Professor Shao-Fan Lin—1000 reference patterns published in the Powder Diffraction File™

At the 10th National Conference on X-ray Diffraction and ICDD Workshop in Shanghai, China, Professor Shao-Fan Lin was recognized and celebrated for his outstanding contributions to materials science, characterization, and phase identification. Dr. Timothy Fawcett presented Professor Lin with an award on behalf of the members and board of directors of the International Centre for Diffraction Data (ICDD) for his submission of 1000 reference patterns published in the Powder Diffraction File.TM Shao-Fan Lin is only the third person who has authored 1000 patterns, joining Don Hanawalt from the Dow Chemical Co. and Larry Calvert from the National Research Council of Canada. Hanawalt's work was part of the foundation of the Powder Diffraction File[™] in 1941. As of Release 2009 of the Powder Diffraction File[™], Professor Lin has published 972 reference materials and has another 45 in press for a total of 1017.

Professor Lin contributed exceptional quality material data sets and has published the crystal structures as well as the powder patterns for over 140 materials. His work has included characterization of pharmaceuticals, pesticides, and many natural products found in Chinese medicine. The award plaque displays the powder pattern and crystal and molecular structure of methyl ephedrine. This was the first published structure of this commercial stimulant, which is manufactured in Asia and globally distributed. Since his first grant in 1988, Professor Lin has contributed material data sets for publication for 21 consecutive years.



Professor Lin was also the recipient of the 2004 ICDD Distinguished Grantee Award. Not only has he contributed over 1000 X-ray powder diffraction patterns through the Grant-in-Aid Program, he has also been a major organizer for all the ICDD Grant-in-Aid workshops in China over the past 15 years, with more than 100 distinguished scientists attending each. Professor Lin also inspired many other Chinese scientists to become grantees for the past 20 years. There are currently 11 active grants in China. In 1988, Professor Lin was named ICDD's first regional technical cochair for China. Together, with Professor Xiaolong Chen, the current co-chair, they have recruited the second largest country membership in the ICDD.

Professor Lin was born in Wuhan, a strategic industrial city in China. He studied organic chemistry at Nankai University in Tianjin, China and became a university faculty member after graduation. He took a two-year sabbatical and carried out research on computers in chemistry at Rutgers University in the United States as a visiting scholar. Upon returning to Nankai University, he gained his full professorship and assumed the position of Chairman of Central Laboratory there. Since his retirement from Nankai University in 2003, he started a new position at the Tianjin Institute of Analysis. His primary research interests include computers in chemistry, interpretation of diffraction patterns, chemistry information on the Internet, compound structure and character relationships, computer-assisted organic synthesis, and computer-assisted instruction. He has been extensively involved in the computerized identification of X-ray powder diffraction patterns. He has published three books and over 100 scientific papers.

Professor Lin has also been very active in the Chinese scientific community. He is currently the Vice Chairman of the Chinese Society of Crystallography, a member of the council of the Chinese Society of Chemistry, the Vice Chairman of the Commission on X-ray Diffraction of Chinese Society of Physics, Chairman of Tianjin Society on X-ray Analyses, a member of the Commission on Powder Diffraction IUCr, a member of Committee on IXAS, as well as the past Chairman of the Central Laboratory Nankai University. He was also involved in many ICDD editorial efforts, including the cross-referencing of the Merck/PDF[®]/CSD databases, and extracting metal and alloy data from the literature, as well as providing ICDD the two-dimensional structures for the PDF[®] organic entries.

Congratulations and thank you to Professor Shao-Fan Lin for his valuable contribution to the Powder Diffraction File.TM

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