Table of Contents

Chapter 1	Urban Growth Prediction Modelling Using Fractals and Theory of Chaos 1
Chapter 2	Fractal and Chaos in Exploration Geophysics 15
Chapter 3	Fractal Interpolation Functions: A Short Survey 43
Chapter 4	Evolution of Cosmic System 61
Chapter 5	Semilinear Venttsel' Problems in Fractal Domains 87
Chapter 6	Fractal Image Compression Using Self-Organizing Mapping 117
Chapter 7	Studying Relationships between the Fractal Dimension of the Drainage Basins and Some of Their Geomorphological Characteristics 137
Chapter 8	Complexity Concepts and Non-Integer Dimensions in Climate and Paleoclimate Research 153
Chapter 9	Analysis of Fractal Dimension of the Wind Speed and Its Relationships with Turbulent and Stability Parameters 195

Chapter 10 Fractal Analysis of InterMagnet Observatories
Data 221

Chapter 11 Application of Multifractal and Joint Multifractal Analysis in Examining Soil Spatial Variation: A Review 251

Index 293