

# Professor Gvanji Mania

(To the 100-th Birthday Anniversary)

Professor Gvanji Mania is a well-known Georgian mathematician and the founder of Georgian school of Probability Theory and Mathematical Statistics. He was born on May 29, 1918 in the village of Etsery to a family of a teacher. In 1935 he became a student of the faculty of Physics and Mathematics of the Tbilisi State University. In 1940-1945 he worked as an assistant in Pedagogical Institute of Zugdidi. In 1943-1946 he worked as an assistant at Railway Engineering Institute of Tbilisi. From 1945 to 1946 he was inspector of higher education school of the Ministry of Education of Georgia.

During 1946-1949 Mania was postgraduate student of Moscow Potemkin State Pedagogical Institute where he defended his thesis and received a candidate's degree. His scientific supervisor was a famous mathematician, professor N. Smirnov and official opponents were academician B. Gnedenko and professor Lyapunov. After the candidate's speech academician Gnedenko said: "Glivenko, Kolmogorov and Smirnov permanently pointed out the shortcomings of their theorems and it should be noted that G. Mania worked exactly on these interesting and important problems. The results obtained in the thesis have the first-class value". Professor Lyapunov said: "It is obvious that these results will be included into "gold fund" of mathematical statistics". No less successful was Mania's doctoral dissertation in 1963. His official opponents were academicians B. Khvedelidze, Y. Prokhorov and S. Syradjinov. In 1964 he was elected professor at Tbilisi State University.

In 1949-1950 Professor Mania worked in Nikoloz Baratashvili Gory Pedagogical Institute as a docent. In 1950-1953 he was docent at Georgian Polytechnic Institute and in 1953-1956 senior researcher at Razmadze Tbilisi Mathematical Institute.

Professor Mania made a great contribution to the creation of new research centers in Georgia such as Computational Center and Institute of Applied Mathematics. In 1956-1964, Mania worked as deputy director in scientific field of Muskhelishvili Computational Center of Georgian Academy of Sciences and in 1966-1972 at Vekua Institute of Applied Mathematics. In 1968 Mania founded the Department of Probability Theory and Mathematical Statistics at the Tbilisi State University. He directed this department until the end of the life. Between 1973 and 1983 he was head of the Sector of Probability Theory and Mathematical Statistics at the Institute of Law and Economics and in 1983-1985 he was in charge of the same Sector at the Razmadze Mathematical Institute of the Georgian Academy of Sciences.

Professor Mania worked productively as a tutor and a researcher. He is the author of many scientific papers, textbooks and monographs. He was a member of various boards and societies, including that of the Bernoulli Society of International Statistical Institute since 1965 and member of the American Mathematical Society. He was also member of the board of International journal *Statistics*. In 1969, he was delegated to 37<sup>th</sup> session of International Statistical Institute in London and in 1970 he participated in International congress of mathematicians in Nice. He was awarded two government prizes and Ivane Javakhishvili medal.

Professor Mania has founded limiting distributions of several important statistics and tabulated these distributions. The proof of these statements are based on Abel and Tauber type theorems proved by Mania, where errors made in Feller's similar theorems were eliminated. These results became important for many scientists who used them in their researches. These statistics are known as Mania's Statistics in scientific literature. In 1961 he represented homogeneity criteria for two normal independent samples. Later, Mania investigated the properties of nonparametric estimations of normal distribution density, which shows that it is impossible to generalize famous theorems of Boyd and Still. In 1974 the monograph "Statistical Estimations of Probability Distributions" was published, which was highly appreciated by colleagues. *International Statistical Review* cited 17 papers by Mania (including the

above mentioned monograph) in bibliography of Werts and Schneider about statistical estimation of density, where this monograph is mentioned as “an excellent book”.

Professor Mania established a Georgian scientific school of Probability Theory and Mathematical Statistics which covered a wide range of sub-disciplines. He made an invaluable contribution to the education of a new generation of Georgian mathematicians.

G. Mania died at the age of 67 years on March 16th, 1985.