

• 2003 •

# 何梁何利奖

HLHL PRIZE

何梁何利基金评选委员会 编

THE SELECTION BOARD OF HO LEUNG HO LEE FOUNDATION



中国科学技术出版社



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国务委员陈至立、全国政协副主席王选等国家领导人与 2003 年度何梁何利基金获奖人合影  
Chen Zhili, State Councilor, Wang Xuan, Vice Chairman of the Chinese People's Political Consultative Conference (CPPCC), and other senior leaders have a group photo taken with the winners of 2003 HLHL Prize.



2003 年 12 月 5 日，何梁何利基金颁奖大会（第十届）在北京钓鱼台国宾馆举行。国务委员陈至立、全国政协副主席王选等在主席台上

On December 5, 2003, the Tenth Award Presentation Ceremony of HLHL Foundation is held at the Beijing Diaoyutai State Guesthouse. Chen Zhili, State Councilor, Wang Xuan, Vice Chairman of the Chinese People's Political Consultative Conference (CPPCC) are present at the Ceremony.



陈至立国务委员代表国务院在基金 2003 年度颁奖大会上发表讲话

Chen Zhili, State Councilor, addresses at the Award Presentation Ceremony of 2003 HLHL Foundation on behalf of the State Council.



基金信托委员会主席、评选委员会主任朱丽兰在基金 2003 年度颁奖大会上作评选委员会工作报告

Zhu Lilan, Chairperson of the Board of Trustees and Chairperson of the Selection Board of HLHL Foundation, delivers Report on the Work of the Selection Board at the Award Presentation Ceremony of 2003 HLHL Foundation.



陈至立国务委员为科学与技术成就奖获得者吴征镒、邹承鲁先生颁奖

State Councilor Chen Zhili presents awards to Mr. Wu Zhengyi and Mr. Zou Chenglu, the winners of 2003 HLHL Prize for Science and Technology Achievements.



何梁何利基金捐资人代表出席 2003 年度颁奖大会

The representatives of the donors of HLHL Foundation attend the 2003 Award Presentation Ceremony.



何梁何利基金 2003 年度科学与技术成就奖获得者吴征镒先生致辞

Mr. Wu Zhengyi, the winner of 2003 HLHL Prize for Science and Technology Achievements, makes a speech.



何梁何利基金 2003 年度科学与技术成就奖获得者邹承鲁先生致辞

Mr. Zou Chenglu, the winner of 2003 HLHL Prize for Science and Technology Achievements, makes a speech.

# 在何梁何利基金 2003 年度 颁奖大会上的讲话

国务委员 陈至立  
(2003 年 12 月 5 日,北京)

各位来宾,同志们、朋友们:

今天,何梁何利基金隆重举行第十届颁奖大会,向荣获 2003 年度何梁何利基金“科学与技术成就奖”的杰出科学家吴征镒、邹承鲁教授和荣获“科学与技术进步奖”的 42 位优秀科技工作者颁奖。这是我国科技界、教育界的一大盛事。他们当中,有为中国科学技术事业毕生耕耘、成就卓著的杰出科学家,有在研究开发前沿开拓创新、勇攀高峰的优秀骨干,也有在新科技革命大潮中脱颖而出、奋发有为的年轻科技人才;有活跃在大城市和发达地区的科技精英,也有奋斗在西北戈壁、西南边陲和祖国内地的卓越儿女;有在“神舟”号载人飞船设计和研制中发挥关键作用的工程专家,也有在抗击“非典”战斗中艰苦奋战、凯旋而归的学科带头人。他们为我国科学繁荣、技术进步和经济发展做出了突出贡献,理当受到全社会的赞扬和尊敬。这里,我代表国务院,向吴征镒教授和邹承鲁教授及全体获奖科学家表示热烈的祝贺并致以最崇高的敬意!

在今天大会上,基金信托委员会主席兼评选委员会主任朱丽兰同志做了很好的工作报告,两位大奖的得主做了感人肺腑的发言,表达了全体获奖人的心声。借此机会,我代表国务院再次感谢何梁何利基金捐款人及其家属热诚支持祖国科技事业的义举,感谢评选委员会专家和工作人员为这项社会科技奖成功实施所做出的可贵贡献。

当今世界,科学技术突飞猛进,经济全球化和新科技革命大潮

涌动。21 世纪，在一定意义上，将是一个科技新纪元。为了全面建设小康社会，加快社会主义现代化进程，党的十六大提出：“走新型工业化道路，大力实施科教兴国战略和可持续发展战略。”随着全面、协调、可持续和以人为本的发展观的确立，资源、环境和安全技术的研究开发将日甚一日地提上重要和紧迫的议程。目前，我国正在研究、制定国家中长期科学和技术发展规划。这个规划将确定至 2020 年中国科技发展的战略目标，提出符合我国实际的战略选择，凝练未来科技发展的战略重点，并提出进一步完善相应保障措施和优化政策环境的建议，将推动我国科学技术事业步入一个崭新的发展时期。

人才是第一资源。科技进步与创新，关键在人才。科技人员是先进生产力的重要开拓者和科技知识的重要传播者，是社会主义现代化建设的骨干力量。党的十六届三中全会《决定》提出要“营造实施人才强国的体制环境”，“尊重知识，鼓励创新，实行公平竞争，完善激励制度，形成优秀人才脱颖而出和人尽其才的良好环境”。我们要在认真贯彻实施国家科技奖励制度的同时，发挥社会力量设立的科技奖励的重要作用，形成推进科技进步与创新的强大合力，鼓励和支持科技工作者坚韧不拔地向科学技术的深度和广度进军，不断攀登科学技术的高峰，为人类做出更大的贡献。同时，切实保护知识产权，完善知识作为要素参与分配的政策，健全国家创新体系。

何梁何利基金是由香港四位著名爱国金融实业家何善衡先生、梁铨琚先生、何添先生、利国伟先生捐款设立的社会公益基金。基金创立者的远见卓识和崇高思想，得到了内地和香港各界的高度赞誉。近十年来，基金伴随着我国科教兴国的实施，以其鲜明的宗旨、规范的运作，公平、公正、公开的评选原则，成为影响广泛的权威性社会科技奖励基金。十年来，包括今天在座的 44 位获奖人，已有 527 位优秀科学家、工程师荣获这项科技奖励。这是我国科技人才群星璀璨的象征，是我国科学技术事业繁荣昌盛的写照。

希望获奖科学家再接再厉，继续努力探索科学真理，大力推进

技术创新，为科技进步与创新做出更大贡献；希望广大科技工作者发扬求实创新精神、拼搏奉献精神，在各自岗位上创造出更多更新的科技成就。同时，也希望何梁何利基金在新的历史时期，与时俱进，越办越好。

同志们，21 世纪头二十年，对我国来说，是一个必须紧紧抓住并且可以大有作为的重要战略机遇期。让我们按照“三个代表”重要思想的要求，发扬开拓、创新、求实、奉献的精神，为祖国繁荣强盛和人类科技进步做出更大的贡献。

# **Address at the 2003 Award Presentation Ceremony of Ho Leung Ho Lee Foundation**

State Councilor    Chen Zhili

( December 5 , 2003 , Beijing )

Guests , Comrades and Friends :

Today we're gathering here to hold the Tenth Award Presentation Ceremony of HLHL Foundation and award the 2003 Prize for Scientific and Technological Achievements to Prof. Wu Zhengyi and Prof. Zou Chenglu , and the Prize for Scientific and Technological Progress to 42 excellent scientific and technical workers. This is a great event in chinese scientific and educational circles. Among the awardees there are the accomplished and brilliant scientists who have devoted themselves to scientific and technological undertakings; the backbones of the scientific and technological contingent who constantly bring forth new ideas in the frontiers of research and development , and have the courage to scale new heights in science and technology; the promising and enterprising young skilled personnels who proved themselves in the tide of the new scientific and technological revolution; the elites of scientific and technological circles who are working hard in big cities and developed regions; the worthy sons and daughters who are working hard in the country's northwestern Gobi Desert , southwestern frontier and hinterland; the experts in engineering who played a key role in designing , researching and developing Shenzhou series of manned spacecraft as well as; the leading scientists who fought bravely in the battle against severe acute respiratory syndrome ( SARS ) and returned in triumph. They are deserved to be praised and respected by the whole nation for their outstanding contributions to the country's scientific prosperity , technological progress and economic development. Here , on behalf of the State Council , I'd like to extend warm congratulations to Prof. Wu Zhengyi , Prof. Zou Chenglu and all the other award-winning scientists , and avail myself of this opportunity to express the assurance of my highest considera-

tion.

At today's ceremony, Comrade Zhu Lilan, chairwoman of Board of Trustees of HLHL Foundation and chairwoman of the Selection Board of HLHL Foundation, made a wonderful report, and two awardees also delivered touching speeches voicing aspiration of all awardees. I'd like to take this opportunity, on behalf of the State Council, to thank the donors of HLHL Foundation and their families once again for their support to motherland's scientific and technological undertakings, the experts and all staff of the Selection Board of HLHL Foundation for their great contributions to successful implementation of this social scientific and technological award.

In the world of today, science and technology is going ahead by leaps and bounds. The spring tide of the new global revolution of science and technology as well as economic globalization is surging. In a sense, the 21<sup>st</sup> century is a new era of science and technology. In order to build a well-off society in an all-round way in China and speed up the process of the socialist modernization drive, as the 16<sup>th</sup> CPC National Congress states, "China must take a new way to industrialization and implement the strategy of rejuvenating the country depending upon science and education, and that of sustainable development." With the establishment the strategy of the concept of all-round, coordinate, sustainable development, and giving people the top priority, the research and development of resources, environment and security issues will be increasingly put on the important and urgent agenda.

At present, our country is outlining a medium and long-term national program of scientific and technological development. In this program the strategic goal of China's scientific and technological development toward 2020 will be set forth, the strategy choice in line with our national conditions will be put forward, the strategic focuses of the future scientific and technological development will be highlighted, and the proposals for further improving relevant guarantee measures and optimizing policy – related circumstance will be offered, all of which will bring the nation's scientific and technological undertakings into a completely new developing period.

Human resources are the first primary resources. The key to scientific and technological progress and innovation is the management of human resources. Scientific and technological personnels are the important pioneers of the advanced productive

forces, the important spreaders of scientific and technological knowledge, and the backbones of the socialist modernization drive. The Decision approved at the Third Plenary Session of the Sixteenth CPC Central Committee stated that it's necessary to improve a favorable circumstance for the nation's revitalization based on human resources development, to respect knowledge, to encourage innovation, to implement the fair competition, to improve the incentive mechanisms and to form a fine environment in which excellent talented people can show themselves and talents can be made full use. While implementing the nation's reward system of science and technology, we must give full scope to the important role of the scientific and technological rewards set up by social organizations so as to form a powerful joined forces, to promote scientific and technological progress and innovation, to encourage and support scientific and technical workers to indomitably deepen and broaden the frontiers of science and technology, to scale new heights without stop, and make greater contributions to mankind. In the meanwhile, we must protect the intellectual property rights earnestly, improve the income distribution policy that knowledge can be as a factor participating in the income distribution, so as to perfect the national innovation system.

HLHL Foundation is a public welfare fund, jointly founded by patriotic financial industrialists Mr. S. H. Ho, Mr. Leung Kau Kui, Mr. Ho Tim and Dr. Lee Quo-Wei. The founders have been spoken highly by all circles in Chinese mainland and Hong Kong for their farsightedness and lofty ideas.

Over the last ten years, since China implemented the strategy of rejuvenating the country through science and education, HLHL Foundation, with distinctive purpose, normal operation and selection principles of fairness, impartiality and openness, has become a far-reaching and authoritative non - government award foundation of science and technology in China.

During the past ten years, 527 outstanding scientists and engineers including 44 rewardees here today, have won this scientific and technological award. This symbolizes not only a galaxy of skilled personnels in our country, but also prosperity of scientific and technological undertakings.

I wish the awardees to make persistent efforts for further exploration of scientific truth, to give major energy to promote technological innovations, and to make greater

contributions to scientific and technological progress and innovation.

I wish scientific and technical workers to carry forward the spirit of realistic approach, innovation, hard struggle and devotion so as to make more and newer achievements in their respective posts. Meanwhile, I also wish HLHL Foundation to be run better and better, and to advance with the times in a new historical period.

Comrades, the first two decades of the 21<sup>st</sup> century are a period of critical strategic opportunities, which China must seize tightly and which offer bright prospects.

Let's carry forward the spirit of pioneering, innovation, realistic approach and devotion in accordance with requirements of the important thought of the "Three Represents," so as to make greater contributions to the prosperity of our motherland, and scientific and technological progress of mankind.

# 序

过去的一年，何梁何利基金在信托委员会主席，现任全国人大教科文卫委员会主任委员朱丽兰教授的领导下，继续取得满意的成绩。信托委员及评选委员会副主任杨振宁教授由于已退任有关职务及转任基金顾问，其原来的职务已由杨纲凯教授接替。杨纲凯教授为现任香港中文大学副校长、研究院院长及物理学讲座教授，各捐款人谨对杨教授之接任表示欢迎。

今年是基金成立十周年。回顾在这十个年头里，虽然人事几历更替，然而，在信托委员会、评选委员会及投资委员会历任委员的通力合作下，国家科学技术部和教育部由基金成立至今给予的全力协助与支持，以及在各位顾问的宝贵指导下，基金的日常运作及评奖工作更趋成熟和畅顺，财务与投资状况亦维持良好，其在社会上的知名度与影响力亦不断增加。对此，我们表示由衷的敬意和谢忱。

十年来，基金按多个学科领域共颁出了 21 个科学技术成就奖和 506 个科学技术进步奖，颁出的奖金总额达到港元一亿零五百万元。作为一项民间发起的科技奖励基金，能够得到这个理想成绩，各捐款人均感到十分欣慰。

2003 年 12 月 5 日在北京钓鱼台国宾馆举行的基金 2003 年度颁奖典礼，厚蒙陈至立国务委员、全国政协王选副主席及科技部徐冠华部长亲临主持，为大会增光不少，各捐款人深表感谢。这届分别有两位及 42 位专家学者获颁科学与技术成就奖和进步奖。同时更是基金自 1994 年成立以来，被提名人数最多的一届，共有 330 位，候选人的质量亦较高，反映了社会对何梁何利基金的认受和重视程度与日俱增。

自中国推行改革开放以来，经济的迅速增长和社会建设的需要，为我国科学技术的创新与发展提供了强大的动力。十年来，基金见证了祖国的科研人才辈出。他们的卓越成就，反映国内对科研工作的日益重视，以及科学技术水平的不断提升，实在令人深为鼓舞。

2003 年其中一项令中国人至感振奋的科学盛事，就是我国自行研制的“神舟五号”载人飞船，成功发射并安全返回地面，实现了中华民族数千年来的飞天梦想，成为中国迈向世界科技高峰的重要里程碑。这一项辉煌的成就，充分体现了中华民族的非凡智慧和伟大创造力，对于推动我国对科研的重视和科学技术事业的发展，从而提升综合国力和民族凝聚力，都具有重大和深远的历史意义和激励作用。

随后“神舟五号”宇航员杨利伟访港，以及“神舟五号”返回舱的展出，更在香港掀起了热潮，令香港市民可直接分享祖国航天科技的历史性突破，同为国家的科技成就自豪。

“十年树木，百年树人”，说明了培养人才绝非容易，而是一个漫长的过程。今年初，国务院温家宝总理在国家科学技术奖励大会的讲话中指出：“科技创新，人才为本。为了尽快把我国科技事业搞上去，我们需要造就一支规模宏大的科技人才队伍，需要一批在关键领域和重点岗位的科技领军人物，需要一批世界一流的科学家”。同时亦提出：“要在全社会形成崇尚科学、尊重人才的良好风尚”。

何梁何利基金成立的原旨，亦在于奖励和表扬中国优秀科技人才。我们衷心期望基金在中国推动科教兴国的过程中，能继续发挥其最大的鼓励作用。

何 添 何子焯（已故何善衡  
先生之长子）

利国伟 王梁洁华（已故梁铨琚  
博士之女儿）

2004 年 4 月于香港

## PREFACE

Ho Leung Ho Lee Foundation continued to achieve excellent results in 2003 under the leadership of Professor Zhu Lilan, Director of the Science, Education, Culture and Health Commission of the National People's Congress.

During the year, Professor Chen-Ning Yang retired from the positions of member of the Board of Trustees and Vice Chairman of the Selection Board and became an Advisor. He was succeeded by Professor Kenneth Young, Pro-Vice-Chancellor, Dean of Graduate School and Professor of Physics at The Chinese University of Hong Kong. We would like to take this opportunity to extend our warmest welcome to Professor Young.

The Foundation celebrates its 10th anniversary in 2004. Despite personnel changes, the Foundation has been running smoothly over the last 10 years under the guidance of the Board of Trustees and the Selection Board, as well as with the full support of the Ministry of Science and Technology, the Ministry of Education and the Advisors.

Since its establishment, the Foundation's operations and prize evaluation procedures have become increasingly efficient. Its financial and investment positions remain sound, and its reputation and influence in the community continue to grow. These trends all bode well for the continued success of the Foundation. We appreciate sincerely to all these successes.

The Foundation has up to now handed out a total of 21 Awards of Scientific and Technological Achievement and 506 Awards of Scientific and Technological Progress to eminent scientists, paying out a total of HK \$ 105 million in prizes. This is an achievement in which the donors of Foundation can justifiably take pride.

The Foundation held its Award Presentation Ceremony for 2003 at the Diaoyutai State Guest House on 5 December 2003. We, the donors, were greatly honoured to have Mrs. Chen Zhili, State Councillor; Mr. Wang Xuan, Vice-Chairman of the