

• 1996 •

# 何梁何利獎

## HLHL PRIZE

何梁何利基金評選委員會 編

THE SELECTION BOARD OF HO LEUNG HO LEE FOUNDATION



科學出版社

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何梁何利基金评选委员会 编

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## 内 容 简 介

本书是何梁何利基金出版物——《何梁何利奖》的第三集。书中概要介绍了1996年度何梁何利基金53位获奖人的生平经历和主要科技成就。为了便于海内外人士了解本奖背景，书中同时收入了反映何梁何利基金及其科技奖励情况的资料，作为附录刊出。

This is the third collection of the publications of Ho Leung Ho Lee Foundation—Ho Leung Ho Lee Prize. In this book, the biographical notes on the awardees and their main scientific and technological achievements are accounted briefly. This collection includes appendices concerning Ho Leung Ho Lee foundation and its scientific and technological prizes in order to help the readers both in China and abroad to understand the background of these prizes.

• 1996 •

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何梁何利基金评选委员会 编

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基金首届颁奖大会期间,李鹏总理、吴邦国副总理等党和国家领导人与捐款人获奖人合影留念  
Premier Li Peng, Vice Premier Wu Bangguo and other senior leaders with donators and awardees of Ho Leung Ho Lee (HLHL) Foundation during the first award ceremony.



李鹏总理、吴邦国副总理、卢嘉锡副委员长、宋健国务委员等党和国家领导人出席本奖首届颁奖大会  
Premier Li Peng, Vice Premier Wu Bangguo, Mr. Lu Jiaxi, Vice Chairman of the Standing Committee of the National People's Congress, Dr. Song Jian, State Councilor and other high-ranking officials attended the first award ceremony of HLHL Foundation.



朱镕基副总理、宋健国务委员在人民大会堂会见捐款人利国伟博士、何添博士等一行  
Vice Premier Zhu Rongji, Dr. Song Jian met with the party of donator headed by Dr. Quo-Wei Lee and Dr. Ho Tim at the Great Hall of the People.



王兆国等领导同志与何梁何利基金 1995 年度获奖人合影留念  
Mr. Wang Zhaoguo, Vice Chairman of the Chinese People's Political Consultative Conference (CPPCC), with the awardees of '95 HLHL Foundation.





吴阶平、宋健、孙孚凌等领导同志与基金 1996 年度获奖人合影留念

Mr. Wu Jieping, Vice Chairman of the Chinese National People's Congress (CNPC), Mr. Song Jian, State Councilor, and Mr. Song Fuling, Vice Chairman of CPPCC with the awardees of '96 HLHL Foundation.



捐款者及其代表在基金发布庆典上合影。自左至右：何庆华女士、何添先生、利国伟先生、王梁洁华女士

Donators and their representatives at the celebration of the establishment of Ho Leung Ho Lee Foundation. From the left: Ms. Ho Ching Hwa, Dr. Ho Tim, Dr. Quo-Wei Lee, and Ms. Anne Wong Leung Kit Wah.

1994年5月13日,何梁何利基金在北京举行成立庆典。图为宋健国务委员等在主席台上  
The celebration of the establishment of Ho Leung Ho Lee Foundation in Beijing on May 13, 1994. Mr. Song Jian, State Councilor, on the platform.



朱镕基副总理会见捐款人一行时合影留念  
Vice Premier Zhu Rongji with the party of donor.

何梁何利基金在京举行记者会,向中外记者介绍基金奖励情况。自左至右:何添先生、利国伟先生、惠永正先生、杨振宁先生、段瑞春先生  
News conference on introduction of prizes from Ho Leung Ho Lee Foundation to domestic and foreign reporters in Beijing.  
From the left: Dr. Ho Tim, Dr. Quo-Wei Lee, Mr. Hui Yongzheng, Dr. Chen Ning Yang and Mr. Duan Ruichun.



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# 序

1996 年是何梁何利基金继续成功的一年，承接着对上两年的经验，是年度基金的一切运作更见顺利，在评选委员会努力下，第三届颁奖典礼已于 1996 年 10 月 17 日在北京圆满举行。欣悉是届获得成就奖的专家学者共有 3 位，而获得进步奖的更多达 50 位，反映出国家科技界人才辈出，诚足欣慰。过去三届，已合共有 11 位专家学者获得成就奖和 110 位获进步奖。

今年（1997）对国家来说是具有重大意义的一年，7 月 1 日香港回归祖国是一项历史盛事，作为中国的特别行政区，香港回归后实行一国两制，将确保继续安定繁荣和经济的成功发展，将来在国家的大力支持下，香港的国际金融及商业中心地位将更形巩固。自从 70 年代末期祖国实施改革开放政策以来，香港工业已开始北移，至 80 年代末期，大部分劳力密集的工业差不多都已转往国内生产，香港工业迈向高科技发展将日形迫切，将来对内地高科技人才当必倚仗良多。我们希望何梁何利基金在促进科技研究、奖励科技人才方面发挥更大的作用，最终亦能使香港在科技化发展过程中受惠。

过去 3 年来，基金在信托委员会惠永正主席、羊子林副主席、韦钰委员、杨振宁委员和欧肇基委员的努力下，基金无论在财务、投资和评奖工作方面都有良好成绩，我们至深铭感。评选委员会在惠永正主席领导下，承担了重要的任务，他们在公平、公开和公正的原则下进行了严谨的评选程序，确保了得奖者的科学研究成就达到高水平，维持了基金奖项的尊崇地位。评选委员之一的叶正大先生由于职务变动关系，请辞评选委员之职，叶正大先生过去 3 年对基金评选工作贡献良多，我们谨此致谢。另亦欣悉基金已经邀请得现任国防科工委科技委副主任郭桂蓉先生答允接任评选委员，谨表

欢迎之意。

藉此机会，我们亦要向基金的三位顾问：宋健国务委员、国务院港澳办鲁平主任和新华社香港分社周南社长致谢，过去3年，他们对基金给予宝贵指导和支持，使基金得益不浅。

展望未来，基金的各项工作将更见繁重，我们深信在各方面共同努力之下，必能取得更美好的成绩。

何善衡      何 添  
利国伟      王梁洁华（已故梁铨琚先生之女儿）

1997年6月于香港

## PREFACE

The year 1996 was one of continuing success for the Ho Leung Ho Lee Foundation. Building on the experience of the past two years, the operation of the Foundation was conducted even more smoothly. Thanks to the concerted efforts of the Selection Board members of the Foundation, the Foundation's third award presentation was successfully held in Beijing on 17 October 1996. Three scientists received "Awards of Scientific and Technological Achievement" and 50 recipients obtained "Awards of Scientific and Technological Progress", reflecting the country's rich pool of talent in the field of science, which is extremely encouraging. In the past three years, a total of 11 scientists have received "Awards of Scientific and Technological Achievement" and 110 have obtained "Awards of Scientific and Technological Progress".

This year (1997) is a year of great significance for the country. The return of Hong Kong to the motherland on 1 July will be a historic event. As a Special Administrative Region of China, Hong Kong will implement the "one country, two systems" policy and this will ensure the continuation of its stability, prosperity and successful economic development. With the great support of China, Hong Kong's status as an international financial and commercial centre will be further enhanced. Since China launched its reforms and open door policy in the late 1970s, Hong Kong's industry has been moving northwards. By the late 1980s, a substantial portion of the manufacturing process of the labour-intensive industries was undertaken in China. The need for high-tech industrial development in Hong Kong is becoming more press-



ing and its future reliance on technological expertise from the Mainland will increase. We hope that the Ho Leung Ho Lee Foundation will play a more significant role in advancing scientific research and fostering talent and that, in turn, Hong Kong will benefit in its process of scientific and technological advancement.

In the past three years, through the concerted efforts of the Board of Trustees' Chairman, Mr. Hui Yongzheng; its Vice-Chairman, Mr. Yang Zilin and its members Professor Wei Yu, Professor Chen-Ning Yang and Mr. Alexander Siu Kee Au, the Ho Leung Ho Lee Foundation has achieved satisfactory results in financial management, investment and award selection, for which we are extremely grateful. Under the leadership of its Chairman, Mr. Hui Yongzheng, the Selection Board of the Foundation has undertaken the important task of selection under the principles of fairness, openness and impartiality, ensuring that the achievements of the awardees meet high standards and maintaining the prestigious status of the Awards. Owing to a change in his post, Mr. Ye Zhengda, one of the members of the Selection Board, has tendered his resignation. We are deeply indebted to Mr. Ye Zhengda for his valuable contributions in the past three years. We are also pleased to welcome Mr. Guo Guirong—the Vice Chairman of the State Commission of Science, Technology and Industry for National Defenses of China as a succeeding member of the Selection Board.

We would also like to take this opportunity to extend our gratitude to the three advisers of the Foundation—Mr. Song Jian, State Councillor, Mr. Lu Ping, Director of the Hong Kong and Macau Affairs Office and Mr. Zhou Nan, Director of the Hong Kong Branch of the Xinhua News Agency—for their valuable advice and support in the past three years, from which the Foundation has benefited significantly.

Looking ahead, the work of the Foundation will become more heavy. We strongly believe that through the united efforts of the various parties, the

Foundation will achieve even better results.

Ho Sin-Hang      Ho Tim

Lee Quo-Wei      Wong Leung Kit-Wah  
(daughter of the late Leung Kau-Kui)

June 1997, Hong Kong

# 致 辞

## ——在何梁何利基金 1996 年度颁奖大会上的讲话

在这秋高气爽、硕果累累的收获季节，我们在这里隆重举行颁奖大会，向获得何梁何利基金 1996 年度奖励的科学家颁奖，我谨代表基金信托委员会和评选委员会，向获奖的科学家们致以崇高的敬意和热烈的祝贺。

众所周知，何梁何利基金是由香港何善衡慈善基金会有限公司、梁铨琚先生、何添先生、伟伦基金有限公司于 1994 年共同捐资设立的一项永久性科技奖励基金，其目的是通过对取得杰出成就的我国科技工作者进行奖励，进一步在全社会倡导尊重知识、重视人才、崇尚科学的良好风尚，激励一代代科技工作者不断攀登科学技术高峰，加速国家现代化建设进程。基金设“科学与技术成就奖”，用于奖励长期致力于推进国家科技进步，贡献卓著，并取得国际高水平科技成就者；设“科学与技术进步奖”，用于奖励在自然科学的某一领域取得重大发明、发现和科技成果者。在国务院领导同志的关心和社会各界的大力支持下，基金已经成功地进行了两届奖励，得到了各方面的广泛肯定和支持，取得了良好的社会效果。

何梁何利基金是一项民间科技奖励基金，实行的是一套全新的奖励制度，它只有在实践中不断完善才能获取旺盛的生命力。在今年的评奖工作中，何梁何利基金继续坚持了公平、公开、公正的评审原则，坚持了按照既定章程办事、依靠专家评选的机制。同时，我们认真听取社会各方面的建议，结合前两届评奖的实际情况，对评选工作作了适当改进：一是在评选出的成就奖不满 10 名、不突破每年 1500 万港元奖金总额的前提下，进步奖获得者可以超过 50 名；二是为了使评选工作更加科学合理，新增聘了师昌绪、曾庆存、钱易、杨祖佑四位科学家进入评选委员会；三是在提名推荐阶段，



为了尽可能地把贡献最多、成就最大的科学家推荐上来，除了继续邀请专家学者以个人名义参加提名推荐工作外，又邀请了国家科委、国家教委、国防科工委、中国科学院、中国工程院、国家自然科学基金会各以单位名义推荐 10 名候选人，使提名人总数达到 1400 多人，其中海外提名人 200 名。

按惯例，1996 年的评选工作从 3 月初开始，仰仗全体提名人的积极参与，共有 281 位科学家获得提名。7 月中旬，何梁何利基金召开专业评审会议，由 90 位我国著名科学家组成的专业评审组经过三天严格、认真的评议和投票表决，从上述 281 位被提名人中推举出“科学与技术成就奖”候选人 16 名，“科学与技术进步奖”候选人 98 名。最后，由 20 位国内和海外学者组成的评选委员会于 8 月底在北京举行终评会议，对通过初评的候选人又进行了认真的评议，并以无记名投票表决方式评选产生了今年的获奖人。其中，有 3 位候选人获赞成票达到三分之二多数，被评为“何梁何利基金科学与技术成就奖”，各授予奖励证书和奖金 100 万港元；有 50 位候选人获得过半数赞成票，被评为“何梁何利基金科学与技术进步奖”，各授予奖励证书和奖金 10 万港元。

迄今为止，何梁何利基金已经实施了三届奖励。在以往几届评奖工作中，我们得到了社会各界特别是科技界的热情关心和支持，我要借此机会，向给予我们热情支持的各界朋友，向积极参与提名和评审的科技专家，表示衷心的感谢。我们热诚希望社会各界继续关心和支持基金的各项工作，使之在振兴中华的伟大事业中发挥更大的作用。

国家科委副主任 惠永正

1996 年 10 月 17 日

## TO THE READERS

### Address at the '96 Award Ceremony of Ho Leung Ho Lee Foundation

It is our pleasure to hold this grand Award Ceremony here, and in the golden season of harvest, to bestow prizes to awardees of the '96 HLHL Foundation. I, on behalf of the Board of Trustees and the Selection Board of the HLHL Foundation, would like to extend our sincere salutations and warm congratulations to the awarded scientists.

It is well-known that HLHL Foundation is a permanent foundation which is established with donation from the S. H. Ho Foundation Limited, Dr. Kau-Kui Leung, Dr. Ho Tim, and Wei Lun Foundation Limited. Its objectives are to promote a general love of knowledge and a respect for intellectuals in society, the advancement of science and to accelerate the modernization of China. The Foundation annually issues awards to Chinese scientists who have made outstanding achievements. The Prize for Science and Technology Achievements is awarded to those who have worked for the promotion of scientific and technological progress in China for a long time, and have made significant contributions to, and achieved world-class achievements in their academic fields. The Prize for Scientific and Technological Progress is awarded to those who made important inventions, discoveries or research results in specific areas, especially in recent years. With strong support from the leaders of the State Council and the communities concerned, the Foundation has so far successfully issued two sets of awards, win high praise and is recognized for its positive influence on society.

The HLHL Foundation is a non-government science and technology foundation. It adapts a completely new evaluating institution, and is being

continually improved through practice. During the evaluation and examination of the '96 Awards, the Selection Board kept to its principles of equality, openness and fairness and insisted in relying on evaluation by experts according to established regulations. At the same time we responded sincerely to the suggestions from communities and reviewed the procession of two formal sets of awards, and made proper improvement of the regulations: Firstly, in the case that the number of awardees of the Prize for Achievement is less than 10, and the total value of the prize does not break the annul limitation of 15 million HK dollars, the number of awardees of the Prize for Progress may exceed 50; Secondly, 4 scientists, Mr. Shi Changshu, Mr. Zeng Qingcun, Mr. Qian Yi and Mr. Henry T. Yang, are selected and invited into the Selection Board for their scientific expertise. Thirdly, at the stage of nomination, while experts will still be invited to act as personal nominators, the Selection Board will invite the State Science and Technology Commission, the State Education Commission, the State Commission of Science, Technology and Industry for National Defense, the Chinese Academy of Sciences, the Chinese Academy of Engineering, and the National Natural Science Foundation as collective nominators, in order to cover as many scientists of excellence as possible. Each of the collective nominators can recommend 10 candidates. This has resulted in the number of nominators to increase to more than 1400, among which 200 people come from overseas.

In accordance with past procedures, the evaluation and examination of HLHL Awards started at the beginning of March. Thanks to the positive participation of all the nominators, 281 scientists were nominated. In mid July the Foundation held the preliminary review conference. Ninety eminent Chinese Scientists were asked to set the specific area review teams. After a three-day restricted review, the teams voted and selected 16 candidates for the Prize for Achievement and 98 candidates for the Prize for Progress out of the above 281 nominees. Finally, a selection committee consisting of 20 domestic and overseas scientists held the final selection meeting at Beijing in