ABSTRACTS

- Yurevich A. V. Psychological Foundations of Modern Science. The author views modern science as an inevitable result of a certain psychology created and simultaneously expressed by the Protestant ethics. The main ingredients of this psychology described in the article were the new style of thinking, novel attitudes towards nature and labor, achievement motivation, mass neurosis creating a need for order satisfied by science, etc. A special attention is drawn to the general complication of mass psychology and the emergence of a new type of personality as a prerequisite for modern science.
- Kurtik G. E. Astral Symbolism in Mesopotamia of the Third Millenium B.C. The remnants of Mesopotamian glyptics and ceramics mostly from the 3rd Millenium B.C. reveal an exceptionally rich astral symbolism of the culture of that period. The three core symbols (crescent, four-, and eight-pointed star within a disk or without it) are those of the main astral deities, Nanna, Utu, and Inanna, representing Moon, Sun, and Venus. Apart from them, there exist quite a few other symbols which bear or can possibly bear astral meanings, such as sun-discs, points, rosettes, sunrise sign, images of wings and radiances from the deities, and even such complex sign as the image of an eightpointed star on the pole with sunrise sign at its lower end. Particularly interesting are the symbols decorating the two-level seals of the Early Dynastic Period, which the author interprets as standing for the «heaven-earth» structure. The article gives a detailed description of the symbols in the «heavenly» domain of these seals (the panther; the bearded bare hero; the boat with anthropomorphic traits, carrying a deity; the plow; the lion; the jug; the scorpio or the scorpio-man, etc.), which may be viewed as representing certain constellations. These symbols suggest that some of Mesopotamian constellations, known from the texts of the 2nd and 1st Millenia B.C., were identified as early as in the middle of the 3rd Millenium B.C. The symbolic and the lit erary sources, however, do not fully correspond with each other: some symbols from the «heavenly» domain of the seals have no analogs among the names of constellations found in the texts of the 2nd and 1st Millenia B.C., just as some of those names have no direct parallels among the symbols. One plausible reason for this discrepancy is that the constellations-related symbolism of the 3rd Millenium B.C. was essentially different from the celestial symbolism of the later period.
- Gleizer G. D. On the Value of π in the Old Testament. Applying cabbalistic deciphering technique to a verse of the Old Testament (I. Kings, 7.23), the article suggests that the builders of the first Jerusalem Temple, in the reign of Solomon, did possess a much deeper mathematical knowledge than the students of ancient culture have hitherto believed they may have had. According to the author's conclusion, they may have been familiar with the first five numerals of the π constant. If this hypothesis finds additional support, our views of the level of mathematical knowledge in the ancient world may be significantly changed.
- Pethers P. The Pamir Journeys of Nikolai Korzhenevskii. This paper presents and discusses excerpts from the field diary of the Russian geographer Nikolai Korzhenevskii (1879–1958), pertaining to the early period (1903–14) of his studies in Central Asia. In his lifelong devotion to the Pamir area, Korzhenevskii partook of the three epochs in its exploration: following the initial efforts of solitary scientists (such as his elder contemporaries Semenov-Tian-Shanskii and Mushketov), he started his research as a young military officer, carrying it through the period of enthusiastic amateurism to the stage of broad complex investigations of the Soviet era. Among his discoveries in the Pamir mountains were the 7105 meter-high peak (to which he gave, contrary to the tradition, the name of his wife, Evgeniia Korzhenevskaia) and the 108 kilometer-long meridional range (which he named «The Academy of Sciences' Range»).

- Kopylov G. I. «Evgenii Stromynkin» (a Novel in Verse). The first, three-chapter, version of «Evgenii Stromynkin» was written in 1949, shortly before its author's graduation from the Department of Physics of Moscow State University. Revised and completed with three more chapters by 1956, when Kopylov was already working at the Institute of Nuclear Studies in Dubna, the poem won immediate success among the Soviet physicists for its satirical and truthful representation of their community. Owing to these features, as well as the criticism it raised against the Soviet order in general, «Evgenii Stromynkin» was widely circulated and came to be considered as «the first swallow of the physicists' *samizdat.*» Both its contents and the history of its creation (analyzed in the commentary) make the poem a valuable source for those interested in the social history of Soviet science.
- An Unknown Letter of T. D. Lysenko to I. V. Stalin (publication and foreword by Iu. N. Vavilov). The publication features an exchange of letters between T. D. Lysenko and I. V. Stalin, both of which, hitherto unknown to historians, have been recently found in the Stalin files (kept at the Archive of the President of Russian Federation). This exchange took place in the late Fall of 1947, in the days when Lysenko's reputation was put to doubt, owing to the failure of the practical recommendations he had made during WW II. Writing to Stalin about his projects of cultivating new varieties of wheat, Lysenko drew a sharp distinction between «our Michurinist genetics» and «Mendelian-Morganist genetics ... developed in the Western capitalist countries not for the goals of agriculture, but to serve the reactionary purposes of eugenics, racism, etc.» He concluded by emphasizing the necessity of implementing the fundamentals of Michurinism in «our cadre of biologists, agronomists, and stock-breeders.» Stalin must have agreed with this appeal, closing his response with the words «[t]he future belongs to Michurin.» Furthermore, he ordered to distribute Lysenko's letter among the top party officials and agricultural ministers, supplementing it with his comment. The contents of Stalin's response and comment throw light on the work of the Soviet decision-making machinery in the late 40s, and reveal the background of the August 1948 session of VASKhNIL.
- Solov'iov Iu. Ia. The First Elected President of the Russian and the Soviet Academy of Sciences. The article gives a concise account of life and scientific work of the geologist A. P. Karpinskii. Having graduated from the St. Petersburg Mining Institute in 1866, he continued working there as a professor until 1882. The second stage of his career (1882–1903) was work with the Geological Committee. It was during these years that Karpinskii headed such large-scale projects as the first comprehensive geological survey of European Russia and wrote fundamental works on geology, petrography, paleontology, stratigraphy, paleogeography, and tectonics. The third, and most important, period of his work took place at the Academy of Sciences (he was elected its member in 1896). Karpinskii was actively involved in the work of several Academy bodies, such as the Magnetic Commission which was in charge of geological survey all over Russia. In May 1917, the Academy's General Assembly unanimously elected Karpinskii its President (in the two preceding centuries of its history, Presidents of the Russian Academy of Sciences were appointed by the Emperors.) He was re-elected three times, becoming the first President of the Soviet Academy of Sciences as well.
- Krivonosov Iu. I. From the History of Our Institute. In 1960, an attempt was made to «expel» the Institute for the History of Science and Technology from the system of the Academy of Sciences. The article provides a documentary account of this episode, based on previously unstudied archival sources.