ABSTRACTS

I. V. Yaschyshyna

Social Effectiveness of the Innovation Policy in the EU

The social focus of the innovation policy in the EU is studied. Qualitative parameters and essential social vectors of the key strategic documents and medium-term innovation programs of the EU are analyzed. It is argued that at late 20 - early 21 centuries the EU was moving away from the narrow concept of the innovation policy towards its broader concept that puts emphasis on the expansion of innovation beyond the merely technical and technological boundaries and on solving a series of social problems. It is shown that the social objectives account for 42 to 72% of the EU Framework Programs budget. The social effectiveness of the innovation policy in the EU is highlighted; it is shown that a growth in the innovation index (SII) in EU member states has had positive effects for Human Development Index and per capita GDP (measured by PPP).

V. P. Soloviyov, V. I. Khorevin

Possibility for Adaptation of Successful Principles of Science and Innovation Management: Introduction to the Issue

Basic principles of managing financial flows for science and technology in countries with successful economies are outlined. The management of science & technology financing in the U. K. is taken as a successful story and the point of reference. A comparison of science & technology management principles in Ukraine and countries with highly performing technological sectors is given. Successful practices of budgetary support for broad-scale practical utilization of R&D results are highlighted.

A. A. Slonimsky, M. A. Slonimska

Scientific Innovation Clusters and Technology Platforms: Issues of Partnership and Budgetary Support

The Belarusian, Russian and European policy of innovative new tools development stimulation — clusters and technology platforms are analyzed. It is shown that scientific innovation clusters and technology platforms represent disparate network initiatives for the moment. Several directions of strengthening linkages between clusters and technology platforms focused on the synergy of their interaction are outlined in the conclusion. The role of the government in promoting clusters and technology platforms is considered.

A. Voitovych, G. Dubinskiy

Approximation of Ukrainian Innovations to the EU

The paper considers options for Ukrainian technological development and innovation activities to integrate in the European Union, studies possible scenarios for such integration. The paper studies specific issues related to R&D in the EU, development of innovations in the EU across sectors of substantial export potential for Ukrainian industry, specifically ferrous and non-ferrous metal sectors.

Yu. V. Movsevenko

Transformation of the Marketing Mix of Industrial Property in the Context of the Global Economy Evolution

The marketing mix of industrial property is studied as not a mere result of interactions of scientific fields but as an element that transforms in view of the challenges of the time and in the innovation policy framework.

V. Yu. Gryga

Prospects of New Technologies Development in Ukraine

Issues of advanced technologies development in Ukraine are dealt with. Global trends in future technology development, identified by analyzing the dynamics of co-patenting (patent pairs) using PCT procedure, are studied. Patenting of advanced technologies by Ukrainian inventors is studied by use of data from the database «Inventions (Utility Models) in Ukraine". The results show a wide gap between the technological development trajectory in Ukraine and the current global trends.

A.I. Koretsky

Correspondence between Actual Human and Financial Resources in the Ukrainian R&D and the Legally Fixed Science and Technology Priorities

The scopes of financing and numbers of research personnel in the Ukrainian R&D in the latest period are analyzed by projecting them on the legally fixed science & technology priorities. As a visible correspondence between R&D resources and priorities in Ukraine cannot be found, it leads to the conclusion that the practices of R&D support in Ukraine have been dissociated from the legally fixed (declared) R&D priorities.

M. E. Ilchenko, L. S. Perelygina

The Early History of Helicopter Design in Ukraine (late 19th – early 20th centuries)

It is shown that the world's first operating rotary wing aircraft with tandem rotors was built in Ukraine in 1911–1914 and the first person in the world who flew on a rotorcraft was the Ukrainian M. Sorokin, but not the Frenchman P. Cornu.

Vadim I. Bolshakov, Volodymyr I. Bolshakov

Academician Kyryl Fedorovych Starodubov and His Academic School on Thermal Strengthening of Metallic Products

The paper is devoted to the work path of Kyryl Fedorovych Starodubov, an outstanding scientist in the theory of thermal handling of steel, a teacher and a public activist, professor, doctor of technical sciences, an academician of the Academy of Sciences of the Ukrainian Soviet Socialist Republic.

V.I. Onopriyenko, M. V. Onopriyenko

Academician O. S. Povarennykh: His Contribution to Science History and Science Studies. In Memory of the 100th Anniversary since the Birthday.

Olexandr S. Povarennykh (1915–1986), an academician of the Academy of Sciences of the Ukrainian Soviet Socialist Republic, is a founder of the crystal chemistry field in mineralogy. Of especial importance were his works in the fields of new systematization of minerals on the crystal chemistry basis, development of principles of minerals' strength theory on the crystal chemistry basis. His fundamental works have been translated abroad; he was a member of mineralogical societies in U. K. and Ireland, Italy, the U.S., Canada, Japan, Poland. Povarennykh is a well-known historian and methodologist of science, and his singular ways led him to his professional achievements.