

• 2008 •

# 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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# 致何梁何利基金 2008 年度颁奖 大会贺信

中共中央政治局委员、国务委员 刘延东  
(2008 年 10 月 29 日)

欣悉何梁何利基金 2008 年度颁奖大会于 10 月 29 日在北京隆重召开，向荣获今年基金“科学与技术成就奖”、“科学与技术进步奖”和“科学技术创新奖”的 57 位优秀科技工作者颁奖。这是我国科技界、教育界和社会各界的一大喜事。我谨代表国务院向全体获奖科学家表示热烈的祝贺！向全国科技工作者致以亲切的问候！同时，向来京出席这次颁奖盛会的基金捐款人代表，表示由衷的敬意！

在中央人民政府和香港特区政府关怀和支持下，由香港爱国金融实业家何善衡、梁铨琚、何添、利国伟先生捐款创建的何梁何利基金，已经成为我国社会力量设立的科技奖励中规模最大、影响最广的成功范例。14 年来，先后向 804 位杰出科技工作者授予何梁何利科学与技术奖的殊荣。对在全社会弘扬科学精神，鼓励广大科技人员勇攀科学技术高峰，加快我国科技进步与创新，发挥了重要作用。基金以具有权威性和公信力的评选记录，在国内外赢得良好声誉。在此，我衷心感谢基金的创立者、管理者和历届评选委员会委员为我国科技事业所做出的宝贵贡献。

希望获奖科学家和广大科技工作者再接再厉，努力提高自主创新能力，为建设创新型国家谱写更新、更美的篇章。祝愿何梁何利基金与时俱进，为祖国实施科教兴国战略和人才强国战略，实现中华民族的伟大复兴作出更大贡献。

# LETTER OF CONGRATULATIONS TO THE 2008 AWARDING CEREMONY OF HO LEUNG HO LEE FOUNDATION

Liu Yandong, Member of the Political Bureau of the CPC Central  
Committee and the State Councilor

( October 29 , 2008 )

On hearing that the 2008 Annual Awarding Ceremony of Ho Leung Ho Lee Foundation would be held ceremoniously in Beijing on October 29, 2008 to present awards to 57 outstanding scientific and technological personnel who have won the Prize for Scientific and Technological Achievements, the Prize for Scientific and Technological Progress, and the Prize for Scientific and Technological Innovation, which is a happy event of the circle of science and technology, the circle of education and other social circles, I would like to extend, on behalf of the State Council, our warm congratulations to all prize winners, cordial greetings to all personnel engaged in scientific and technological work in China, and heartfelt respects to the representatives of donors of the Foundation attending the ceremony.

With the support and guidance of the Central Government and the Hong Kong SAR Government, Ho Leung Ho Lee Foundation donated and established by four patriotic financial industrialists from Hong Kong, namely Ho Sin-Hang, Leung Kau-Kui, Ho Tim and Lee Quo-Wei. Its establishment has set a successful example for the non-government scientific and technological prizes as the largest and most influential prize of its kind. In its 14-year history, the Foundation has awarded honorable prizes to 804 outstanding scientific and technological personnel, which has played a critical role in promoting scientific spirit in the whole society, encouraging scientific and technological personnel to mount the peaks of science and technology, and accelerating China's scientific and technological advancement and innovation. The authoritative and credible prize selection records of the Foundation have won it excellent reputation both in China and abroad. Here, I would like to extend my heartfelt thanks to the founders, management personnel and previous and current members of

the Selection Board for their precious contributions to China's scientific and technological cause.

I hope that all prize-winning scientists and other scientific and technological personnel continue to make determined and persistent efforts to enhance our independent innovation capability and make more contributions to the construction of an innovative country. May Ho Leung Ho Lee Foundation advance with the time and make greater contributions to the fulfillment of the strategy of reinvigorating the country through science and education and the strategy of strengthening the country through human resources development and the great rejuvenation of the Chinese nation.

# 在何梁何利基金 2008 年度颁奖 大会上的讲话

全国政协副主席、科技部部长 万 钢

(2008 年 10 月 29 日)

各位来宾，同志们、朋友们：

今天，在洋溢欢乐和喜庆的气氛中，何梁何利基金隆重举行颁奖大会，向荣获 2008 年度何梁何利基金“科学与技术成就奖”的杰出科学家房建成教授和 38 位荣获“科学与技术进步奖”、18 位荣获“科学技术创新奖”的优秀科技工作者颁奖。这是我国科技界、教育界和社会各界的一大盛事。刘延东国务委员发来贺信，代表国务院热烈祝贺这次盛会的召开，祝贺 57 位科技工作者获得何梁何利科技奖，使我们深受鼓舞。在此，受严隽琪副委员长的委托，我一并代表全国人大常委会、全国政协，向全体获奖科技工作者表示热烈的祝贺！向何梁何利基金创立者和捐款人代表热诚支持祖国科技事业的义举表示崇高的敬意，同时也向何梁何利基金信托委员会、评选委员会、投资委员会的出色工作表示深切的谢意！

刚才，基金评选委员会主任朱丽兰同志做了很好的报告，介绍了何梁何利基金伴随建设创新型国家的主旋律，秉承“公平、公正、公开”的评选原则，运用科技奖励的有力杠杆，表彰和激励为祖国科技事业作出突出贡献的科技人员，在促进我国科技进步与创新中发挥了重要作用。这些成绩可圈可点，可喜可贺。获奖科学家代表房建成教授的发言，展示了我国新一代科技人员朝气蓬勃、勇攀高峰的豪迈情怀，表达了全体获奖科学家的共同心声，令人振奋，令人鼓舞。

当前，新科技革命突飞猛进，高技术前沿孕育着革命性突破，新技术、新产业以群体崛起，创新冲击波深刻影响着经济和社会的发展进程。实践证明，加速科学技术发展，人是最重要、最宝贵的第一资源。树立和落实科学发展观，必须坚持以人为本，坚定不移地实施科教兴国战略和人才强国战略，加快高素质、高水平科技人才队伍建设，为建设创新型国家提供人才保障。

中华人民共和国宪法庄严宣告：“国家发展自然科学和社会科学事业，普及科学和技术知识，奖励科学研究成果和技术发明创造。”我国《科学技术进步法》规定：“国家鼓励国内外组织或者个人设立科学技术奖项，对科学技术进步给予奖励。”我们不仅要办好国家科技奖，而且要鼓励和支持社会力量设立科技奖，逐步完善以政府奖励为导向、社会力量奖励和企事业单位奖励为主体的科技奖励体制，营造鼓励创新的良好社会环境，使创新智慧竞相迸发、创新人才大量涌现，培养造就世界一流科学家和科技领军人才，加快创新型国家建设进程。

1994年3月，香港爱国金融家何善衡、梁铨琚、何添、利国伟先生捐款创立以奖励祖国内地杰出科学家为宗旨的何梁何利基金，至今已经14年了。804位优秀科技工作者获得何梁何利科技奖的殊荣，成为他们在科学征程上勇往直前的强大精神动力。当年基金创立者“在中国的土地上，建立中国人自己的基金，奖励中国优秀科技工作者”的崇高愿景，已经在我国科技界深深扎根。何梁何利基金遵循科学技术发展规律，借鉴国际经验，结合我国实际，以严格评选程序和标准，规范透明的运行机制，客观公正的评选记录，赢得了我国科技界、教育界和社会各界的赞誉，在海内外的影响与日俱增，堪称社会力量创建科学技术奖项的成功范例。

14载春秋，斗转星移。当年富有远见卓识的四位捐款人中，梁铨琚、何善衡、何添先生先后在九旬高龄驾鹤仙逝。正如朱镕基同志所说，他们“高谊可风，功在当代，泽被永远”。我们永远怀念他们。令人高兴的是，2005年10月基金信托契约修订案经香港高

等法院批准，基金捐款人代表实现了由老一辈向新一代的平稳过渡。近三年来，何梁何利基金顺应建设创新型国家的战略目标，与时俱进，开拓进取，优化奖项结构，完善评选标准，加强评委队伍建设，取得十分可喜的成绩，基金的权威性和公信力进一步提高。今年，“科学与技术成就奖”获奖人房建成教授的新型磁悬浮控制力矩陀螺等重大发明，达到国际最先进水平，实现我国对地观测卫星和大型航天器关键机构的跨越发展。38位“科学与技术进步奖”获奖人的科技成果，90%进入世界前列。18位“科学技术创新奖”获奖人拥有发明专利达231项，其创新业绩达到国际先进水平的占94.4%。他们中间，有毕生耕耘、德高望重的老一辈科学家；有作为重大科技专项的中流砥柱的中年科技骨干；有在新科技革命大潮中涌现的一代新秀；还有在改革开放后，赴国外留学回国创业的海外学子。他们在不同领域，顽强拼搏、勇攀高峰，用杰出的科技成果和创新业绩，为加速我国现代化建设作出突出贡献。这57位获奖科学家不愧是我国产学研各条战线杰出科技工作者的代表，是我国科技进步与创新群星璀璨的生动写照。

何梁何利基金是香港特区的法人组织，从成立至今，一直选择原国家科委和科技部作为其评选委员会在内地的挂靠单位。这里，我代表科学技术部，感谢何梁何利基金对科技部的信任。科技部将一如既往，会同教育部及有关部门，大力支持何梁何利基金在内地的各项工作，竭诚提供力所能及的服务；大力支持基金评选委员会依据章程，科学管理，独立运行，不受任何单位和个人的干扰。同时，我衷心期待何梁何利基金科学与技术奖，今后办得更好、办得更成功、办得更有特色，朝着办成国际一流的科技奖励的方向阔步前进，为祖国科学技术进步与创新作出更大的贡献！

让我们更加紧密团结在以胡锦涛同志为总书记的党中央周围，高举中国特色社会主义伟大旗帜，深入贯彻落实科学发展观，为建设创新型国家，实现中华民族的伟大复兴，谱写新的更加辉煌的篇章！

## **ADDRESS AT THE 2007 AWARDING CEREMONY OF HO LEUNG HO LEE FOUNDATION**

Wan Gang, Vice Chairman of the National Committee of the Chinese People's Political  
Consultative Conference and Minister of Science and Technology

(October 29, 2008)

Dear comrades, friends and our distinguished guests,

Today, the Ho Leung Ho Lee Foundation holds the awarding ceremony in great joy and jubilation to present awards to Prof. Fang Jiancheng, an excellent scientist and the winner of the 2008 HLHL Foundation's Award for Scientific and Technological Achievements, and other prominent scientists including 38 winners of the Award for Scientific and Technological Progress and 18 winners of the Award for Scientific and Technological Innovations. This is a grand event of the science and technology circle, the education circle and other circles of the society. State Councilor Liu Yandong sent her letter of congratulations on behalf of the State Council to warmly congratulate the opening of the ceremony and the 57 scientists winning the HLHL awards. This is a great encouragement and stimulation to us. Now, with the entrustment of Vice Chairman Yan Junqi and on behalf of the Standing Committee of the National People's Congress and the National Committee of the Chinese People's Political Consultative Conference, I would like to give our warm congratulations to all the award winners, to pay our highest respect to the founders and the donor representatives of Ho Leung Ho Lee Foundation for their patriotic act in sincerely supporting the scientific and technological causes of the motherland, and to express our deepest gratitude to of the Board of Trustees, the Selection Board and the Investment Committee of the Ho Leung Ho Lee Foundation for their excellent work!

Just now, Comrade Zhu Lilan, chairperson of the Selection Board, delivered a great report, describing that Ho Leung Ho Lee Foundation has carried forward the selection principle of fairness, justice and openness under the motherland's main

strategy of building a new type innovative country, took advantage of the powerful leverage of scientific and technological awards, rewarded and encouraged scientists who have made prominent contributions to the motherland's scientific and technological causes, and played an important role in promoting China's scientific and technological progress and innovation. Their achievements are both remarkable and delectable. The exciting and inspiring speech delivered by Prof. Fang Jiancheng shows the ambitions of the new generation scientists in China, full of vigor and courage to surmount new peaks in research, and expresses common feeling from the bottom of the hearts of all award winners.

Nowadays a new science and technology revolution advances by leaps and bounds. Revolutionary breakthroughs are about to dawn the frontiers of high technologies. New technologies and industries emerge in large groups. The shockwave of innovations has deep impact on economic and social development. As proved by experience, in order to accelerate the development of science and technology, manpower must be treated as the primary resource of the most importance and value. And in order to establish and carry out the scientific outlook on development, we must adhere to the principle of human-oriented concept and unswervingly implement the strategies of rejuvenating the nation through science and technology and of invigorating the country with talents so as to speed up the formation of a team of scientific and technological talents of high quality and high caliber and produce sufficient talent supply for building an innovative country.

As is solemnly stated in the Constitution of the People's Republic of China, "The state promotes the development of the natural and social sciences, disseminates knowledge of science and technology, and commends and rewards achievements in scientific research as well as technological innovations and inventions." The Law of the People's Republic of China on Science and Technology Progress prescribes: "The State shall encourage domestic and foreign organizations or individuals to set up science funds of various kinds to finance scientific research and technological development." We should not only operate well the national scientific and technological awards but also encourage and support social groups to establish scientific

and technological awards so as to gradually improve the scientific and technological awarding system with the government awarding as the guiding force and the awarding of the social resources and the enterprises and institutions as the principal part, to create a good social environment that encourages innovation and produces large surges of innovative ideas and creative talents, and to cultivate world-class scientists and talents leading in scientific and technological research and speed up the progress of building an innovative country.

Fourteen years has passed since patriotic Hong Kong financiers Ho Sin-hang, Leung Kau-Kui, Ho Tim and Lee Quo-Wei founded Ho Leung Ho Lee Foundation for the purpose of awarding excellent Chinese scientists on the mainland in March 1994. There are 804 eminent scientists have been honored with Ho Leung Ho Lee scientific and technological awards, which become their strong spiritual drive to advance boldly on the path of scientific research. The noble vision of the founders of the HLHL Foundation “to establish a foundation of the Chinese people to award excellent Chinese scientists on China’s land” has taken deep roots in the Chinese science and technology circle. Ho Leung Ho Lee Foundation follows the principles in science and technology development, draws from international experience and fully considers the practical situation in China. Its strict selection procedures and standards, standardized and transparent operation mechanisms, and fair and objective selection records has gained praises from the science and technology circle, the education circle and other social circles in China. The Foundation’s domestic and overseas influence grows rapidly. It is a good example of the social groups’ successes in establishing scientific and technological awards.

Fourteen years has gone by and three of the far-sighted donors, Mr. Leung Kau-Kui, Mr. Ho Sin-hang, and Mr. Ho Tim, have passed away successively in their nineties. As Comrade Zhu Rongji has commended, their establishment of the Foundation is a demonstration of a praiseworthy and noble spirit and an act that will contribute to the development of the present age and also benefit future generations. They will always live in our memory. To the pleasure of all, the Modification to the Trustee Agreement was approved by the Hong Kong High Court. A smooth transition

was completed from the senior generation to a new one of the representatives of the foundation donors. In the recent three years HLHL Foundation has operated in compliance with the strategic goal of building an innovative country, advancing with the time and exploring progressively. It has optimized the structure of the awards, improved the selection standards, and strengthened the building of a prestigious selection board. The remarkable achievements obtained in these efforts further enhanced the Foundation's authoritativeness and public trust. This year the new-type magnetic suspended control moment gyroscope and other important internationally state-of-the-art inventions of Prof. Fang Jiancheng, winner of the Award for Scientific and Technological Achievement, represent a leap in key components on earth observation satellites and large spacecrafts. And 90% of the research results of the 38 winners of the Award for Scientific and Technological Progress are leading achievements in the world. The 18 winners of the Award for Scientific and Technological Innovations own 231 invention patents. 94.4% of their innovations are up to internationally leading standards. Of all these prominent scientists, there are prestigious senior scientists who have devoted their lives to the scientific and technological causes, middle-aged scientists who are the backbone of the major scientific and technological projects, the younger generation who has emerged in the tides of new science and technology revolution, and overseas students who have studied abroad and returned the motherland to start their own businesses after the reform and opening up. These scientists have made strenuous efforts to surmount new peaks in scientific research and also prominent contribution to accelerate the modernization of China with their outstanding scientific and technological research results and innovation achievements. These 57 award-winning scientists are creditably the representatives of the excellent scientists working in various industrial, academic and scientific research areas and a vivid miniature of China's landscape of scientific and technological progress and innovation in which a myriad of brilliant scientists shine.

As an organizational legal person of the Hong Kong SAR, HLHL Foundation has always selected the original National Scientific and Technological Commission and now the Ministry of Science and Technology as the superior organization of its Se-

lection Board on the mainland ever since its foundation. Here, I would like, on behalf of the Ministry of Science and Technology, to thank the HLHL Foundation for their trust to the Ministry. The Ministry of Science and Technology will, as always, in conjunction with the Ministry of Education and other relevant departments, vigorously support various work of the HLHL Foundation on the mainland. We will do our best to provide service as much as we can and vigorously support the scientific management and independent operation of the Selection Board in accordance with its rules and regulations, free from the interference of any organization and individual. At the same time, I sincerely hope that the Scientific and Technological Awards of Ho Leung Ho Lee Foundation will operate with better performance, more successes and more features to boldly advance toward the goal of establishing an internationally first-rate scientific and technological awarding organization, and to make greater contribution to the scientific and technological progress and innovation of the motherland!

Let us solidify closer around the CPC Central Committee headed by General Secretary Comrade Hu Jintao, hold high the great banner of socialism with Chinese characteristics, deeply carry out and implement the scientific outlook on development, and write more brilliant chapters for building an innovative country and realizing the great rejuvenation of the Chinese nation!

# 序

在全体人员的同心协力下，何梁何利基金持续稳步发展，无论在国内外国都取得很好的声誉和权威性，评选机制也树立了公平、公开、公正的榜样，奠定了坚实的基础。这些成绩，都得益于信托委员会、投资委员会和评选委员会同仁的努力，各位基金顾问的英明指导，以及所有义务参与基金工作人员无私奉献的成果。对此，各捐款人都表示衷心的感谢。

在过去十多年，国家在各方面均有飞跃的进步和发展，我们都以身为中国人而深感自豪。虽然国家社会和经济环境出现了巨大的转变，但何梁何利基金仍然坚守四位捐款人成立基金的原旨，继续根据信托契约的规范，严谨地运作。

过去一年，基金在信托委员会朱丽兰主席和广北副主席、赵沁平委员、杨纲凯委员、柯清辉委员的带领，以及评选委员会的紧密协调和配合下，得以畅顺地运作，而且更就评奖工作以至奖励范围等各方面，提出了不少有益的改革建议，希望借此令基金不断适应环境的变迁，从而对基金的长远运作和发展，产生良好的效用。2008 年发生百年一遇的金融海啸，环球经济备受打击，基金的投资亦难以独善其身。然而，在投资委员会的审慎管理和努力下，将金融海啸对基金财务基础的影响尽量减少，各捐款人对此表示感谢。

信托委员和投资委员会委员柯清辉先生由于退休关系，不再担任恒生银行副董事长兼行政总裁，因此，已于 2009 年 5 月初辞任基金的所有职务。新任恒生银行副董事长兼行政总裁梁高美懿女士，已同意于 2009 年 5 月接替柯先生在基金的职务，令基金得以倚仗长才。各捐款人除感谢梁高美懿女士的支持外，亦衷心祝愿柯

先生退休后生活愉快。

2008 年是中国光辉璀璨的一个年头，北京奥运圆满举行和“神七”成功发射及回收，均令世界对中国的实力刮目相看，当中科技扮演了极为重要的角色。去年年底，国家主席胡锦涛在出席纪念中国科协成立五十周年大会的讲话中指出，当今世界，科技竞争在综合国力竞争中的地位更加突出，要把建设创新型国家作为面向未来的重大战略选择，同时强调科技工作者是国家的宝贵财富，要把培养造就科技人才特别是创新型科技人才工作放在更加突出的位置，切实贯彻尊重劳动、尊重知识、尊重人才、尊重创造的方针。何梁何利基金增设“科学与技术创新奖”正是朝着这个方向出发。

在基金迈向第十五周年之际，我们衷心期望，在全体同仁再接再厉之下，基金的发展可以不断自我突破，为促进国家科技进步和创新，发挥更大的力量。

利国伟

何子焯（已故何善衡  
博士之长子）

梁洁华（已故梁铄琚  
博士之女儿）

何厚浹（已故何添博  
士之儿子）

2009 年 6 月于香港

## PREFACE

Thanks to the concerted efforts of its staff and all the others who have been helping it, 2008 saw Ho Leung Ho Lee Foundation keep growing at a steady pace, enhance its goodwill and authority, and further improve an election mechanism that is impartial, open and just. These achievements reflect the dedication of the Board of Trustees, Investment Committee and Selection Board, the wise guidance of consultants to the Foundation, and the selfless work of all volunteers participating in the Foundation's activities. We are deeply grateful for these contributions.

In the past decade, our country has made substantial headway on all fronts and we are very proud of this progress. While mindful of the huge changes in the social and economic environments in China, the Foundation continues to adhere to the original objectives of the four founders and to operate in accordance with the trust deed.

The Foundation's accomplishments in 2008 were made possible by the strong leadership of the members of the Board of Trustees, including Chairwoman Professor Zhu Lilan, Vice Chairman Mr He Guangbei, Professor Zhao Qingping, Professor Kenneth Young, and Mr Raymond C F Or, as well as the support of the Selection Board.

The Foundation has developed a number of constructive reform proposals related to the evaluation and scope of awards, in the hope of better aligning its activities to the changing landscape and strengthening the success of its long-term operation.

The financial tsunami that hit the world's markets last year dealt a heavy blow to the global economy. Like many other organisations, the Foundation was not immune to the adverse effects of this once-in-a-century event. However, we are pleased to report that prudent management by the Investment Committee helped minimise the negative impact of the tsunami on the financial base of the Foundation.

Mr Raymond C F Or resigned from the offices of Member of the Board of Trustees and Member of the Investment Committee in early May 2009 consequent upon his retirement as Vice-Chairman and Chief Executive of Hang Seng Bank Limited. We would like to thank Mr Or most sincerely for his valuable contributions to the Founda-