

*Czesław Domański**

SAMUEL DICKSTEIN (1851–1939)

In 2011 we celebrated 160 anniversary of birth of Samuel Dickstein – professor of mathematics and history of science, and a great promoter of Polish mathematics. Dickstein was born in Warsaw on 12 May, 1851 and died there on 28 September, 1939.



In the years 1866–1869 he attended the Main School in Warsaw. He graduated from Warsaw University in 1870, and later the same year he obtained a degree of candidate of mathematical sciences. Dickstein started his professional career as a teacher of mathematics first in a secondary school and then in Kronenberg School of Trade. In the following years (1878–1888) he was running his own highly reputable grammar school. Alongside his pedagogical duties Dickstein dedicated a lot of time and effort to establishing various scientific centres. In 1881 he started publishing a periodical on pedagogy entitled “Pedagogical Movement”, and in 1884, in co-operation with A. Czajewicz, he founded “Mathematics and Physics Library”, whose aim was to provide academic textbooks of high standard for secondary and university students. In the same year he co-founded with E. and W. Natansons and W. Gosiewski, the first Polish periodical devoted to mathematics entitled „Papers in Mathematics and Physics”. Over the years he continued his publishing activity, and in 1897 the first issue of a new magazine „Mathematical News”, intended for more elementary reader, came out. Dickstein was also one of the organizers of a network of meteorological stations, and since 1903 the chairman of the board of the Meteorological Bureau. His interests also encompassed the field of insurance and he participated in setting up “Providence” – the first Polish insurance company. After 1905 numerous scientific institutions were established on his initiative e.g. Warsaw Scientific Society, whose founding member and

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first vice-president he became. In 1906 the Society of Scientific Courses was founded in Warsaw, and again it was Samuel Dickstein who was one of the organizers and later the chairman of the scientific board. After Warsaw University had been re-activated in 1915 Dickstein was appointed the honorary professor of mathematics and history of science and he was giving lectures there, mainly in algebra, until 1937. In 1890 he became a member of Society of the Friends of Science and a corresponding member of Polish Academy of Sciences in Cracow. In 1921 Dickstein was granted an honorary doctorate of Warsaw University. Moreover, he was a member of numerous foreign learned societies e.g. Scientific Society in Prague, an honorary member of Jednoty Českých Matematiků a Fysiků and International Commission for Teaching Mathematics.

In recognition of his historical research, Dickstein was appointed for the post of vice-president of the International Academy of History of Sciences. When it comes to writing Samuel Dickstein was mainly active in three areas: publishing results of his own research publishing textbooks mostly for secondary level of education, and promoting most interesting mathematical papers published in periodicals edited or co-edited by him. However, his major work is a monograph „Hoene-Wroński, His Life and Works”, published in Cracow in 1896. The ideas of Józef Maria Hoene-Wroński (1778–1853) inspired lot of mathematicians. As written by Kofler (1962), Stefan Banach „basing his considerations on vague ideas of Wroński, came to an important theorem, which was formulated on the basis of Banach space – the term well known to mathematicians all over the world”.

A vast array of 263 works by Dickstein includes a number of statistical papers e.g. “An Outline of Political Statistics” published in Warsaw in 1910, where he makes a distinction between theoretical and practical statistics and defines their aims. Throughout his life Dickstein was an enthusiastic promoter of science and organizer social activities. Among other things, Polish science owes to Dickstein the discovery of achievements of Adam Kochański (1631–1700) in the field of mathematics.

Dickstein published results of his research in „Papers of Academy of Sciences (Faculty of Mathematics and Natural Science)” in 1898. It appears that Leibniz had a lot of respect for Kochański’s extensive mathematical knowledge and he frequently shared with Kochański his opinions about the latest developments in mathematics. Kochański was the first Polish mathematician to become acquainted with the fundamentals of differential calculus and integral calculus thanks to conducting correspondence with one of its authors. Generally, Kochański was much better known abroad than at home which can be seen when his correspondence, mostly with Leibniz, is studied. Discovered by Dickstein in a library in Hanover, this correspondence contains 24 letters of Kochański and 12 replies sent by Leibniz.

The Warsaw Scientific Society developed a project to organize the Room of Mathematics which could house a valuable collection of books donated by professor Dickstein (Kuratowski, 1973).

Edward Malczewski in “Development of Mathematics in Poland” perceives Samuel Dickstein’s merits as very significant and says: „he is the first great organizer of Polish mathematics whose widespread activities lasted until the outbreak of World War II, „...It is really difficult to find words to describe his services . He is the founder of the first mathematical periodicals, since 1888 he edits and publishes at his own expense „Papers in Mathematics and Physics ”, and since 1897 „Mathematical News”. He publishes in co-operation with Czajewicz „Works and Dissertations in Mathematics and Physics”, he builds up an enormous collection of mathematical books which is later donated to Warsaw Scientific Society. He takes care of fledgling mathematicians, encourages them to carry on with their work, and publishes their papers in his periodicals. His papers on Polish mathematicians are published in foreign scientific journals. As he is well-known and respected thanks to his publishing and organizational activity, he becomes a representative o Polish mathematics on the international scene. Not only is he an individual representative but he also becomes a substitute for all those mathematical institutions which are still non-existent at the time. His great and undeniable achievement was compiling the mathematical output of Hojne-Wroński”, „... He is also interested in applied mathematics, participates in the process of building first insurance institutions, educating actuaries and developing meteorological network etc.”

To pay tribute to this eminent mathematician and untiring organizer of scientific life the Polish Mathematical Society funded in 1978 the Samuel Dickstein Prize which is awarded for notable achievements in the field of history of mathematics, philosophy of mathematics, popularization of mathematics, and remarkable achievements in teaching, organizational and publishing activity.

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