



## Call for papers

**XVI International Conference on Neurocybernetics (ICNC-12)**  
**September 24-28, 2012,**  
**Rostov-on-Don,**  
**Russia**  
\*\*\*\*\*

### THE MAIN TOPIC OF THE ICNC-12

*“From Brain Mechanisms Towards Neuromimetic Systems With Adaptive Behavior”*

The ICNC-12 is devoted to the 50th Anniversary of the Conferences on Neurocybernetics and the 100th Anniversary of the birth of the Conference Founder, Professor A.B. Kogan - an outstanding Russian neurophysiologist and neurocyberneticist.

The ICNC-12 is organized by Russian Ministry for Education and Science, Southern Scientific Center of the RAS, I.P. Pavlov's Russian Physiological Society, Interregional Association for Cognitive Research, Russian Neural Networks Society, Southern Federal University (SfedU), A.B. Kogan Research Institute for Neurocybernetics (KRINC SfedU).

### ORGANIZING COMMITTEE OF THE ICNC-12

**Kiroy V.N.**, Prof., KRINC SFedU, Rostov-on-Don, Russia, Chair

**Kaljaev I.A.**, corr. member of the RAS, Scientific Research Institute for Multiprocessing Computing Systems SFedU, Taganrog, Russia, Vice-Chair

**Shulgovskiy V.V.**, Prof., MSU, Moscow, Russia, Vice-Chair

**Aidarkin E.K.**, Prof., SFedU, Rostov-on-Don, Russia, Chair of the Program Committee

**Comley R.**, Prof., Middlesex University, London, UK

**Danilova N.N.**, Prof., MSU, Moscow, Russia

**Dunin-Barkowski W.L.**, Prof., Center for Optical Neural Technologies, Scientific Research Institute for System Analysis, RAS, Moscow, Russia

**Fedorenko G.M.**, Prof., Southern Scientific Center of the RAS, Rostov-on-Don, Russia

**Gao X.W.**, Prof., Middlesex University, London, UK

**Gorban A.N.**, Prof., University of Leicester, Leicester, UK

**Ivanitskiy A.M.**, corr. member of the RAS, Prof., Institute of Higher Nervous Activity and Neurophysiology of RAS, Moscow, Russia

**Kaplan A.**, Prof., MSU, Moscow, Russia

**Makarenko A.S.**, Prof., Institute of Applied System Analysis, National Technical University of Ukraine “Kyiv Polytechnic Institute”, Kyiv, Ukraine

**Ostrovskiy M.A.**, member of the RAS, Prof., Institute of Biochemical Physics of the RAS, Moscow, Russia

**Poljanski V.B.**, Prof., MSU, Moscow, Russia

**Poznanski R.**, Prof., Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia

**Rachkovskij D.A.**, Prof., International Research and Training Center for Information Technologies and Systems NAS and Ministry of Education and Science, Kiev, Ukraine

**Rybak I.A.**, Prof., Drexel University, Philadelphia, USA

**Velichkovskiy B.M.**, corr. member of the RAS, Prof., National Research Centre "Kurchatov Institute", Moscow, Russia  
**Yahno V.G.**, Prof., Institute of Applied Physics RAS, Nizhniy Novgorod, Russia  
**Yermakov P.N.**, member of the RAE, Prof., SFedU, Rostov-on-Don, Russia  
**Zakharevich V.G.**, Prof., SFedU, Rostov-on-Don, Russia

**Shaposhnikov D.G.**, KRINC SFedU, Rostov-on-Don, Russia, Secretary  
**Petrovskiy V.V.**, KRINC SFedU, Rostov-on-Don, Russia, Secretary

#### **IN THE FRAMEWORK OF THE ICNC-12 WILL BE HELD:**

- The Fourth International Symposium on Neuroinformatics and Neurocomputers
- The Second International Symposium on "Brain-Computer" Interface
- The Sixth International Young Scientists School: "Neuroinformatics, Neurocybernetics, Neurocomputers"

#### **THE TOPICS OF ICNC-12 WILL BE AS FOLLOWS:**

- Subcellular, neuronal and population mechanisms of brain system functions
- Organization of informational and control brain systems
- Mechanisms of higher brain functions (perception, sensory and motor integration, navigation, cognitive functions)
- Man-machine problem
- Biologically motivated algorithms and models for information processing
- Neural architectures and synthesis of brain-based devices

**Working languages of the Conference are English and Russian.**

#### **KEY DATES:**

May 15, 2012 – deadline for registration and abstract submission on the site of the ICNC-12 (<http://icnc12.krinc.ru>)

June 15, 2012 – notification of acceptance of abstracts

#### **REGISTRATION FEE:**

Regular participant:	€100
Student:	€50

The registration fee will cover the Conference proceedings, coffee-breaks, and excursions. Participation in the Conference and publication will be contingent on the payment of a Conference fee.

#### **CALL FOR PAPERS**

Contributed papers should be submitted electronically in Russian or English, as Word file, via web form at <http://icnc12.krinc.ru>. Papers should be presented in the following format:

1. Papers must be 2-4 pages A4 in length;

2. Double-column format with the Times New Roman font, with single line spacing. The column width should be 8 cm. The distance between columns should be 1 cm;
3. Thesis format – MS Office Word (\*.doc);
4. Margins: 2 cm on each side;
5. Each paper should start with the title, author(s), affiliation(s), and the e-mail address of the corresponding author, printed in the full page format (centered). The title should be printed starting from the top line of the first page by capital letters with the bold font of 14 points. The title should be followed by one empty line, then author(s) name(s) (initials preceding) should be printed by lowercase letters with the bold font of 12 points.
6. Affiliation(s) should follow author(s)' name(s) (starting in the next line), all affiliations for each author should be indicated. If an authors have several affiliations, they should be numbered. E-mail address of the corresponding author should be printed in the next line. Then, two lines should be omitted.
7. The paper should include a short abstract (in English, up to 10 lines), introduction, methods, results, conclusions, references. Subtitles in the text should occupy a separate line, be centered and printed by lowercase letters with the bold font of 12 points, and be separated from the top and bottom text by empty lines.
8. Figures should be placed into the paper text (in current column). Figure legends should be formatted according to the figure width and printed with the font of 10 points.
9. Table numbers and titles should be placed above tables and printed with the bold font of 12 points.
10. Figures and tables should be enumerated throughout the paper. Single figures and tables should not be enumerated.
11. Formulas printed in a separate line(s) should be centered. Formula number(s) should be right-aligned and put into parenthesis.
12. References in the paper text should be made by numbers and put into square brackets.
13. Reference list should be printed by lowercase letters with the bold font of 12 points in alphabetic order. If the paper is submitted in Russian, references to papers in Russian should precede those to English papers. If the paper is submitted in English, all references to papers in Russian should be translated in English and marked as (in Russian) at the end.

## **PUBLICATION OF THE ICNC-12 PAPERS**

ICNC-12 Proceedings will be published before the conference including papers submitted and accepted by the Organizing Committee. Selected papers submitted in English will be published in international journal **“Journal of Integrative Neuroscience”**, Publisher **“World Scientific”** (<http://www.worldscinet.com/jin/jin.shtml>). Selected papers submitted in Russian will be published in Russian journals: **“Neurocomputers: design and applications”** (<http://www.radiotec.ru/catalog.php?cat=jr7>), Publisher **“Radiotekhnika”**; **“Valeology”** (<http://journal.valeo.sfedu.ru>), Publisher **“Publishing office of Southern Federal University”**.

### **CONTACT US:**

Organizing Committee of ICNC-12  
A.B.Kogan Research Institute for Neurocybernetics  
Southern Federal University  
194/1 Stachka Ave  
Rostov-on-Don 344090, Russia

**phone:** +7 863-243-37-44  
**phone/fax:** +7 863-243-35-77  
**e-mail:** [icnc12@nisms.krinc.ru](mailto:icnc12@nisms.krinc.ru)  
**web:** <http://icnc12.krinc.ru>