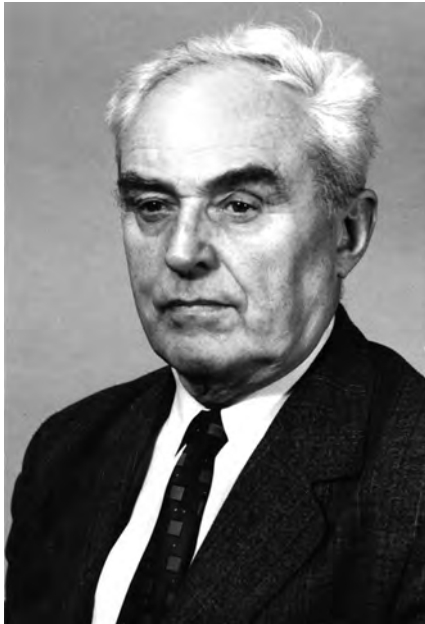


CENTENARY OF ACADEMICIAN IVAKHNENKO BIRTH



Academician
Oleksiy Hryhorovych IVAKHNENKO
(1913-2007)

We are pleased to inform you that on April 2, 2013 the Jubilee session of Scientific council of the International Research and Training Centre for Information Technologies and Systems of the National Academy of Sciences and the Ministry of Education and Sciences of Ukraine will be held devoted to the 100th anniversary from the birthday of Honoured Scientist of Ukraine, Academician of the NAS of Ukraine, professor Oleksiy Hryhorovych Ivakhnenko.

O.H.Ivakhnenko was an outstanding scientist in the field of automatic control, cybernetics and informatics, whose scientific results have found a worldwide recognition. He published near 40 monographs and more than 400 scientific articles many of which, first of all books, have been translated into English, German, Polish, Bulgarian, Romanian and Chinese. Large amount of his articles has been published in scientific periodicals of USA, England, Germany, and other countries.

O.H.Ivakhnenko has developed new principles and devices for automatic control of electric engines speed and designing systems with magnetic amplifiers. His achievements in the invariance theory and in the theory of combined systems of automatic control based on the principle of compensation of measured disturbances are universally recognized. He has published the first domestic monograph on technical cybernetics which was republished abroad several times. The further development of principles of combined control in O.H.Ivakhnenko's works is connected with the use of principles, devices and ways of self-tuning,

self-training, pattern recognition and forecasting in control systems. In 1961 he was elected as member of the Academy of Sciences of Ukraine.

During last 45 years, the main brainchild of O.H.Ivakhnenko, the Group Method of Data Handling (GMDH), has been actively developing as a method of inductive modelling and forecasting of complex processes and systems. The world-level of achievements in this area is confirmed by the fact that the abbreviation GMDH became conventional in the scientific literature. The domestic schools in the United States, Germany, Japan, China, the Czech Republic and others countries have been formed for development and application of GMDH.

In 1984, the collective monograph of American and Japanese scientists was published in USA with the description and examples of effective application of GMDH in various applied areas. In 1992, a new book of O.H.Ivakhnenko was published in the United States based on the results of the next stage of development of GMDH as a machine learning method. Later he increased the capability of his method by its synthesis with the achievements of the theory and practice of neural networks. Dozens of articles on the GMDH appear each year in scientific journals over the world, and the Internet sources www.gmdh.net, www.mgua.irtc.org.ua, www.knowledgeminer.com are actively visited.

Since 2002 annual international conferences and workshops on inductive modelling dedicated to the theory, methodology and applications of GMDH have been hosted in many countries what serves as scientific recognition of global authority of O.H.Ivakhnenko's school. They take place both in Ukraine and abroad and involve scientists from around the world.

The scientific school of O.H.Ivakhnenko serves for a long time as an authoritative and productive smithy of highly skilled scientific staff: under his supervision, nearly 200 candidate dissertations were carried out and successfully defended and almost 30 of his disciples have defended doctoral dissertations and created their own scientific schools.

For his outstanding scientific achievements, O.H.Ivakhnenko was awarded the title of the Honoured Scientist of Ukraine, the "Friendship of the nations" order and medals, the State premiums of Ukraine for his works in the field of the invariance theory of automatic systems (1991) and the series of works on information technologies in the field of artificial intelligence (1997). In 2003 he was elected an Academician of the National Academy of Sciences of Ukraine.

O.H.Ivakhnenko serves as an example of a scientist with a heightened sense of novelty and outstanding scientific intuition as well as original scientific ideas, unrivalled ability to work tirelessly and generate generously the original research ideas and results.

Organizing Committee