

Brief Newsletter from World Scientific

April 2017

Nobel Laureates Discuss the Late Kerson Huang World Scientific Announces Memorial Volume for Prof Kerson Huang



World Scientific Publishing has announced it will issue a memorial volume dedicated to Prof Huang who passed away in September 2016 at the age of 88. The volume features recollections of Prof Huang by former colleagues and students, including Profs Chen-Ning Yang and Samuel Ting. The book also features reflections on Prof Huang's achievements in various branches of physics.

A well-respected theoretical physicist, who was versed in both English and Chinese literature, Prof Huang was a fellow at IAS, Princeton from 1955–1957 before joining the faculty of MIT. There he remained until his retirement from teaching in 1999. His research in theoretical physics included work on Bose–Einstein condensation and quantum field theory. In his long and illustrious career, Prof Huang has worked with many prominent physicists, including Nobel laureates Chen-Ning Yang, Tsung-Dao Lee and Steven Weinberg. In recent years, Prof Huang was a visiting professor at Nanyang Technological University in Singapore where he worked on both biophysics and quantum cosmology.

The memorable volume celebrates Prof Huang's numerous contributions and the impact he had on students and fellow academics.

I have fond memories of the years 1955-1957 when Kerson spent two years at the IAS, during which we had a successful collaboration on the problem of dilute hard sphere Bosons.

C.N. Yang

Nobel Prize in Physics 1957

Kerson Huang was an outstanding theoretical physicist. I first saw his name in Physical Review at the Physics Department Library of the University of Michigan when I was an undergraduate there.

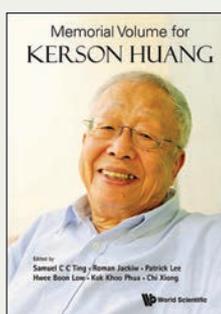
Samuel Ting

Nobel Prize in Physics 1976

I knew Kerson (Professor Huang in those days) many years before he knew me. I was a student in several of his classes while I was an undergrad and graduate student at MIT in the late 1960's ...

Patrick Lee

MIT



Memorial Volume for Kerson Huang

Edited by: **Kok Khoo Phua** (NTU, Singapore), **Hwee Boon Low** (NTU, Singapore), **Chi Xiong** (NTU, Singapore)

<http://www.worldscientific.com/worldscibooks/10.1142/10376>



Forthcoming Titles

Memorial Volume Celebrating WSPC author Mildred Dresselhaus 'Queen of Carbon' to be issued

To celebrate the life and work of the late Mildred Dresselhaus, World Scientific plans to publish a memorial volume for her later this year. Professor emerita at MIT, her research into the fundamental properties of carbon helped earn the late Prof Dresselhaus the nickname, 'Queen of Carbon'. The volume will be edited by Prof Gang Chen, Carl Richard Soderberg Professor of Power Engineering at MIT, and Prof Nai-Chang Yeh from Caltech.

Meanwhile, readers are encouraged to read Prof Dresselhaus's bestselling publication with World Scientific, Physical Properties of Carbon Nanotubes, an introductory textbook on carbon nanotubes.

Forthcoming Memorial Volume for Professor Mildred Dresselhaus "Queen of Carbon Science"



edited by
Gang CHEN (MIT) &
Nai-Chang Yeh (Caltech)

Physical Properties of Carbon Nanotubes

By: **R Saito** (University of Electro-Communications, Tokyo),
G Dresselhaus & **M S Dresselhaus** (MIT)

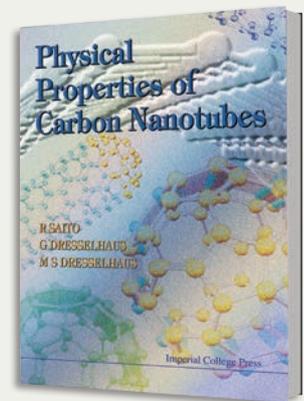
"The book is a well organized systematic treatise that should be enjoyed by any researcher in the field as well as by graduate students. Theories and experiments are truly organically linked in the text and this is its unique feature."

Fullerene Science & Technology

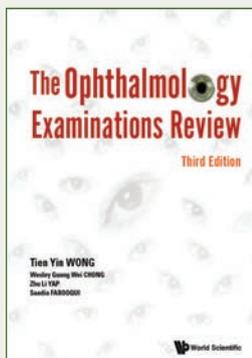
"Those involved in the research of carbon nanotubes will find this book useful for understanding the basic properties of carbon tube materials."

IEEE Electrical Insulation Magazine

This is an introductory textbook for graduate students and researchers from various fields of science who wish to learn about carbon nanotubes. The field is still at an early stage, and progress continues at a rapid rate. This book focuses on the basic principles behind the physical properties and gives the background necessary to understand the recent developments. Some useful computational source codes which generate coordinates for carbon nanotubes are also included in the appendix.



<http://www.worldscientific.com/worldscibooks/10.1142/P080>



The Ophthalmology Examinations Review (3rd Edition)

By: **Tien Yin Wong** (Singapore National Eye Centre, Singapore), **Wesley Guang Wei Chong** (Singapore National Eye Centre, Singapore), **Zhu Li Yap** (Singapore National Eye Centre, Singapore), **Saadia Farooqui** (Singapore National Eye Centre, Singapore)

The third edition of an important ophthalmological reference, the book provides a broad review for final year ophthalmology residents and trainees taking specialist ophthalmology examinations. The book deals primarily with key facts and topics that are important from an examination perspective. This volume will help the resident organize and synthesize knowledge acquired from various other sources or textbooks. While not meant to replace standard textbooks, enough information is contained within the book to serve as the main revision text nearer the exams.

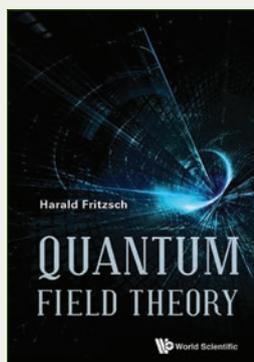
In this new edition, topics such as the new understanding of disease mechanisms, new investigations (e.g. OCT), and new procedures and treatment (e.g. use of anti-vascular endothelial growth factors, new refractive surgical techniques, new corneal transplant) are covered.

A must read for final year ophthalmology residents and trainees for both British postgraduate exams and American Boards exams as well as junior residents.

<http://www.worldscientific.com/worldscibooks/10.1142/10474>



New Notable Titles



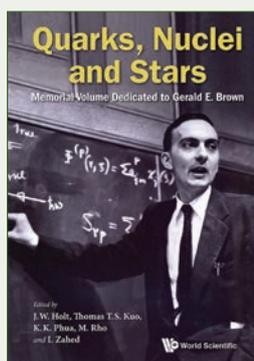
Quantum Field Theory

By: **Harald Fritzsch** (*Ludwig Maximilian University of Munich, Germany*)

Curious about what our universe is composed of? This forthcoming title discusses the dynamics of electrons and quarks as described by the Standard Model of particle physics, which itself is based on quantum field theories. Using a general framework of quantum field theories, the volume gives readers a guided tour of classical mechanics and relativistic mechanics. This is followed by a discussion of classical scalar fields, electrodynamics and quantum mechanics.

Also in focus in this volume are gauge theories of quantum electrodynamics (QED) and quantum chromodynamics (QCD), based on the gauge group $SU(3)$. Concluding the volume is a discussion of the Grand Unification where strong and the electroweak interactions are unified at very high energies. Essential reading for graduate students and researchers interested in quantum field theory and its application in Standard Model and Grand Unification.

<http://www.worldscientific.com/worldscibooks/10.1142/10081>



Quarks, Nuclei and Stars

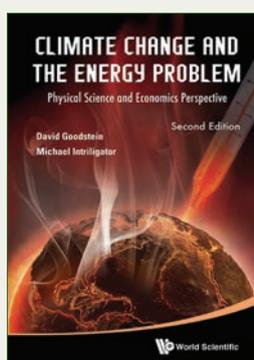
Memorial Volume Dedicated to Gerald E Brown

Edited by: **J W Holt** (*Texas A&M University, USA*), **Thomas T S Kuo** (*Stony Brook University, USA*), **K K Phua** (*NTU, Singapore*), **M Rho** (*CEA Saclay, France*), **I Zahed** (*Stony Brook University, USA*)

A memorial volume is dedicated to physicist Gerald 'Gerry' E Brown (1926–2013), an inspiring father figure for generations of theoretical nuclear physicists, the book covers a wide range of topics in nuclear physics. The list of topics include nuclear structure, two- and three-body nuclear forces, strangeness nuclear physics, chiral symmetry, hadrons in dense medium, hidden local symmetry, heavy quark symmetry, cosmic neutrinos, nuclear double-beta decay, neutron stars, gravitational waves, renormalization group methods, exotic nuclei, electron ion collider (EIC), and much more.

Written mostly by Gerry's former students and collaborators, this volume provides readers a window into Gerry's personal legacy and humanity. This book captures vivid recollections of Gerry at Stony Brook, Princeton and Copenhagen, and conveys both the legend's sense of humour and his intuitive style.

<http://www.worldscientific.com/worldscibooks/10.1142/10464>



Climate Change and the Energy Problem

Physical Science and Economics Perspective (2nd Edition)

By: **David Goodstein** (*Caltech*), **Michael Intriligator**

This important second edition compendium deals with primary world problems of global warming and energy crisis. In alternating chapters, it lays out the nature of the two interrelated problems, and specifies the various economic considerations.

Written by world-renowned experts in their respective fields, the volume presents unique perspectives: the nature of the problems faced and a discussion of various scenarios and solutions. A must read for all who are concerned about climate change.

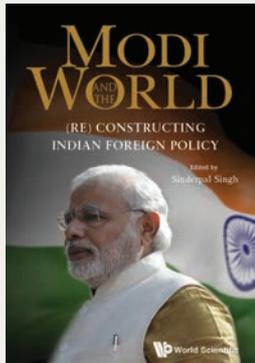
<http://www.worldscientific.com/worldscibooks/10.1142/10400>



New Social Science Titles

Modi and the World (Re) Constructing Indian Foreign Policy

Edited by: **Sinderpal Singh**
(S Rajaratnam School of International Studies, NTU, Singapore)



From pre-election fever to controversial post-election policies, Prime Minister Narendra Modi has been the focus of much attention and speculation. Having expended a significant amount of time, energy and political capital in conducting India's engagement with the outside world since taking office in May 2014, Modi's foreign policy has been analysed endlessly by a section of Indian strategists and foreign policy watchers hoping to determine a 'Modi Doctrine' behind it all.

This edited volume attempts to interrogate the extent to which Indian foreign policy, under Modi, has undergone significant change and the extent to which this manifests itself as a new doctrine in Indian foreign policy. Individual chapters cover key bilateral relationships (the United States, China, Australia and Pakistan) as well as broader regional relationships (South Asia and the Indian Ocean Region) and specific themes (such as economic diplomacy).

A must read for researchers, academics and anyone interested in Indian politics and international relations.

<http://www.worldscientific.com/worldscibooks/10.1142/10348>



The Singapore Blue Chips The Rewards & Risks of Investing in Singapore's Largest Corporates

By: **Nandini Vijayaraghavan, Umesh Desai**
(Thomson Reuters, Hong Kong)



A pioneering and comprehensive work, this book puts the spotlight on 22 of Singapore's largest corporates. This is the first book that provides a quick snapshot of Singapore's large market capitalisation corporates as investment propositions, and is a timely tribute to the nation's 50 years of independence and development.

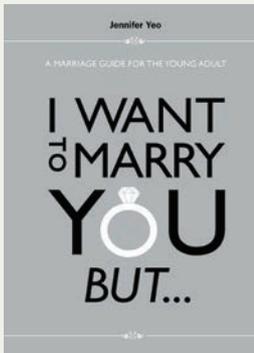
Written for finance professionals and students as well as readers with a general interest in business, investing and finance, each chapter of this book is dedicated to one company and delves into its attractiveness as an investment proposition, the associated investment risks and the company's prospects as at end-2016.

<http://www.worldscientific.com/worldscibooks/10.1142/9960>



Company News

WSPC launches legal guide to marriage in Singapore



I Want to Marry You But ...

A Marriage Guide for the Young Adult

By : **Jennifer Yeo**

From left to right: Guest of honour, Mrs Betty Wu-Lee; former Singapore Foreign Minister, Mr George Yeo; and author Mrs Jennifer Yeo

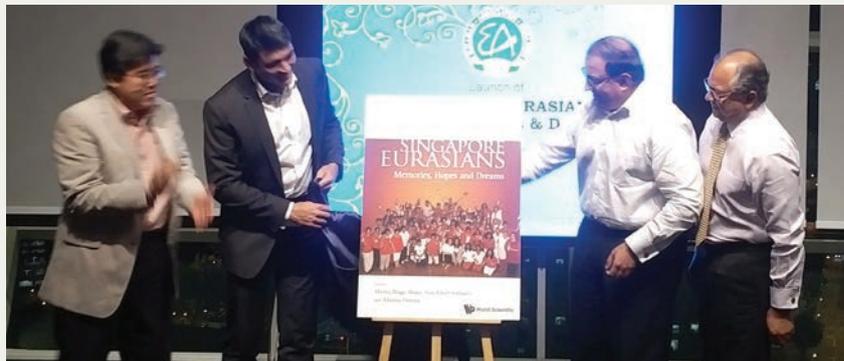
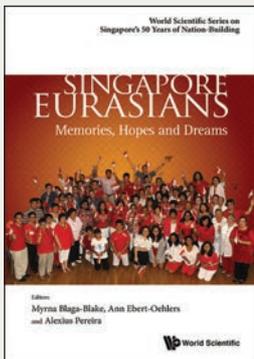
Written from the perspective of a seasoned practitioner of Singapore law, Jennifer Yeo, founder and senior partner of the law firm Yeo- Leong and Peh LLC, the book takes readers through laws governing marriage and divorce. In addition, it also provides coverage of laws relating to the adoption of children and contemporary issues. The launch event at the National Library Building was attended by 150 guests, which included the author's family and friends as well as readers.

A book which simplifies the labyrinth of legislation and case law and seeks to allay fears among young adults considering marriage. By encouraging an understanding of what marriage entails and flagging out possible difficulties readers may encounter during the course of their relationships, the volume encourages readers to be aware of the potential pitfalls often ignored when planning for marriage. Readers interested in obtaining a copy of the book, are advised to access the following link

<http://www.worldscientific.com/worldscibooks/10.1142/8509>



World Scientific Completes SG50 Series with Launch of Book on Eurasian Community



From left: Alexius Pereira (Editor of the book), Bennett Theseira (The Eurasian Association President), S Iswaran (Minister for Trade and Industry, Eurasian community's representative in Cabinet, GOH)

World Scientific launched "Singapore Eurasians - Memories, Hopes and Dreams" on 15 February 2017 in celebration of the Eurasian community in Singapore. The last instalment in the international publisher's SG50 series, the book offers insights into Singapore's Eurasian community, which has played an important role in Singapore's nation-building. A definitive record of Singapore's Eurasian history and heritage, the book aims to educate younger generations of Eurasians about their roots, the community's achievements and its collective hopes and dreams for the future.

Minister S Iswaran, who was Guest of Honour at the launch, noted that the Eurasian community was a "living tribute to openness and diversity" which had "long made Singapore special", and reminded the 100 strong audience that "openness and diversity must remain a vital part of our core values as a society". He praised the book for doing "an excellent job of capturing the story of the Eurasian community ... through its vivid personal and family recollections, captures the essence of who Eurasians are". He noted that these stories enabled the community, especially the younger generation, to "appreciate and take pride in their cultural heritage, as well as anchor a deep sense of identity."

<http://www.worldscientific.com/worldscibooks/10.1142/10031>

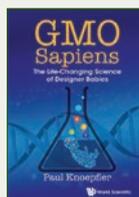


Company News

Bestselling WSPC titles to be made available in different languages

World Scientific Publishing has sold the translation rights for several of its bestsellers in a continued effort to make excellent publications available to the academic community and the reading public.

The list of titles includes:



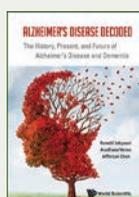
GMO Sapiens **The Life-Changing Science of Designer Babies**

By: **Paul Knoepfler** (*UC Davis*)

<http://www.worldscientific.com/worldscibooks/10.1142/9542>

Translated into German by Springer

Expected publication date: mid 2018



Alzheimer's Disease Decoded

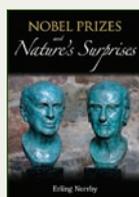
The History, Present, and Future of Alzheimer's Disease and Dementia

By: **Ronald Sahyouni** (*UC Irvine*), **Aradhana Verma** (*UC San Francisco*), **Jefferson Chen** (*UC Irvine*)

<http://www.worldscientific.com/worldscibooks/10.1142/10023>

Translated into Dutch by New Scientist Veen Media

Expected publication date: mid 2018



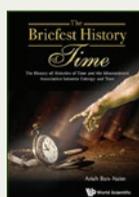
Nobel Prizes and Nature's Surprises

By: **Erling Norrby** (*The Royal Swedish Academy of Sciences, Sweden*)

<http://www.worldscientific.com/worldscibooks/10.1142/8881>

Translated into Japanese by Kagaku Dozin

Expected publication date: end of 2017 to early 2018



The Briefest History of Time

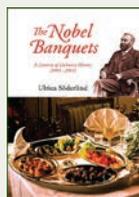
The History of Histories of Time and the Misconstrued Association between Entropy and Time

By: **Arieh Ben-Naim** (*The Hebrew University of Jerusalem, Israel*)

<http://www.worldscientific.com/worldscibooks/10.1142/9943>

Translated into Korean by Yekyong Publishing

Expected publication date: end of 2017 to early 2018



The Nobel Banquets

A Century of Culinary History (1901–2001)

By: **Ulrica Söderlind** (*Stockholm University, Sweden*)

<http://www.worldscientific.com/worldscibooks/10.1142/7789>

Translated into Chinese by SDX Joint Publishing Co

Expected publication date: end of 2017 to early 2018



Random Fields

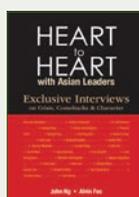
Analysis and Synthesis (Revised and Expanded New Edition)

By: **Erik Vanmarcke** (*Princeton University, USA*)

<http://www.worldscientific.com/worldscibooks/10.1142/5807>

Translated into Chinese by Higher Education Press

Expected publication date: early 2018



Heart to Heart with Asian Leaders

Exclusive Interviews on Crisis, Comebacks & Character

Edited by: **John Swee Kheng Ng** (*Meta Consulting Pte Ltd, Singapore*), **Alvin Jong Peng Foo**

<http://www.worldscientific.com/worldscibooks/10.1142/9540>

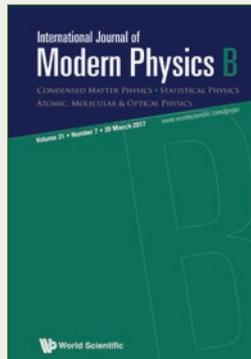
Translated into Vietnamese by Alpha Books

Expected publication date: mid 2018



Company News

Special issue on Topological Phase Transitions and New Developments to be published by IJMPB



In recent years, ideas from topology have rapidly driven theoretical and experimental efforts into the study of new exotic materials. Topological phase transitions involving vortices that appear at critical temperatures in thin superconductors, superfluids or magnets have attracted much attention.

World Scientific's International Journal of Modern Physics B (IJMPB) will publish selected papers from the Workshop on Topological Phase Transitions and New Developments held in June 2017 at Nanyang Technological University, Singapore. Distinguished speakers at the workshop include two of the 2016 Nobel laureates in Physics, Duncan Haldane and John Michael Kosterlitz.

World Scientific Book Series Selected for Inclusion in SCOPUS

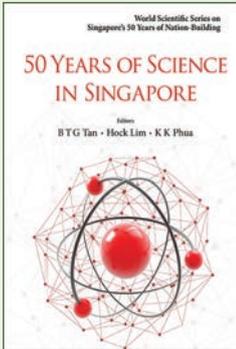
World Scientific's Series on Knots and Everything is the latest book series that has been selected for indexing by SCOPUS. A series that explores all facets of knot theory, the existing 59 volumes expand on the reach of knots in subjects as diverse as physics, mathematics, logic, linguistics, philosophy and biology. Other than theoretical discussion, the books in the series also touch on practical experience.

At the helm is series editor, Louis Kauffman, a prominent leader in Knot Theory. Achievements in his illustrious career include a state sum model for the Alexander–Conway Polynomial, the bracket state sum model for the Jones polynomial, the Kauffman polynomial and Virtual Knot Theory.

The Series on Knots and Everything joins a list of outstanding publications by World Scientific which are included on the SCOPUS index. The most recent additions to the index include:

- **World Scientific Series on Asia-Pacific Weather and Climate**
<http://www.worldscientific.com/series/wssapwc>
- **Series on Concrete and Applicable Mathematics**
<http://www.worldscientific.com/series/scam>
- **Computational and Experimental Methods in Structures**
<http://www.worldscientific.com/series/cems>
- **Series on Number Theory and Its Applications**
<http://www.worldscientific.com/series/sntia>
- **Series on Knots and Everything**
<http://www.worldscientific.com/series/skae>
- **Interdisciplinary Mathematical Sciences**
<http://www.worldscientific.com/series/ims>

Book Reviews



World Scientific Series on Singapore's 50 Years of Nation-Building 50 Years of Science in Singapore

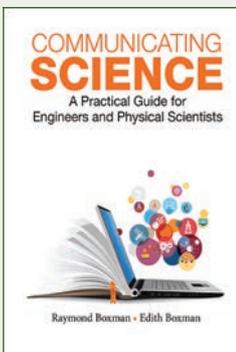
Edited by: **B T G Tan** (NUS, Singapore), **Hock Lim** (NUS, Singapore), **K K Phua** (Institute of Advanced Studies, NTU, Singapore)

"The writing of the 50 YEARS OF SCIENCE IN SINGAPORE has been a monumental task with three editors and more than 50 writers working tirelessly over two years. Each of the 30 chapters contain stories of daring to be different from the current way of doing things and daring to go beyond world class. The human spirit of daring and enterprise and the determination to go beyond world class show throughout the book."

Lui Pao Chuen

Former Chief Defence Scientist and Special Advisor to National Research Foundation, Singapore

<http://www.worldscientific.com/worldscibooks/10.1142/10057>



Communicating Science A Practical Guide for Engineers and Physical Scientists

By: **Raymond Boxman** (Tel Aviv University, Israel), **Edith Boxman**

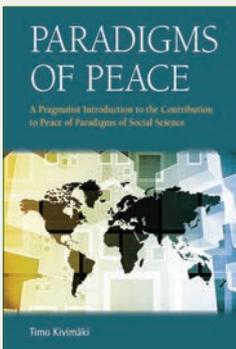
"The book, written from years of experience publishing and teaching, is a delightful, informative, easy read. Taking the provided lessons to heart by writers of scientific publications, journals articles or other formats, could save countless hours and frustration for writers and reviewers."

I highly recommend this book to all who are new to publications or to those who feel that improvement of their skills could be possible."

André Anders

Editor-in-Chief of Journal of Applied Physics Senior Scientist, Lawrence Berkeley National Laboratory

<http://www.worldscientific.com/worldscibooks/10.1142/10145>



Paradigms of Peace A Pragmatist Introduction to the Contribution to Peace of Paradigms of Social Science

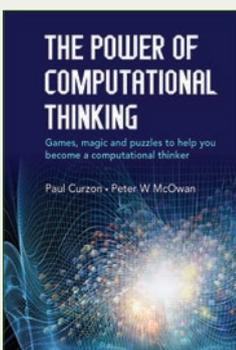
By: **Timo Kivimäki** (University of Bath, UK)

"Paradigms of Peace is a compelling read, grounded in practice and experience-based insight as well as epistemological inquiry. The book opens with an exploration of basic tenets of pragmatism, preparing the ground for its later consideration of constructivist pragmatism and highlighting observations on the 'false gods' of peace research."

Judith Large

University of Kent (CARC), Journal of Peace Research

<http://www.worldscientific.com/worldscibooks/10.1142/p1080>



The Power of Computational Thinking Games, Magic and Puzzles to Help You Become a Computational Thinker

By: **Paul Curzon** (Queen Mary University of London, UK), **Peter W McOwan** (Queen Mary University of London, UK)

"The book is not on my to-buy list because I've already purloined a copy but it certainly should be on the reading lists of teachers of computing. It gives an insight into our curriculum mantra, 'to use computational thinking... to understand and change the world'."

John Woollard

CAS Tenderfoot coordinator, CAS Assessment wg chair, BCS Certificate assessor

<http://www.worldscientific.com/worldscibooks/10.1142/q0054>

