



CHIRILĂ, TRAIAN

Honorary Member, AUSTRALIA

Professor, Ph.D.

Date and place of birth: 14 February 1948, Arad, Romania

Position: Director biomaterials and polymer research
Adj. Assoc. Professor, Centre for Ophthalmology and Visual Science
Adj. Res. Professor, School of Applied Chemistry.

Affiliation: Lions Eye Institute

Research profile: T. V. Chirilă was born and educated in Romania, where he obtained a B. Eng. in polymer technology (1972) and a Ph.D. in organic chemistry (1981), both from the Polytechnic University of Timișoara. In 1983, he was granted residence in Australia and relocated to Perth. During 1984, he worked as a Research Fellow at Curtin University of Technology. In 1986, he joined the Lions Eye Institute as a Senior Scientist (later, Director of Department) with the main task of establishing a department for research and development of polymeric biomaterials with applications in eye surgery. Between 1989 and 1994, he was the Assistant Director (Research) of the institute. In 1992 he was made a Fellow of Royal Australian Chemical Institute (RACI). He holds honorary professorships with the University of Western Australia (1992) and Curtin University of Technology (1999). Dr. Chirilă has received the RACI Polymer Division Citation in 1993 and the RACI Applied Research Medal in 1999. In 2003, he was elected a corresponding member of the Academy of Romanian Scientists. Since 1987, he has obtained 22 research grants totalling A\$ 6.2 million.

Dr. Chirilă's past and current research has contributed in several areas of biomaterials and polymer science, especially to the understanding of biomaterials and biocompatibility, development of polymers for intraocular implants, hydrogels, radiation-absorbing polymers, hydrophilic sponges, artificial cornea, artificial vitreous substitutes, calcification of polymers, interaction of laser radiation with polymers, photoresponsive polymers, sustained release of bioactive agents, tissue engineering, and the use of polymers in genetic therapies. He developed an artificial cornea, which is currently used in blind patients with significant clinical success. One of his recent research interests consists in the mechanism of spontaneous calcification of hydrogels, an issue of importance in the medical applications of polymers. His activity has resulted to date in 109 publications and 21 patents. He also presented over 110 communications at scientific meetings, and lectured as a visiting professor or scientist in China, USA, Japan, Romania, Italy, France, and Switzerland.

In 2005, he joined the newly founded Queensland Eye Institute in Brisbane, where he was offered a position of Senior Scientist to continue his research and to establish a department of ophthalmic bioengineering. Currently; Chief Scientist of the institute and holds three adjunct professorships at the Queensland University of Technology and the University of Queensland (Australian Institute for Bioengineering and Nanotechnology, and Faculty of Health Sciences). Member of the Australasian Society for Biomaterials and Tissue Engineering, New York Academy of Sciences, and the American Chemical Society. Member of editorial boards - 9 journals. His main research interests include polymer science, hydrogels, ophthalmic biomaterials and tissue engineering, supramolecular polymers. Inventor of AlphaCor™, an artificial cornea, and AlphaSphere™, an orbital implant, both in clinical.