

On the 80th birthday of A.A. Mak



Professor Artur Afanas'evich Mak, an outstanding scientist in the field of laser physics, Doctor of Physics and Mathematics, an Honoured Worker of Science, and the head of the Research Institute for Laser Physics, 'S.I. Vavilov State Optical Institute' was 80 on 15 May 2005.

Artur Afanas'evich was born on 15 May 1930 in the town of Kamenets-Podol'skii, Khmel'nitskaya region in Ukraine. After graduating from the Leningrad Polytechnical Institute in 1954, he joined the S.I. Vavilov State Optical Institute. In 1993 Artur Afanas'evich founded and headed the Research Institute for Laser Physics, which became one of the leading centres in the world in the field of laser science. At present, A.A. Mak is the scientific supervisor of this institute.

In his works Artur Afanas'evich combines the fundamental research in the field of spectroscopy and laser optics with the applied problems on their use in engineering, technology and medicine. Together with his colleagues, he managed to create a number of unique lasers and laser systems, including highly stable lasers for precision measurements and lasers emitting beams with an ultrasmall angular divergence.

A.A. Mak supervises investigations of diode-pumped solid-state lasers, works in the field of gas fullerene–oxygen–iodine lasers, nonlinear correction of aberrations in lasers and observation optical systems, research in the field of laser radiation phase correction, interaction of laser radiation with matter, etc. Works of the Research Institute for Laser Physics are known and called for both in Russia and abroad. Artur Afanas'evich is the member of the Expert Council on Laser Technologies in the State Duma Committee of the Russian Federation.

In 2010 the leading scientific school 'Laser Optics' headed by A.A. Mak for many years received a Grant from the RF President, which makes it possible to carry out research at the Research Institute for Laser Physics as well as to support talented scientific youth.

Artur Afanas'evich has been the member of the Editorial Board of Quantum Electronics for almost forty years (virtually since the foundation of the journal). Currently, he is the member of the Editorial Council of the journal.

Artur Afanas'evich pays much attention to teaching. From 1977 till 1993, he was the professor of the Optics chair at the St. Petersburg State University; from 1993 till 2005 – head of the branch chair at the St. Petersburg State University of Information Technologies, Mechanics, and Optics; at present, he is the scientific supervisor of the Master Programme at the 'Laser Optics' chair founded in 2010 at the same university.

Since 1977 A.A. Mak has been organising International Conferences on Laser Optics in St. Petersburg, which became one of the largest world forums of the scientists and specialists involved in development, design and application of lasers and laser systems. The last of them, the 13th International Conference on Laser Optics 2008 gathered 750 participants from 40 countries of the world. At present, preparations for the next conference, which will be held in St. Petersburg from 28 June till 2 July 2010, are on the way. The success of 'Laser Optics' Conferences among Russian and foreign scientists is mainly due to their permanent chairman and organiser.

Being the author of 60 inventor's certificates and patents, three monographs, over 260 research papers, Prof. A.A. Mak enjoys well-deserved reputation among the Russian and foreign scientists and developers of newest laser systems.

For his outstanding services, A.A. Mak was awarded the USSR State Award (1974), the Lenin Prize (1982), and the Russian Government Science Award (1997). He was also decorated with the Red Labour Banner order (1971), the Lenin order (1978), the order 'For Service to the Motherland' class IV (2001) and III (2007), and several medals.

The Editorial Council and Editorial Board of Quantum Electronics heartily congratulate Artur Afanas'evich Mak on his jubilee and wish him sound health and many years of creative activity for the benefit of Russian and world science.

O.N. Krokhin