

## ABOUT CONFERENCE

ICFIRTP'20, technically sponsored by IEEE UP Section, India, aims to explore the impact of Fourth Industrial Revolution on value proposition it makes and competitive edge it gives. In this conference we will also investigate the influence of digital revolution on specific, related industries that are vital to GLOBAL economy – Engineering, Metal, Oil& Gas, Power and Logistic Services. The conference will be gathering all type of enterprises, exploring smart operations and innovative applications. For those who provide solutions and innovative ideas, we would like to invite you to exhibit your services.

ICFIRTP'20, aims to provide expert insight into recent advances in key areas of Industry 4.0, and a balanced perspective on how these may influence manufacturing, ICT etc. The conference will cover an array of topics including four technical sessions and their subtopics such as Future of Industrialization: Robotics and collaborative robots, Additive Manufacturing, Augmented and Virtual Reality, Era of Revolution: Blockchain, Neuromorphic Systems, Artificial Neural Networks and Artificial Intelligence as well as Design, Sustainability and Innovation: Bioinspired advanced manufacturing, Sustainable waste management, Technology innovation for a green economy, Computing and Communication: Cloud and Communication Networks and Services, Human-Centered Computing. The vision behind this world congress is to serve as a unique global platform for researchers, academicians, professionals, students, industrialists and technocrats from world-renowned institutions and industries to share and exchange new research studies and advancements in IR 4.0.

## WELCOME TO ROORKEE

Roorkee is a quiet, scenic town located along the historic Ganga canal in the Haridwar District of Uttarakhand, India. It has the glorious distinction of being the fountain head of engineering education in India, and has emerged as one of the leading educational hubs in Uttarakhand with IIT Roorkee located in the city. It has also grown to become one of the most important industrial cities in Uttarakhand with number of large- and small-scale industries. Roorkee is also home to several government research institutes such as Central Building Research Institute, Irrigation Research Institute, Institution of Engineers Regional Centre, Irrigation Design Organization and National Institute of Hydrology. Some tourist destination are also located near by the city such as Dehradun, Mussoorie, Haridwar, Rishikesh, Nanital etc.

Quantum University is a state private university established by Uttarakhand State Legislature through the Quantum University Act, 2016. Quantum University is transformation of Quantum Global Campus, and has a ten-years old legacy of academic excellence. The vision is "To be a seat of learning where a student gains academic and professional excellence, stays connected with the inner self, imbibes respect for human values, and becomes a world citizen." Quantum University imparts rigorous technical and soft skills trainings under an array of industrial tie-ups and International-National MOUs such as Xebia Academy, Netherland, Tribhuvan University, Nepal, ICT Academy, INDIA, Quickheal, INDIA, Salesforce Inc, Singapore, Oracle Inc, USA and University, of Kwazulu Natal, Durban, South Africa.

## EMINENT KEYNOTE SPEAKERS

**Prof Valentina Emilia Balas**, Professor of Automation and Applied Informatics, Aurel Vlaicu University of Arad, Romania

**Dr. Sheng-Lung Peng**, Department of Computer Science and Information Engineering, National Dong Hwa University, Hualien, Taiwan

**Prof. (Dr.) Rajesh Kumar**, Professor, Department of Electrical Engineering, Malaviya National Institute of Technology Jaipur, India

**Prof. (Dr.) P.P. Dhyani**, Scientist Member, World Economic Forum

**Prof. (Dr.) Kusumdeep**, Department of Mathematics, IIT Roorkee

**Mr. Anand Sahay**, CEO, Xebia

## SECRETARIAL COMMITTEE

### Patrons

Shri Ajay Goyal, Chancellor, Quantum University

Shri Praveen Garg, Pro-Chancellor, Quantum University

Shri Shobhit Goyal, Member, BOG, Quantum University

### Mentor & Technical Chair

Prof. (Dr.) Vivek Kumar, Vice-Chancellor, Quantum University

### General Chair

Prof. (Dr.) Gulshan Chauhan, Dean, Faculty of Technology, Quantum University

### Technical Committee

Er. Satender Kumar, Sr. Assistant Professor, Quantum University

Dr. Amit Dixit, Professor, Quantum University

Er. M. Kannan, Sr. Assistant Professor, Quantum University

### Organizing Committee

Convener : Dr. Aditi Sharma, Associate Professor, Quantum University

Co-Convener : Dr. Kamlesh Singh, Associate Professor, Quantum University

Organizing Secretary : Er. Jaspreet Srivastava, Asst Prof, Quantum University

Publication Head : Dr. Chandni Sharma, Quantum University

Media Head : Mr. Guru Prabhat, Quantum University

Web Application Head : Mr. Deepak Bhatt, Quantum University

### Venue Address :

22km Mile Stone, Mandawar, Roorkee Dehradun Highway

(NH-73), Uttarakhand, India-247167

[www.quantumuniversity.edu.in](http://www.quantumuniversity.edu.in)



In Association with  
IEEE Student Chapter Quantum University

Organized by  
Deptt. of Computer Sc. & Engineering, Quantum School of Technology  
Deptt. Co-ordinator, Er. Satender Kumar +91 7830118211

For Details & Registration  
[icfirtp.quantumuniversity.edu.in](http://icfirtp.quantumuniversity.edu.in)  
Contact Persons : Dr. Aditi Sharma +91 8058940685,  
Er. Jaspreet Srivastava +91 8006657251  
[convener.icfirtp@quantumeducation.in](mailto:convener.icfirtp@quantumeducation.in)

CALL FOR PAPERS

Conference Track

ICFIRTP’20 aims to provide excel the innovation and research in the area of IR4.0 as following conference tracks.: but not limited to

Era of Revolution

Artificial Neural Networks and Artificial Intelligence  
Machine Learning  
Expert Systems and Intelligent Agents  
Human Computer Interaction  
Computer Vision  
Geographic Information Systems  
Fuzzy Systems and Hybrid Systems  
Image Processing & Pattern Recognition  
Information Retrieval, Natural Language Processing, and Ontology  
Data Communication, Computer Network and Security & Forensic  
Internet of Things  
Medical Diagnosis  
Blockchain  
Quantum Computing  
Cloud Computing and Ambient Intelligence  
3G/4G/5G Network Evolutions  
Computational Intelligence and Evolutionary Computation  
Neuromorphic Systems  
Mobile Applications  
Digital Transformation

Future Industrialization

Industrial Internet of Things  
Cyber security  
Cognitive Computing  
Additive Manufacturing  
Augmented and Virtual Reality  
Big Data and Analytics  
Robotics and collaborative robots  
Autonomous Robots  
3D Printing and additive manufacturing  
Industry 4.0  
Nanotechnologies  
Smart Grids  
Sensing and Sensor Networks  
Power Electronics  
Digital Circuits  
Analogue Circuits & Signal Processing  
Design Automation  
Computer and Control Systems  
Factory Automation  
Motion Control  
Machine to Machine

Computing and Communication

Communication Protocols  
Cognitive Radio  
Advanced Wireless Systems & Technologies  
Beyond LTE-A, WSN  
Biomedical Engineering  
Cloud, Communication Networks & Services  
Cooperative and Cognitive Networks  
Cryptographic Applications for Networks  
Data, Network Security & Safety  
Data Mining  
Decision Support and Recommender Systems  
Embedded System  
High Performance  
Grid Computing  
Human-Centered Computing  
Mobile Computing  
VLSI and Large-scale applications  
Multi-networking and Multi-services  
Network Management  
Networks Analyzing & Programming  
Networks Operations, Multi-networking and Multi-services  
Network Management  
Networks Analyzing & Programming  
Networks Operations and Management  
Remote Sensing  
Satellite Communications & Telecommunication Systems  
Software Engineering & Software Development  
Switching & Routing  
Web Application and Web Service

Design, Sustainability & Innovation

Sustainable water management  
Reusable; No plastic in Industry  
Bioinspired advanced manufacturing  
Regenerative medicine  
Biomechanics and Biomechatronics  
Sustainable Business models  
Sustainable waste management  
Sustainable and resource efficient building design  
Technology innovation for a green economy  
E- Learning  
Tools for Business Innovations  
Design for Disassembly  
Energy and climate policy  
Traffic Identification and Classification  
Smart Cities  
Green entrepreneurship  
Green supply chain management  
Green transportation



IMPORTANT DATES

Paper Submission Due	20th January 2020
Acceptance Notification	05th February 2020
Author Registration	15th February 2020
Conference Dates	March 15th-16th, 2020

REGISTRATION

Category	Early Bird Submission (15th Feb 2020)	Late Fee Submission
Academician/ PhD Research Scholar/ Industrialists	2500	3000
IEEE Author Academician	2000	2500
Students	1500	2000
Foreign Authors	250\$	350\$
Foreign IEEE Authors	200\$	250\$

MODE OF PAYMENT

Name	Quantum University
Branch	Dehradun Main Branch
A/C No	00880200000776
IFSC Code	BARBoDEHRAD (read 5th letter as ZERO)

PUBLICATION DETAILS

Selected papers presented in ICFIRTP 2020 will be published in the Scopus Indexed Journals after going through their review process on Journal Conditions

1. Key Engineering Materials
2. Recent Patents of Computer Science
3. International Journal of Computing and Digital Systems (IJCDS)
4. Journal of Content Community & Communication
5. International Journal of Recent Technology and Engineering (IJRTE)
6. International Journal of Innovative Technology and Exploring Engineering (IJITEE)
7. International Journal of Engineering and Advanced Technology (IJEAT)

Conference content will be submitted for inclusion into Scopus as well as other Abstracting and Indexing (A&I) databases. Paper submissions are allowed only through easychair, for submitting the paper use following link:  
<https://easychair.org/conferences/?conf=icfirtp2020>



ADVISORY BOARD

Prof. Sanjiv K. Bhatia, Professor, Univ. of Missouri – St. Louis, USA  
Dr. Khedo Kavi Kumar, Professor, University of Mauritius, Mauritius  
Dr. Yu-Chen Hu, Professor, Providence University Taichung City, Taiwan  
Dr. Dhananjay Singh, Professor, University of Foreign Studies (HUFs), Seoul, South Korea  
Prof. Jong-Myon Kim, Professor, University of Ulsan, Ulsan  
Prof. R. Balasubramanian, Professor, IIT Roorkee INDIA  
Prof. A. K. Mishra, Professor, MNNIT Allahabad, India  
Prof. Asheesh Kumar, Professor, MNNIT Allahabad, India  
Prof. Phalguni Gupta, Director, NITTTR Kolkata, India  
Prof. Partha Pratim Roy, Professor, IIT Roorkee, INDIA  
Prof. Pushparaj Mani Pathak, Professor, IIT Roorkee  
Prof. Vineet Kansal, Professor, IET Lucknow, UP, India  
Prof. A. K. Khare, Ex-Director, IEC University  
Prof. K. K. Pande, Dean, TMU, Moradabad  
Prof. Rajeev Agarwal, Director, G.L. Bajaj Institute of Tech. & Management, G. Noida  
Prof. Ajay Rana, Dean, Amity University, U.P.  
Prof. Ankush Mittal, Ex-Professor, IIT Roorkee  
Prof. Haranath Kar, Professor, MNNIT Allahabad, India

TECHNICAL PROGRAM COMMITTEE

Prof. Rajesh Bhadada, MBM Engineering College, Jodhpur  
Prof. Shailesh Tiwari, ABES Engineering College, Ghaziabad, India  
Prof. Lalit Awasthi, NIT Hamirpur, India  
Dr. Upasana Singh, University of Kwazulu-Natal, South Africa  
Dr. Rajesh Bodade, Military College of Telecommunication, Indore, India  
Dr. S.S. Sarangdevot, Vice Chancellor, JRN Rajasthan Vidyapeeth University, Udaipur  
Dr. Sudheshna Chakraborty, Sarda University  
Dr. Ravi Tomar, UPES, Uttarakhand  
Dr. Mahesh Kumar, IIT Jodhpur  
Dr. Vishal Bhatnagar, Ambedkar Institute of Technology, New Delhi, India  
Dr. D. S. Yadav, AKTU, Lucknow, India  
Dr. Jagannath V Aghav, College of Engineering Pune, India  
Dr. Rajeev Srivastava, CSE, ITBHU, India  
Dr. N.C. Barwar, MBM Engineering College, Jodhpur, India  
Dr. Vinay Rishiwal, M.J.P. Rohilkhand University, Bareilly  
Dr. Tanupriya Choudhary, UPES, Dehradun  
Dr. N.N. Jani, KSV University Gandhi Nagar, India  
Dr. Ashok K. Patel, North Gujrat University, Patan, Gujrat, India  
Dr. Rizwan Patan, Galgotias University, Uttar Pradesh, India  
Dr. K. Suresh, Galgotias University, Uttar Pradesh, India  
Dr. Awadhesh Gupta, IMS, Ghaziabad, India  
Dr. Dilip Sharma, GLA University, Mathura, India  
Dr. Tarun Shrimali, Sun rise Group of Institutions, Udaipur, India  
Dr. Atul Patel, CU Shah University, Vadhwan, Gujrat, India  
Dr. Vishal Gaur, Govt. Engineering College, Bikaner India  
Dr. Naresh Kumar, Roorkee College of Engineering, India  
Dr. B.S. Deovra, JRN Rajasthan Vidyapeeth University Udaipur, India  
Dr. Ashok Jain, Maharaja College of Engg, Udaipur, India  
Dr. Bharat Singh, JRN Rajasthan Vidyapeeth University, Udaipur, India

