DR. MANOJ SAHNI

Dr. Manoj Sahni is working as an Associate Professor and Head, Department of Mathematics, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India. He has more than sixteen years of teaching and research experience. He holds a M.Sc. degree in Mathematics from Dayalbagh Educational Institute (Deemed University), Agra, M.Phil. from I.I.T. Roorkee, and a Ph.D. in Mathematics from Jaypee Institute of Information Technology (Deemed University), Noida, India. He has published more than 52 research papers in peer-reviewed Journals, Conference proceedings, and book chapters with reputed publishers like Springer, Elsevier, etc. He also serves as an editorial board member and a reviewer for many reputed international journals. Beside these contributions to the mathematical community, he has served as an advisory board member of several conferences and associated scientific committee. He has also organized many Seminars, Workshops, Short term training programs at PDPU, and various other Universities within India and abroad. In 2018 he has organized special Symposia in an International Conference (AMACS2018) on Fuzzy Set Theory: New Developments and Applications to Real-Life Problems held at London. He conducted the 1st International Conference on Mathematical Modeling, Computational Techniques, and Renewable Energy on February 21–23, 2020. His contributions also include delivery of many expert talks at the National and International level events in various Institutions and Universities across globe. He is a member of many international professional societies, including the American Mathematical Society, Forum for Interdisciplinary Mathematics, Indian Mathematical Society, IAENG, and many more.

INTRODUCTION TO THE SPECIAL ISSUE:

The Special Issue of Structural Integrity and Life 2020 contains selected papers from the 1st International Conference on 'Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy', held on February 21 – 23, 2020, at the Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India.

The 1st International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy was held on February 21–23, 2020, at Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India. Over 100 participants gathered to share their knowledge at one platform in a communicative environment. The participants varied from 15 states of India to various other countries like Japan, Chile, etc. The objective was exchanging new knowledge and recent development in all aspects of computational techniques, mathematical modelling, energy systems, applications of fuzzy sets and many more. The International Conference on 'Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy' was organized by the Department of Mathematics, Pandit Deendayal Petroleum University, in association with the Forum for Interdisciplinary Mathematics (FIM). The conference has provided an opportunity for researchers, academicians, and students to share their knowledge and discuss the latest developments in the area of interdisciplinary mathematics, statistics, computational intelligence, and renewable energy.

In this Special issue, the collection of articles from the International Conference with peer -reviewed process has been carefully selected based on mathematical modelling of various real-life applications. It includes modelling of different solid and fluid mechanics problems using differential equations, modelling using statistical process, mathematical modelling in uncertain environment, and many more. One can also find the latest analytical and numerical techniques which can be helpful in solving other mathematical problems. This special issue includes 10 articles carefully selected taking into consideration the aim and scope of the Journal.

The aim of this special issue is to spread knowledge among researchers, educationalist, eminent scientist and the students about recent development in the area of the mathematical modelling, so that they get acquainted with all the latest techniques which can be applied in the scientific and technical fields. These articles definitely benefit to all the scholars, engineers and scientists who are in the search of new mathematical tools.