



All Maglev alphabetically...



Shelikhova, Alla K., Russian University of Transport, Moscow, Russia.*

Alla K. SHELIKHOVA

Zaitsev, A. A., Shmatchenko V. V., Plekhanov P. A., Roenkov D. N., Ivanov V. G. Magnetic Levitation Transport Systems: English-Russian Explanatory Dictionary. Edited by Doctor of Economics, Professor A. A. Zaitsev. St. Petersburg, Nauka Publishers, 2020, 272 p. ISBN 978-5-02-039736-1.

ABSTRACT

The peer-reviewed explanatory dictionary is the first attempt to publish a dictionary-

reference, which includes terms used in design, manufacture and operation of maglev transport systems. In this case, the actual terms are accompanied by definitions and explanations.

The explanatory dictionary is structured into 16 thematic sections and includes a total of 513 terms and definitions. Each section is dedicated to a specific subject area of maglev transport systems: from the physics of magnetic levitation to operation and maintenance.

The publication is addressed to specialists of transport, industrial and scientific organizations who are interested in development of maglev.

Keywords: *transport, maglev, magnetic levitation, levitate, dictionary, explanatory dictionary, terms, concepts, definitions, stability of terminology, conceptual apparatus of science.*

*Information about the author:

Shelikhova, Alla K. – Head of the RUT Transport editions, Member of the Editorial Board of World of Transport and Transportation Journal, Russian University of Transport, Moscow, Russia, shelikhova.alla@yandex.ru.

Review received 28.05.2020, accepted 18.06.2020.

For the original Russian text of the review please see p. 244.

The famous British linguist, the most outstanding teacher of the English language in the world, Randolph Quirk, once describing the prevailing «dictionary» stereotypes, paraphrased the Bible: *«In the beginning there was not a word, but a dictionary»*. For a scientist, dictionaries are a kind of normative code, a «linguistic Bible».

I hope no one will dispute another axiom: the dictionary is the oldest and most significant achievement of world linguistics. The «boom of dictionaries», which is observed today all over the world, began in the middle of 20th century. Then it became clear that any dictionary is not just a thick book in which incomprehensible words are explained in alphabetical order, that in fact the dictionary is a guide to the world of science and culture.

In the 90s of the last century in Great Britain, one of the polls showed that the most popular book among the British was not a culinary reference book or the Bible. 90 % of British families in those years had at least one dictionary on their bookshelves. The Bible was second with 80 %, and cookbooks were third, with an honorable 70 %.

Why do you need a dictionary at all? The task of any dictionary is to reflect the actual terms and concepts. It is in terminology that the main meaning of any phenomenon, especially scientific, is concentrated. The dictionary records and systematizes the meanings of words, their history, transfers the accumulated knowledge to future generations. And here it doesn't matter whether it is about linguistics, philology or technical sciences ...

It is obvious that the dictionary reflects changes in the conceptual apparatus of science, but its role in stability of terminology should also not be underestimated. The word included in the dictionary starts a new, completely different life. Replacing one word for another in science is not as harmless as it seems at first glance. For example, choosing the right word to search for scientific publications is a key problem today. Any scientific work makes sense if scientists interested in this topic can find work and use it in their research. Therefore, even the fate of a scientific discovery can sometimes depend on the correct use of terms and concepts.

A new term that is included in the dictionary is always «the source of the problem». With the birth of a new word, a new direction appears in science.

For example, the term «maglev» by the standards of world history appeared not so long ago and «implies magnetic levitation of vehicles...».

The great mystery of levitation in 20th century has ceased to be a mystery. In 1911, it is believed, Russian scientists in the laboratory of Omsk Institute demonstrated that transport without wings and wheels is possible, and in 1945 Moscow scientist Vladimir Arkadiev made a small magnet «levitate» over a superconducting lead disk.

Magnetic levitation is real and meets all the laws of physics. And the term denoting it is already on hearing even among the inhabitants. Obviously, many countries are engaged in this new field, many works are published on the topic of levitation. Therefore, the problem and the need to standardize vocabulary in Russian and foreign works are in the air.

Many were waiting for appearance of the English-Russian explanatory dictionary edited by D.Sc. (Economics), professor A. A. Zaitsev «Magnetic Levitation Transport systems English-Russian explanatory



dictionary». The dictionary was created in the scientific and educational engineering cluster «Russian Maglev». It was published by St. Petersburg publishing house «Nauka». As the book reviewer, President of the International Maglev Steering Committee (IMB) Johannes Klushpis wrote: «There are few countries in the world that have as much potential for profitable introduction of Maglev train technology as Russia has... Continued research will require a common understanding of basic physical and technological concepts. To begin with, scientists need to adopt a common terminology on key aspects... Standardization and norm setting are key requirements».

By linguistic standards, this dictionary is not the largest. It includes a total of 513 terms and concepts used in development, manufacture and operation of maglev transport systems, with definitions and explanations. But for a new field of knowledge, this is already something! And this is an important step for international scientific discussion, which must «speak» the same language in order to understand each other. It is very significant that namely Russian scientists have made the main contribution to development of such a dictionary. There is no doubt that it will help you ask the right questions and find the best answers at the international level.

A special dictionary will become an assistant not only to well known experts, it will also help in teaching and training new personnel. Like any dictionary, it will be constantly updated and supplemented with new words, terms, concepts...

...Some believe that dictionaries, as a species, have outlived their usefulness. But today, in order to keep up with the times, you need to own a huge amount of information, the volume of which is growing day by day. Human knowledge is also rapidly updated. The number of terms is growing, new words appear and old ones go out of use, the meaning of old words and rules change. And the human mind, unfortunately, cannot hold such a volume of specific information. I would like the new dictionary to become in this a faithful assistant to everyone who keeps up with the running time. It has all the prerequisites for this. ●

