



Editors:

Prof. Nikos E. Mastorakis, Technical University of Sofia, Bulgaria
Prof. Anca Croitoru, University "Al. I. Cuza" of Iasi, Romania
Prof. Valentina Emilia Balas, "Aurel Vlaicu" University of Arad, Romania
Prof. Eduard Son, Russian Academy of Sciences, Moscow, Russia
Prof. Valeri Mladenov, Technical University of Sofia, Bulgaria

RECENT ADVANCES in MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS



Proceedings of the 10th WSEAS Int. Conf. on
MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS (MCBE'09)

Prague, Czech Republic, March 23-25, 2009

Recent Advances in Computer Engineering
A Series of Reference Books and Textbooks

ISBN: 978-960-474-063-5
ISSN: 1790-5109



Published by WSEAS Press
www.wseas.org

RECENT ADVANCES in MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS



RECENT ADVANCES in MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS

**Proceedings of the 10th WSEAS International Conference on
MATHEMATICS and COMPUTERS in
BUSINESS and ECONOMICS (MCBE'09)**

**Prague, Czech Republic
March 23-25, 2009**

Recent Advances in Computer Engineering
A Series of Reference Books and Textbooks

Published by WSEAS Press
www.wseas.org

ISSN: 1790-5109
ISBN: 978-960-474-063-5

RECENT ADVANCES in MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS

**Proceedings of the 10th WSEAS International Conference on
MATHEMATICS and COMPUTERS in
BUSINESS and ECONOMICS (MCBE'09)**

**Prague, Czech Republic
March 23-25, 2009**

Recent Advances in Computer Engineering
A Series of Reference Books and Textbooks

Published by WSEAS Press
www.wseas.org

Copyright © 2009, by WSEAS Press

All the copyright of the present book belongs to the World Scientific and Engineering Academy and Society Press. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Editor of World Scientific and Engineering Academy and Society Press.

All papers of the present volume were peer reviewed by two independent reviewers. Acceptance was granted when both reviewers' recommendations were positive.
See also: <http://www.worldses.org/review/index.html>

ISSN: 1790-5109
ISBN: 978-960-474-063-5



World Scientific and Engineering Academy and Society

RECENT ADVANCES in MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS

**Proceedings of the 10th WSEAS International Conference on
MATHEMATICS and COMPUTERS in
BUSINESS and ECONOMICS (MCBE'09)**

**Prague, Czech Republic
March 23-25, 2009**

Editors:

Prof. Nikos E. Mastorakis, Technical University of Sofia, Bulgaria
Prof. Anca Croitoru, University "Al. I. Cuza" of Iasi, Romania
Prof. Valentina Emilia Balas, "Aurel Vlaicu" University of Arad, Romania
Prof. Eduard Son, Russian Academy of Sciences, Moscow, Russia
Prof. Valeri Mladenov, Technical University of Sofia, Bulgaria

International Program Committee Members:

Haiyi Zhang, CANADA
Sen Chi Yu, TAIWAN
Wei Xia, CANADA
Richard Willgoss, AUSTRALIA
Lamberto Tronchin, ITALY
Jorge A. Tejedor, SPAIN
Reza Tavakkoli-Moghaddam, IRAN
Yoshiaki Tadokoro, JAPAN
Chang-kyo Suh, KOREA
Amritasu Sinha, RWANDA
Arkadiusz Salski, GERMANY
Sunint Saini, INDIA
Michael Rosenman, AUSTRALIA
Jong Il Rhee, KOREA
Mohammadreza Rafiei, IRAN
Miroslav Pokorny, CZECH REPUBLIC
Anna Perez, VENEZUELA
Zeljko Panian, CROATIA (HRVATSKA)
Edson Paladini, BRAZIL
Ahmad Moreb, SAUDI ARABIA
Gholam Ali Montazer, IRAN
Azlinah Mohamed, MALAYSIA
Patricia Milligan, UNITED STATES
Jesus Medel, MEXICO
Arie Maharshak, ISRAEL
Edwirde Luiz Silva, SPAIN
James Liu, HONG KONG S.A.R.
Yuan-Horng Lin, TAIWAN
Hankyu Lim, KOREA
Stanislava Labatova, SLOVAKIA
Selva Kumar, INDIA
Walter Kr?mer, GERMANY
Andrei Kolyshkin, LATVIA
Vladimir Kazakov, MEXICO
Elza Jurun, CROATIA
Zhang Jie, CHINA
Girija Jayaraman, INDIA
Shabiul Islam, MALAYSIA
Qiang Hua, CHINA
Chih-hung Hsu, Please, select:
Adolfas Gaigalas, UNITED STATES
Rudolf Freund, AUSTRIA
Kwoting Fang, TAIWAN
Sylvia Encheva, NORWAY
Alexandar Djordjevich, HONG KONG S.A.R.
David Chiu, CANADA
Igor Bernik, SLOVENIA
Mojca Bernik, SLOVENIA

Azam Beg, UNITED ARAB EMIRATES
Noor Habibah Arshad, MALAYSIA
Mohammadreza Anvari, CANADA
Kakuro Amasaka, JAPAN
Rossella Agliardi, ITALY
Elettra Agliardi, ITALY
Shuzlina Abdul Rahman, MALAYSIA

Preface

This year the 10th WSEAS International Conference on MATHEMATICS and COMPUTERS in BUSINESS and ECONOMICS (MCBE'09) was held in Prague, Czech Republic. The Conference remains faithful to its original idea of providing a platform to discuss theoretical and applicative aspects of business management, financial management, decision analysis, project management, human resources management, business design and business strategy, production and logistics, integrated manufacturing systems etc. with participants from all over the world, both from academia and from industry.

Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of this conference are published in this Book that will be indexed by ISI. Please, check it: www.worldses.org/indexes as well as in the CD-ROM Proceedings. They will be also available in the E-Library of the WSEAS. The best papers will be also promoted in many Journals for further evaluation.

A Conference such as this can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors

Table of Contents

<u>Plenary Lecture 1: Algorithm for Encoding Messages with Visual Key</u>	11
<i>Dorel-Mihail Dusmanescu</i>	
<u>Plenary Lecture 2: On the Bending of Carbon Nanotubes</u>	12
<i>Ligia Munteanu</i>	
<u>Plenary Lecture 3: System-theoretic Foundations of the Theory of Economic Policy</u>	13
<i>Reinhard Neck</i>	
<u>Plenary Lecture 4: Knowledge and Information Technology and Urban (Regional) Development</u>	14
<i>Niksa Alfirevic</i>	
<u>Plenary Lecture 5: Financial Instruments for Mega Investments in the Aftermath of the Global Crisis</u>	15
<i>Mircea Boscoianu</i>	
<u>The Green Solow Model with Logistic Population Change</u>	17
<i>Massimiliano Ferrara, Luca Guerrini</i>	
<u>Automated Trading based on Uncertain OWA in Financial Markets</u>	21
<i>Benjamin Fonooni, Seied Javad Mousavi Moghadam</i>	
<u>Contributions to the Definitions of the Particularities of Consumer Goods Distribution Marketing</u>	26
<i>Marius Balasescu, Lavinia Dovleac, Carmen Anton, Simona Balasescu</i>	
<u>On the Bending of Carbon Nanotubes</u>	30
<i>Ligia Munteanu</i>	
<u>Statistical Methods used for Identification of Art Prices Determinants</u>	36
<i>Joanna Bialynicka-Birula</i>	
<u>Micro Business of Currency Conversion using Data Mining Techniques</u>	42
<i>Hameed Ullah Khan, Zahid Ullah, Maqsood Mahmud</i>	
<u>Measuring Fund Performance in Romanian Economy using Return Calculation</u>	48
<i>Dumitru Nica, Brindusa Covaci, Mihai Covaci</i>	
<u>Stock Portfolio Selection using Mathematical Programming: An Educational Approach</u>	53
<i>Christina Beneki, George Kaimakamis, Konstantinos Kiriakopoulos, Alexandros Koulis</i>	
<u>Multidimensional Models for Simulation</u>	58
<i>Alexandru Daniela Ioana</i>	
<u>Minimum Risk Portfolios using MMAR</u>	64
<i>Alexandre Pantanella, Augusto Pianese</i>	
<u>Analysis and Evaluation Possibilities of the Accounting Services</u>	72
<i>Mirela Camelia Baba</i>	
<u>Strategic Implications of eTourism for the Consumer of the Future</u>	76
<i>Daniela Firoiu, Sion Beatrice, Cezar Mihaicescu</i>	

<u>A Practical Solution for Stock Market Integration</u>	82
<i>Vlad Diaconita, Ion Lungu, Adela Bara</i>	
<u>Software Characteristics of M-Learning Applications</u>	88
<i>Catalin Boja, Lorena Batagan</i>	
<u>Identification based on Radio Frequency (RFID) - A New Information Technology with Broad Applications in Economics</u>	94
<i>Lucian Constantin Gabriel Budacia, Elisabeta Andreea Budacia, Ionel Iacob</i>	
<u>Increase of a Company's Efficiency by Implementing the Computer Technology Enterprise Application Integration</u>	100
<i>Lucian Constantin Gabriel Budacia, Elisabeta Andreea Budacia, Ionel Iacob</i>	
<u>Econometric and Neural Network Analysis of the Labor Productivity and Average Gross Earnings Indices in the Romanian Industry</u>	106
<i>Madalina Ecaterina Andreica, Nicolae Cataniciu, Mugurel Ionut Andreica</i>	
<u>Knowledge and Information Technology and Urban (Regional) Development</u>	112
<i>Niksa Alfirevic, Jurica Pavicic, Kresimir Znidar</i>	
<u>Mutual Funds for Distribution and Calculation Returns</u>	117
<i>Eduard Ionescu, Brindusa Covaci, Mihai Covaci</i>	
<u>M-Applications Development using High Performance Project Management Techniques</u>	123
<i>Paul Pocatilu, Marius Vetrici</i>	
<u>The Effects of Implementing Organizational Structural and Risk Management Strategies in Information System Projects</u>	129
<i>Noor Habibah Arshad, Azlinah Mohamed, Ruzaidah Mansor</i>	
<u>Exploratory Study on IT Outsourcing</u>	135
<i>Syaripah Ruzaini Syed Aris, Noor Habibah Arshad, Azlinah Mohamed</i>	
<u>Optimal Conditions for the Control Problem Associated to a Ramsey Model with Taxes and Exponential Utility</u>	141
<i>Olivia Bundau</i>	
<u>Using Computers and Simulations in Business Education</u>	147
<i>Andreea Zamfir, Ion Plumb, Cosmin Dobrin, Ion Popa</i>	
<u>Timing Models for Mutual Funds</u>	153
<i>Emilian M. Dobrescu, Silvia Delia Olaru, Elena Gurgu, Brindusa Covaci</i>	
<u>Study on Residential Assemblies. Database and Algorithms</u>	159
<i>Mirela-Catrinel Voicu, Andreea Banciu, Mihai Dragota, Raul Turcu</i>	
<u>Influencing Factors of Knowledge Transfer in IT Outsourcing</u>	165
<i>Azlinah Mohamed, Noor Habibah Arshad, Nurul Aisyah Sim Abdullah</i>	
<u>A Discrete IS-LM Model with Tax Revenues</u>	171
<i>Mihaela Neamtu, Gabriela Mircea, Dumitru Opris</i>	

<u>Internet and eBusiness</u>	177
<i>Sion Beatrice, Daniela Firoiu, Cristina Maria, Cezar Mihalcescu</i>	
<u>Business Intelligence Effective Solutions of Management</u>	181
<i>Vasilica Voicu, Daniela Zirra, Doinita Ciocirlan</i>	
<u>Neimark-Sacker Bifurcation in an Discrete Time Dynamic System for Internet Congestion</u>	186
<i>Gabriela Mircea, Dumitru Opris</i>	
<u>Multi-Criteria Decision-Making</u>	192
<i>Sylvia Encheva</i>	
<u>Knowledge Management at Educational Institutions: Case of Pakistan</u>	198
<i>Peter Mikulecky, Mohammad Saeed Lodhi</i>	
<u>A System-Theoretic Formulation of the Theory of Economic Policy</u>	204
<i>Reinhard Neck</i>	
<u>Ontology based Data Mining – A Contribution to Business Intelligence</u>	210
<i>Filipe Pinto, Manuel Filipe Santos, Alzira Marques</i>	
<u>Portfolio Management Method in IT Property</u>	217
<i>Shigeyuki Tani, Tadasuke Nakagawa, Masaharu Akatsu</i>	
<u>Technology Transfer Models in the Knowledge-Based EU</u>	221
<i>Andreea-Clara Munteanu</i>	
<u>Using K-Management to Improve HR Performances</u>	225
<i>Daniela Zirra, Vasilica Voicu, Anca Cruceru</i>	
<u>The Ramsey Model with Logistic Population Growth and Benthamite Felicity Function</u>	231
<i>Massimiliano Ferrara, Luca Guerrini</i>	
<u>Estimating Mixed Spatial Processes in Information-Theoretic Frameworks</u>	235
<i>Rosa Bernardini Papalia</i>	
<u>A Multidimensional Data Model and OLAP Analysis for Agricultural Production</u>	243
<i>Constanta Zoie Radulescu, Marius Radulescu, Adrian Turek Rahoveanu</i>	
<u>Multidimensional Data Structures and Techniques for Efficient Decision Making</u>	249
<i>Madalina Ecaterina Andreica, Mugurel Ionut Andreica, Nicolae Cataniciu</i>	
<u>Forecasting Economic Growth using Financial Variables - Comparison of Linear Regression and Neural Network Models</u>	255
<i>Marijana Curak, Klime Poposki, Ivan Curak</i>	
<u>Algorithms for Encoding Messages using a Visual Key</u>	261
<i>Dusmanescu Dorel</i>	
<u>A Framework for Evaluating Product-Service Systems Strategies</u>	265
<i>Flavio Tonelli, Paolo Taticchi, Elena Starnini</i>	

<u>Using Information Technology on Customer Relationship Management</u>	271
<i>Ting-Sheng Weng</i>	
<u>Money Policy Modelling in View of the Macroeconomics Stabilization</u>	280
<i>Alexandru Ionescu, Andreea Raluca Voicu, Stefan Alexandru Ionescu</i>	
<u>A New Challenge in the Current Economic System: Environment</u>	286
<i>Mirela Mazilu, Mariana Ciobanu</i>	
<u>The Quality Management in General and the Environment Management: A Natural Relationship</u>	292
<i>Mariana Ciobanu, Mirela Mazilu, Sabina Mitroi, Marius V. Ciobanu</i>	
<u>Information Security Employment: An Empirical Study</u>	297
<i>James A. Nelson, Darlene Nelson, Nicholas J. Nelson</i>	
<u>The Use of Topological Quantities to Detect Hierarchical Properties in Financial Markets: the Financial Sector in NYSE</u>	301
<i>F. Pozzi, T. Aste, W. Shaw, T. Di Matteo</i>	
<u>Innovative Analysis of a CRM Database using Online Analytical Processing (OLAP) Technique in Value Chain Management Approach</u>	305
<i>Adrian Micu, Angela-Eliza Micu, Alexandru Capatina</i>	
<u>Authors Index</u>	311

Plenary Lecture 1

Algorithm for Encoding Messages with Visual Key



Associate Professor Dorel-Mihail Dusmanescu

Economical Sciences Faculty
Petroleum and Gas University of Ploiesti
Romania

E-mail: doreld@upg-ploiesti.ro

Abstract: The need of security for messages transferred between two entities in computer network is a reality. Many algorithms use text key's with variable length of them. This paper propose an algorithm that use like encoding key a part of an image. For an image with high color definition we have, for every pixel, three values (corresponding to three fundamental colors) that can be mixed in many modes with every byte of the message for encoding them.

Brief Biography of the Speaker:

Education:

PhD, Petroleum and Gas University of Ploiesti, 2001

MSc, Petroleum and Gas University of Ploiesti, 1989

Work Experience:

2008-present, Assoc. prof., Department for Economic Mathematics and Economic Informatics, Petroleum and Gas University of Ploiesti

1998-2008, Senior lecturer, Department for Informatics, Department for Economic Mathematics and Economic Informatics, Petroleum and Gas University of Ploiesti

1994-1998, Assistant, Department for Informatics, Petroleum and Gas University of Ploiesti

Plenary Lecture 2

On the Bending of Carbon Nanotubes



Professor Ligia Munteanu
Institute of Solid Mechanics
Romanian Academy, Ctin Mille 15, Bucharest
Romania
E-mail: ligia_munteanu@hotmail.com

Abstract: In this paper, we analyse the bending of a zigzag single-walled nanotube of carbon (10,0). By coupling the continuum theory with molecular dynamic theory we model a deformation solitonic mechanism, to explain the high strength of nanotubes in bending. When the external bending moment increases, the axial compression in the tube increases too, and when the compressive stress reaches a critical value, the tube will locally buckle with the bending angle at 25.58° . Above of this value, a solitonic deformation mechanism is starting and a portion of the nanotube becomes to rotate about a central hinge line. For large distances, the van der Waals force is attractive, but when the separation between the atoms is below the equilibrium distance of 3.42\AA , it becomes strongly repulsive. Upon complete unloading from angles below 110° the nanotube completely recovers. At a very large bending angle of 120° , atomic bonds break and the deformation of the nanotube becomes irreversible.

Brief Biography of the Speaker: Ligia Munteanu (born in 1967) received the PhD degree in Mathematics from University of Bucharest in 1999. She obtained a Master degree (DEA) in Continuum Mechanics–Composites in 1993 at the Poitiers University, France. Since 1989 she is a senior scientific researcher at the Institute of Solid Mechanics of Romanian Academy, Dept. of Continuum Mechanics. She is the winner of the prize Henri Coanda of Romanian Academy in 2002. Her main research topics include the theory of continuum mechanics, dynamics, soliton theory, nano and micro scale phenomena, and the mechanics of composites. Her work has been published in several journals and books among which we can mention the monography Introduction to Soliton Theory: Applications to Mechanics, published in the Book Series “Fundamental Theories of Physics”, vol.143, Kluwer Academic Publishers, 2004, the paper On the free vibrations of a piezoceramic hollow sphere, Mechanics Research Communications, Elsevier, 34, 2, 123-129, 2007, and the book (with. N.D.Stanescu, V.Chiroiu, N.Pandrea) Dynamical Systems. Theory and Applications, vol.1, Ed.Academiei, Bucharest 2007. She is a member of GAMM - Gesellschaft fuer Angewandte Mathematik und Mechanik.

Plenary Lecture 3

System-theoretic Foundations of the Theory of Economic Policy



Professor Reinhard Neck

Department of Economics

Klagenfurt University

Klagenfurt, Austria

E-mail: Reinhard.Neck@uni-klu.ac.at

Abstract: In this paper, we formulate a dynamic theory of economic policy using concepts and axioms of mathematical system theory. First, the notion of a dynamic economic system is characterized axiomatically. Then the basic problem of the theory of economic policy as introduced by Tinbergen and Theil is expressed as a control problem for a dynamic economic system. In this way, a more general framework for the theory of economic policy than available so far can be developed in terms of mathematical system theory. Finally, we discuss some extensions of the framework, in particular to economic policy problems with more than one decision maker.

Brief Biography of the Speaker: Reinhard Neck was born in 1951 in Vienna, Austria. He received a PhD in statistics and economics from the University of Vienna and the habilitation from the Vienna University of Economics and Business Administration. He was assistant professor at the University of Fribourg, Switzerland and the Vienna University of Economics and Business Administration, Schumpeter Research Fellow at Harvard University, Cambridge, MA, USA, Full Professor of Economics at the Universities of Bielefeld and Osnabruck, Germany, and Austrian Visiting Professor at Stanford University, Stanford, CA, USA. Since 1997, he is Full Professor at the Department of Economics, Klagenfurt University, Klagenfurt, Austria, where he is now Head of Department. 2007 and 2008, he was President of the Austrian Economic Association. Neck has edited and co-authored about 30 books and authored or co-authored about 250 scientific journals and collective volumes.

Plenary Lecture 4

Knowledge and Information Technology and Urban (Regional) Development



Associate Professor Niksa Alfirevic

Co-authors: Jurica Pavicic, Kresimir Znidar

University of Split, Faculty of Economics

Matice hrvatske 31, 21000 Split

CROATIA

E-mail: nalf@efst.hr

Abstract: Knowledge and learning, as the major processes of 'knowledge production', are often cited as ultimate sources of competitive advantage, due to the special characteristics, arising from the analysis of knowledge as an economic factor. In this paper/speech, linkage is made between the well-described theories of knowledge-based companies (economies) and the spatial proximity, facilitated by the relevant urban/region policies. In addition, the theoretical determinants of such a 'knowledge city' ('knowledge region') are placed within the wider context of innovation, with the specific linkage to the idea of habitus, as elaborated by P. Bourdieu in the field of sociology.

Brief Biography of the Speaker: Niksa Alfirevic, born in 1972, has obtained his MSc and PhD in business administration, while he currently studies for a PhD in sociology from the University of Klagenfurt in Klagenfurt, Austria, with the topic on the sociology of virtual communities in South-East Europe. Other significant research interests include: knowledge-based development, knowledge management, as well as management of nonprofit and public organizations. He currently serves as an associate professor of management and e-business.

Niksa Alfirevic has authored 15 papers in scientific journals, including 2 referred in Current Contents and 1 in INSPEC (in a WSEAS journal), more than 30 conference papers and 4 books. He has participated in numerous research and consulting projects, including those sponsored by European Commission (CARDS 2002, 2004) and World Bank. He currently manages the international research project Toward the Knowledge-Based Development of the Alps-Adriatic Region, in partnership with the Dept. of Sociology of University of Klagenfurt.

Plenary Lecture 5

Financial Instruments for Mega Investments in the Aftermath of the Global Crisis



Professor Mircea Boscoianu

Military Technical Academy of Bucharest
81-83 George Cosbuc, Bucharest
Romania

E-mail: mircea_boscoianu@yahoo.co.uk

Abstract: Mega investments are different from financial investments and other types of real investments. Mega investments have a long building time and are not productive during a significant period between the investment decision and the completion of the construction. During building the circumstances may significantly change and this uncertainty is difficult to be explained by using traditional instruments. A robust decision support needs arising from the main characteristics (large irreversible initial investment, long economic life, long term) of mega investments.

The traditional theory of investment does not consider irreversibility/ uncertainty; in this case is not included any managerial flexibility ingredient (the value of waiting, the possibility to postpone irreversible investments). In this case, the standard profitability measures will tend to give inappropriate indicators for investment and entry decisions (Barham, Chavas, Klemme, 1994). Pindyck (1991) demonstrated that an irreversible investment opportunity is much like a financial call option. Valuing real investments with option valuation models (Black-Scholes option pricing, Cox-Ross-Rubinstein binomial option pricing) use the assumptions that models may not be fully compatible with real investments. Pindik proposed an efficient method to include the option value of waiting in the traditional profitability analysis. In this case, the positive potential of the investment is taken into consideration by using real option analysis (ROA). In a new generation of models, ROA is mixed with soft computing techniques like fuzzy logic (Zmeskal, 2001, Collan, Carlsson, Majlender, 2003) or with DSS tools (Alcaraz, Heikkila, 2003).

Efficient financial strategies should also respond to the main problems of the markets related to the global crisis: the private loan failure, the liquidity crunch. In this case, government appears to be the only currently available and dependable remedy.

A new framework based on the mixing of ROA with fuzzy logic (ROA-FL) is presented. Based on the critical review of the traditional investment valuation methods it is demonstrated that this framework offer a better valuation and provide a robust decision support for the selection of financial instruments for mega investments in the aftermath of the global crisis.

Brief Biography of the Speaker: Mircea Boscoianu was born at 29.04.1966 in Suceava, Romania. He graduated the Faculty of Integrated Systems of Armament, Department of Aerospace Engineering in the Military Technical Academy of Bucharest (1990) and the Faculty of Cybernetics in the Academy of Economic Studies of Bucharest (1996). His first PhD was in Aerospace Engineering (1993-1999) in Military Technical Academy and the second in Cybernetics and Statistics (2000-2003) in the Academy of Economic Studies of Bucharest.

His research and teaching activities (1990-2008, Military Technical Academy, Dept of Integrated Aeronautical Systems) covered an extended area of Aerospace Engineering, Cybernetics, Statistics and interdisciplinary domains like mini and micro Unmanned Aerial Vehicles, Risk Management, Financial Management, Management of Extreme Risk Events, Soft Computing. He is author/ co-author of more than 120 published papers and has contributed to more than 10 books in these fields. Mircea Boscoianu has 7 participations (2 plenary speaker in 2008) in WSEAS Conferences with more than 20 papers. He was the Head of Saphire-FAI Programme (2006-2008) and is member of the Astronautical Commission of the Romanian Academy since 2005.

Mircea Boscoianu has an interesting experience in national projects/ programs (5 projects in CNCSIS 2003, CEEEX 2005, SECURITY 2005, PN2 2007 as general manager and many projects as scientific/ economical manager) and he contributed as a member in one FP5 project and two FP7 proposals (FP7-SEC2007-3.3.01, FP7-SEC2007-4.3.01).