

Thursday, May 5th at 6:30pm

At the MIT Museum

13SEAS Ocean Engineering Student's Association
and MIT's Hart Nautical Gallery present:

China: The World's First Ocean Voyagers of Exploration ???

Between 1405 and 1423, the Chinese Empire financed seven remarkable sailing voyages with the purpose of discovering new lands and peoples. Unlike later European explorers like Columbus, Magellan and da Gama, who took a very few number of ships on each voyage; the Chinese explorers created large sailing armadas (between 50 and 300 ships) for each voyage (as depicted below). The mariner Zheng He commanded the voyages, which in total, utilized a crew of approximately 28,000 men.



As the last of the voyages were ending, the Emperor's government began to dissolve. A fire tore through the Forbidden City and destroyed all the collected knowledge of foreign lands, included these seven voyages of discovery. Soon thereafter, the Emperor died and his replacement abruptly changed China's open foreign policy to one of isolation from the rest of the world. As a result of the great fire and this policy shift, there are very few records of Zheng He's seven voyages.

Due to this loss of records, there are many unanswered questions. How did these large fleets navigate? What were the logistics of planning and executing such large voyages? Based on sparse records, one estimate puts the size of the largest sailing vessels of the fleet at a length of 450 feet, but is this even structurally possible? Lastly, it is for certain

that the Chinese armadas reached the east of coast of Africa. A recent “pop-history” book with the sensationalistic title *1421: The Year China Discovered America* claims that Zheng He’s fleets reached the Americas decades before Columbus. Whether these assertions are correct or not, the fact remains that the Chinese were master sailors and explorers.

Dr. Jin Wu, distinguished oceanic scientist and former Minister of Education of the Republic of China, will discuss the history of Zheng He’s voyages, and then explore the scientific and technological aspects of the voyages as well as their contemporary significance.

Jin Wu (Ph.D. in Mechanics and Hydraulics, University of Iowa), an internationally renowned researcher in oceanic science, was the Minister of Education in the Republic of China on Taiwan from 1996 to 1998. He is a member of both the U.S. National Academy of Engineering and the Academia Sinica. He is currently the Distinguished Professor of Hydraulic and Ocean Engineering, National Cheng Kung University (in Tainan, Taiwan), and concurrently Director of the Water Resources Research Center and Director of the Research Institute for Public Affairs, both at Cheng Kung University. Dr. Wu was for many years a professor of marine studies at the University of Delaware, one of the world’s foremost centers for marine and oceanic studies. He is now H. Fletcher Brown Professor Emeritus of Marine Studies and Civil Engineering, University of Delaware.

The New York Chapter of the Chinese Institute of Engineers has described Dr. Wu in these words:

In 1994, Dr. Wu was called back by his alma mater to serve as the president of National Cheng Kung University. Despite a short tenure of less than two years, he was selected as the most respected university president in Taiwan. Subsequently, he served as the Minister of Education for nearly two years, and carried out many breakthroughs in education reforms. He was the cabinet member with the highest approval rating, and was selected as the most influential person in education in Taiwan for the past decade.