BIOGRAPHICAL NOTES

Liubomir Nikolov Tchakalov (February 6, 1886 — September 11,1963) was born in Samokov, in the family of an impoverished tailor. He received his primary education in his home town and then completed his secondary education at the Secondary Boys' School in Plovdiv in 1904. In the autumn of 1904 he became a student in mathematics at Sofia University, where he studied until 1907. In connection with the students' demonstration on January 3, 1907 and the subsequent closing of the University, Tchakalov continued his studies at the Zagreb and Belgrade Universities during the summer term of the 1906/1907 academic year and the winter term of the 1907/1908 academic year. His university education was completed in Sofia in 1908. During the same year he was given a teaching post at the First Secondary Boys' school 1n Sofia and at the same time he was asked to become assistant lecturer in mathematics at Sofia University. Since January 1, 1909, Tchakalov was given a regular post as assistant lecturer in mathematics. Between 1910 and 1912 he was sent to specialize successively at the universities in Leipzig and Goettingen. On October 1, 1914, he was appointed regular associate professor at the Department of Higher Analysis, in 1919 he was elected extraordinary professor and in 1922 — regular professor at the same department, where he remained until his emeriting in 1952.

Tchakalov spent the 1924/1925 academic year at the universities of Paris and Naples, finishing his scientific specialization there with a doctorate on "Ricatti's Equations" [66, 76] (the references are from the complete bibliography of L. Tchakalov's works, L. Tchaka1ov. **Opera. Vol. 1,** Sofia. Bulg. Acad. Sci., 1982, 9—16), defended at the University of Naples in 1925. During the same year he was elected member of the Bulgarian Academy of Sciences. He was also member of the Chech Academy of Sciences, the Warsaw Academy of Sciences and other scientific societies in Bulgaria and abroad.   .

As associate professor and regular professor at Sofia University he read lectures on the basic courses in theory of analytical functions, and ordinary differential equations. Parallel with that he also read extracurricular lectures in various mathematical disciplines, e.g. theory of entire functions, theory of elliptic functions, variational calculus, theory of trigonometric series, integral equations, foundations of arithmetic, algebra and analysis, as well as elementary mathematics. He is the author of textbooks in the theory of analytical functions and ordinary differential equations [63,65].

The scientific Interests of Liubomir Tchakalov comprise various spheres of mathematics. His works treat problems in the domain of algebra, theory of numbers, theory of differential equations, as well as numerous problems in the field of complex and real analysis.

His interests in the theory of numbers are directed towards solving indefinite equations in numbers from a given domain of rationality, as well as towards investigating the arithmetic properties of some transcendental functions [3, 69, 78].

In the domain of algebra Tchakalov considers some geometrical problems connected with the algebraic solvability of equations, as well as

problems related to the distribution of the zeroes of algebraic polynomials [55, 6, 72, 82].

In the field of differential equations the attention of Liubomir Tchakalov is attracted by the theorems on the existence of solutions of ordinary differential equations, as well as systems of such equations [40, 41].

Publications in the domain of analysis are the most numerous among L. Tchakalov's works. His studies in complex analysis comprise the theory of entire functions and the theory of univalent functions [9, 15, 32, 33, 43, 45, 47, 81, 86, 102]. Parallel with this, he also treats some other problems of the complex analysis, e.g. his studies on the Euler function $F(z)$ and on the polar singularities of the exponential series [19, 42].

The highlight in the scientific publications of Liubomir Tchakalov is the cycle of works on the task of specifying the mean value theorems for real polynomials [62, 83], as well as the related publications, on the presentation of Newtonian difference quotients [13,109] and on a problem of Darboux [10, 110]. Tchakalov's method for the treatment of the above-mentioned problem is interesting not only with its originality but also with the fact that it is applicable for the solution of other important problems in the domain of analysis as well. In order to illustrate the above, it can be noted that the same method, complemented by Helly's theorems, makes it possible to prove the theorems for the moments of Stiltjes and Hamburger.

Of particular interest for specialists working in the field of computational mathematics, are Tchakalov's studies on various types of quadrature Gaussian formulae [24, 50, 75]. These problems have attracted his attention practically throughout his entire scientific creativity.

Liubomir Tchakalov has published studies on a number of specific questions in the domain of analysis, of which we shall mention his studies on a problem of D. Pompeiu [8], on some theorems of Polya and Nevanlinna [18], on a minima! property of a class of trigonometric polynomials [36, 103] and on the convergence of a trigonometric interpolation formula [30, 44].

In spite of the great thematic variety of Tchakalov's works, they are united by a characteristic trait — his ability to find always an original method, leading directly to the goal, by means of which to attain exhaustive solution of the problem considered. And in this respect it is of indisputed interest to study the scientific heritage of Liubomir Tchakalov.