

Foreword to Advanced Technologies in Biophotonics: the 80th anniversary of Professor Valery Tuchin

Dear Colleagues,



On February 4, 2024, Valery V. Tuchin turned 80 years old. He is a Doctor of Sciences, professor, head of the Optics and Biophotonics Department of the Physical Institute of Saratov University, corresponding member of the Russian Academy of Sciences, author of fundamental world-class scientific works in the field of biophotonics, winner of numerous prizes in the field of science.

Valery V. Tuchin, one of the world's leading experts in biophotonics, was born in Saratov. In 1966, he graduated from the Department of Radiophysics and Electronics of the Physics Department of Saratov State University.

In the 1960s, there was a scientific breakthrough associated with the creation of an optical quantum generator, which did not bypass the Department of Optics of Saratov University. Laser became the main focus of scientific research of postgraduate student Valery Tuchin. His interests concerned fluctuations in laser radiation, dynamic processes in gas-discharge lasers, and modulation characteristics of lasers. Valery defended his PhD thesis (1974) and doctoral dissertation (1982) on this topic.

In the mid-1980s, Prof. Tuchin began creating his own scientific school in the field of biotissue optics, which eventually grew into an interdisciplinary science – biophotonics, and pioneered “tissue optical clearing” as a new direction.

Valery Tuchin is a man of amazing scientific intuition. He generously shares ideas with colleagues, connecting Saratov University with scientific groups around the world. His authority and charisma, as well as energy and efficiency allow him to implement large international projects, conferences and symposiums, both in Russia and abroad.

For almost 30 years now, the Saratov Fall Meeting (SFM) has been hosting international events annually at Saratov University, attended by leading and young scientists from different countries. The organizer and inspirer of this widely known event in the scientific world is V. V. Tuchin. Our journal regularly publishes special sections with articles based on the materials of the reports presented at SFM. In addition to SFM, Valery is a co-chairman of well-known international conferences held within the framework of Photonics West in the USA, International Conference on Photonics and Imaging in Biology and Medicine (PIBM) in China and SPIE Photonics Europe in France.

Professor Valery Tuchin is a unique example of an outstanding scientist, a talented teacher, and organizer of the scientific process. He has created a scientific school known all over the world. His fruitful scientific and educational activities have marked by the awarding of medals, orders, honorary titles and prizes from the State and various scientific communities, as SPIE, OPTICA, Laser Association of the Russian Federation and others. In 2024, Valery Tuchin became a laureate of the “Vyzov” Award in the “Scientist of the Year” nomination.

This special issue is a tribute from students and colleagues to a brilliant scientist, an outstanding teacher and just a wonderful person. Congratulations to Valery Tuchin on his anniversary and wish him good health, creative inspiration and great success in his multifaceted activities!

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