

# Introduction to the Special Issue on Inventive Network Structures for Next Generation Wireless Personal Systems

S. Smys<sup>1</sup> · Robert Bestak<sup>2</sup>

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Welcome to the Special Issue of the Wireless Personal Communication Journal on Inventive Network Structures for Next Generation Wireless Personal Systems. We have received a large number of wireless personal communication-related submissions to the journal. Wireless personal communication needs are extending beyond its limitations by gradually incorporating a wide range of challenging services and applications. The tremendous growth of wireless personal communication devices and heterogeneous access technologies provides uninterrupted services to both mobile and static users. The integration of localized interoperability network structure with seamless access between various vendors still poses significant technical challenges. Most of existing network architectures follow the neighbor aware architecture information exchange, but current wireless technology need new dynamic architecture/routing techniques to scalable in small geographical areas and rely on different metrics.

This special issue addresses the applicability of various technologies with emphasis on wireless applications. These integrated network environments require innovative computing strategies to exploit the communication opportunity. The contributions of this special issue covered the high-quality theoretical as well as practical works on a wide range of wireless issues. The contributed papers mainly focus on performance improvements of wireless networks. The contributed papers have been divided into three categories. The first category contains papers that deal with the performance improvements of wireless networks. The second group of papers in this issue deals with mobility in wireless systems.

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✉ S. Smys  
smys375@gmail.com

Robert Bestak  
robert.bestak@fel.cvut.cz

<sup>1</sup> Karpagam College of Engineering, Coimbatore, India

<sup>2</sup> Czech Technical University in Prague, Prague, Czech Republic

This group of papers offers solutions localization. The third group of papers covers infrastructure issues of wireless networks.

We would like to thank the authors of the papers whose keen efforts and dedications made the publication of this special issue possible. We are indebted to the promptness and devotion of the reviewers whose valuable evaluations improved the quality of the papers significantly. In addition, we would like to thank the Springer publication staff members for their continuous support and dedication. We particularly appreciate the relentless support and encouragements granted to us by Dr. Ramjee Prasad, the Editor-in-Chief of the Wireless Personal Communication Journal.



**Dr. S. Smys** received his M.E and Ph.D. degrees all in Wireless Communication and Networking from Anna University and Karunya University, India. His main area of research activity is localization and routing architecture in wireless networks. He serves as Associate Editor of Computers and Electrical Engineering (C&EE) Journal, Elsevier and Guest Editor of MONET Journal, Springer. He is served as a reviewer for IET, Springer, Inderscience and Elsevier journals. He has published many research articles in refereed journals and IEEE conferences. He has been the General chair, Session Chair, TPC Chair and Panelist in several conferences. He is member of IEEE and senior member of IACSIT wireless research group. He has been serving as Organizing Chair and Program Chair of several International conferences, and in the Program Committees of several International conferences. Currently he is working as a professor in the Department of Information Technology at Karpagam College of Engineering, Coimbatore, India.



**Dr. Robert Bestak** obtained a Ph.D. degree in Computer Science from ENST Paris, France (2003) and MSc degree in Telecommunications from Czech Technical University in Prague, CTU, (1999). Since 2004, he has been an Assistant Professor at Department of Telecommunication Engineering, Faculty of Electrical Engineering, CTU. His main research interests include 5G networks, cognitive networks and spectrum management. He is the Czech representative in the IFIP TC6 working group and he serves as associate editor of Telecommunication System and Electronic Commerce Research, Springer and. Dr. Bestak has served as Steering and Technical Program Committees member for numerous IEEE/IFIP international conferences. He participated in several national and EU founded research projects (FP7-ROCKET, FP7-TROPIC, etc.).