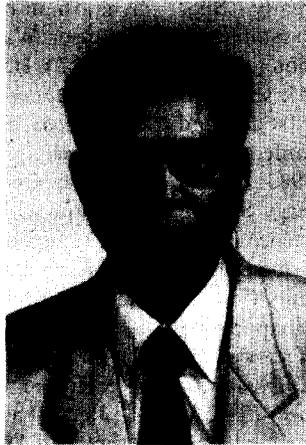


Chinese Academician, Professor Bu-Xuan Wang on his 70th Birthday



PROFESSOR Bu-Xuan Wang (formerly Pu-Hsuan Wang), Chinese Academician, celebrates his 70th birthday this year. It gives us great pleasure on this occasion to offer our sincere congratulations on his life-long and multifaceted contributions to thermal science in general, and heat and mass transfer in particular.

Professor Wang was born on 5 February 1922 in Jiangsu Province, China. He received his B.Sc. degree from Tsinghua University in 1943 and his M.Sc. degree from Purdue University (U.S.A.) in 1949, both in mechanical engineering. He joined Beijing University (then Peking University) in 1950 and became an associate professor in 1951. He returned to Tsinghua University the following year and was appointed full professor in 1961. In 1980, he was elected Academician of the Chinese Academy of Sciences, the highest honor a scientist or scholar in China may have.

Professor Wang's research activities covered a variety of subjects, including heat and mass transfer processes in porous media, thermophysical properties, measuring techniques, biomedical heat transfer, energy planning and solar energy utilization. Most noteworthy among his contributions are the study of film boiling heat transfer in subcooled liquid flowing at high velocities and the simultaneous heat and moisture transport in unsaturated and saturated porous media. His basic research on the film boiling of subcooled liquid flowing at higher velocity along a solid surface and on the evaporation of liquid drops on solid surface from 1981 to 1987, won the 4th *National Natural Science Prize* in 1989, which is the most prestigious award in natural science in China.

Very recently, he proposed a new explanation of the classical Leverett's capillary hysteresis phenomenon with a postulated 'minimum gradient' assumption, such that the isothermal flow would happen only when the magnitude of driving potential gradient exceeds this minimum value. A method has been established to determine, experimentally, the minimum gradient and capillary potential of wet porous media. While the generation of new knowledge is central in Professor Wang's research, a number of projects he undertook were prompted by national needs. From 1963 to 1966, he led a research team seeking to accelerate the synthesis of ammonia in a large Sichuan plant by enhancing heat transfer through a redesign of the heat exchanger to obtain a more favourable temperature distribution in the piled catalyst. The effort resulted in a doubling of the daily production. During 1974–1978, he conducted studies on the reforming of the frozen soil in Qinghai Plateau in order that the railroad bed could be adequately supported in all seasons. In the course of his research, he has supervised a dozen doctoral theses since the national degree system was established in the 1980s and has over 120 refereed papers to his credit during the last ten years.

Professor Wang has been an influential thinker and effective spokesman for China's engineering education. As early as 1952, he instituted the Teaching & Research Group on Thermodynamics and Heat Transfer in Tsinghua University. In 1955, he was appointed a member of the National Long-Range Research Planning Committee. Two years later, he proposed the establishment of the then new discipline of 'Engineering Thermophysics' in universities throughout China. He is a founding member of the

Chinese Society for Engineering Thermophysics (CSEPT) and served as its vice President and Chairman of CSEPT's Heat and Mass Transfer Division in 1978 and has been the Associate Editor-in-Chief of the *Chinese Journal of Engineering Thermophysics* since 1979. He also founded the Chinese Solar Energy Society (CSES) and served as its President and was Editor-in-Chief of the *Chinese Journal of Solar Energy* during the period 1979–1987. He is currently CSES' Honorary President. Professor Wang also established the Thermophysical Properties Division of the Chinese Society for Measurement (CSM), served as its Chairman since 1983 and chaired the 1st and 2nd National Thermophysical Properties Conference in 1984 and 1987. He was for four years (1985–1989) a member of the Thermophysics and Energy Science Review Panel of the National Natural Science Foundation of China and is currently the chairman of the Teaching Directory Committee of University Courses on Thermal Science, a prestigious position appointed by the State Education Commission. Professor Wang was the Associate Editor-in-Chief of the *Chinese Journal of Mechanical Engineering* and since 1990 its Editor-in-Chief. He currently serves on the editorial boards of *Science in China*, *Chinese Science Bulletin*, *Chinese Journal of Chemical Industry and Engineering*, and *Journal of Astronautic Metrology and Measurement*. He has written eight textbooks, one of which *Engineering Heat and Mass Transfer* (Science Press, Beijing (1982)) won the National Outstanding Textbook Prize in 1987.

Professor Wang has productively participated in international activities in the broad field of thermal and science and technology since China opened her door to the West. In 1981, he inaugurated the China Section of the International Solar Energy Society (ISES). He was elected a member of the Executive Committee of the International Center for Heat and Mass Transfer (ICHMT) in 1982 and again until 1987. He chaired the International Conference on Solar and Wind Energy Applications in 1985. He was a delegate to the Assembly for International Heat Transfer Conference (IHTC) in 1986. Professor Wang founded the Asian Thermophysical Properties Congress in 1984 and chaired its 1st conference in Beijing in 1986 and

its 2nd in Sapporo, Japan, in 1989. He was also the chairman of the 1st and 2nd International Symposium on Heat Transfer in 1985 and 1988, respectively, and edited the papers presented. The Symposium papers were subsequently published as Hemisphere's series *Heat Transfer Science and Technology* for 1987 and 1989. This year, he will chair the 3rd International Symposium in Beijing and also the 5th International Symposium on Transport Phenomenon. Since 1983, Professor Wang has been an editor of this journal (*JHMT*). He is also a member of the editorial boards of *International Journal of Thermophysics* and *Drying Technology*. In the past decade, Professor Wang has organized a number of delegations to visit universities and research institutions in Australia, Japan, Germany, U.S.A. and U.S.S.R.

In recognition of Professor Wang's professional accomplishments, he was given the 'Research Scholarship Award' by the Japan Society for the Promotion of Science and the 'Energy for Mankind Award' by the Global Energy Society, both in 1985. In 1989, he received the 'Distinguished Contribution Prize' from the Japan Thermophysical Properties Society and the 'Honorary Award' from the Chinese Academy of Sciences. He was also the recipient of the 'Honorary Certificate for Long-Term Distinguished Teaching' from the State Education Commission in 1990 and the 'Honorary Certificate for Pioneer Worker' from the Chinese Mechanical Engineering Society in 1991.

On behalf of Professor Wang's students, colleagues and friends all over the world, and members of the editorial boards of this journal, we wish him many more years of happiness, good health and continued success.

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