GRANT ALLOCATION CONDITIONS

for scientific publications under the Project "Prediction, inhibition and prevention of emergency conditions and negative environmental consequences of technological processes"

REVIEW

In modern global society, it is no longer enough to evaluate the effectiveness of complex systems as the ratio between the achieved result and the resources used or the probability of achieving the goal with limited resources. In the framework of such traditional approaches, criteria for economic benefit are priority for assessing the effectiveness of technological processes and products. However, insufficient attention is paid to the more important criteria today: environmental and industrial safety. Underestimation of these criteria today can lead to serious consequences in the long term: accidents, man-made disasters, loss of life. This statement also applies to technological processes, including innovative technological products being introduced, if at the stage of their implementation or operation it is not possible to foresee possible consequences due to factors that have not been taken into account and affect their safety in the future.

One of the ways to overcome this problem is the implementation of the program for generating new ideas and creating innovative technological solutions, the criteria for evaluating the effectiveness of which will be environmental and industrial safety. In particular, such decisions should be aimed at the development of measures, systems and management processes to solve the problems of forecasting, inhibition and prevention of emergency conditions and negative environmental consequences of technological processes. Moreover, such processes themselves should be considered in the framework of modern ideas about potential efficiency, but with priority criteria regarding the safety of functioning of complex systems that implement these processes.

We consider scientific ideas regarding such innovative technological solutions to be especially valuable. We assume that external financing will help scientists working in the field of environmental, industrial safety, reliability of production systems and critical infrastructure systems to share their experience with practitioners and implementing organizations.

The problem of environmental and industrial safety is an acute concern for any country, so we greatly appreciate the scientists' opinion on the solution of these applied problems.

STRUCTURE

This Grant covers scientific publications on topics related to the potential effectiveness of technological processes and products in various areas of national economies.

The main emphasis should be placed on environmental and industrial safety criteria. We expect that the technological or organizational solutions proposed by the authors can be used to predict, inhibit and prevent emergency conditions and negative environmental consequences of technological processes.

WHO MAY APPLY TO

The Grant is targeted and allocated to the PC Technology Center scientific publishing house for the publication of scientific articles on the subject of the Grant in the «Technology audit and production reserves» journal. According to the results of the monitoring of scientific periodicals, this journal is recognized to the greatest extent satisfying the requirements of the Grant Provider, since the policy of the journal declared by the publisher is focused on precisely three key aspects on the Grant topic:

- obtaining primary data on functioning technological facilities as complex systems ("technological audit").
 - selection and justification of criteria for the effectiveness of technological processes,
- search for efficiency potentials based on the results of a technological audit ("production reserves").

In addition, the subject matter of this journal by its volumes allows covering all areas of potential interest to the Grantor in the framework of the project "Forecasting, inhibition and prevention of emergency conditions and negative environmental consequences of technological processes":

- "Industrial and technology systems" volume the effectiveness of industrial systems and technological processes, including the assessment of their reliability
- "Information and control systems" volume information management systems for collecting, analyzing and processing data, control systems in industry and critical infrastructure,
- "Chemical engineering" volume chemical processes and apparatus for solving environmental problems,
- "Economics of enterprises. Macroeconomics" volume forecasting the security and sustainable development of national economies.

FUNDING

For the publication of scientific articles on the topic "Environmental and industrial safety of technological processes as criteria for the potential effectiveness of complex systems" funding of 12,000 EUR is allocated for the period from 01.04.2020 to 31.12.2021.

WHAT TO DO AND WHEN

Manuscripts for publication must be sent to the Grantee by 31.12.2020. Over the next period, in accordance with the schedule of the review process, publication portfolios are formed.

ADDITIONALTERMS

- 1. All articles for publication should be submitted to the editorial office of the Grantee, the «Technology audit and production reserves» scientific journal, by 31.12.2020.
- 2. The Grant does not provide for profit by the publisher PC Technology Center, which must be confirmed by the official financial report on the use of the Grant funds. The decision

to publish is made following a double-blind peer review conducted in a planned manner during 2020-2021. The amount of the Grant is calculated based on the costs of the publisher provided previously to the Grantor, minus the publisher's profit.

Confirmation of these conditions is confirmed.

From the Grantor



From the Grantee

