

Brief Newsletter from World Scientific October 2017

World Scientific Publishing Proudly Presents Publication Paying Tribute to 1999 Nobel Laureate *Ahmed Zewail*

Personal and Scientific Reminiscences

Tributes to Ahmed Zewail

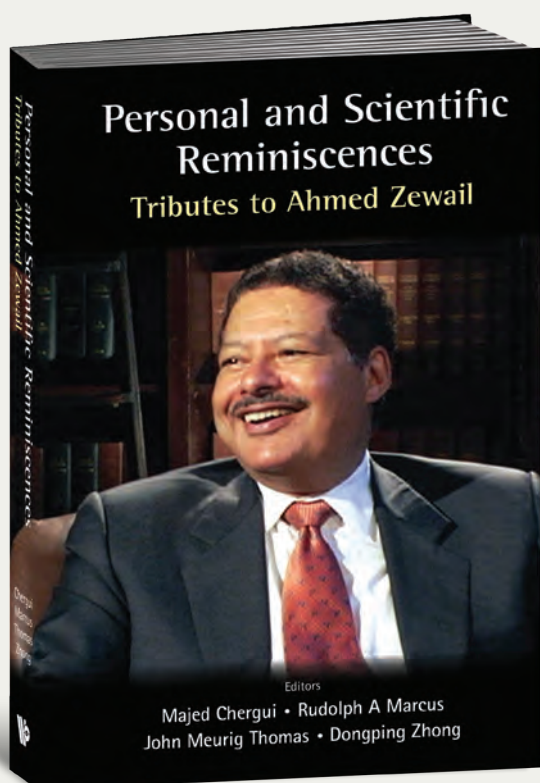
Edited by: **Majed Chergui** (*École Polytechnique Fédérale de Lausanne, Switzerland*),
Rudolph A Marcus (*Caltech*), **John Meurig Thomas** (*Cambridge*),
Dongping Zhong (*The Ohio State University, USA*)

This volume is a compilation of wonderful tributes to the late Ahmed Zewail (1946-2016), who is widely considered the 'Father of Femtochemistry'. Largely composed of testimonies by friends and relatives of Zewail and outstanding scientists from around the world who have worked with or were affiliated with the Nobel laureate, this book further embellishes his reputation as an icon in the field of physical chemistry and the father of ultra fast electron-based methods.

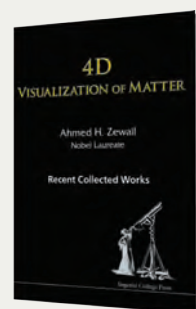
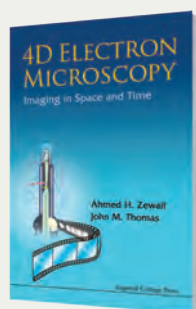
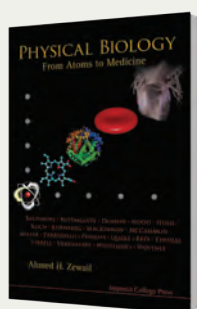
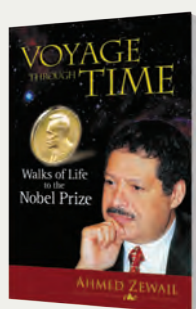
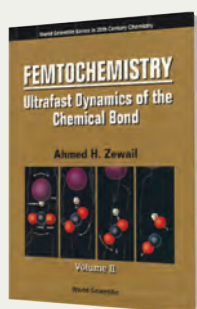
Individual contributions describe the author's own unique experience and personal relationship with Zewail and includes details of his scientific achievements and the stories surrounding them.

Personal and Scientific Reminiscences collects accounts from some of the most important figures in the physical and chemical sciences to give us unique insight into the world and work of one of the greatest scientists of our time. A book not to be missed by students, practitioners and researchers working with chemistry, physical chemistry and physics as well as readers with an interest in the history of science.

<http://www.worldscientific.com/worldscibooks/10.1142/Q0128>



Significant books by Professor Ahmed Zewail



PHOTOSYNTHESIS AND BIOENERGETICS

edited by **James Barber**
Imperial College London, UK

Alexander V Ruban
Queen Mary University of London, UK

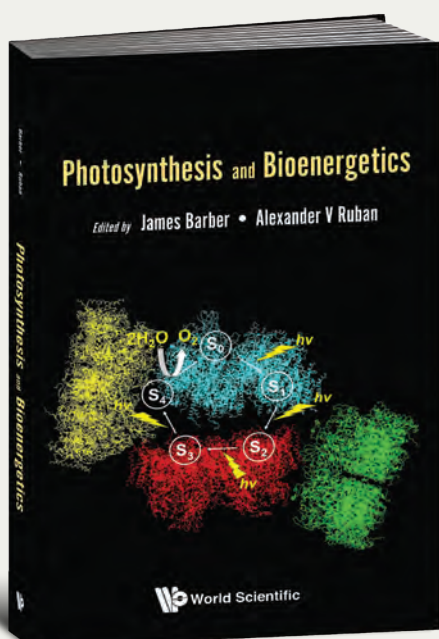


Contributions from leading scientists including Nobel Laureate Rudolph Marcus who created a theory of electron transport reactions

Dedicated to:



John Walker FRS **Leslie Dutton FRS** **Jan Anderson FRS**
Nobel Laureate



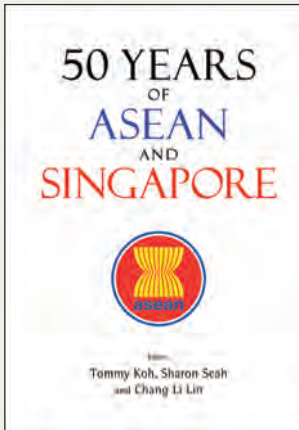
This book is a tribute to three outstanding scientists, Professors Jan Anderson FRS, Leslie Dutton FRS and John Walker FRS, Nobel Laureate. Covering some of the most recent advances in the fields of Bioenergetics and Photosynthesis, this book is a compilation of contributions from leading scientists actively involved in understanding the natural biological processes associated with the flow of energy in biological cells. The lectures found in this significant volume were presented at a meeting in March 2016 in Singapore to commemorate the outstanding research in this area.

The contents begin with the ideas, specially the contribution from Nobel Laureate Rudolph Marcus, who is well-known for creating the theory of electron transport reactions. This is followed by contributions of many others on various aspects of respiratory and photosynthetic transport chains as well as the dynamic regulation of light harvesting and electron transport events in oxygenic photosynthesis. The book is highly recommended to postgraduate students and researchers who are interested in various aspects of bioenergetic cycles.

<http://www.worldscientific.com/worldscibooks/10.1142/10713>



Company News



World Scientific Launches Book Commemorating ASEAN and Singapore Ties 50 Years of ASEAN and Singapore

Edited by: **Tommy Koh** (Ambassador-at-Large, Singapore), **Sharon Li-Lian Seah**, **Li Lin Chang**

At an event attended by Singapore's Minister for Foreign Affairs, Vivian Balakrishnan, World Scientific launched a book commemorating the history of ties between Singapore and the ASEAN community, *50 Years of ASEAN and Singapore*.

Edited by Ambassador-at-Large Professor Tommy Koh and co-editors, Sharon Seah and Chang Li Lin, this book brings together 46 essays written by Singaporeans who have played a part in the partnership between ASEAN and Singapore. The volume sheds light into the workings of ASEAN and acts as a valuable record of Singapore's contributions to ASEAN through the lens of diplomats, academics, civil society leaders and officials.

The contents of the book include the foundational documents of ASEAN, ASEAN's Challenges, ASEAN's landmark achievements, ASEAN's external relations, Making of the ASEAN Charter, ASEAN and Civil Society, Singaporeans in ASEAN, Post-Charter ASEAN, and ASEAN's future.

The event was made all the more memorable by students from various schools and embassy staff from ASEAN nations who attended it dressed in national costume and colours.

<http://www.worldscientific.com/worldscibooks/10.1142/10572>



From left: Chang Li Lin, Tommy Koh, Dr Vivian Balakrishnan, Sharon Seah

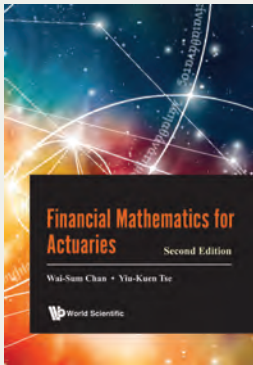
World Scientific Chairman Delivers Speech at Tsung-Dao Lee Institute



World Scientific Chairman Prof K. K. Phua delivers speech at Tsung-Dao Lee Institute, at Shanghai, China

Chairman and Editor-in-Chief of World Scientific Publishing as well as the Founding Director of the Institute of Advanced Studies at Nanyang Technological University, Professor Kok Khoo Phua was invited to deliver a speech at The Future of Physics and Astronomy Seminar and the Inauguration Ceremony for the Founding Director of the Tsung-Dao Lee Institute, in Shanghai, China, in September 2017. In his speech, Prof Phua expressed his hope for further collaboration with the Tsung-Dao Lee Institute in the future. 2004 Nobel laureate in Physics, Prof Frank Wilczek was appointed as the first director of the Tsung-Dao Lee Institute. Many of the biggest names in the science community attended this event, including Prof Frederick Duncan Michael Haldane (2016 Nobel laureate in Physics), Prof Lars Brink (Fellow of the Royal Swedish Academy of Sciences, former Chairman of the Nobel Prize Committee), Prof Antti Niemi (Fellow of the Finland Academy of Sciences), Prof Jian-Wei Pan (Fellow of the China Academy of Science, Vice President of the University of Science and Technology of China), Prof Shou-Cheng Zhang (Stanford University), Prof Shu-De Mao (Tsinghua University), Prof Henry Tye (Hong Kong University of Science and Technology) among others.

Notable Titles

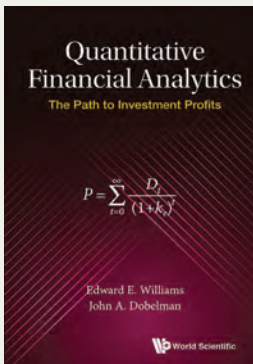


Financial Mathematics for Actuaries (2nd Edition)

By: **Wai-Sum Chan** (*The Chinese University of Hong Kong, Hong Kong*),
Yiu-Kuen Tse (*Singapore Management University, Singapore*)

Financial Mathematics for Actuaries is a textbook for students in actuarial science, quantitative finance, financial engineering and quantitative risk management and is designed for a one-semester undergraduate course. Discussions are linked to real financial market data, such as historical term structure, and traded financial securities. The topics discussed in this book are essential for actuarial science students. They are also useful for students in financial markets, investments and quantitative finance. Students preparing for examinations in financial mathematics with various professional actuarial bodies will also find this book useful for self-study. In this second edition, the recent additions in the learning objectives of the Society of Actuaries Exam FM have been covered.

<http://www.worldscientific.com/worldscibooks/10.1142/10564>



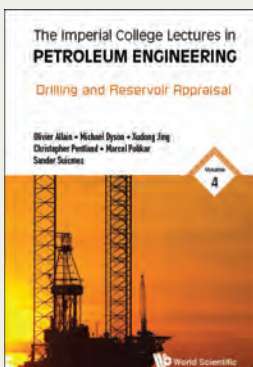
Quantitative Financial Analytics

The Path to Investment Profits

By: **Edward E Williams** (*Rice University, USA*), **John A Dobelman** (*Rice University, USA*)

This book provides a comprehensive treatment of the important aspects of investment theory, security analysis, and portfolio selection, with a quantitative emphasis not to be found in most other investment texts. The statistical analysis framework of markets and institutions in the book meets the need for advanced undergraduates and graduate students in quantitative disciplines, who wish to apply their craft to the world of investments. Professionals preparing for the CPA, CFA, and or CFP examinations will also benefit from a close scrutiny of the many problems following each chapter. The level of difficulty progresses through the textbook with more advanced treatment appearing in the latter sections of each chapter, and the last chapters of the volume.

<http://www.worldscientific.com/worldscibooks/10.1142/10555>

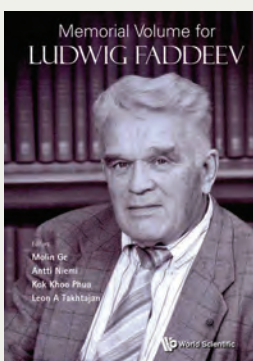


The Imperial College Lectures in Petroleum Engineering Volume 4: Drilling and Reservoir Appraisal

By: **Olivier Allain** (*KAPPA, France*), **Michael Dyson** (*Striatum Ltd, UK*), **Xudong Jing** (*Shell, Netherlands*),
Christopher Pentland (*Petroleum Development Oman, Oman*), **Marcel Polikar** (*Independent Consultant, Canada*),
Sander Suicmez (*Maersk Oil & Gas, Denmark*)

Covering the fundamentals of drilling and reservoir appraisal for petroleum, the book has three major sections. The first looks at the basic principles of well engineering in terms of planning, design and construction. The second section is focussed on drilling and core analysis, and the laboratory measurement of the physico-chemical properties of samples. Finally, in the third section production logging, an essential part of reservoir appraisal becomes the centre of focus. As part of the Imperial College Lectures in Petroleum Engineering, and based on a lecture series on the same topic, this volume provides the introductory information required for students of the earth sciences, petroleum engineering, engineering and geoscience.

<http://www.worldscientific.com/worldscibooks/10.1142/Q0115>



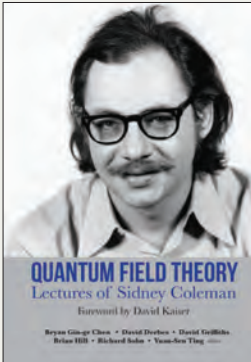
Upcoming Title

Memorial Volume for Ludvig Faddeev

Editors: **Molin Ge** (*Nankai University, China*), **Antti Niemi** (*Stockholm University, Sweden*),
Kok Khoo Phua (*Nanyang Technological University, Singapore*), **Leon A. Takhtajan** (*Stony Brook University, USA*)

Both a theoretical physicist and mathematician, Ludvig Faddeev is best known for "the Faddeev equations", the first mathematically well-posed formulation of the quantum-mechanical three-body problem which are foundational in few-body physics. Having made multiple seminal contributions to theoretical physics (Faddeev--Popov ghosts, Faddeev--Senjanovic quantization, Faddeev--Jackiw quantization among others), he was conferred numerous prizes and memberships of prestigious institutions in recognition of the importance of his work. These include the Dannie Heineman Prize, the Dirac Prize, the Max Planck Medal, the Shaw Prize and the Lomonosov Gold Medal among others.

Physics



Lectures of Sidney Coleman on Quantum Field Theory

Foreword by David Kaiser

Edited by: **Bryan Gin-ge Chen** (Leiden University, Netherlands), **David Derbes** (University of Chicago, USA), **David Griffiths** (Reed College, USA), **Brian Hill** (Saint Mary's College of California, USA), **Richard Sohn** (Kronos, Inc., Lowell, USA), **Yuan-Sen Ting** (Harvard)

Sidney Coleman was a physicist's physicist. He is largely unknown outside of the theoretical physics community, and known only by reputation to the younger generation. He was an unusually effective teacher, famed for his wit, his insight and his encyclopedic knowledge of the field to which he made many important contributions. The immediacy of Prof. Coleman's approach and his ability to present an argument simply without sacrificing rigor makes this book easy to read and ideal for the student. Part of the motivation in producing this book is to pass on the work of this outstanding physicist to later generations, a record of his teaching that he was too busy to leave himself.

Reviews

"Sidney Coleman was the master teacher of quantum field theory. All of us who knew him became his students and disciples. Sidney's legendary course remains fresh and bracing, because he chose his topics with a sure feel for the essential, and treated them with elegant economy."

Frank Wilczek

Nobel Laureate in Physics 2004

"When stumped on some physics, I often still ask myself, even after nearly forty years, 'What would Sidney say?' His lectures and their transcriptions were models of clarity and charm. The subjects remain crucial to frontier physics. This volume is a treasure."

Hugh David Politzer

Nobel Laureate in Physics 2004

<http://www.worldscientific.com/worldscibooks/10.1142/9371>



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World Scientific's German Office Makes Its Presence Felt In the Industry

The German office of World Scientific Publishing was formed in 2015 and is located in the heart of Munich, next to Munich's two biggest and most prestigious Universities: the Ludwig-Maximilian University and the Technical University of Munich. Since the opening of the Munich branch, World Scientific further expanded its collaboration with German universities, research institutions and important German scientific organisations and increased sales revenue in Germany for World Scientific by over 30%.

World Scientific's German representatives were most recently seen at the Joint Annual Meeting of Swiss Physical Society and Austrian Physical Society in Genève, Switzerland; the 19th International Congress of the ÖMG and Annual DMV Meeting in Salzburg, Austria; and the 11th Open-Access-Days conference in Dresden.

Significant Events Hosted and Attended by World Scientific's German Office

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2015



Conference: Challenges in Derivatives Markets: Fixed income modeling, valuation adjustments, risk management, and regulation at TUM, Mar. 30 to Apr. 01, 2015
Supported by the KPMG Center of Excellence in Risk Management

2016

June



Book Launch of Goethe's "Exposure of Newton's Theory" A Polemic on Newton's Theory of Light and Colour by Michael Duck, Michael Petry

September



The 66th Annual Meeting of the Austrian Physical Society at the Vienna University in Vienna, Austria, on September 26 to 29, 2016.

November



Talk by Dr. Jan-Thorsten Schantz, editor of the World Scientific book series "Current Therapies in Regenerative Medicine" at Lehmanns Book Shop in Munich, Germany

2017

April



Conference: Innovations in Insurance, Risk- and Asset Management at TUM (5. – 7. April 2017)
Supported by the KPMG Center of Excellence in Risk Management

August



Joint Annual Meeting of Swiss Physical Society and Austrian Physical Society and ÖPG, 21 - 25 August 2017 in Genève

September



19th International Congress of the Austrian Mathematical Society (ÖMG) and Annual Meeting of the German Mathematical Society (DMV) from September 11-15, 2017 in Salzburg.



World Scientific participated in the 21st German Conference of Women in Physics (Deutsche Physikerinnentagung, DPT) which took place September 28 - October 1, 2017, in Ilmenau.

Newly launched in June 2017

 OPEN ACCESS JOURNAL

**MOLECULAR
FRONTIERS**
JOURNAL



<http://www.worldscientific.com/mfj>



The Molecular Frontiers Journal fosters exploration and discovery, helping to realize science's promise. Connecting scientists from a multitude of disciplines around matters of global significance, to encourage new perspectives on scientific quandaries that can lead to breakthroughs.

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Molecular Frontiers Foundation,
Chalmers University of
Technology, Sweden

Managing Editor

Dr. Lorie Karnath

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Molecular Frontiers Foundation,
Jason Learning
Germany

Recognizing the need to identify and advance the important messages of science, a number of individuals gathered in Sweden to form what became known as the Molecular Frontiers Foundation. Since 2006, this organization operates as a non-profit, hosted by the Royal Swedish Academy of Sciences. Its Scientific Advisory Board, including many Nobel Prize laureates, represents expertise from a wide range of scientific disciplines. Over the past ten years the MFF has been creating symposia that serve to identify and consider scientific initiatives of global import. This sharing of discovery, serves to increase accessibility to, as well as foster the understanding of new scientific developments, while serving to inspire audiences of all ages around the world.

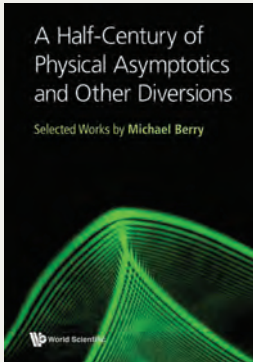
The mission of MFF is to raise the appreciation and access to molecular science, hoping to cultivate interest among the general public with a specific focus on stimulating an interest in the sciences in young people.

This Journal is in line with the mission of MFF. Its inaugural issues compile a series of presentations delivered by some of the top scientists in the world during the MFF conferences over the years.

Editorial Board

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Reviews



A Half-Century of Physical Asymptotics and Other Diversions

Selected Works by Michael Berry

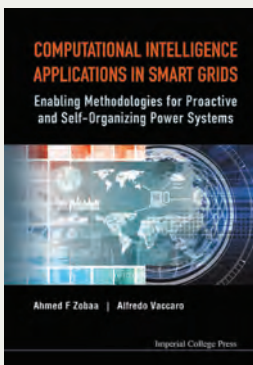
By (author): **Michael Berry** (University of Bristol, UK)

“Michael Berry is a magician of mathematical physics who possesses remarkable powers for teaching good behavior to ill-behaved mathematical functions. In addition to his powerful scientific imagination, Berry has gifts for writing gracefully and telling fascinating tales.

Among the pleasures of reading Berry’s papers are the fascinating historical asides that illuminate the paths into new landscapes of physics. For both expert readers and not-so-expert readers, Berry’s book is filled with treasures.”

Daniel Kleppner
MIT

<http://www.worldscientific.com/worldscibooks/10.1142/10480>



Computational Intelligence Applications in Smart Grids

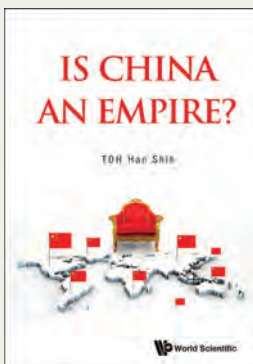
Enabling Methodologies for Proactive and Self-Organizing Power Systems

Edited by: **Ahmed F Zobaa** (Brunel University, UK), **Alfredo Vaccaro** (University of Sannio, Italy)

“Since it examines many of the current key issues associated with the deployment of large-scale SG (smart grid), engineers, computer scientists, and educators working in SG technologies would all benefit from this book. ”

IEEE Electrical Insulation Magazine
Sep/Oct Vol 33 No 5

<http://www.worldscientific.com/worldscibooks/10.1142/p976>



Is China an Empire?

By: **Han Shih Toh**

“The book dabbles in the geopolitical implications, but its real value is as a thorough chronicle of this second phase of China’s economic re-emergence.”

David Plott
Global Asia

<http://www.worldscientific.com/worldscibooks/10.1142/9554>



Advanced Series on Directions in High Energy Physics: Volume 27

Technology Meets Research

60 Years of CERN Technology: Selected Highlights

Edited by: **Christian Fabjan** (Vienna University of Technology, Austria & Austrian Academy of Sciences, Austria),

Thomas Taylor (CERN, Switzerland), **Daniel Treille** (CERN, Switzerland), **Horst Wenninger** (CERN, Switzerland)

“The book clearly explains the context in which these different technological innovations appeared. It is a very well told story of cutting edge developments in mechanics, materials, electronics and data science to unravel the secrets of Nature.

This excellent book, very well documented and as self-contained as possible, should interest readers with different backgrounds.”

Ralph Eichler
ETH Zürich

<http://www.worldscientific.com/worldscibooks/10.1142/9921>

