32nd International Conference of the System Dynamics Society, Delft, Netherlands

20 июля 2014 - 24 июля 2014

Пресс-релиз Российского общества СД, приуроченный к участию на конференции.

The Russian Chapter of the System Dynamics Society was created in 2006 with participation of leading Russian universities. It participates in SDS Conferences since 2008. In 2011, the Russian Chapter of the SDS became a member of the Federation of European Simulation Societies (EUROSIM) (<u>http://www.eurosim.info</u>).

The main task of the Society is propagation of system dynamics in the Russian-speaking academic and practical environment by means of granting the information in Russian and English languages, an exchange of experience between members of a society, and establishment of business and research contacts, supporting activity of System Dynamics Society in Russia.

Activities of the Russian Chapter include:

- provision of the information for experts, researchers;

- organization of regular meetings, round tables and conferences on system dynamics and application of simulation modeling;

- promotion of initiatives on the organization of educational programs in system dynamics;

- publications of scientific, popular, and methodical works.

Recent System Dynamics-related Conferences in Russia

Every 2 years the National Simulation Modeling Society organizes theoretical and practical conference IMMOD «Simulation Modeling: Theory and Practice». This conference provides a comprehensive analysis of the current state and development perspectives of the simulation modeling theory and simulation tools in business, industry and administrative governance. Russian Chapter members regularly present their reports there. The latest conference was held in November 2013 in Kazan.

The annual International scientific conference «Modernization of the Economy and Society» having section Y entitled «Instrumental methods in the analysis of social and economic processes» was held at the Higher School of Economics in Moscow (April, 2014). The session was devoted to application of simulation modeling of social and economic systems. In June 16-19, 2014 XII All-Russian Conference on Problems of Control was held by the Institute of Control Sciences of Russian Academy of Science. More than 1000 participants registered at this conference, including members of Russian Chapter of SDS, who presented their reports.

Institute for Informatics and Mathematical Modeling of Technological Processes of the Kola Science Center of Russian Academy of Science regularly organizes the All-Russia scientific and practical conference with the international participation «Theory and practice of system dynamics» in the city of Apatitys.

The International conference «Government in the XXI century: traditions and innovations» (with the separate section devoted to simulation modeling and games) is annually held at the School of Public Administration of the Lomonosov Moscow State University.

Participation in the 32nd International System Dynamics Conference

During the few last years, the Russian Chapter of the Society regularly presented posters on the International Conference of System Dynamics, where the key activities, large scientific schools and its certain personalities were presented. Members of the Russian Chapter also regularly present results of their scientific works. At the recent International SD Conference that took place in July, 2014 in Delft (Netherlands), N. Lychkina (Higher School of Economics) together with Y. Morozova (Higher School of Economics) presented the paper «Simulation of the pension system process development».

Once again, there was participation and sponsorship by Russian companies The AnyLogic Company and JSC Prognoz (Perm) which have been acting as sponsors of the Russian International Conference for Chapter for the SD the last few years. JSC Prognoz (www.prognoz.com) develops business intelligence and business performance management solutions that help corporations and government agencies harness the power of data to make informed decisions. The flagship application is the Prognoz Platform, a modular software package with data storage, reporting, analytical, modeling and forecasting capabilities.

The AnyLogic Company (<u>www.anylogic.com</u>) is a leading provider of dynamic simulation tools, technologies and consulting services for business applications. The company designs, develops and markets AnyLogic — the first and only tool that brings together system dynamics, process-centric (discrete event), and agent-based methods within one modeling language and one model development environment.

There were more than 10 Russian-speaking system dynamics specialists from Russia, Moldova, Republic of Tatarstan, Latvia, America, France and other countries, who attended the conference. The following members of the Russian Chapter presented papers and posters: Natalia Lychkina (Higher School of Economics), Alexander Ryzhenkov (Institute of Economics & IE SB RAS, NSU), Oleg Pavlov (Worcester Polytechnic Institute), Valeriy Skribans (Riga Technical University).

During the negotiations at the conference, Head of Russian Chapter achieved agreements with colleagues from the United States (WPI), UK, Norway, and other countries for the establishment of joint educational projects in the field of system dynamics, inviting experts to the scientific activities and master classes carried out in Russia.

The Russian Chapter also presented at the conference the problem-oriented books published in Russia. One of them was a monograph on system dynamics, Simulation Modeling of Economic Processes, by Prof. Lychkina. The paper is based on the fundamental works of J. Forrester; simulation of enterprises, and social and economic systems operation. It was published by INFRA-M publishing house and was recommended by the Ministry of Education of Russia. The other was the book of D. Katalevsky, Fundamentals of Management Simulation Modeling and System Analysis, published in Moscow by University Press.

System dynamics related educational programs

Several universities in Russia continue to host the following educational programs:

- National Research University, Higher School of Economics (<u>www.hse.ru</u>): Educational programs at the Faculty of Business Informatics, Faculty of Management, and the Faculty of Logistics are offered by Prof. A. Andranik, Prof. N. Filinov and Prof. N. Lychkina. The Faculty of Logistics launched the new Master's degree program entitled «Informational analytical solutions in logistics». The program includes teaching system dynamics and simulation modeling for managers;

- Lomonosov Moscow State University, School of Public Administration (<u>www.msu.ru</u>): A laboratory of simulation under the direction of D. Kavtaradze is engaged in the development of educational games on the basis of system dynamics models;

- State University of Management (<u>www.guu.ru</u>): two courses are offered in the Faculty of Economic Cybernetics and the Faculty of Information Systems, namely «Simulation Modeling of Economic Processes», and «Decision Support Systems». The author of the courses is Prof. N.Lychkina, Deputy Head of Information Systems Chair for Science;

- Perm National Research University (former Perm State University, <u>www.psu.ru</u>): The Information Systems and Mathematical Methods in Economics Department launched a Master's

degree program, «Business Intelligence Systems in Forecasting and Management of Socio-Economic Development Processes in Countries and Territories», where students study a course of system dynamics.

Moscow experts together with authors of the program and head of the system dynamics modeling group, Professor N. Lychkina, and AnyLogic Company representatives, A. Borshchev and T. Popkov, presented a training course for professionals on «Simulation modeling of economic processes» at the Higher School of Business of State University of Management (mbiprogram.ru, Director V. Godin). The course focused on the following topics:

- Modern simulation technologies and their applications in information systems in business;

- AnyLogic, the modern simulation tool;
- System dynamics modeling;
- Solutions for federal, regional, and municipal authorities;
- Solutions for enterprises, banks and financial institutions.

Further development and international cooperation

The chapter plans to carry out co-operative programs, seminars, workshops, and master degree programs on simulation modeling and system dynamics, write monographs, organize a roundtable discussion on «Strategies of Socio-Economic Development of Russia up to 2020 (Strategy-2020)» and participate in some activities within the recently established National Simulation Modeling Society. Joint educational projects at the leading Russian universities, as well as international projects, are also planned.

We welcome the members of System Dynamics Society to strengthen cooperation with the Russian Chapter and are ready to provide support from the Higher School of Economics, the Moscow State University and others.

Today there is a certain interest in system dynamics and simulation modeling from both business and government organizations. We are ready to respond to these challenges in cooperation with our international colleagues.