Russian Chapter

The Russian Chapter of the System Dynamics Society was created 6 years ago. The main objectives of the Chapter are the propagation of system dynamics in Russian-speaking educational and expert communities, providing information in Russian and English, sharing experience between members of the Chapter, making contacts with business and research institutions, and the support of System Dynamics Society activity in Russia.

In 2010, members of the Chapter created a <u>Chapter website</u>. (sysdynamics.ru)

The Russian Chapter of the System Dynamics Society has become a member of the Federation of European Simulation Societies (EUROSIM) in 2011. (simulation.su)

Recent System Dynamics Related Conferences in Russia:

- IMMOD- Theoretical and practical conference in St. Petersburg, Russia—"Simulation Modeling: Theory and Practice." This conference provided a comprehensive analysis of the current state and development prospects of the simulation modeling theory and simulation tools in business, industry and administrative governance. The conference includes section "System dynamics".
- For the sixth time we organized the All-Russia theoretical and practical conference (with international participation) titled "Theory and Practice of System Dynamics" in the city of Apatitys in Spring 2012, under the aegis of the Russian Academy of Sciences.
- Every May there is an annual international conference at the School of Public Administration of the Lomonosov Moscow State University called, "Government in the XXI Century: Traditions and Innovations." This conference includes a separate section on simulation modeling and simulation games.
- The representatives of the Russian System Dynamics Society organized and led session W-04 "The Usage of systematic approach in strategic planning: Russian and foreign experience" on the 13th International scientific conference "Modernization of the economy and society" in Higher School of Economics, Moscow (April 3-5, 2012). The session devoted to application of simulation modeling of social and economic systems
- Master-class and plenary report «System dynamics and administrative consulting. Dynamic architecture of the enterprise» presented by N. Lychkina on the International seminar for school students «New information technologies» (Sudak, Crimea, May 17-21, 2012)

During the last few years, the Russian Chapter of the Society presented posters at the International Conference of System Dynamics Society (Athens, Albuquerque, Seoul, Washington, and St.-Gallen).

The companies XJ Technologies (St.-Petersburg) and PROGNOZ (Perm) during the last 5 years acted as sponsors of the International System Dynamics Conference.

Participation in the 29th International System Dynamics Conference

The 29th International System Dynamics Conference took place on July, 2012 in St-Gallen,. There was participation and sponsorship by Russian companies XJ Technologies and PROGNOZ.

PROGNOZ (prognoz.ru) 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 5 Platform, a modular software package with data storage, reporting, analytical, modeling and forecasting capabilities.

XJ Technologies (xjtek.ru) 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 15 Russian-speaking system dynamists from Russia, Israel, USA, Latvia, Serbia, Germany and other countries, attended the conference. Following members of Russian Branch presented papers and posters: Natalia Lychkina (State University of Management), Nina Abramova and Svetlana Kovriga (Institute of Control Science of RAS), Alexander Ryzhenkov (Institute of Economics SB RAS), Oleg Pavlov (WPI), Valeriy Skribans (Latvia), Andrey Borshchev (AnyLogic).

There were topic-oriented books published in Russia that were presented at the conference in St-Gallen by Russian Chapter. One was a monograph on system dynamics, *Simulation Modeling of Economic Processes* by Prof. Lychkina. The paper is based on fundamental works of J. Forrester, simulation of enterprises, and social and economic systems operation. It was published by INFRA-M publishing house and recommended by the Ministry of Education of Russia. The other was Katalevsky's book *Fundamentals of Management Simulation Modeling and System Analysis* (published in Moscow by University Press).

Educational programs

Several universities introduced educational programs, among them are:

- Lomonosov Moscow State University, School of Public Administration: A laboratory of simulation under the direction of D. Kavtaradze is engaged in the development of educational games on the basis of system dynamic models. (msu.ru)
- <u>State University of Management</u>: Under the Faculty of Economic Cybernetics and Faculty of Information Systems, two classes, "Simulation Modeling of Economic Processes," and "Decision Support Systems," are offered by Prof. N. Lychkina, Deputy Head of Information Systems for Science. (guu.ru)
- <u>National Research University, Higher School of Economics</u>: Educational programs at the Faculty of Business and Computer Science and Management, Logistics are offered by Prof. A. Andranik, Prof. N. Filinov and Prof. N. Lychkina. (hse.ru)
- <u>Perm National Research University (former Perm State University)</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. (psu.ru)

Moscow experts together with authors of the program and head of the SD modeling group Professor N.Lychkina and Heads of XJ Technologies 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 focuses on the following topics:

- Modern simulation technologies and their applications in information systems business
- Significant applications and business, management IT consulting

- Modern simulation tool AnyLogic
- System dynamics modeling
- Solutions for federal, regional, municipal authorities
- Solutions for enterprises, holding companies, banks and financial institutions

Further development and International cooperation

The chapter plans to carry out co-programs on simulation modeling and system dynamics, seminars and workshops, master degree programs, write monographs, organize a roundtable discussion on "Strategies of Socio-Economic Development of Russia up to 2020 (Strategy-2020)" and IMMOD 2013 Conference in St. Petersburg, 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 State University of Management, the Moscow State University and others. XJ Technologies and PROGNOZ are ready to provide organizational support as well.

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.

Submitted by: N. Lychkina



Presentation of Russian Chapter Poster: Nina Abramova (Institute of Control Science of RAS), Natalia Lychkina (State University of Management), Svetlana Kovriga (Institute of Control Science of RAS).