

Brief information about the project

Name of the project	AP15473224 "Development of new approaches to building a theory of scientific revolutions"
Relevance	<p>The question of the nature and mechanisms of scientific and technological revolutions is currently acquiring not only academic, but also pronounced applied interest. Political scientists are unanimous in the opinion that we are on the threshold of fundamental transformations of the world order. This process cannot but be associated with fundamental changes in scientific and technological paradigms. At the same time, the existing point of view on the mechanisms of scientific and technological revolutions, including those dating back to the works of T. Kuhn, does not stand up to criticism. Consequently, the requirement of the time is to build an adequate theory of scientific and technological revolutions, for which there are all the necessary prerequisites, including recently obtained results that consistently substantiate the concept of V.I. Vernadsky based on modern information theory.</p>
Purpose	<p>Development of prerequisites for the creation of a comprehensive theory of scientific and technological revolutions, synthesizing concepts dating back to the works of T. Kuhn, J. Schumpeter and V.I. Vernadsky, based on the consideration of science as a social institution that generates intangible assets, the liquidity of which depends on the nature of the perception of their ideological basis by society.</p>
Objectives	<p>Provide a detailed justification for the need for a radical revision of existing approaches to building a theory of scientific revolutions. Solving this problem will make it possible to reveal as clearly as possible the significance of this project as the basis for the formation of scientific and technological policy in the conditions of a radical restructuring of the world order.</p> <p>To provide evidence of the possibility of synthesizing approaches to building a comprehensive theory of scientific revolutions, going back to the concept of T. Kuhn, with the economic theory of innovation, going back to the concept of J. Schumpeter, as well as with the concept of V.I. Vernadsky. Solving this problem creates specific tools for building a comprehensive theory of scientific revolutions.</p> <p>To provide evidence of the existence of objective patterns reflecting the processes of assimilation of scientific and technological achievements and scientific ideas by society and political elites. Solving this problem will create the correct methodological prerequisites for building a comprehensive theory of scientific revolutions.</p> <p>To develop and justify the basic provisions of the theory of scientific revolutions, based on an analysis of the specifics of information processes occurring in the scientific and technical community and the nature of its communications with society and political elites. Solving this problem is key for this project, as it ensures the achievement of its main goal.</p> <p>Apply the developed provisions of the complex theory of scientific revolutions to the analysis of the nature of the development of infocommunication technologies and artificial intelligence systems and provide evidence of the constructiveness of the proposed</p>

	<p>approach. Solving this problem will allow us to demonstrate the constructiveness of the proposed approach using a specific example.</p>
Expected and achieved results	<p>It has been proven that existing approaches to building the theory of scientific revolutions do not correspond to modern realities and it will be proven that they need a radical revision.</p> <p>The possibility of synthesizing approaches to building the theory of scientific revolutions, going back to the concept of T. Kuhn, with the economic theory of innovation, going back to the concept of J. Schumpeter, as well as with the concept of V.I. Vernadsky.</p> <p>Based on the physical theory of the noosphere, the possibility of constructing a theory of scientific revolutions based on objective prerequisites related to the nature of the assimilation of scientific and technological achievements and scientific ideas by society and political elites will be proven.</p> <p>The basic provisions of the theory of scientific revolutions will be developed and substantiated, based on an analysis of the specifics of information processes occurring in the scientific and technical community and the nature of its communications with society and political elites.</p> <p>Evidence of the constructiveness of the proposed approach will be given using the example of applying the developed provisions of the complex theory of scientific revolutions to the analysis of the nature of the development of infocommunication technologies and artificial intelligence systems.</p> <p>The significance of the project results is mainly determined by the fact that its results create tools for developing scientifically based decisions in the field of implementation of scientific and technological policy, considering the pronounced transformations of the world order and the exhaustion of the possibility of effectively using previously existing paradigms for the development of science and technology.</p> <p>The significance of the project's results is also determined by the fact that they make it possible to remove the expressed contradictions inherent in existing theories of scientific and technological revolutions, particularly those dating back to the concept of T. Kuhn.</p>
Research team members with their identifiers (Scopus Author ID, Researcher ID, ORCID, if available) and links to relevant profiles	<p>Vitulyova Yelizaveta Sergeevna – PhD candidate, Scopus H-index – 8, Researcher ID AAO-4550-2020, ORCID 0000-0002-6075-4870, Scopus Author ID 57211658771.</p>
List of publications with links to them	<p>1. Suleimenov, I.E., Gabrielyan, O.A., Massalimova, A.R., Vitulyova, Y.S. World spirit from the standpoint of modern information theory. European Journal of Science and Theology, 2024, 20(1), 19–31. http://www.ejst.tuiasi.ro/issue20.html</p>
Patents	-