

## QUESTIONNAIRE

(\*) – mandatory fields

	<b>Details about organisation</b>
<b>* Organisation name</b>	Computer Center of Southern Federal University
Organisation acronym	CC RSU
<b>* Organisation Activity Type</b> (RES - Research, HE - University, SME - Small and Medium Enterprise, IND - Industry, OTH - Other)	RES
<b>* Keywords of main research areas</b>	Mathematical simulations; packages of applied programs; parallellizing algorithms and programs; iterative methods for nonsymmetric linear equation systems; software for parallel supercomputers; software for databases; complex information systems of management; signal processing and software for hydroacoustics; hardware and software, technical maintenance of computer networks
<b>* Head of organisation (first name, family name)</b>	Professor Lev Krukier
<b>* Post code</b>	344090
<b>* Country</b>	Russia
<b>* City</b>	Rostov-on-Don
<b>* Street, House</b>	Prospect Stachki, 200/1, building 2
<b>* Telephone (+ country &amp; city codes)</b>	+7 (863) 2975100
<b>* Fax (+ country &amp; city codes)</b>	+7 (863) 2975101
<b>* E-mail</b>	<a href="mailto:uginfo@rsu.ru">uginfo@rsu.ru</a>

<b>* Description of organisation and its research achievements for the last five years (~ 5000 signs)</b>
<p>Main areas of research:</p> <ul style="list-style-type: none"> <li>• Mathematical simulations for complex scientific and technological projects and problems, development and application of packages of applied programs</li> <li>• Mathematical simulation of hydrophysical problems in basius</li> <li>• Parallellizing algorithms and programs</li> <li>• Iterative methods for nonsymmetric linear equation systems</li> <li>• Software for parallel supercomputers</li> <li>• Software for databases</li> <li>• Development of computer-aided instalations and packages of academic courses</li> <li>• Methods of creating and accompanying complex information systems of management</li> <li>• Development of complex information systems for management</li> <li>• Signal processing and software for hydroacoustics</li> <li>• Development of compilers and systems software</li> <li>• Advancement of the regional computer network, connected with the Internet</li> </ul>

via communication satellite

- Hardware and software, technical maintenance of computer networks

One of the project, realized in CC RSU is Creation of the program environment for realization of mathematical models on the heterogeneous computer complex on a basis aspect- oriented programming.

The group of researchers carries out task on development of methodology aspect - oriented programming for problems of the various classes realized on the heterogeneous computer complex.

Our researchers formulate the main ideas of this approach, which consists of original realizations of a new kind of code structure with the help of the specialized processing text files. Use of aspects allows carrying out multivariate structurization of a program code. Besides the given approach allows to configure program systems on qualitatively higher level and to carry out a floppy and reliable variation of created program parameters.

	<b>Contact Information</b>
<b>* Contact person (first name, family name)</b>	Mrs. Galina Muratova
<b>* Department / Laboratory</b>	
<b>* Position</b>	Vice-Director by Information technologies
<b>* Qualification and research experience</b>	PhD in Mathematical sciences
<b>* Post address (house, street, city, code, country)</b>	Building 2, 200/1, Stachki av., Rostov-on-Don, Russia, 344090 Russia
<b>* Telephone (+ country &amp; city codes)</b>	+7 (863) 2975092
<b>* Fax (+ country &amp; city codes)</b>	+7 (863) 2975101
<b>* E-mail</b>	<a href="mailto:muratova@rsu.ru">muratova@rsu.ru</a>

	<b>* Please, use "X" to indicate the scientific area/s of your potential project</b>
CHEMISTRY	
SOCIAL AND HUMAN SCIENCES	
ECONOMIC SCIENCES	
ENGINEERING SCIENCE	X
ENVIRONMENT	X
AGRICULTURE AND FOOD	
HEALTH	
MATHEMATICS	X
INFORMATION SCIENCE	
PHYSICS	
NANOTECHNOLOGIES	
ENERGY	
TRANSPORT	
SPACE	

	<b>Please, confirm your agreement on data publication and dissemination</b>
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<b>I agree with the publication of the data</b> on the web-site <a href="http://www.inco-eeca.net">http://www.inco-eeca.net</a> , and <b>dissemination</b> among Mobility National Contact Points of the EU MS and AC <b>(YES / NO)</b>	YES
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