

## NEFYODOV Eugene I. Institute of Radio Engineering and Electronics (IRE) of Russian Academy of Sciences, Friazino Branch, Chief-Researcher

## Adjunct-Professor of Durban Technological University, RSA

## **Doctor of Physical-Mathematical Sciences, Professor**

RUSSIA, 141190, Fryazino, MOSCOW Reg., Vokzalnaya str., house 19, ap. 131 Phone: (+7-495)-526-9230 priv. E-mail: nefyodoy32@mail.ru

Eugene I. NEFYODOV was born at August 19<sup>th</sup>, 1932 in Taganrog-tows. Childhood in this Russian town, then school in Baltics, then the Second World War, life in evacuation in Volga region... After war finished, again Taganrog, secondary school (with gold medal).

In beginning of 1950s, Soviet Army was re-equipped, passed by powerful rates to new weapon, and this required a great number of high-qualified military-technical personnel. That is why, the yesterday school-boy Eugene Nefyodov was attracted to Soviet Army was directed for education at Military Engineering Communication Academy. This Academy was in Leningrad-city.

After that, the military service as the head of radio receiving center in Kandalaksha-town (Murmansk region) with his wife (the reliable partner for all future life). This two military years gave to him many new knowledge, however, the destiny prepared him to the other direction: the science had called. Teaching in Taganrog Radio Engineering Institute, education at PhD course of IRE RAN, defense of PhD thesis and joining with Friazino branch if IRE RAN. After that, all future life became the scientific researches

This side of biography is related (more than 50 years) with electrodynamics and microwave and mm-wave engineering. He had a happy to have as supervisors the excellent Russian scientists – the founders of its science.

Among the main scientific achievements, there is a cycle of research for obtaining of single-frequency oscillations (the system of non-focusing mirrors) – the research which was officially registered as scientific discovery, place him in the first line of scientists in electrodynamics. But the genuine talent of scientist and science organizer, the creator of scientific school with world priority is related with his results in creation of volumetric integrated circuits (VIC or 3D-IC) of microwave and mm-wave ranges and system for ultra-fast information processing on the base of VIC (so-called, "topological

computer", "computer on volumetric field coupling"). This idea passed ahead the modern science level approximately by 20-30 years, and its fruitful implementation (for instance, in Tula-town on the basis of Central Design Bureau of apparatuses, where the technological base was developed), unfortunately, was interrupted by USSR destroy.

During last 10 years this idea was logically extended by E.I. Nefyodov and his scientific pupils to higher conceptual level: electrodynamics and informatics of alive system.

Eugene Nefyodov published more than 30 books (scientific books and students textbooks), 230 scientific papers, he is an authors of 50 authors certificates and patents; he reared the manifold team of pupils, which were formed the third generation of Russian experts in electrodynamics who created there own daughter scientific schools: in Samara-town (V.A. Neganov), Nizhniy-N|ovgorod school of physics abd electrodynamics (S.B. Raevskiy), Tula school of field and emission biophysics and bioinformatics (A.A. Yashin).

E.I. Nefyodov is the Honor Radio Engineer of URSS and Russian Federation, he was awarded by Popov medal, he is an active member (academician) of several Russian and foreign Academies of Sciences. He is the Honor Professor of EuroAsian National university named after L.N.Gumiliov. He is the Adjunct-Professor of Durban Technological University.