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## **Guest Editorial Column: Special Issue of Journal of Mobile Multimedia “CONASENSE”**

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Dear Readers,

We are glad to introduce you to this special issue of the Journal of Mobile Multimedia: *CONASENSE*. This special issue is published in collaboration with the International Symposium on 5G & Beyond for Rural Upliftment, jointly with BIT Sindri, IIT(ISM) Dhanbad, the IEEE 5G summit and 35<sup>th</sup> GISFI Standardization Series Meeting (GSSM) held on 8-9 February 2020 at IIT (ISM) Dhanbad and BIT Sindri, Jharkhand-India. The Symposium included special sessions organized by WWRF and provided a platform for global networking as it brought together renowned speakers, scientists, researchers, practicing engineers and industry leaders from across the globe. Participants collaborated to discuss critical issues in advancing technologies and their applications in varied areas such as agriculture, health and education for India. Overall, it emphasized the amalgamation of 5G technologies, artificial intelligence, smart platforms and the Internet of Things.

CONASENSE represents a newly established scientific society whose name represents its vision of Communication, Navigation, Sensing and Services (CNSS), 20 to 50 years from now. Its fundamental ideas include an integrated vision with benefits to communications systems, navigation systems, sensing systems and services.

The scope of the this issue includes the theory and applications of electronics, communications, instrumentation, computational intelligence and innovative business models to industrial and manufacturing systems and processes. It is clear that 5G has the potential to be transformative for citizens, businesses, governments and economies. Investment is key but there are many factors to take into account before investments can be committed.

This special issue brings together shortlisted research outputs presented and published as part of the 5G Symposium on Rural Upliftment. It is intended to help the reader navigate through the issues related to 5G and provides a measured, practical approach to policy-makers looking to make important investment decisions in the months and years ahead. The Symposium held earlier this year was a successful event that received 45 research articles in addition to different keynote sessions and panel discussions. The presented articles were published as the conference proceedings in the River Publishers Series in Information Science and Technology “*Proceedings: International Symposium on 5G & Beyond for Rural Upliftment 2020*”. The proceedings can be found at: [https://www.riverpublishers.com/research\\_details.php?book\\_id=783](https://www.riverpublishers.com/research_details.php?book_id=783). In this special issue we have made a selection of the highest quality research articles. After thorough revision and review, 24 research papers are included in this special issue.

All of these articles have been peer reviewed against the publication standards. International reviewers review the main features of the journal, and the articles published in the columns are subject to a short peer-review process. This is not only a way to select the best contributions but also to make the articles accessible to a wide audience. In general, overview articles are the main feature of this publication, and we are pleased to thank the Editorial Board for guaranteeing the quality and accessibility of the technical content while preserving the informative appeal of the *Journal*.

We would also like to extend our sincere gratitude to Ms. Nidhi, Researcher at CGC-Aarhus University, Denmark for her constant technical support and hard work as a member of the Organizing Committee to make the Symposium so successful along with the related publications including the Proceedings and Special Issue.

We hope you will all enjoy reading this special issue and will get valuable information about 5G and beyond technologies.

**Dr Nigel Jefferies & Dr Dharmendra Kumar Singh**  
**Guest Editors**

**Nigel Jefferies**



**Chairman of the Wireless World Research Forum (WWRF)**

Dr Nigel Jefferies is the Chairman of the Wireless World Research Forum, a global partnership between industry and academia to develop a research agenda for mobile communications. He is a Senior Wireless Standards Consultant at Huawei Technologies, and was previously Head of Academic Relationships for Vodafone Group Research & Development and a Principal Mathematician at Racal Research Ltd. He has led a number of research projects including the European-funded IST project SHAMAN, which studied the security of future mobile systems, and ran the Secure Applications Steering Group for Mobile VCE. Other collaborative research projects on various aspects of security for mobile communications include 3GS3 in the UK-funded LINK programme, and ASPECT and USECA in the European ACTS programme. His research interests include cryptography, security of systems and applications of mathematics to telecommunications. He was a member of the UK government’s 5G advisory committee. He received a PhD in functional analysis from Goldsmith’s College, London, and an MA in mathematics from the Queen’s College, Oxford. He is a Senior Member of the IEEE, a Fellow of the Institute of Mathematics and its Applications and a Chartered Mathematician.

**Dharmendra Kumar Singh**



**Director, BIT Sindri**

Dr. Dharmendra Kumar Singh is presently working as Director, BIT Sindri since Jan. 2017. Before joining the present position, he was Professor at Department of Electronics and Communication Engineering, NIT Patna from Aug. 2011 to Jan. 2017. He worked Head of Departments ECE, CSE & IT at NIT Patna, from Nov. 2011–March 2014. He was the Dean (Research & Consultancy) from April 2014–March 2016 at NIT Patna. Prior to joining NIT Patna he was Head Electronics & Comm Engg and Information Technology, BIT Sindri, since 2002–11. He started his career as Asstt. Professor at BIT Sindri in year 1992 and was also In charge Vice Chancellor of BBMKU, Dhanbad from Nov. 2017–May 2018. He was on Board of Director, Bihar State Electronics Corp, Patna from 2013–2016, Member of BoG, NIT Mizoram from 2013–15, Chairman, BOG, UCET, VBU Hazaribag, etc.

He has incredible contribution at academic and Research & Development level. He was instrumental in starting the curriculum on information technology at BIT Sindri and other institutes of Bihar and Jharkhand and also MCA and B.Tech program at VBU Hazaribag through UGC and Govt. of Jharkhand. He has published more than 70 papers in journals and conferences. He supervised 7 Ph.D. in computer Science & Engg and Electronics Communication Engineering. He was the member and convener of various computerization programs of BIT Sindri, Vinoba Bhave University, Ranchi University, Dhanbad district and IT department GOV. of Jharkhand and NIT Patna. He is Member of various professional societies at National Level. He has Chaired many National Seminars and Conferences and has been invited for special talk by Academic Staff College Ranchi, IIT BHU, ISM Dhanbad, Kalinga Institute of Technology Bhubaneswar, Central University Bihar and many colleges of India and other Universities of repute.

He was felicitated by Deputy Commissioner, Dhanbad on the eve of Independence day for his contribution in teaching and social welfare of Jharkhand.