
Editorial

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Welcome to this special edition of the *International Journal of Advanced Intelligent Paradigms (IJAIP)*! I am excited and honoured to serve as the guest editor of this special edition of *IJAIP*. I trust that the articles contained within will provide the reader with insight into valuable research in the area of modelling and simulation in disaster management. We have invited a prestigious group of researchers to participate in this special edition given the global importance of disaster management, prediction and mitigation.

Utilising technology to address disaster management is becoming ever more important with the substantial increase in catastrophic events worldwide. Specifically, there has been a significant increase in the occurrence of natural disasters since 2000 as noted by the Center for Research on the Epidemiology of Disasters (CRED). CRED reports that during the 2000–2009 there were 385 disasters, an increase of 233% since 1980 to 1989, and a 67% increase since 1990 to 1999. This has resulted in a staggering loss of life, destruction of infrastructure and a resulting global economic impact from 1992–2001 of \$446 B. It is imperative that technologies such as modelling, simulation and analysis be utilised to mitigate, manage and prepare for these inevitable events.

This edition of *IJAIP* provides articles from academic researchers, governmental researchers and practitioners that are utilising exciting and innovative approaches in modelling and simulation to support various phases of the disaster management continuum. This special edition focuses on modelling and simulation research and technologies that are in use or in development within this field of study. We encourage the establishment of research and technical collaborations that can further advance the development of insights and innovations to address this ever present and growing need to develop technology that can minimise the impact of disaster on the global community.

I would like to thank Dr. Valentina Balas and the editorial board of *IJAIP* for the invitation to serve as the guest editor on this issue of *IJAIP*. I look forward to seeing this research area grow and expand through resulting collaborative efforts that may be initiated due to this special edition. I thank each of the contributors for providing excellent papers that describe the innovative research you are leading. I extend heartfelt appreciation to my research team and a special thank you for Mr. Larry Lowe for your outstanding support in this endeavour. To the readers, thank you for viewing this edition of *IJAIP* and please contact me and the authors to share your insights, thoughts and ideas on how we might better utilise simulation and other emerging technologies to support our global community response to natural disasters.