

Curriculum Vitae:

Name: Mr. Fan, Hai-fu
Date of birth: 15 August 1933
Place of birth: Canton, China
Title: Professor of Crystallography
Member of the Chinese Academy of Sciences
Member of TWAS (The Academy of Sciences for the Developing World)
Institution: Institute of Physics, Chinese Academy of Sciences, Beijing 100190, P. R. China

Education:

1956: graduated at the Department of Chemistry, Peking University, Beijing, China.

Research and/or Professional Experience:

1956: Research assistant, Institute of Physics, Chinese Academy of Sciences.
1962-1965: Part-time lecturer, Department of Physics, University of Science and Technology of China.
1963: Research associate, Institute of Physics, Chinese Academy of Sciences.
1978: Associate research scientist, Institute of Physics, Chinese Academy of Sciences.
1980-1983: Head of the Laboratory of X-ray Analysis, Institute of Physics, Chinese Academy of Sciences.
1984-2001: Head of the Research Group on Methods of Solving Crystal Structures, Institute of Physics, Chinese Academy of Sciences.
1985-1988: Adviser of the Structure Analysis Centre, University of Science and Technology of China, Hefei.
1986-present: Senior research scientist, Institute of Physics, Chinese Academy of Sciences.
1990-1992: Part-time Professor, Structure Analysis Centre, University of Science and Technology of China, Hefei.
1991-1995: Part-time Professor, Department of Physics, Zhongshan (Sun Yat-sen) University, Guangzhou (Canton).
2005-2008: Part-time Professor, School of Life Sciences, Peking University, Beijing, China.
2014-present: Professor, [University of Chinese Academy of Sciences, Beijing, China](#).

Memberships:

1964-present: Member of the Chinese Physical Society.
1987-1996: Member of the American Crystallographic Association.
1987-present: Member of the National Committee of Crystallography of China (appointed).
1987-1993: Member of the Commission on Crystallographic Computing, International Union of Crystallography (elected).
1991-: Member of the Chinese Academy of Sciences (elected).
2000-: Member of TWAS (The Academy of Sciences for the Developing World) (elected)

Honors:

I. Invited lectures given at the following conferences:

1. Symposium (domestic) on Natural Organic Chemistry, Shanghai, China, July 1963.
2. Pre-meeting Workshop on Direct Methods and their Application to Structures showing Superstructure Effects, 9th European Crystallographic Meeting, Turin, Italy, August 1985.

3. IUCr (International Union of Crystallography) Winter School on Direct Methods, Macromolecular Crystallography and Crystallographic Statistics, Madras, India, December 1985.
4. IUCr Symposium on Molecular Structure: Chemical Reactivity and Biological Activity, Beijing, China, September 1986.
5. Symposium in Honor of Jerome Karle and Herbert Hauptman (Nobel laureates in chemistry, 1985), XIVth IUCr Congress, Perth, Australia, August 1987.
6. IUCr Summer School on Crystallography and Its Teaching, Tianjin, China, September 1988.
7. School on Direct Methods of Solving Crystal Structures, Erice, Italy, April 1990.
8. The XVth IUCr Congress, Bordeaux, France, August 1990.
9. International Conference on Advanced Methods in X-ray and Neutron Structure Analysis of Materials, Prague, Czechoslovakia, August 1990.
10. International Workshop on Methods of Structure Analysis of Modulated Structures and Quasi-crystals, Lekeitio-Bilbao, Spain, May 1991.
11. Beijing International Conference on High Tc Superconductivity, Beijing, China, May 1992.
12. American Crystallographic Association 1992 Annual Meeting, Pittsburgh, USA August 1992.
13. The 7th Chinese International Summer School of Physics, Beijing International Workshop on Modern Crystallography, Beijing, China, August 1993.
14. The XVIth IUCr Congress, Beijing, China, August 1993.
15. The 2nd Conference of Asian Crystallographic Association, Bangkok, Thailand, November 1995.
16. Asian School on Crystallographic Computing; Bangkok, Thailand, November 1995.
17. EUCHEM Conference on Electron Crystallography, Stockholm, Sweden, June 1996.
18. The XVIIth IUCr Congress, Seattle, USA, August 1996.
19. Pittsburgh Diffraction Conference, Pittsburgh, USA, November 1996.
20. International School of Crystallography, 25th Course: Direct Methods of Solving Macromolecular Structures, Erice, Italy, May 1997.
21. International School of Crystallography, 26th Course: Electron Crystallography, Erice, Italy, May 1997.
22. 6th TWAS General Conference, Rio, Brazil, August 1997.
23. International Kunming Symposium on Microscopy, Kunming, China, July 2000.
24. Euro Conference on Phasing Biological Macromolecules, Martina Franca, Italy, June 2001.
25. Euro Summer School on Electron Crystallography, Barcelona, Spain, July 2001.
26. Joint annual meetings of the Microscopical Society of Canada and Microscopy Society of America. Quebec, Canada, August 2002.
27. AsCA04 Conference, Hong Kong, China, June 2004.
28. International Workshop on Recent Advances in Phasing Methods for High-Throughput Protein Structure Determination, Beijing, China, November 2005.
29. Joint Conference of the Asian Crystallographic Association and the Crystallographic Society of Japan, Epochal Tsukuba, Japan, November 2006.
30. International Conference on Structural Genomics 2006 Hands-on Workshop in Yokohama, Japan, October 2006.
31. X-ray Methods in Structural Biology Workshop, Cold Spring Harbor Laboratory X-ray Crystallography Course at IBP, Beijing, April 29 - May 15, 2008.
32. Patterson Award Symposium: Advances in Macromolecular Phasing and Their Impact to Structural Biology, American Crystallographic Association Meeting, Knoxville, May 31 - June 5, 2008.
33. IUCr Crystallographic Computing School, Kyoto, Japan, August 18 - 23, 2008.
34. AsCA Workshop, Beijing, China, October 22, 2009.
35. CCP4 workshop, Shanghai, China, March 28-31, 2011.
36. International workshop on Science with Free Electron Lasers, Shanghai, China, August 20-21, 2011.

37. IUCr & AsCA workshop, Xi'An, China, August 24-27, 2012.

II. Invited lectures given at the following institutions:

1. Institute for Protein Research, Osaka, Japan. 1980.
2. Department of Applied Chemistry, Faculty of Engineering, Nagoya University, Japan. 1980
3. Laboratory of Chemistry for Natural Products, Tokyo Institute of Technology, Japan. 1980.
4. Max-Planck-Institute für Festkörperforschung, Stuttgart, Germany. 1981.
5. Institut für Anorganische Chemie, Universität, Göttingen, Germany. 1981.
6. Department of Physics, University of York, UK. 1981, 1988, 1992, 2002.
7. Department of Chemistry, Chinese University of Hong Kong, Hong Kong, China. 1987.
8. Institut de Chimie des Substances Naturelles, CNRS, France. 1988.
9. Biological, Environmental and Medical Research Division, Argonne National Laboratory, USA. 1988.
10. Department of Crystallography, Pittsburgh University, USA. 1988.
11. The Gibbs Seminar Series, Chemistry Department, Harvard University, USA. 1988.
12. Medical Foundation of Buffalo, USA. 1988.
13. Laboratorium voor Kristallografie, University of Amsterdam, The Netherlands. 1988
14. Laboratorium voor Kristal- en Structuurchemie, University of Utrecht, The Netherlands. 1988.
15. Department of Biochem. & Biophys., University of North Carolina, USA. 1992, 1996.
16. Laboratorium voor Kristallografie, University of Nijmegen, The Netherlands. 1992.
17. Laboratory of Chemical Physics, Materials Science Center, University of Groningen, The Netherlands. 1992.
18. X-ray Crystallography Unit, School of Physics, Universiti Sains Malaysia, Malaysia. 1995.
19. Laboratory of Protein Structure and Cellular Function, Kimmel Cancer Institute, Thomas Jefferson University, USA. 1996.
20. Metallurgy Division, NIST, USA. 1996.
21. NCI-Frederick Cancer R & D Center, USA. 1996
22. Dept. Natuurkunde, University of Antwerpen, Belgium. 1997.
23. Department Material Science, National Tsing Hua University, Taiwan. 1998
24. Department of Physics, Nanjing University, China. 1998.
25. Department of Physics, Fu Dan University, Shanghai, China. 2000.
26. Department of Physics, University of Science and Technology of China, Hefei, China. 2000.
27. Department of Molecular Biology, University of Science and Technology of China, Hefei, China. 2000.
28. Institute of Solid State Physics, Chinese Academy of Sciences, Hefei, China. 2000
29. Department of Biology, Tsinghua University, Beijing, China. 2002,
30. Institute of High Energy Physics, Beijing, China. 2003
31. Institute of Biophysics, Chinese Academy of Sciences, Beijing, China. 2004, 2006, 2009, 2011.
32. School of Life Sciences, Peking University, Beijing, China. 2004, 2005.
33. Lanzhou University, Lanzhou, China. 2006
34. Shanghai Synchrotron Radiation Facility (SSRF), Shanghai, China. 2009, 2012.
35. National Center for Nanoscience and Technology, Beijing, China. 2010.
36. School of Life Science, Tsinghua University, Beijing, China. 2015.

III. Awards:

1. Scientist with outstanding contribution, awarded by the personnel ministry of China, 1986.
2. Second Price of National Natural Science, China, 1987. (The first author)
3. Ye Qi-sun prize, the Chinese Physics Society, 1991. (co-recipient with Professor Li Fang-hua)
4. Second Price of National Science and Technology Advancement, China, 1992. (The second author)
5. TWAS (The Academy of Sciences for the Developing World) Award in Physics, 1996. (co-recipient with Professor Enrique Tirapegui from Chile)
6. Science and Technology Progress Award in Physics, Ho Leung Ho Lee Foundation, Hong Kong, China, 1998.
7. Second Price of National Natural Science, China, 2005. (The second author)
8. Tan Kah Kee Science Award in mathematics and physics, Beijing, China, 2006.

Research Activities:

1. Methods in crystal structure analysis for small molecules, proteins, superstructures and incommensurate modulated structures;
2. Image processing in high resolution electron microscopy;
3. Crystallographic computing;
4. Diffraction analysis methods related to HXFEL (Hard X-ray Free Electron Laser).

(More details available at <http://cryst.iphy.ac.cn>)

Book:

Physical and Non-physical Methods of Solving Crystal Structures. By M. M. Woolfson & Fan, Hai-fu, Cambridge University Press, England 1995.

Publications (research papers):

(Available at <http://cryst.iphy.ac.cn>)