

## BIBLIOGRAPHY

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# Journal *Vestnik opytnoi fiziki i elementarnoi matematiki* (VOFEM) [*Herald of Experimental Physics and Elementary Mathematics*]: open access digital archive

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The first Russian physico-mathematical popular science journal *Vestnik opytnoi fiziki i elementarnoi matematiki* (VOFEM) (*Herald of Experimental Physics and Elementary Mathematics*) was published from August of 1886 to 1917. The journal appeared 24 times a year in separate 24- or 32-page issues. There were 674 VOFEM issues altogether.

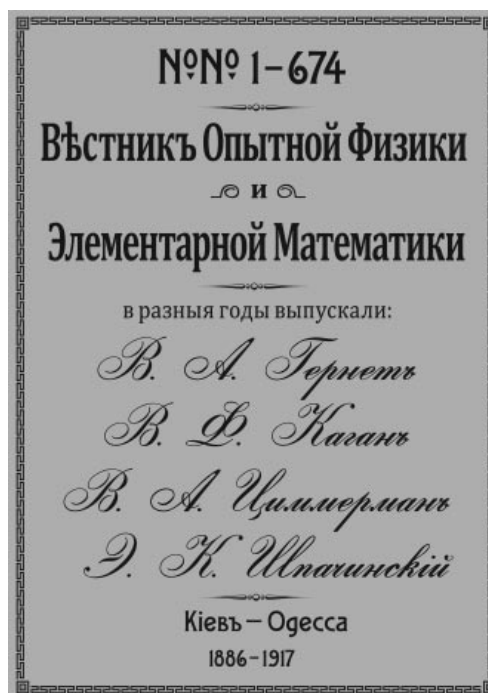
VOFEM ‘grew up’ from the *Journal of Elementary Mathematics* which was issued by Professor Vasilii Petrovich Ermakov in Kiev from 1884. Because of the pressure of work and complexities of the publishing process, two years after the start Ermakov decided to cancel the publication of the journal. However, the journal did not fold, because a member of the staff, Erasm Kornelievich Shpachinskii, undertook the publishing and editing, but changed the name of the journal and extended the subject to include physico-mathematical issues. Having become tired of the constant indigence due to publishing the journal, Shpachinskii left for Odessa, where in some time he passed the journals publication to Vladimir Aleksandrovich Gernet and the editing to Vladimir Akimovich Tsimmerman. From 1902, the second (and from 1904, the only) editor was Veniamin Fedorovich Kagan.

In the first issue of the journal, Shpachinskii wrote on behalf of the editorial staff: “...Our journal is predominantly, but not exclusively, intended for the youth being brought up in our educational institutions, and therefore will first of all tend to satisfy, in the field of physico-mathematical sciences, the want of extending the mental outlook, which claims its right especially vividly in the teenager and always shows up among students in the form of an irresistible striving for wider knowledge than is envisaged by the official program. ...

Second, our journal is meant generally for all physics and elementary mathematics teachers predominantly with the aim of uniting our pedagogical forces that are spread over the whole territory of Russia....

Inclusion in the program, in addition, of the division of chronicles, extracts, etc., is explained by the desire of the editorial staff to make their journal a real ‘herald’ of everything that is of general scientific interest and relates to the area of physico-mathematical sciences.”

The problems posed were not only solved but also substantially widened. We list some of the journal rubrics, as many of them were introduced for the first time and laid the foundation for years to follow:



Nos 1–674  
*Vestnik opytnoi fiziki i elementarnoi matematiki*  
(*Herald of Experimental Physics and Elementary Mathematics*)  
Edited and published in different years by  
V A Gernet  
V F Kagan  
V A Tsimmerman  
E K Shpachinskii  
Kiev–Odessa  
1886–1917

Papers on mathematics, papers on physics, pedagogical notes, inventions and discoveries, mathematical minutiae, experiments and devices, personalities, scientific chronicles, reports on scientific society meetings, topics for the staff, topics for learners, problems for learners, maturity test problems, problems for prizes, solutions to problems, bibliographies (a list of the latest Russian publications, authors’ reports, news from foreign literature), reviews of scientific journals, books and booklets submitted to the publishers, and publishers’ responses.

The main content of the journal included popular science papers on physics and mathematics. Among the authors of translated papers, we can find the names of famous scientists who shaped the science of that time: O Wiener, H Helmholtz, P Seeman, J Kaiser, F Klein, O Lodge, A Michelson,

S Newcomb, M Planck, H Poincaré, W Ramsay, A Righi, A Slabi, F Soddy, J J Thomson, and A Eddington. Some of the texts of these authors, which first appeared in Russian as papers (sometimes a series of papers), were then published as books and booklets in *Mathesis*, the first Russian publishing house of scientific and popular scientific compositions from the field of physico-mathematical sciences (<http://mathesis.ru>).

It was common practice in the journal to publish the names of the authors of both the problems themselves and the solutions submitted. Among them are well-known persons and gymnasia students of those times and even — in the last issues — participants on the front lines in the war.

Under the rubric of information on the meetings of scientific societies, we may be surprised by the immediacy of publications in the ‘pre-electronic-mail’ epoch. Reports on sessions in Moscow, Kiev, and Kharkov, not to mention Odessa, were often published in issues appearing the month following the date of the meeting.

Great attention was also paid to issues of education: particular physical and mathematical methods, the description of classroom physical experiments, reviews of the measures taken to reform mathematical education in schools abroad, etc.

The first attempt to digitize the journal (the first several issues) was made by Sergei Markelov, a student of Igor Fedorovich Sharygin.

A project aimed at complete digitization of the journal was carried out at the Laboratory for the Popularization and Propaganda of Mathematics of the Steklov Mathematical Institute, Russian Academy of Sciences (RAS) with the participation of the Ushinskii Pedagogical Library, Russian Academy of Education (RAE) and support from the Dynasty Foundation of Dmitry Zimin.

The electronic archive of the journal *Vestnik opytnoi fiziki i elementarnoi matematiki* is accessible for free on the Internet: <http://vofem.ru>. A disc with a local version of the archive has been published. The Mathematical Etudes project (<http://etudes.ru>) sends the disc free to school teachers and libraries on request.