials and Process | Semiconductor Technology | Power Systems and Energy Engineering | Soft Computing Techniques in Power Systems | Transmission and Distribution System and Apparatus | Instrumentation & Feedback Control Systems | Power Electronics & Energy Efficient Drives | Renewable Power Conversion Technologies | Power Quality Improvement Techniques | HVDC/FACTS | Electrical Machines and Industry Applications | Bio-medical Engineering | Intelligent Systems | High Voltage Engineering & Insulation Technology | Photo/Opto Electronics

Track 4 - Advanced Materials

Biomaterials | Composite Materials | Energy Storage and Conversion Materials | Renewable Materials | Functional Materials | Nano Materials | Building Materials | Chemical Materials | 3D Materials | Cryogenic Materials | Polymer Science | Smart/Intelligent Materials/Intelligent Systems | Optical/Electronic/Magnetic Materials | Automation, Control and Information Technology | Magnetic Materials and Smart Materials for Specific Applications | MEMS and Structural Control | Active Materials in MEMS Applications | Materials Property and Characterisation | Thin Film Technology

Registration fee details

Category	Indian authors	Foreign authors
Graduate students	Rs. 8,000	USD 250
Research scholars / Academicians	Rs. 7500	USD 250
Industry / Others	Rs. 10,000	USD 250
Listeners*	Rs. 2,000	USD 100
Poster**	Rs. 4,000	USD 150
Additional page charge**	Nil	Nil
Conference kit and print proceedings***	Rs. 2,000	USD 100

The registration fee includes the PUBLICATION FEE for IOP: Materials Science and Engineering.

Registration is per paper not per author. One full registration covers participation and e-certificates for all authors along with e-proceedings. More than one authors can be allowed under "Listener" category.

*For additional author participation | **Presentation and publication in print proceedings with ISBN only | ***No page limit

***one conference kit, proceedings, conference complements and participation ticket for one author during the conference.

Contact details

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Website
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The book of proceedings of GC-RDCT 2021 with all the accepted papers will be published in the following IOP Conference Series

IOPscience
Materials Science and Engineering
A Conference Proceedings Journal

Indexing and Abstracting

The book of proceedings of GC-RDCT 2021 will be indexed in

Conference Proceedings Citation Index – Science (CPCI-S)
(Thomson Reuters, Web of Science)

EI - Compendex

EX Libris Primo

Inspec

Chemical Abstracts Service

INIS (International Nuclear Information System)

NASA Astrophysics Data System

SPIRES

VINITI Abstracts Journal (Referativnyi Zhurnal)

Important dates

Last date for paper submission	25, May 2021
Notification of acceptance	25, June 2021
Registration commencement	15, April 2021
Registration deadline	05, July 2021
Camera Ready Paper (CRP) submission	05, July 2021
Conference date(s)	29 - 30, July 2021

The proceedings is expected to be published online in IOP: MSE before 28, October 2021.

Publications



Global Conference on
Recent Developments in Computer and Communication Technologies
(GC-RDCT 2021)

29-30, July 2021 | Mangalore, India | www.gc-rdct.com

Program Schedule

Date	Time	Event
29.07.2021	09.30 am to 10.00 am	Inaugural Function Meeting link: https://meet.google.com/oxv-oabd-adu
29.07.2021	10.00 am	Keynote 1 Ts. Dr. Tan Chye Lih Head of Strategy and Risk management Division, SQM Faculty of Mechanical Engineering Technology, Universiti Malaysia Perlis (UNIMAP), Malaysia. Meeting link: https://meet.google.com/oxv-oabd-adu
29.07.2021	10.45 am	Keynote 2 Dr. Manoharan P A Dean - Innovations Chennai Institute of Technology & Director Robota Technology Innovation Pvt. Ltd., Chennai Meeting link: https://meet.google.com/oxv-oabd-adu
29.07.2021	11.30 am to 05.30 pm	Session: EE01 (Online) Meeting link: meet.google.com/jik-qynh-ajc
		Session: EE02 (online) Meeting link: meet.google.com/tkw-vegt-fwi
30.07.2021	10.00 am	Keynote 3 Dr. Patel R N Department of Electrical Engineering National Institute of Technology Raipur Raipur, Chhattisgarh, India Meeting link: https://meet.google.com/oxv-oabd-adu
30.07.2021	10.45 am	Keynote 4 Dr. Murugappan M Department of ECE Kuwait College of Science and Technology (A Private University), Kuwait. Meeting link: https://meet.google.com/oxv-oabd-adu
30.07.2021	11.30 am to 05.20 pm	Session: CS01 (online) Meeting link: meet.google.com/dvf-fqyu-jhg

CS - Computer Science & Engineering
 EE - Electrical, Electronics & Communication Engineering

Note:

1. Start time given above indicates Indian Standard Time (IST).
2. Presentation will be conducted using Google Meet.
3. Participants can join their respective sessions by clicking the meet link given
4. Mode of presentation should be powerpoint presentation(ppt or pptx)
5. Duration of presentation: 10 minutes (presentation) + 5 minutes(Queries)
6. Participant using Google Meet will be admitted at any time prior to their scheduled time.
7. Participants are requested to follow the scheduled time; especially regarding the time for your talk.
8. Participants are requested to contact the respective session In-Charges for presentation related queries.
9. If any problem connecting to session, please text to the respective session In-Charges (Or) GC-RDCT Whatsapp group during presentation date(s).


Principal
A. J. Institute of Engineering & Technology
Mangalore - 575 006

Session: EE01

Date: 29.07.2021

Time: 11.30 am to 05.30 pm

Session In-charge: **Mr. Raghavendra Havaladar**Session in-charge Contact Number: **+91 9731099138**Google Meet ID/Link: meet.google.com/jik-gynh-ajc

Time	Paper ID	Paper Title
11.30 am	RDCT 1015	Simulation of Different Third Harmonic Injected PWM Strategies for 5-Level Diode-Clamped Multilevel Inverter
11.50 am	RDCT 1020	High Performance Wallace Tree Multiplier Using Majority Gate Based Adders
12.10 pm	RDCT 1025	A Review of Meshing Techniques in the field of Biomedicine
12.30 pm	RDCT 1028	Application of Natural Betalain Dye from Beetroot for Improved Efficiency in Dye Sensitized Solar Cell
12.50 pm	RDCT 1031	Pair sum modulo labeling of spider graph
02.00 pm	RDCT 1042	Power-efficient Strategies for Sensing in Autonomous Mobile Robots, a critical requirement of I4.0 standard
02.20 pm	RDCT 1043	Low Power Memory System Design Using Power Gated SRAM Cell
02.40 pm	RDCT 1045	Replacing two As atoms in silicene nanoribbons in the presence of an external electric field
03.00 pm	RDCT 1048	Efficient Waste Management Models for Smart Cities: A Case Study
03.20 pm	RDCT 1049	Design and Simulation of Sierpiński Triangle Fractal Antenna for S-Band
03.40 pm	RDCT 1075	Design and evaluation of hybrid SHE+STT-MTJ/CMOS full adder based on LIM architecture
04.00 pm	RDCT 1080	Design & Simulation of S Band Planar Microwave Filter for Wireless Application
04.20 pm	RDCT 1082	A Different Shaped Radiating Element Wide Band Multi-Band Massive MIMO Antenna for 5G/WLAN applications with Enhanced Correlation Coefficient
04.40 pm	RDCT 1059	UIE-Net: Underwater Image Enhancement Network for Improved Visual Perception
05.00 pm	RDCT 1061	Restoration of degraded underwater images with attenuation coefficients as a clue
05.20 pm	RDCT 1062	3D Pointcloud Rendering in ARCore

Session: EE02

Date: 29.07.2021

Time: 11.30 am to 04.00 pm

Session In-charge: **Mr. Pradeep Kumar**Session in-charge Contact Number: **+91 9448189416**Google Meet ID/Link: meet.google.com/tkw-vegt-fwi

Time	Paper ID	Paper Title
11.30 am	RDCT 1090	Influence of pH and salinity on photocatalytic dye degradation and heavy metal ion reduction with cobalt ferrite photocatalysts
11.50 am	RDCT 1091	Mathematical model and analysis of PV Converter - Inverter System
12.10 pm	RDCT 1096	Propagation of Partial Discharge Pulses in Transformer Windings
12.30 pm	RDCT 2010	Selection of an efficient wind turbine generator at Government science college premises Chitradurga, India
12.50 pm	RDCT 2015	UWB dual notch implementation using folded bi-section stepped impedance resonator
02.00 pm	RDCT 2022	A Novel Approach in Hybrid Median Filtering for Deinoising Medical Images
02.20 pm	RDCT 2026	Automatic Detection of New Vessels in Retinal Photographs using Machine Learning
02.40 pm	RDCT 2027	Fruit Classification Comparison Based on CNN and YOLO
03.00 pm	RDCT 2032	Development of data driven adaptive edge detectors for image processing
03.20 pm	RDCT 2035	Assessment of Asphalt Road Pavement Rehabilitation and Maintenance Practices: The Case of West Showa Zone in Oromia, Ethiopia
03.40 pm	RDCT 1089	Design of All-Optical Logic Gates Based on a Germanium Ring Resonator using Photonics Technology
04.00 pm	RDCT 2011	Low-compute facial expression recognition using fiducial feature-sets
04.20 pm	RDCT 2037	Effect of Thermal Barrier Coating in Sustainable Power production of Gas Turbines
04.40 pm	RDCT 1083	Integrated Multi-Operational Antenna System Design for CR Applications
05.00 pm	RDCT 1084	Performance Evaluation of GFDM with TWTA High Power Amplifier Model

Session: CS01

Date: 30.07.2021

Time: 11.30 am to 04.00 pm

Session In-charge: **Mr. Terance Marian F**Session in-charge Contact Number: **+91 9845095295**Google Meet ID/Link: meet.google.com/dvf-fgyu-jhq

Time	Paper ID	Paper Title
11.30 am	RDCT 1004	Group Leverage Centrality and its Applications in Brain Networks
11.50 am	RDCT 1036	Open Source Knowledge Delivery
12.10 pm	RDCT 1050	Deep Neural Network for Electroencephalogram based Emotion Recognition
12.30 pm	RDCT 1057	Real-time Flow Visualization using Projection Mapping Technique
12.50 pm	RDCT 1079	Medical Health Data Privacy Preservation Systems Using BlockChain and Smart Contract
02.00 pm	RDCT 1085	Internet of Things (IoT) in Education
02.20 pm	RDCT 1093	Ring-Based Quantum Network with Quantum Key Distribution (QKD) and Quantum Digital Signature(QDS)
02.40 pm	RDCT 1095	Analysis of an algorithm used for finding Unipolar Orthogonal Codes
03.00 pm	RDCT 1097	Simulation Tests of Tokyo Quantum Network
03.20 pm	RDCT 2009	APACHE-II Score based Clinical Decision Support Model for ICU Patient Monitoring
03.40 pm	RDCT 2024	Comparison of word embeddings in text classification based on RNN and CNN
04.00 pm	RDCT 2031	Math Adventures with Tuffy: A 2D game to aid in learning Mathematics
04.20 pm	RDCT 2038	Comparison of D-Vine and R-Vine Technique for Virtual Network Embedding Problem
04.40 pm	RDCT 2043	Improving the Relation Classification Using Convolutional Neural Network
05.00 pm	RDCT 2012	Symmetric Key Cryptosystem based on Sequential State Machine



AJ INSTITUTE OF ENGINEERING & TECHNOLOGY

A Unit of Laxmi Memorial Education Trust

(Approved by AICTE, New Delhi, Affiliated to Visvesvaraya Technological University, Belgaivi)

NAME OF THE EVENT:	Global Conference of Recent Developments in Computer and Communication Technologies (GC-RDCT 2021)
ORGANISING DEPARTMENT / COMMITTEE :	Department of Information Science & Engineering Department of Computer Science & Engineering Department of Electronics & Communication Engineering
DATE :	29-07-2021 and 30-07-2021
NAME OF THE RESOURCE PERSON :	<p>Keynote 1 – 29.07-2021 Ts. Dr. Tan-Chye Lih Head of Strategy and Risk Management Division, SQM Faculty of Mechanical Engineering Technology, University Malaysia Perlis (UNIMAP) Malaysia. Meeting link: https://meet.google.com/oxv-oabd-adu</p> <p>Keynote 2 – 29.07-2021 Dr. Manoharan P A Dean - Innovations Chennai Institute of Technology & Director, Robota Technology Innovation Pvt. Ltd., Chennai Meeting link: https://meet.google.com/oxv-oabd-adu</p> <p>Keynote 3 – 30.07-2021 Dr. Patel R N Department of Electrical Engineering National Institute of Technology Raipur Raipur, Chhattisgarh, India. Meeting link: https://meet.google.com/oxv-oabd-adu</p> <p>Keynote 4 – 30.07-2021 Dr. Murugappan M Department of ECE Kuwait College of Science and Technology (A Private University) Kuwait. Meeting link: https://meet.google.com/oxv-oabd-adu</p>
NO OF PARTICIPANTS :	48 participants in Virtual mode

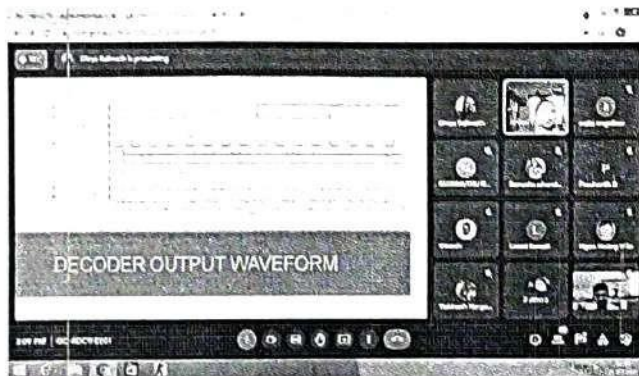
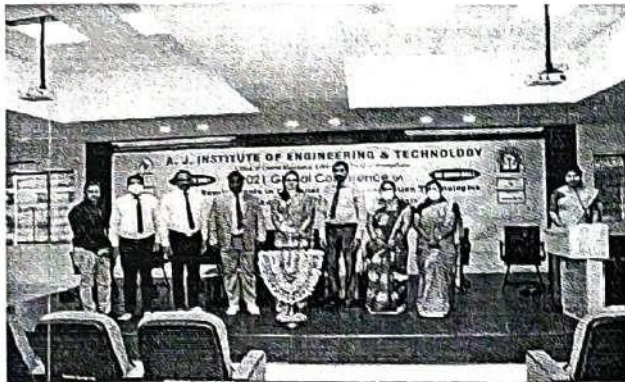
A two-day Global Conference of Recent Developments in Computer and Communication Technologies (GC-RDCT 2021) was inaugurated on 29-07-2021 in Seminar Hall-1 at AJIET Campus. The inaugural function started by 9.35 AM. and the delegates were escorted to dais by Dr. Nagesh H. R. and Dr. Sangeetha D. M. The function was presided by Mrs. Ashritha P. Shetty - Director, LMET(R), Principal Dr. Shantharama Rai C., Chief convener of GC-RDCT 2021 Dr. Nagesh H.R., Chief convener of GC-RASM 2021 Dr. Sangeetha D.M. and HOD's of various departments. Ms. Shraddha and Team evoked the blessings of almighty with a prayer song. Dr. Nagesh H.R. welcomed the gathering and Dr. Sangeetha D.M. briefed about the conference. The CMS partner for the conference Dr. Thangaprakash S. from

Diligentec solutions released the conference souvenir virtually and delivered a talk on about the conference. Principal Dr. Shatharama Rai C. addressed the gathering about the Institute and the conference. Presidential address was delivered by Mrs. Ashritha P. Shetty and congratulated the team for organizing the conference at international standards. Vote of Thanks was delivered by Mrs. Smitha Shetty.

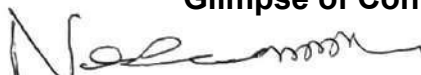
Day 1 - The program started with Keynote session 1 at 10.15 AM., followed by keynote session 2 at 10.45 AM. Altogether around 02 parallel sessions started by 11.30 AM, and held virtually using Google meet platform. Around 25 papers were presented in virtually and out of 31 registered papers.

Day 2- 30.7.2021: Keynote session 3 started by 10.00 AM followed by Keynote session 4 at 10.45 AM. Thereafter one (01) parallel session started at 11.30 AM and around 14 papers were presented in the session.

Valedictory: In the evening by 4.30 PM, valedictory session was held virtually via Google Meet. Mrs. Smitha Shetty welcomed the gathering. Dr. Nagesh H.R. delivered Valedictory Speech. Principal Dr. Shantharama Rai C., delivered the presidential address. Few researchers and Session chairs shared their valuable feedbacks. Dr. Thangapraksh S., shared the concluding remarks of the conference followed by Vote of thanks by Dr. Sangeetha D.M. The session concluded by 5.00 PM.



Glimpse of Conference Inauguration and Keynote Sessions


Convener

Dr. Nagesh H R

CC to:

1. President, LMET, Mangaluru
2. Vice President, LMET, Mangaluru


Principal

A.J. Institute of Engineering & Technology
Mangaluru - 575 006