

# CONTENTS

## I. Geographic Information Systems

<b>APOSTOL Sebastian, BOFU Constantin, AFRĂSINEI Mircea</b> ZONAL STUDY FOR THE OPTIMUM PLACEMENT OF A PUMPED-STORAGE HYDROELECTRIC SUPERIOR RESERVOIR	5
<b>BADEA Ana-Cornelia, BADEA Gheorghe</b> CONSIDERATIONS ON OPEN SOURCE GIS SOFTWARE VS. PROPRIETARY GIS SOFTWARE	15
<b>BALAN Isabela, CRENGANIŞ Loredana, CORDUNEANU Flaviana</b> FLOOD ANALYSIS USING Mike 11 by DHI AND ARCGIS. CASE STUDY – THE FLOOD IN THE UPPER CATCHMENT OF RIVER GERU, GALAŢI COUNTY, ROMANIA	27
<b>BOFU Constantin, CRENGANIŞ Loredana, HOGAŞ HoraŢiu, MANDACHE Bogdan</b> THE UTILITY OF GIS IN ANTISOCIAL EVENTS MONITORISATION	39
<b>DROJ Gabriela, DROJ LaurenŢiu</b> GIS BASED AUTOMATED VALUATION MODELS – A GENUINE SOLUTION FOR REAL ESTATE VALUATION IN ROMANIA	45
<b>GAVRILAS Gilda, CRENGANIS Loredana</b> ASPECTS REGARDING THE MODELING OF WATER DISTRIBUTION NETWORKS USING GEOGRAPHICAL INFORMATION SYSTEMS (GIS) AND THE EPAET PROGRAM	53
<b>GAVRILAS Gilda, CRENGANIS Loredana</b> THE USE OF GEOGRAPHIC INFORMATION SYSTEMS (GIS) IN UPGRADING WATER DISTRIBUTION AND SEWERAGE SYSTEMS	59
<b>ILIE Elena-Cristina, IONEANU Stefana, PETRUSI-ROSIANU Ionela, CĂLIN Alexandru</b> GIS IN TOURISM	65
<b>LATEŞ Iustina, CRENGANIŞ Loredana</b> SEISMIC HAZARD MAPS OF THE BUILDINGS WITH 3D MODELLING IN GIS APPLICATION	73
<b>MARCU Casiana, CATITA Cristina, CRENGANIŞ Loredana, STATESCU Florian</b> A GIS BASED ASSESSMENT OF RENEWABLE ENERGY SOURCES IN ROMANIA AND ITS IMPACT ON ISOLATED AREAS	79
<b>MERCIU George LaurenŢiu, PĂUNESCU Vlad, PLĂVICHEANU Sabina</b> THE GEOGRAPHIC INFORMATION SYSTEM FOR PUBLIC ADMINISTRATION REGARDING THE UPDATING OF GREEN CADASTRE. THE CASE STUDY OF: BUCHAREST	87
<b>MUŞAT Cosmin Constantin, BREBU Floarea-Maria, BĂLĂ Alina Corina, HERBAN Ioan Sorin</b> RESOURCES DEVELOPMENT GEOSPATIAL DATA USING THE DIGITAL TOPOGRAPHIC PLAN OF ROMANIA- TOPRO5	93



**TRELIA Mirela Mădalina, CĂLUȚĂ Georgiana Ancuța, SIMA Alexandra Ramona,** 99  
**PUENARU George, RADU Toma-Alexandru, CĂLIN Alexandru**  
THE REQUIREMENT OF IMPLEMENTING GIS IN URBAN DEVELOPMENT

## **II. Applied and Environmental Science**

**BOARIU Costel, BOFU Constantin** 107  
STRUCTURAL DESIGN FOR EMBANKMENT DAM BOTTOM-DISCHARGE CONDUIT.  
CASE STUDY

**LUCA Mihail, BĂLAN Anca** 115  
RESEARCH OF MORPHOLOGICAL PROCESSES INTO THE MOLDOVA RIVERBED USING  
PERIODIC TOPOGRAPHIC MEASUREMENTS

**NICHERSU Iulian, NICHERSU Iuliana, MIERLĂ Marian** 123  
APPLICATIONS OF FRACTAL GEOMETRY IN MORPHO-HYDROGRAPHIC NETWORK OF  
THE DANUBE DELTA POTAMOLOGY

**POPOIU Loredana Andreea, MITROI Raluca** 131  
EVALUATION OF ECOLOGICAL POTENTIAL OF BARRIER LAKES ON PHYTOPLANKTON  
AND PHYTOBENTHOS AS REQUIRED BY THE WATER DIRECTIVE 2000/60/EC

**PROCA Gabriela Ecaterina** 139  
LAND MEASUREMENTS IN RESIDENTIAL CONSTRUCTION ENGINEERING IN THE  
CONTEXT OF CHANGING THE LAW 10/1995 ON CONSTRUCTION QUALITY

**SCRIPCARIU Cristian Florin, LUCA Mihail** 143  
CONSIDERATION ON HYDRAULIC REABILITATION OF ACCESSIBLE WASTEWATER  
COLLECTORS