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Series Editors: V.V. Eremenko, L.A. Pastur, V.A. Sirenko

Editorial Board: G. Feldman, I. Galetich, M. Sherbina

Institute of Low Temperature Physics and Engineering,

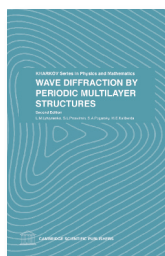
National Academy of Sciences of Ukraine, Kharkov.

WAVE DIFFRACTION BY PERIODIC MULTILAYER STRUCTURES SECOND EDITION

L.M. Lytvynenko, S.L. Prosvirnin, S.A. Pogarsky, M.E. Kaliberda

Institute of Radio Astronomy, National Academy of Sciences of Ukraine

V. N. Karazin Kharkiv National University, Ukraine



The second edition of this volume includes new results, research and further development of the new approach to constructing the theory of electromagnetic wave interaction (propagation and scattering) with periodic sequences of screens. The crucial point of the method is an embedding of reflection operator of semi-infinite layered complex structure into the theory of wave scattering. This new technique is applied to the solution of electromagnetic wave scattering by different kinds of periodic structures and includes the investigation of the diffractive properties of multilayer sequences of two-dimensional periodic plane screens. The second edition includes practical applications of new research pertaining to the development of the theory of metamaterials, element base of functional devices of the microwave and antenna techniques. It also considers the periodic structures which either interact with the fields which have a continuous space spectrum, or generate the diffracted fields with a continuous space spectrum. Much attention is given to the mathematical problems connected with solutions of the boundary problems and to the development of effective methods of numerical solution of nonlinear operator equations and estimation of accuracy of numerical results. The volume provides a useful reference for radiophysicists and radioengineers and for researchers working in areas of applied physics including acoustics, aero- and hydrodynamics.

2021

280pp

Hbk

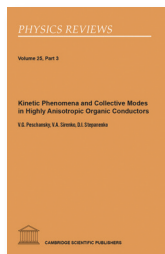
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£60/\$80/€70

KINETIC PHENOMENA AND COLLECTIVE MODES IN HIGHLY ANISOTROPIC ORGANIC CONDUCTORS

V.G. Peschansky, V.A. Sirenko, D.I. Stepanenko

Institute of Low Temperature Physics and Mathematics, Kharkiv, Ukraine



We present a review of experimental and theoretical studies of transport phenomena in strongly anisotropic organic conductors. Considerable attention is paid to the phenomena that are specific to quasi-2D and quasi-1D conductive structures and have no analogues both in ordinary metals and in truly 2D or 1D conducting systems. Angular magnetoresistance oscillations, de Haas-van Alphen and Shubnikov-de Haas phenomena, high-temperature quantum oscillations of the magnetoresistance, and high-frequency resonances, including those arising due to the movement of electrons on open trajectories, are discussed. The resonant angular oscillations of high-frequency conductivity and weakly damped electromagnetic waves in quasi-2D organic conductors under strong spatial dispersion are considered. We review high frequency collective processes in highly anisotropic conducting systems in the presence of an external magnetic field taking into account of the Fermi-liquid interaction. The specific of the quasi-two-dimensional electron energy spectrum and of the Fermi-liquid interaction in layered conductors leads to occurrence of weakly-damping eigen oscillations of the electron and spin densities which are absent in a quasi-isotropic metal.

Physics Reviews

2020

110pp

Pbk

978-1-908106-61-2

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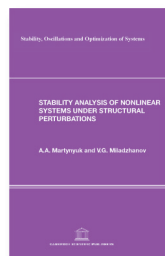
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STABILITY, OSCILLATIONS AND OPTIMIZATION OF SYSTEMS

Series Editors: A.A. Martynyuk, P. Borne, C. Cruz-Hernández

STABILITY ANALYSIS OF NONLINEAR SYSTEMS UNDER STRUCTURAL PERTURBATIONS

A.A. Martynyuk, *Institute of Mathematics, National Academy of Sciences of Ukraine Kyiv, Ukraine*
V.G. Miladzhanov *Andizhan University, Uzbekistan*



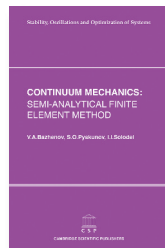
This innovative book focuses on some problems of stability theory of nonlinear large scale systems under structural perturbations. The book describes a new application of Liapunov matrix-valued functions method to the stability of evolution problems governed by nonlinear continuous systems, discrete-time systems, impulsive systems and singularly perturbed systems. The authors take a challenging and original approach based on the concept of structural perturbations combined with direct Liapunov's method. The book is intended for specialists in dynamical systems, applied differential equations, and the stability theory. It may also be useful for graduate students and researchers in mathematics, control theory, and mechanical engineering.

Volume 8 in the book series Stability Oscillations and Optimization of Systems

2015 260pp Hbk 978-1-908106-37-7 £60/\$110/€70

CONTINUUM MECHANICS: SEMI-ANALYTICAL FINITE ELEMENT METHOD

V.A. Bazhenov, S.O. Pyskunov, I.I. Solodei, *Kyiv National University of Construction and Architecture, Ukraine*



The research presented in this monograph is a continuation of the development of semi-analytical finite element method (SFEM), a new effective numerical approach applied to new classes of problems including those of spatial evolution quasi-static and deformation problems. Contents include:

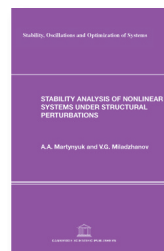
- Initial physical linear and nonlinear relations for evolutionary deformation process of three dimensional bodies
- Semi-analytical finite element method solving equation for stress-strained state determination of inhomogenous three dimensional bodies.
- Definition of thermoelastic-plastic stress-strained state based on semi-analytical finite element method
- Investigation of evolutionary deformation and damage accumulation process of three dimensional bodies under creep
- Life-time determination of spatial bodies considering continual fracture zone presence
- Linear stationary oscillations problems of three dimensional inhomogenous bodies
- Linear and nonlinear deformation process of three dimensional bodies under intense impulsive loads.

Volume 9 in the book series Stability Oscillations and Optimization of Systems

2019 260pp Hbk 978-1-908106-63-6 £60/\$110/€70

DYNAMICAL SYSTEMS WITH RANDOM STRUCTURE AND THEIR APPLICATIONS

I. Dzhalladova, *Kyiv National Economic University, Ukraine*
M. Růžickova, *University of Białystok, Poland*



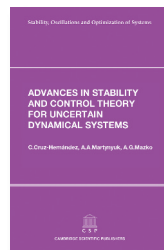
Problems described by differential or difference equations with a random structure arise in various areas of research and practice and form an important part of applications of mathematics. The development and stability of dynamical systems with random structure depend on an understanding of the system, on the rich experience and the interaction of system with the environment. This book describes the development of a new method for studying the stability of dynamical systems with a random structure of various types, based on the construction and study of so-called moment equations. It also describes the use of this method in investigating the stability and properties of solutions of dynamical systems with a random structure that serve as a mathematical model for various applications, especially in banking and finance.

Volume 10 in the book series Stability Oscillations and Optimization of Systems

2020 264pp Hbk 978-1-908106-66-7 £60/\$80/€67

ADVANCES IN STABILITY AND CONTROL THEORY FOR UNCERTAIN DYNAMICAL SYSTEMS

C. Cruz-Hernández, *CICESE, San Diego, USA*
A.A. Martynyuk, *Institute of Mechanics, Kyiv, Ukraine*
A.G. Mazko, *Institute of Mechanics, Kyiv, Ukraine*



This multiauthor volume consists of sixteen chapters presenting the results of theoretical research and engineering applications of some uncertain systems.

The volume comprises four parts:

- I Stability and Control in Uncertain Systems
- II Stability and Stabilization in Discrete-Time Systems
- III Synchronization in Dynamical Systems
- IV Engineering Applications

In recent decades, the problems of stability and control of systems with uncertain parameters values have received much attention in many areas including biology, chemistry, optics, electronics, mechanics, economics.

This volume is intended to provide a useful source of reference for graduates, postgraduates, researchers and professionals working in these areas.

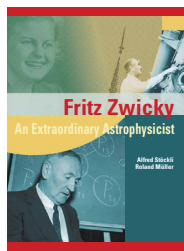
Volume 11 in the book series Stability, Oscillations and Optimization of Systems

2021 340pp Hbk 978-1-908106-73-5 £60/\$80/€67

TITLES IN ASTRONOMY AND ASTROPHYSICS

FRITZ ZWICKY: AN EXTRAORDINARY ASTROPHYSICIST

A. Stöckli and R. Müller - Translated by Ian Gordon
Foreword to the English Edition: L. Woltjer



This English edition of the biography of Fritz Zwicky highlights his fundamental research and discoveries including supernovae, dark matter, clusters of galaxies, neutron stars, gravitational lenses and morphology and also recognises his significant contribution to research in astronomy and astrophysics. It presents a fascinating account of the life and work of this great twentieth century Swiss scientist and will appeal to a wide readership.

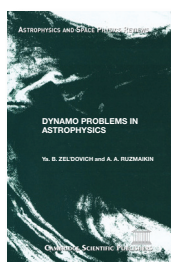
New in Paperback

Advances in Astronomy and Astrophysics

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DYNAMO PROBLEMS IN ASTROPHYSICS

Ya. B. Zel'dovich and A. A. Ruzmaikin



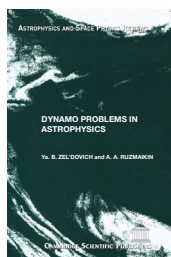
This edition of a classic review presents some topics in hydromagnetic dynamo theory in the astrophysical context of large magnetic Reynolds number. Criteria are defined for field generation in a state of near-complete freezing in. An account is given of certain qualitative aspects of a turbulent dynamo operating through nonuniform rotation of a conducting medium subject to random motions with helicity. Such dynamos might be at work in planetary cores, stellar envelopes, galaxies and the gaseous accretion disks around X-ray sources. The concepts of stochasticity and strange attractors in a magnetic dynamo are examined and a qualitative interpretation is offered for the occasional prolonged interruptions of the solar cycle, such as the Maunder minimum.

Astrophysics and Space Physics Reviews

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| 2015 | 70pp | Pbk | 978-1-908106-44-5 | £30/\$46/€42 |
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STRUCTURE OF THE UNIVERSE

Ya. B. Zel'dovich



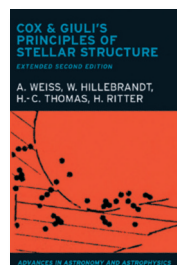
Ya. B. Zel'dovich was one of the first scientists to recognize that the early universe could be useful in research and the understanding of high energy physics. In 1970, the study of the large scale structure of the Universe resulted in Zel'dovich's proposal of the "pancake theory". Zel'dovich's studies leading to this proposal showed that for an ellipsoid of gas on a supergalactic scale, an approximation can be used that will model the collapse along the shortest axis producing sheets and an oblate/pancake form, similar to filamentary structure seen in distribution of galaxies. The Zel'dovich Approximation for the growth of large scale structure is a successful analytical model of structure formation.

Astrophysics and Space Physics Reviews

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COX AND GIULI'S PRINCIPLES OF STELLAR STRUCTURE: EXTENDED SECOND EDITION

A. Weiss, W. Hillebrandt, H.-C. Thomas and H. Ritter,
Max-Planck-Institut für Astrophysik, Garching, Germany



Cox and Giuli's Principles of Stellar Structure has been the reference textbook for studies of the structure of stars for several decades. This new edition has been extended by four specialists in the field to take into account the most recent improvements relevant for the modelling and understanding of stars. New developments have been added to the original text.

Now in Paperback

Contents include:

- Introduction and Survey of Observations
- Physical Conditions in Stellar Interiors
- Radiation Theory
- Thermodynamic Equilibrium
- Local Thermodynamic Equilibrium (LTE)
- Thermal and Radiative Equilibrium
- Solution of the Equation of Transfer
- Conditions for LTE

Appendix 7-A. Solving the Equation of Transfer

Appendix 9-A. Semi-Degenerate Equations of State

Appendix 10-A. Non-ideal Gas Effects

Appendix 13-A. Stability of the Radiative Gradient

Advances in Astronomy and Astrophysics

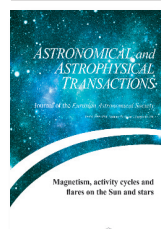
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| 2004 | 782pp | Hbk | 978-1-904868-20-0 | £70/\$90/€80 |
| 2006 | 782pp | Pbk | 978-1-904868-55-2 | £50/\$78/€58 |

ASTRONOMICAL AND ASTROPHYSICAL TRANSACTIONS: JOURNAL OF THE EURASIAN ASTRONOMICAL SOCIETY

Editor: N.G. Bochkarev, Sternberg Astronomical Institute,
Lomonosov Moscow State University, Russia

MAGNETISM, ACTIVITY CYCLES AND FLARES ON THE SUN AND STARS

V. Abramenko, Crimea Astrophysical Observatory, Crimea



These two special issues of Astronomical and Astrophysical Transactions comprise papers presented at the conference "Magnetism, activity cycles and flares on the Sun and stars" which was held at the Crimean Astrophysical Observatory in Crimea, Russia.

Energy emitted by the Sun is the essential source of energy for life on our planet. The physical processes inside the magnetized solar plasma are responsible for the solar activity and its consequences in the near-Earth space. In addition, by exploring the Sun we can learn about other stars, especially those which are similar to the Sun. Many of the problems pertaining and related to these topics were discussed during the conference.

The wide range of scientific discussions and collaborations together with acquaintance with beautiful Crimean landscapes were the highlights of the successful conference.

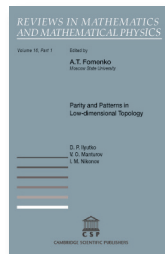
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REVIEWS IN MATHEMATICS AND MATHEMATICAL PHYSICS

Series Editor: A.T.Fomenko, Moscow State University, Russia

PARITY AND PATTERNS IN LOW-DIMENSIONAL TOPOLOGY

D.P.Ilyutko, Dept of Mechanics and Mathematics, Moscow State University V.O.Manturov, Dept of Fundamental Sciences, Bauman Moscow State Technical University I.M.Nikonov Dept of Mechanics and Mathematics, Moscow State University



Algebraic and topological objects are usually encoded by diagrams and moves (words and relations, etc). Diagrams (words) consist of nodes (crossings, letters). The parity theory initiated in 2009 by the second named author (V.O.Manturov) argues that if there is a smart way to distinguish between even and odd nodes (crossings, letters) in a way consistent with moves then this allows one to construct functorial mappings between objects of the theory, construct various powerful invariants, reduce problems about objects (say, knots) to problems about their diagrams, refine many existing invariants. Over the last four years, parity theory has experienced a rapid growth; investigations were undertaken by dozens of scientists worldwide. Various problems in low-dimensional topology were solved by using parity.

2016 150pp Pbk 978-1-908106-47-6 £40/\$50/€45

SPECTRAL EXPANSION OF THE TRANSFER MATRICES OF GIBBS FIELDS

Second Edition - R.A. Minlos, Institute for Information Transmission Problems, Moscow



This survey presents investigations of the structures of the spectrum of transfer matrices (stochastic operators) of lattice Gibbs fields and considers cluster expansion of the transfer matrix, invariant cluster R-particle subspaces of the transfer matrix and cluster operators in representation. This edition of a classic review provides a useful source of reference for students, postgraduates and researchers in these areas of mathematics. This edition has been updated with a supplementary review of recent investigations.

2019 70pp Pbk 978-1-904868-99-6 £30/\$40/€35

DIFFERENTIAL-TOPOLOGICAL THEORY OF WEBS AND ITS APPLICATIONS

Alexander Shelekhov, Moscow State University

This review is a survey of new results on the local differential-topological theory of webs. The most studied are three-webs and their special classes and characteristics. The three-web formed by foliations of codimension p, q, r on a manifold of dimension $p + q$ is denoted by $W(p, q, r)$. In case $p = q = r$, the closure of sufficiently small configurations of a certain type on the web $W(r, r, r)$ corresponds to some identity in the coordinate quasigroup f . It was V.V. Blaschke and his colleagues K. Reidemeister, G. Thomsen, G. Bol, and others, who began the study of the differential-topological theory of webs in 1920s – 1930s. The study of multidimensional three-webs continued with the work of G. Bol (1935-1936), S.S. Chern (1936), M. Akivis (since 1969), V.V. Goldberg (since 1973) and others. In this review the author also describes the configurations that arise at the boundary of a curved three-web and fractal structures that naturally arise on a curvilinear three-web.

2022 100pp Pbk ISBN 978-1-908106-76-6 £40/\$50/€45

QUANTIZATION CONDITIONS ON RIEMANNIAN SURFACES AND SPECTRAL PROPERTIES OF NON-SELFADJOINT DIFFERENTIAL OPERATORS

Andrei Shafarevich, Lomonosov Moscow State University Anna Allilueva, Kurchatov Institute, Moscow Stanislav Stepin, Lomonosov Moscow State University



The book is devoted to the description of spectral properties of non-selfadjoint differential operators. It is well known that, for self-adjoint operators, asymptotic properties of spectra are deeply connected with real Lagrangian geometry and theory of Hamiltonian systems. For example, semi-classical eigenvalues can be computed from Maslov quantization conditions on Lagrangian manifolds; these manifolds have to be invariant with respect to Hamiltonian systems, defined by symbols of initial operators. For non-selfadjoint operators, the corresponding theory is not well developed. We describe known results in this direction (including quite recent ones); the main idea of the new theory is to replace the real geometry by the complex one and to describe spectral characteristics of operators via geometrical properties of complex manifolds. We study this correspondence for a number of operators, which are popular in mathematical physics, and discuss physical applications.

2021 100pp Pbk 978-1-908106-70-4 £40/\$50/€45

INTERMITTENCY, DIFFUSION AND GENERATION IN A NONSTATIONARY RANDOM MEDIUM

Second edition - Ya.B.Zeldovich, S.A.Molchanov, A.A.Ruzmaikin and D.D.Sokoloff



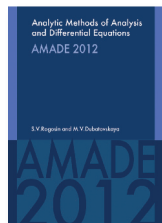
This classic survey considers passive scalar and vector transport processes in a random nonstationary medium, which are described by linear parabolic equations. Integration over random paths is used, along with the asymptotic behavior of the product of a large number of independent identically distributed random matrices. The most interesting effect is the appearance of concentrated structures (intermittency) of a smooth initial distribution of the transported quantity. The occurrence of intermittent distributions in the linear problem is due to the fact that the coefficients of the transport equation are stochastic. The intermittency shows itself in the rates of exponential growth of the successive moments (Lyapunov exponents) as the moment number increases. Moment equations are obtained for the scalar and vector, and are used to study temperature evolution and magnetic-field generation in a random fluid flow. These equations are differential in a medium with short time correlations and integral in the general case. The range of application of the diffusion description is analyzed. The behavior of the diffusion coefficients in the case of time reversal is examined. The properties of an individual realization of a scalar and vector are also explained, and a dynamo theorem is given on the exponential growth of the magnetic field in a random flow with renewal.

2015 118pp Pbk 978-1-908106-41-4 £35/\$60/€45

TITLES IN MATHEMATICS

ANALYTIC METHODS OF ANALYSIS AND DIFFERENTIAL EQUATIONS: AMADE 2012

**S.V. Rogosin, Belarusian State University, Minsk and
M.V. Dubatovskaya, Belarusian State University, Minsk**



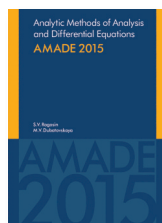
The seventh international workshop of AMADE was held in Minsk, Belarus in September 2012 and covered key topics including integral transforms and special functions; differential equations; integral, difference, functional equations and fractional calculus; real and complex analysis; operator theory; mathematical methods in economics; modern problems of mechanics, biomechanics and nanomechanics. The

volume is prepared on the base of plenary invited lectures presented at AMADE 2012.

2013 300pp Pbk 978-1-908106-29-2 £55/\$75/€65

ANALYTIC METHODS OF ANALYSIS AND DIFFERENTIAL EQUATIONS: AMADE 2015

**Edited by S.V. Rogosin, Belarusian State University, Minsk and
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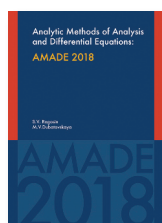
The eighth International Workshop of AMADE was held in Minsk, Belarus in September 2015. The workshop was dedicated to the memory of Professor Anatoly Aleksandrovich Kilbas (1948-2010) a brilliant mathematician, an internationally well-known author and editor and one of the organizers of the AMADE conferences. The volume comprises selected papers which were presented at the Workshop and covered

key topics including integral transforms and special functions; differential equations; integral, difference, functional equations and fractional calculus; real and complex analysis; operator theory; mathematical methods in economics; modern problems of mechanics, biomechanics and nanomechanics.

2017 176pp Pbk 978-1-908106-56-8 £55/\$75/€65

ANALYTIC METHODS OF ANALYSIS AND DIFFERENTIAL EQUATIONS: AMADE 2018

**Edited by S.V. Rogosin, Belarusian State University, Minsk
M.V. Dubatovskaya, Belarusian State University, Minsk**



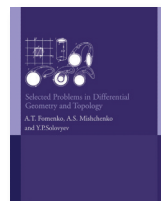
The book presents a collection of papers prepared on the basis of plenary invited lectures at the ninth International Workshop "Analytic Methods of Analysis and Differential Equations", dedicated to 70th anniversary of Professor Anatoly Kilbas (1948 – 2010). The Workshop was held in Minsk, Belarus in September 2018 and covered key topics of Analysis and Differential Equations, including fractional calculus and fractional

differential equations, integral transforms, factorization of matrix-functions and vector-matrix boundary value problems, elliptic and parabolic partial differential equations, linear and nonlinear ordinary differential equations and systems treated by exact and numerical methods. Special attention is given to the applications of the developed technique to the study of problems of mechanics, biomechanics, medicine and economics.

2020 200pp Pbk 978-1-908106-65-0 £55/\$75/€65

SELECTED PROBLEMS IN DIFFERENTIAL GEOMETRY AND TOPOLOGY

**A. T. Fomenko, A. S. Mischenko and Y. P. Solov'yev.
Moscow State University, Russia**



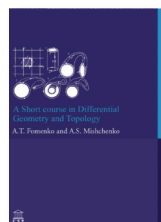
This volume is intended as a supplementary text for a course on differential geometry and topology and other courses in mathematics, physics and mechanics for graduate students specializing in mathematics and applied fields. The volume is divided into two parts. Part I includes problems prescribed in standard courses of geometry and topology. Part II contains problems

intended for a more profound grasp of modern geometry and its applications. There are Answers and Solutions given to the problems presented in Parts I and 2.

2013 350pp Hbk 978-1-904868-33-0 £50/\$65/€58

A SHORT COURSE IN DIFFERENTIAL GEOMETRY AND TOPOLOGY

A. T. Fomenko & A. S. Mischenko, Moscow State University, Russia



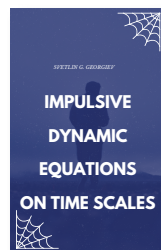
This volume is intended for graduate and research students in mathematics and physics. It covers general topology, nonlinear co-ordinate systems, theory of smooth manifolds, theory of curves and surfaces, transformation groups, tensor analysis and Riemannian geometry, theory of integration and homologies, fundamental groups and variational principles in Riemannian geometry. The text is presented in a form

that is easily accessible to students and is supplemented by a large number of examples, problems, drawings and appendices.

2009 350pp Hbk 978-1-904868-32-3 £55/\$70/€64

IMPULSIVE DYNAMIC EQUATIONS ON TIME SCALES

S.G. Georgiev Sorbonne University, Paris, France



This volume reviews the qualitative theory of impulsive dynamic equations on time scales and summarizes the most recent contributions in this area. The eight chapters in the book are pedagogically organized and each chapter concludes with a section with practical problems. It can be used as a course book and the contents include:

Elements of Time Scale Calculus
The Lebesgue Integration. Sobolev Spaces

Existence and Stability of First Order Impulsive Dynamic Equations
Boundary Value Problems for First Order Impulsive Dynamic Equations
Existence of Solutions of Second Order Impulsive Dynamic Equations
Boundary Value Problems for Second Order Impulsive Dynamic Equations
Oscillations of Impulsive Dynamic Equations
Linear Impulsive Dynamic Systems . . .

The book is intended for senior undergraduate students and graduate students of engineering and science courses.

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CAMBRIDGE CENTRAL ASIA FORUM BOOK SERIES

BANKING IN CENTRAL ASIA AND MONGOLIA SINCE 1875

Masaru Honma



This volume traces the history of banking in Central Asia and Mongolia since the last quarter of the nineteenth century. The history of banking in the regions has several distinctive characteristics including:

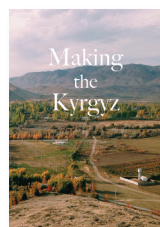
- banking was originally an exogenous system introduced by Russians. Central Asia was a predominantly traditional Muslim area which was not conducive for indigenous banking systems, while Mongolia was a mainly nomadic region with a small population scattered throughout the vast territory
- both regions experienced extreme paradigm changes from commercial banking to rigid socialist banking during end of 1920s and early 1930s, and vice versa in early 1990s. Both transitions were harsh; most banks closed mainly because of the difference in socialist and capitalist banking systems.
- the banking histories of the regions provide rare examples of parallel histories or social experiments including: monetary and banking union of Bukhara, Khiva and Russia; the different transition paths of five former Soviet Union republics which were almost identical until 1987; perestroika banking reforms in Central Asia and in Mongolia.
- the banking sector experienced amazing rises and falls, due to extreme history, and the strong interaction and intervention of politics in banking activities.

This volume provides the first overview of the development of the banking sector in the whole region since its inception up until the present day and describes the key issues together with the historical time lines, emphasising the interdependency of political and social systems and banking development. It provides a useful source of reference for students of economic history, regional studies (Central Asia, Russia, China and Mongolia) and for economists, bankers, researchers, historians, journalists, diplomats.

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MAKING THE KYRGYZ

Editors: Janie Wardle and Prajakti Kalra



This multiauthor volume comprises some of the papers presented at the seminar entitled: *Rhythms of the Past and Tunes for the Future: A Kyrgyz Epic* which was held at Jesus College, University of Cambridge in October 2016. The seminar was dedicated to the 25 year anniversary of independence of the Kyrgyz Republic. The volume presents an overview of the Kyrgyz Republic from many perspectives including history and politics, economy, development of heritage tourism, ethnic diversity, culture, beliefs, traditions, role of women, education.

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REFORMS IN KAZAKHSTAN: AN ANALYTICAL VIEW

Kenzhegali Sagadiyev

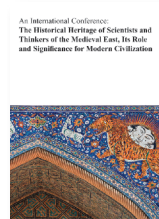


This volume comprises the scientific articles, speeches and interviews of Kenzhegali Sagadiyev, the famous scientist, public figure and statesman, doctor of economic sciences, professor, deputy of the Mazhilis of Parliament of Republic of Kazakhstan (III and IV convocations), and full member of National Academy of Sciences. This edition provides an overview of topical issues of development of Kazakhstan's economy in the context of the past twenty five years since the country gained independence and also the reflections of the author on various aspects of Kazakh society. Individual sections have been expanded to include additional text, photographs and commentaries with some reference to new developments, opportunities, trends and influences both nationally and internationally in politics, economy, trade, society, culture, education, science, technology, communication, urban and rural environment.

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AN INTERNATIONAL CONFERENCE: THE HISTORICAL HERITAGE OF SCIENTISTS AND THINKERS OF THE MEDIEVAL EAST, ITS ROLE AND SIGNIFICANCE FOR MODERN CIVILIZATION

Editors: Janie Wardle and Prajakti Kalra



With the initiative of the President of Republic of Uzbekistan, His Excellency Islam Karimov, the Academy of Science of Uzbekistan organized this international conference entitled *The Historical Heritage of the Scientists and Philosophers of the Medieval East, its Role and Importance for the Modern Civilization in Samarkand* on 15–16th May, 2014.

The aims and objectives of the conference were to provide a broad introduction and understanding of the significant contribution of the scientists and philosophers of the Medieval East, including Muhammad al-Khorezmi, Akhmad al-Farganiy, Abu Rayhan al-Biruni, Ibn Sino, Mirzo Ulugbek, and also the great masters of artistic literature and linguistics: Alisher Navoi, Mahmoud Zamakhshari, Zakhiriddin Babur, and an analysis and extensive discussion of their works and discoveries.

President Islam Karimov (1938–2016) attached great importance to the revival and preservation of the cultural and scientific heritage of Uzbekistan and he played a significant role in supporting academic and research activities. He gave the keynote address at this conference and the proceedings publication is dedicated to his memory.

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TITLES IN CENTRAL ASIAN STUDIES

PROCEEDINGS OF THE XIITH CONFERENCE OF THE EUROPEAN SOCIETY FOR CENTRAL ASIAN STUDIES Central Asia: A Maturing Field

Editors: A. Morrison and S. Saxena



The European Society for Central Asian Studies biennial conference was held at Churchill College, University of Cambridge, UK, in September 2011. The choice of the subject for the conference – Central Asia: A Maturing Field – reflects the appreciation of the qualitative changes in the academic vision of various aspects of the post-soviet development of the Central Asian region. It was hosted by Cambridge Central Asia Forum, Jesus College and Centre for Development Studies, University of Cambridge and Cambridge Kazakhstan Centre. The Chairman of All Party Parliamentary Group on Central Asia, Lord V. Waverley, the Chairman of CCAF, Siddharth Saxena and Chokan Laumulin from Kazakhstan Centre opened the conference and presented the objectives of the Central Asia Forum in strengthening the role and significance of this region in the international arena. The keynote speech was given by the noted scholar of Central Asia, Professor Edmund Bosworth. The presentations included the following subjects: Economy, geopolitics and international relations; History; Literature and language; Ethnic and religious identity; Cultural anthropology; Art, architecture, culture; Education reforms.

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Editors: Manoj Bhatia, Anupam Saxena, Upasana Singh, Richa Mishra, Sugandha Shanker



This volume presents the Proceedings of the fifth international conference entitled: Green, Growth, Globalization and Governance: Challenges and Opportunities; which was held at J.K. Lakshmi Pat University, Jaipur, India in 2017 and comprises a collection of research papers reflecting upon new ideas pertaining to sustainable growth. The conference provided a platform to discuss and share experiences of experts from various disciplines regarding the achievement of balance between growth, globalization and governance so that green (environment) can be utilised at an optimum level and maintained for the future.

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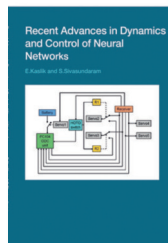
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