

PREFACE

I am delighted to introduce the latest volume of the Hong Kong Chinese Materia Medica Standards (HKCMMS) publication containing reference standards for 60 Chinese Materia Medica (CMM).

Promotion and pursuit of health is one of the primary global endeavours. The growing increase in use of CMM and rising importance of traditional medicine(TM) practice in the health system of countries around the world make the safety and quality control of herbal medicines central to the agenda of health authorities worldwide. In response to these challenges, the Department of Health, Hong Kong SAR instituted the HKCMMS Project in 2002 to develop reference standards on the CMM which are commonly used, of international importance and with good economic values.

When we first embarked on the Project in 2002, the biggest challenge was to develop a series of technical guidelines and methodology for guiding a robust and scientifically-rigour research. With no prior experience of standard setting work, the research teams have been working hard ever since to bring the research work to fruition. The first volume of the HKCMMS covering 8 CMM was published in 2005. During the ensuing years, there has been a huge leap forward in our research efforts. Another four volumes of HKCMMS covering 132 CMM were published with tremendous support of six local universities as our research partners.

This current volume marks an important milestone for the HKCMMS Project – attainment of the goal by the Chief Executive of the Hong Kong SAR Government at his 2009/10 Policy Address to develop the HKCMMS for 200 CMM. Our achievement is even more important in the international context that both of the recently released the World Health Organization (WHO) Regional Strategy for Traditional Medicine in the Western Medicine in the Western Pacific (2011-2020) and the WHO Traditional Medicine Strategy (2014-2023) recognise the setting and adoption of standards for TM to ensure their quality and safety.

Over the years, the HKCMMS is gaining popularity as reference standards for Chinese medicine traders and practitioners, academicians and laboratories in the field of Chinese medicine testing and certification alike. The research results generated definitely would help to contribute to the health of members of the public, as well as to facilitate the development of the testing and certification industry in Hong Kong.

The standard-setting endeavours of HKCMMS has been a valuable experience. As the WHO Collaborating Centre for Traditional Medicine, the Department of Health will continue to share our knowledge and experience on traditional medicines with other countries and assist in their capacity building efforts. An example is a regional training workshop which we have co-organized with the WHO in 2013.

Neither the research work nor this volume of HKCMMS could have been achieved without our International Advisory Board (hereinafter called “the Board”) comprising eminent local and overseas TM experts. Thanks are due to members of the Board who share our vision and rigorously and generously shepherd the research project. I am also grateful to the contributions made by the Government Laboratory of the HKSAR.

This publication, like our previous five volumes, is a true celebration of the research collaboration venture we have nurtured and forged with research institutions in Hong Kong and beyond. My heartfelt appreciation go to members of the research teams of the Chinese University of Hong Kong, the City University of Hong Kong, the Hong Kong Baptist University, the Hong Kong Polytechnic University, the Hong Kong University of Science and Technology, the University of Hong Kong and Taiwan’s China Medical University.

Finally, I would also like to offer my deepest thanks and appreciation to the China Food and Drug Administration, State Administration of Traditional Chinese Medicine, the National Institutes for Food and Drug Control, and the Chinese Pharmacopoeia Commission of the People’s Republic of China for their invaluable advice on the development of HKCMMS and their permission to adopt information from the Chinese Pharmacopoeia.

Dr CHAN Hon-ye, Constance, *JP*
Director of Health

Members of the International Advisory Board

- | | |
|---------------------------------|---|
| Prof. Dr. Rudolf BAUER | Professor in Pharmacognosy, Head, Institute of Pharmaceutical Sciences, Department of Pharmacognosy, TCM Research Center Graz, Karl-Franzens-Universitaet Graz, Austria |
| Prof. David BRIGGS | Adjunct Professor, Centre for Complementary Medicine Research, University of Western Sydney, Australia |
| Prof. Nuntavan BUNYAPRAPHATSARA | Professor in Pharmacognosy, Faculty of Pharmacy, Mahidol University, Thailand; and Consultant on medicinal plants at The Thailand Research Fund |
| Dr. Constance CHAN | Director of Health, Hong Kong SAR (Chairman of IAB) |
| Prof. Kelvin K.C. CHAN | Joint Chair Professor of Traditional Chinese Medicine, Centre for Complementary Medicine Research, University of Western Sydney and Herbal Medicines Group, Faculty of Pharmacy, University of Sydney, Sydney, New South Wales, Australia |
| Dr. Peter CHAN | Director General, Health Evaluation Directorate, Pest Management Regulatory Agency, Health Canada, Canada |
| Prof. Chun-tao CHE | Norman R. Farnsworth Professor of Pharmacognosy; and Director, WHO Collaborating Center for Traditional Medicine, College of Pharmacy, University of Illinois at Chicago, Chicago, U.S.A. |
| Prof. Harry H.S. FONG | Professor Emeritus of Pharmacognosy, Department of Medicinal Chemistry and Pharmacognosy; and WHO Collaborating Center for Traditional Medicine; College of Pharmacy, University of Illinois at Chicago, Chicago, U.S.A. |
| Prof. em. Dr. Gerhard FRANZ | Chairman of the European TCM-Working Party, EDQM-Strasbourg, France; and Department of Pharmacy, University of Regensburg, Regensburg, Germany |
| Dr. Yukihiro GODA | Head, Division of Drugs, National Institute of Health Sciences, Japan |

- Dr. Cindy LAI Deputy Director of Health, Hong Kong SAR
- Dr. Chau-ming LAU Government Chemist, Government Laboratory, Hong Kong SAR
- Dr. Gerard LEE Member, British Pharmacopoeia Commission,
United Kingdom
- Prof. Rui-chao LIN Professor, Dean of School of Chinese Materia Medica,
Beijing University of Chinese Medicine
- Prof. Zhi-xiang SHEN M. D. President of China Association of Research and Development of
Traditional Chinese Medicine, The People's Republic of China
- Dr. Xiao-pin WANG M.D. Director General, Office of Hong Kong, Macau and Taiwan Affairs,
Department of International Cooperation,
State Administration of Traditional Chinese Medicine,
The People's Republic of China
- Prof. Pei-gen XIAO Honorary Director, Institute of Medicinal Plant Development
(IMPLAD);
Director, Research Centre on Utilization and Conservation of
Chinese Materia Medica,
State Administration of Traditional Chinese Medicine,
The People's Republic of China
- Prof. Zhong-zhen ZHAO Professor, Associate Dean, School of Chinese Medicine,
Hong Kong Baptist University

(Remark: The list is arranged in alphabetical order of last name)

Members of the Scientific Committee

(including those overseas and mainland IAB members who participated in the Scientific Committee meetings during their visits to Hong Kong)

Prof. Kelvin K.C. CHAN	Joint Chair Professor of Traditional Chinese Medicine, Centre for Complementary Medicine Research, University of Western Sydney and Herbal Medicines Group, Faculty of Pharmacy, University of Sydney, Sydney, New South Wales, Australia
Prof. Yuan-shiun CHANG	Professor of Pharmacognosy, School of Chinese Pharmaceutical Sciences and Chinese Medicine Resources, College of Pharmacy, China Medical University, Taiwan
Prof. Chun-tao CHE	Norman R. Farnsworth Professor of Pharmacognosy; and Director, WHO Collaborating Center for Traditional Medicine, College of Pharmacy, University of Illinois at Chicago, Chicago, U.S.A.
Dr. Hon-yeung CHEUNG	Associate Professor, Research Group for Bioactive Products, Department of Biology and Chemistry, City University of Hong Kong
Prof. Harry H.S. FONG	Professor Emeritus of Pharmacognosy, Department of Medicinal Chemistry and Pharmacognosy; and WHO Collaborating Center for Traditional Medicine; College of Pharmacy, University of Illinois at Chicago, Chicago, U.S.A.
Mr. Robert LAW	Senior Pharmacist, Department of Health, Hong Kong SAR (Chairman of Scientific Committee)
Prof. Albert W.N. LEUNG	Director, School of Chinese Medicine, The Chinese University of Hong Kong
Prof. Rui-chao LIN	Professor, Dean of School of Chinese Materia Medica, Beijing University of Chinese Medicine
Prof. Ricky Y.K. MAN	Chair Professor, Department of Pharmacology and Pharmacy, The University of Hong Kong

Prof. Karl W.K. TSIM

Chair Professor, Division of Life Science, and
 Director, Centre for Chinese Medicine R&D,
 The Hong Kong University of Science and Technology

Prof. Kwok-yin WONG

Patrick S.C. Poon Professor in Applied Chemistry and Dean of
 Faculty of Applied Science and Textiles,
 The Hong Kong Polytechnic University

Prof. Zhong-zhen ZHAO

Professor, Associate Dean, School of Chinese Medicine,
 Hong Kong Baptist University

Government Chemist and/or
 his representatives

Government Laboratory, Hong Kong SAR

(Remark: The list is arranged in alphabetical order of last name)

Members of the Editorial Board

Prof. Yuan-shiun CHANG

Professor of Pharmacognosy, School of Chinese Pharmaceutical
 Sciences and Chinese Medicine Resources, College of Pharmacy,
 China Medical University, Taiwan

Prof. Chun-tao CHE

Norman R. Farnsworth Professor of Pharmacognosy; and Director,
 WHO Collaborating Center for Traditional Medicine,
 College of Pharmacy, University of Illinois at Chicago,
 Chicago, U.S.A.

Dr. Hon-yeung CHEUNG

Associate Professor, Research Group for Bioactive Products,
 Department of Biology and Chemistry,
 City University of Hong Kong

Mr. Robert LAW

Senior Pharmacist,
 Department of Health, Hong Kong SAR
 (Chairman of Editorial Board)

Prof. Guo-an LUO

Director of the Network Centre (Ministry of Education) for
 Collaborative Study of TCM Modernization, Department of
 Chemistry, Tsinghua University, The People's Republic of China

- | | |
|-----------------------|---|
| Prof. Ricky Y.K. MAN | Chair Professor, Department of Pharmacology and Pharmacy, The University of Hong Kong |
| Prof. Karl W.K. TSIM | Chair Professor, Division of Life Science, and Director, Centre for Chinese Medicine R&D, The Hong Kong University of Science and Technology |
| Prof. Bao-qin WANG | Professor, Institute for Control of Chinese Traditional Medicine and Ethnic Medicine, National Institutes for Food and Drug Control, State Food and Drug Administration, The People's Republic of China |
| Prof. Kwok-yin WONG | Patrick S.C. Poon Professor in Applied Chemistry and Dean of Faculty of Applied Science and Textiles, The Hong Kong Polytechnic University |
| Prof. Zhong-zhen ZHAO | Professor, Associate Dean, School of Chinese Medicine, Hong Kong Baptist University |

(Remark: The list is arranged in alphabetical order of last name)