

DOCTOR OF SCIENCE

honoris causa

Professor Yuen-Ron SHEN

CITATION

Mr Chancellor,

Teaching, research and service are the three pillars of academic life. Professor Yuen-Ron SHEN, whom we honour here today, has distinguished himself in each of these domains. A native of Shanghai, he took his BS in Taiwan, his MS at Stanford University, and his doctorate at Harvard University. After a year as a Postdoctoral Fellow at Harvard, he joined the University of California at Berkeley in 1964, where he is currently Professor of Physics and Principal Investigator in the Materials and Chemical Sciences Division and the Center for Advanced Materials at the Lawrence Berkeley National Laboratory.

Professor Shen holds honorary professorships at Fudan University, Zhongshan University and the Chinese Academy of Sciences. He is Guest Professor at Peking University and the Institut de Physique et Chimie des Matériaux in Strasbourg, and has held a number of distinguished lectureships at universities in the United States, including at Chicago, Nebraska, Pennsylvania, Southern Illinois and Wisconsin.

He is renowned as an inspiring teacher, and has played a leading role in nurturing a generation of Chinese students at Berkeley. His care for his students is manifested in his desire to inculcate in them an intellectual curiosity and to motivate in them a genuine love for physics. He insists that his students receive appropriate and adequate training for their research, and he sets very high standards both of himself and of his students. He has a reputation for sustained hard work, and would return to his projects even after a late-night party. As one of his former students put it, "He drove me crazy. But, boy, did I learn from him!"

His approach to research is characterised by a determination to succeed, but not at the sacrifice of intellectual honesty. The quest for truth is more important than whether the results do or do not bear out the theory.

His principal research achievements have been in the fields of quantum electronics, laser spectroscopy, molecular and condensed matter physics, and surface science. In particular he has done pioneering work in many areas of nonlinear optics, contributing to their basic understanding, and has created active research fields in nonlinear optics in liquid crystals and nonlinear optical studies of surfaces and interfaces. In recognition of his seminal work in these disciplines, he received the Charles Hard Townes Award of the Optical Society of America in 1986, and the Arthur L. Schawlow Prize in

榮譽理學博士

沈元壤教授

之讚辭

監督先生：

教學、研究與服務是學術生命的三大支柱。今天我們要嘉許的沈元壤教授在這三個領域裡都卓然有成。

沈元壤教授原籍上海，在台灣取得學士學位後負笈美國，先後在史丹福大學及哈佛大學取得碩士及博士學位。在哈佛做了一年博士後研究，他便在1984年加入柏克萊加州大學。現時他是該校物理學教授及羅倫斯柏克萊國家實驗室材料及化學科學部與高新材料中心的主任研究員。

沈元壤是復旦大學、中山大學及中國科學院的名譽教授，也是北京大學及法國斯特拉斯堡物理及化學材料學院的客座教授。此外，他也曾應美國多間大學的邀請擔任傑出學者，包括芝加哥大學、內布拉斯加大學、賓夕凡尼亞大學、南伊利諾大學及威斯康辛大學。

沈教授善於啟發後學，對培育柏克萊新一代中國學生起了主導作用。他對學生諄諄教誨，在激發學生求知慾的同時，更鼓勵他們對物理學產生真正的興趣。他堅守的信念是：學生必須接受適當及足夠的訓練以應付研究工作。他嚴以律己，對學生的要求也很高。他以工作勤奮見稱，在深夜赴會後也會回到工作間繼續他的研究。他的一位學生曾經這樣說：“我被他逼得快要瘋了，但他也真的教曉我不少啊！”

在做研究方面，沈教授全情投入，矢志成功，但卻從不以自己的學術誠信為代價。他認為追求真理比苦心鑽研的理論能否開花結果更為重要。

沈教授主要從事量子電子學、激光光譜學、分子與凝聚物質及表面科學的研究。他在非線性光學的多個領域裡也有開拓性的成就，因而在學界裡推動了更多有關液晶非線性光學與表面及介面的非線性光學的研究。

沈教授在教學上的卓越表現也為他贏得多方讚

Laser Science of the American Physical Society in 1992. His many other awards and fellowships in his distinguished research career have included a Harvard Vinton-Hayes Fellowship in 1972, Guggenheim Fellowship in 1972-73, an Outstanding Scientific Accomplishments Award in Solid State Physics in 1983; the Alexander von Humboldt Senior Scientist Award in 1984; a Sustained Outstanding Research Award in Solid State Physics and the Lawrence Berkeley Laboratory Award for Outstanding Achievements in Technology Transfer, in 1989; and the Max-Planck Society Research Prize in 1996.

Professor Shen is the author or co-author of over 420 publications, including the authoritative and widely used monograph on nonlinear optics, *The Principles of Nonlinear Optics*.

He has received prestigious honours in his profession, having been elected as a Fellow of the Chinese Academy of Sciences, and of Academia Sinica, the American Academy of Arts and Sciences, and the United States National Academy of Sciences.

Our own University has benefited from his counsel since the earliest planning days: he advised the President on the planning of our Physics Department even before the latter took up his job in Hong Kong, and was a founding member of our School of Science Advisory Committee. The University will always remain grateful to him for giving of his wisdom and experience in our early years.

Mr Chancellor,

I have the honour to present, on behalf of the University, Professor Yuen-Ron Shen, Professor of Physics, Academician, for the degree of Doctor of Science honoris causa.

賞。1987年，他獲得美國光學學會頒授Charles Hard Townes Award；1992年獲美國物理學會 Arthur L. Schawlow Prize。他在研究工作上的成就也為他帶來不少榮譽，包括1972年獲 Harvard Vinton-Hayes Fellowship；1972至73年獲Guggenheim Fellowship；1983年獲傑出固體物理科學成就獎；1984年獲Alexander van Humboldt資深科學家獎；1989年獲固體物理持續傑出成就獎；及在1996年獲Max-Planck Society研究獎。

沈教授勤於寫作，曾發表及參與寫作的學術論文超過420篇，其中包括具權威地位及廣為採用的學術專論《非線性光學原理》。

沈教授榮膺多個學院院士銜，他是中國科學院院士、中央研究院(台北)院士、美國文理科學院院士及美國國家科學院院士。

我校在籌辦階段也得到沈教授不少的指導，我們的校長在正式加入科大之前也曾向他請教開辦物理學系的心得。沈教授是科大理學院顧問委員會創校委員，他的智慧和經驗惠澤科大，對此我們將會銘記於心。

監督先生，本人謹恭請閣下，頒授榮譽理學博士學位予物理學教授及研究院院士沈元壤教授。