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## Editorial for the inaugural issue

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**Biographical notes:** Hassan Qudrat-Ullah is an Associate Professor of Management Science at the School of Administrative Studies, York University, Canada. He has over 20 years of teaching, research, industry, and consulting experience in the USA, Canada, Singapore, Norway, UK, Korea, China, Saudi Arabia, Pakistan, Colombia, Switzerland, Spain, and UAE. His research interests include decision making in complex systems, sustainable energy policies, and system dynamics modelling. His research has appeared in highly reputed journals including *Energy Policy*, *Decision Support System*, *Energy*, *Simulations and Gaming*, *Journal of Decision Systems*, *Telecommunication Systems*, *International Journal of Technology Management*, and *Computers and Education*.

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On behalf of the editorial board of the *International Journal of Complexity in Applied Science and Technology*, I am delighted to announce the publication of the inaugural issue of the *International Journal of Complexity in Applied Science and Technology (IJCAST)*: a peer-refereed academic journal of a new kind.

The study of complex systems represents a new approach to science and technology. Exploring how collective behaviours of a system are functions of its interacting parts and how the system interacts and forms relationships with its environment, this journal is dedicated to a challenge rather than to a particular theoretical aspect or to a particular topic. This challenge is to provide 'solutions' to complex managerial problems across domains. To address this challenge, we need to understand the dynamics of actors and resources, both tangible and intangible, of the system. Both agent-based modelling and system dynamics approaches provide powerful tools to capture the dynamics of complex systems. *IJCAST* aims to utilise these emerging approaches for solving the issues of complex systems.

This inaugural issue of *IJCAST* has been nearly two years in the making. A major portion of this success of 'making it happen' is owed to my associate editor, Pascal Perez, University of Wollongong, Australia. I had the honour of having several e-mail interactions with Pascal where we finalised the specifics of this issue. What a befitting title he proposed, 'Next generation infrastructure: from complex technological artefacts to agents of social change', as *IJCAST* has just begun its infrastructural encompassing journey. He assembled the guest editorial team comprising of Peter Cambel, Thomas Dolan, and himself, who have generously given their time and expertise to make this project happen. Their professionalism, seeking compliance to the specific of topics, and attention to detail has made seeing this issue to 'print' a real pleasure.

This inaugural issue, aimed at dealing with infrastructural complexity of this modern age, consists of six papers covering important topics including *geospatial sanitation planning in informal settlements*, *characterisation of infrastructure interdependencies*, *complexities of urban infrastructure design*, and *structuring socio-technical complexity in infrastructure systems*. In fact, an introduction by three of the guest editors, Pascal Perez, Peter Campbell, and Thomas Dolan, demonstrates just how wide-ranging and diverse the interests of the researchers are; these articles truly represent the core of infrastructural complexity scholarship today. Our community, the ultimate judge of this project, will find it an interesting read.

Going forward, with our wide-ranging complexity-based scholarship focused editorial board members, three expert associate editors: Kevin James, Isaac Dwyer, and Pascal Perez, our committed regional editor Europe, Carmine Bianchi, and with the professional production team under the leadership of Liz Harris, our managing editor, *IJCAST* is set to contribute with innovative ‘solutions’ to complex managerial problems across domains. As they say, “the journey of a thousand miles begins with a single step”, we are glad that we have started our journey with impressive contributions on infrastructural complexity. Thank you to all the contributors and thank you to my editorial team!