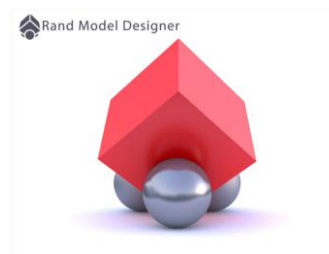


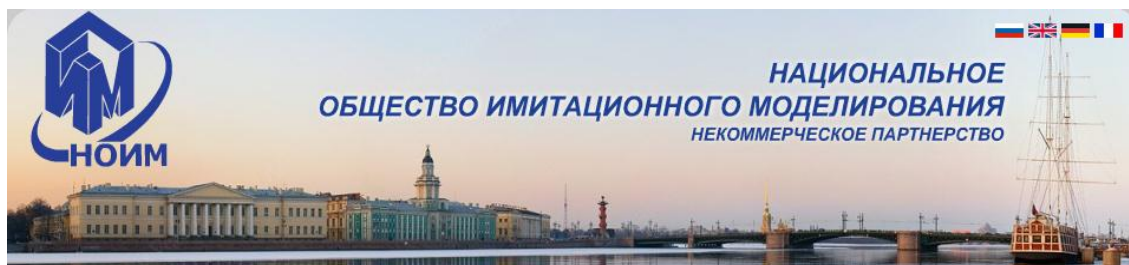
Ministry of education and science of the Russian Federation
National Simulation Society
Saint Petersburg State Polytechnical University
Journal "Computer Tools in Education"

Group of TRANSAS Companies
EuroSim European Association



International Scientific and Technical Conference

Computer modeling and simulation - 2014
(COMOD-2014)



2-4 July, 2014
Saint Petersburg

Chairman of the Conference

Prof. A.I.Rudskoy, corresponding member of the RAS

Co-chairmen

Prof. N.V. Korovkin (Saint Petersburg)

Prof. Yu.B.Senichenkov (Saint Petersburg)

Prof. F. Breitenecker, Ph.D (Austria)

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Prof. S.N. Pozdnyakov (Saint Petersburg)

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Prof. Yu.V. Shornikov (Novosibirsk)

Prof. A. Grebennikov (Mexico)

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Prof. S. Tkachenko (Germany)

The purpose of the conference

Complex natural, technical and industrial systems require complex mathematical models and sophisticated technology to develop, research and visualization. Modern visual simulation environments are the basis of these technologies and are used in scientific research, industrial design, education.

Significant attention will be paid to the joint operation of complex technical systems, problems of electromagnetic compatibility. Consideration of the problems of mathematical modeling in electric power industry, again becoming more and more popular in Russia will be new for the COMOD- 2014.

We invite developers of modern media of visual simulation, specialists in the field of EMC, mathematical modeling in electrical engineering and electric power industry, users creating with help of these systems mathematical models of complex dynamical systems, scientists, offering new models, methods and simulation software, to talk about their advance in this area and share their experience. We are particularly looking forward to the youth.

International Scientific and Technical Conference will be held on 2-4 July, 2014 in the St. Petersburg State Polytechnical University

The Conference Subjects:

- mathematical and numerical modeling
- development and application of visual modeling environment of complex dynamical systems
- modeling in electrical engineering and electric power industry
- electromagnetic compatibility
- computer tools in education
- projects of young scientists
- author's presentation of new books
- author's presentation of software systems
- information about planned and completed theses
- author's lectures about software products and subsequent issuance of certificates

Work plan of sections

Section 1. Mathematical and numerical modeling

(Moderators: A. Grebennikov, A. Zemljak, N.N. Bakhtadze, E.A. Novikov,
R. M. Yusupov)

Mathematical models of complex dynamical systems. Numerical simulation of complex dynamical systems - methods and software. Tools for computational experiments.

Section 2. Development and application of visual simulation environment of complex dynamical systems

(Moderators: F. Breitenecker, I.Troch, Yu. B. Kolesov, Yu .B. Senichenkov, Yu. V. Shornikov)

Languages of object-oriented modeling. Architecture and capabilities of visual modeling (simulation) environments. Methods of automatic formation and transformation of mathematical models. Numerical libraries of simulation environments. Organization of computational experiment. Debugging and verification of computer models. Applied libraries. Tools for research, testing and optimization of computer models.

Section 3. Modeling in electrical engineering and electric power industry

(Moderators: N.V. Korovkin, V.V. Titkov, E.N.Popkov, F.H. Khalilov, S.L.Shishigin)

Hybrid Power System, Grounding;
Smart Grid Technology & Applications;
Power System Planning, Stability, Reliability and Security;
Power Quality Issues;
Energy Efficient & Power Saving Technology;
FACTS Technologies;
Optimization Techniques in Power Engineering;
Application of Soft Computing Techniques in Power System Design & Management;
Future Energy Technologies;
Recent Advances In Renewable Energy Generation & Conservation (Wind, Solar, Tidal and Wave);
Superconductivity Application in Power Engineering.

Section 4. Electromagnetic compatibility

(Moderators: N.V. Korovkin, A.A. Vorshevsky, E.N. Fominich, S.V.Tkachenko)

Modeling:

Computational Electromagnetics, PCB, Transmission Lines & Cables, Shielding, EM Absorber, Material in EMC Applications, Meta-materials, Human exposure to ELF/RF EM fields, Biological Effects, Wired & Wireless Communications, Antennas, Propagation & Scattering, Power Line Communications.

High Voltage EMC & Power System EMC:

Lightning & Overvoltage Protection, Intentional EMI & EMP, High Power Electromagnetics.

EMC Measurements & EMC Management and Standards:

Measurement & Instrumentation, Measurement Techniques, EMC Tests,

Standards & Regulations, EMC Education.

Section 5. Computer Tools in Education

(Moderators: F. Esquembre, S. Divjak, S.N. Pozdnyakov, E.B. Yagunova)

Technologies of development and use of computer models in education, training computer models for different areas, new laboratory works, textbooks and lectures on modeling. Propaganda of modeling: competitions, journals, and publishing projects.

Section 6. Projects of young scientists

(Moderator: Yu.B. Senichenkov)

Computer models, new areas and methods for design and research of computer models, simulation software and systems research, created by graduate and PhD students.

Section 7. Author's presentation of new books

Authors of books, textbooks, educational and methodological complex on the conference subjects are invited.

Section 8. The author's presentation of software products

Authors of the program complexes on the conference subjects are invited.

Section 9. Presentation of planned and completed dissertations

All who are interested to discuss their dissertations on the conference subject are invited.

Working language – Russian.

Section 10. Author's lectures about software products with subsequent issuance of certificates

Authors of software products capable during 6 lectures and 3 workshops to teach the participants to work with their products and give certificates those who successfully passed the final test are invited.

The Rend-service company and Saint-Petersburg State Polytechnical University conduct a course of video-conferences «Using Rand Model Designer in the industry and education». This distance learning course will be completed in computer classes during the conference days. Students who successfully complete the training will receive a certificate from the Rend-service company.

Working language of the Conference – English.

Form of presentation and type of publication

№	Form of presentation	Language	Publication in the Conference Proceedings
1.	Poster presentation	Engl./Russian - as an exception	Abstracts in English
2.	Oral presentation	Engl./Russian - as an exception	Abstracts in English
3.	Sectional paper	Engl.	Abstracts in English*) Paper in English*)
4.	Invited paper	Engl.	Abstracts in English Paper in English

*) – translation is extra paid service

After reviewing all the reports will be divided into two groups: (oral presentations and poster presentations), (sectional and invited papers). Only papers of the second group (sectional and invited papers) and all accepted abstracts will be published in the CONFERENCE PROCEEDINGS.

Papers of the second group can be recommended for publication in journals: «Computer tools in education» (List of HAC), "Scientific and technical news of SPbSPU."(List of HAC), «A new University magazine» (List of HAC, in English)

Conference Proceedings will be presented on USB flash drive.

Printed (hard) copy of the Proceedings will be available upon prior request from the Organizing Committee for 1200 roubles.

How to submit abstracts and papers at the conference

All abstracts/papers are accepted only via the conference-machine [easychair.org](http://www.easychair.org). To submit abstract/paper, the author must register on the conference page in the conference machine at <http://www.easychair.org/account/signin.cgi?conf=comod-2014>, get login and password, visit the conference page and upload a single file of your abstract and/or paper. All downloaded materials should be submitted as pdf files.

Proceedings of the conference will include sectional and invited papers and abstracts (more than 1/2 page) in English as far as they are supposed to be included into the Scopus database.

If the participant of the conference is not interested in the publication of the paper in English, he can send only an abstract in English and present his paper in Russian or English. The same applies to the poster session.

Abstracts/reports sent by e-mail will not be considered

Rules for abstracts and papers

All abstracts/reports must be submitted in strict accordance with the template and will be checked automatically. Mismatch template can serve as a formal reason for rejection of abstract/report. You can see the template and download it at: <http://dcn.icc.spbstu.ru> in section *Conference/COMOD-2014*.

Important dates:

- 1st May 2014 – deadline for abstracts submission
- 20 May 2014 –deadline for the author notification that his report/abstract is accepted

Conditions for participation in the Conference

International Scientific and Technical Conference will be held on 2-4 July, 2014 in the St. Petersburg State Polytechnical University (Main Building. Address: ul. Politekhnikeskaya 29 (Metro station "Politekhnikeskaya").

Besides the participation in the plenary and sectional meetings of the conference, participants will be able to take a bus tour around St. Petersburg, as well as boat trip across rivers and canals of St. Petersburg with a gala dinner on the board.

Registration fee includes: koffee -breaks, lunches and dinner on the board of ship, transfer to the boat and back, and a conference bag with the Conference Proceedings on the USB flash drive.

Excursions to Peterhof and Tsarskoye Selo (Catherine Palace and Park with visiting the Amber room) are extra paid.

To participate in the Conference send the registration form to the email address COMOD-2014@spbstu.ru

File name with a registration form must include the name and initials of the participant. For example: ivanov_ak_reg.

Registration fee

Foreign participants can pay the registration fee in rubles or euro:

before 12 June -300 euro

after 12 June (at registration) - 350 euro

Payment methods

All information on bank accounts see on the Conference website <http://dcn.icc.spbstu.ru/> , section *Conference/COMOD-2014*.

You can pay by bank transfer or by cash at registration.

In the payment by bank transfer, please do not forget to write the title of the Conference (COMOD-2014) and your name.

Participants wishing to pay by a bank must cover transaction charges.

Accommodation

1. Hotel "Sputnik" *** (Prosp. Morisa Toreza, 36)

Information for contact

Organizing Committee of SPbSPU
ul. Politekhnikeskaya 29
195251 Saint Petersburg
Russian Federation

General information:

Alla L. Smirnova

Tel/fax: +7 (812) 297 20 88

expert@spbstu.ru

Lidia Papina

Tel/fax: +7 (812) 552 85 34

COMOD-2014@spbstu.ru

Abstracts/papers submission:

Yuriy B. Senichenkov

Elena A. Slok

Tel/fax: +7 (812) 297- 16 39

+7(812) 297 07 29

cm_org@dcn.icc.spbstu.ru

Conference website: <http://dcn.icc.spbstu.ru> ,
section Conferences/COMOD-2014

Appendix 1

International Scientific and Technical Conference Computer modeling and simulation 2014 (COMOD-2014)

Registration Form

Title: Mr Mrs Ms Prof Dr

Last Name _____

First Name _____

Other Names _____

Dates of birth _____

Place of birth _____

Citizenship _____

Passport number _____

Date of issue _____

Date of expiry _____

Country of permanent residence _____

Place of visa issuing _____

Place of work:

Organization _____

Address _____

Position _____

E-mail _____

Phone/Fax _____

Accompanying person, if any _____

Date of arrival _____

Date of departure _____

I am going to present a paper at the conference Yes No

I need to present a paper Yes (Type of equipment) No

I am bringing a poster Yes No

Please note! Copy of the first page of your passport sent by fax or by e-mail is necessary for visa proceedings. Visa support letter (official invitation) will be sent to you within 2 months (for EU members within 2 weeks).

Accommodation needed: Yes No

If yes:

Hotel "Sputnik" Yes No

• single room

• double room

Address: Hotel "Sputnik"- Prosp. M.Toreza,36;
metro station "Ploshchad' Muzhestva"

Date and Place _____

Signature _____