Contents

ARCHITECTURE, URBAN PLANNING, DESIGN
A. V. Badialov. Russian Architecture in American Collections
Z. A. Gayevskaya. Modernizing the rural settlements
distribution in thenon-black soil region under new social-
economic conditions9
Yu. A. Nikitin. All-Union Building Exhibitionin Moscow –
the first constant exhibition complex in the USSR13
BUILDING DESIGNS
V. V. Belov, S. Ye. Nikitin. Diachronic deformation model
of corrosion damaged reinforced concrete elements with cracks18
O. A. Yegorychev, O. O. Yegorychev, A. N. Fedosova. Influence of
boundary conditions on solving the problem of plate's thermo-
elastic vibrations
T. L. Simankina, N. V. Shirko. Creation of graphic images of
objects' physical deterioration and the expenses connected with it30
A. O. Hegai. Investigations of eccentrically compressed with
big eccentricity fiber concrete elements reinforced with high-
strength armature38
A. B. Shmidt. Numerical analysis of glulam plywood structures
behavior containing manufacture defects
STRUCTURAL MECHANICS
AND CALCULATION OF STRUCTURES
Yu. B. Goldshtein. A study of structures` stability with unilateral
constraints at finite displacement
A. V. Zagibalova. Influence of the damping on frequency of free
fluctuations of three-layer flat folded covers
K. V. Kozlov. The bending of continuous composite steel-
reinforced concrete beam with nonlinear concrete creep59
P. V. Sadikov. Update offer to durability check in a body's
singulars points64
GEOENGINEERING
A. N. Saurin, A. I. Korpach. Specialized installation for
strengthening the «base-foundation» system in emergency
buildings with a sleeper distributor
TECHNOLOGY AND ORGANIZATION OF CONSTRUCTION
V. V. Verstov, Ye. N. Filippov. Substantiation of rational kinds of
influences at immersing the polymeric sheet pile into the ground74
A. N. Gaido. The purposes and tasks of investigating the
technological solutions in regard of the arrangement of multi-
story buildings and structures' foundations
BUILDING MATERIALS AND PRODUCTS
T. M. Petrova, O. M. Smirnova. Concrete with increased early
strength based on Ordinary Portland Cement PC 500-DO-N
and CEM I 42,5N91
V. M. Khomich, A. V. Levanov. Method of drilling for
determination of the fluidity limits of steel designs elements96
SANITARY ENGINEERING AND ECOLOGY
M. A. Vardanyan. Extraction of niccolum ions (II) from
aqueous solutions by technogenic waste method104
- · · · · · · · · · · · · · · · · · · ·

2011 4(29) december

Bulletin of Civil Engineers

Scientific-technical journal

The Founder — the Federal State Budgetary Educational Institution of Higher Vocational Education "Saint-Petersburg State University of Architecture and Civil Engineering" (SPSUACE)

The Editor-in-Chief

Yu. P. Panibratov, Dr. Sci. Ec., Professor, Winner of the State Award of the Russian Federation and the Award of the Government of the Russian Federation, Honorary Worker of Sciences of the Russian Federation, Academician of RAACS

Assistants to the Editor-in-Chief

Ye. I. Rybnov, Dr. Sci. Ec., Professor, Honorary Worker of Higher School of the Russian Federation V. I. Morozov, Dr. Sci. Tech., Professor, Winner of the Award of the Government of the Russian Federation (The Senior Editor)

Editorial Board

M. I. Alekseev, Dr. Sci. Tech., Professor, Winner of the Award of the Government of the Russian Federation, Honorary Worker of Sciences of the Russian Federation, Correspondent Member of RAACS

A. N. Asaul, Dr. Sci. Ec., Professor,
Honorary Builder of the Russian Federation,
Honorary Worker of Sciences of the Russian Federatión B. G. Vager, Dr. Sci. Phys.-Math., Professor, Honorary Worker of Higher School of the Russian Federation A. I. Vahmistrov, Dr. Sci. Ec., Professor, Winner of the Award of the Government of the Russian Federation V. V. Verstov, Dr. Sci. Tech., Professor, Honorable Builder of Russia A. A. Veselov, Dr. Sci. Tech., Professor G. V. Yesaulov, Dr. Arch., Professor, Academician of RAACS
Yu. V. Zaytsev, Dr. Sci. Tech., Professor, Winner of the Award of the Government of the Russian Federation, Extraordinary and Plenipotentiary Ambassador
N. I. Karpenko, Dr. Sci. Tech., Professor,
Winner of the Award of the Government of the Russian Federation, Honorary Worker of Sciences of the Russian Federation, Academician of RAACS P. A. Kravchenko, Dr. Sci. Tech., Professor, Honorary Worker of the Higher School of the Russian Federation *L. P. Lavrov*, Dr. Arch., Professor, Honorary Architect of the Russian Federation, Correspondent Member of RAACS I. Yu. Lapina, Dr. Sci. Hist., Professor N. N. Lapshev, Dr. Sci. Tech., Professor, Honorary Worker of Sciences of the Russian S. N. Leonovich, Dr. Sci. Tech., Professor

L. S. Ljahovich, Dr. Sci. Tech., Professor, Honorary Worker of Sciences of the Russian Federation, Academician of RAACS R. A. Mangushev, Dr. Sci. Tech., Professor, Honorary Worker of the Higher School of the Russian Federation, Correspondent Member of RAACS S. N. Nikiforov, Dr. Sci. Tech., Professor S. T. Posohova, Dr. Sci. Psy., Professor Yu. V. Puharenko, Dr. Sci. Tech., Professor, Winner of the Award of the Government of the Russian Federation, Correspondent Member of RAACS V. I. Travush, Dr. Sci. Tech., Professor, Winner of the Award of the Government of the Russian Federation, Academician of RAACS	O. N. Medvedeva. Substantiation of estimation pressure drop in gas distribution systems	114
V. S. Fedorov, Dr. Sci. Tech., Professor, Academician of RAACS S. V. Fedosov, Dr. Sci. Tech., Professor, Winner of the Award of the Government of the Russian Federation, Honorary Worker	M. P. Vlasov, D. Ye. Lantsev, Yu. Ye. Leonov. Formation of firm's positioning strategy for promotion of goods	
of Sciences of the Russian Federation, Academician of RAACS V. D. Kharlab, Dr. Sci. Tech., Professor E. M. Tchernyshov, Dr. Sci. Tech., Professor, Honorary Worker of Sciences of the Russian	development	136
Federation, Academician of RAACS Editor V. I. Gritsuk	PHYSICS, NATURAL SCIENCES AND INFORMATICS Ya. I. Belopolskaya, M. M. Romadanova. Probabilistic represen-	141
Translator T. V. Lappo Proof-reader M. P. Popova Computer imposition V. I. Zholobov The address of the Founder and the Editorial	tations of boundary problem solutions for systems of parabolic equations	149
Office: 2nd Krasnoarmeiskaia St. 4 190005, StPetersburg, Russia Ph./ Fax: (812) 575-16-74, (812) 316-53-11, 316-58-72	K. V. Grigorieva, O. A. Malafeyev. Methods of solution of the dynamic multi-criteria postman's problem	
E-mail: vestnikspb@mail.ru, morozov@spbgasu.ru	S. N. Nikiforov. The role of grants in the development of	
The contents and abstracts of articles are presented on the site: http://www.spbgasu.ru The journal is registered by Federal Agency	scientific school for nonlinear problems of reinforced shells THE HUMANITARIAN SCIENCES	
of Supervision of Legislation Observance in the sphere of mass communications and protection of cultural heritage of the Russian Federation.	N. V. Ershov. The preparation of the first manned space flight S. Yu. Kargapoltsev. Architectural and archaeological research works on the territory of Kazanskaya Street in Saint-Petersburg	
The certificate on registration of mass media ΠΜ № ΦC77-18997 is dated 29.11.2004. The Journal is included by the HAK of the Russian Federation into the List of leading	(season 2011)	
reviewed scientific magazines and editions in which the basic scientific results of dissertations on competition of scientific degree of Doctor of Sciences are to be published Requirements on representation of materials are presented at the end of	E. A. Solovieva. The man in the urban environment: history and prospects of psychological research	195
	We congratulate on the anniversary	
journal. Manuscripts not corresponding to subject range of the journal and not meeting the specified requirements are not accepted; articles rejected by the editor are not returned to the author	SPSUACE To the Memory of Vladimir Petrovich Ilyin Information about the IV International Symposium «Actual Problems of Computer Modeling of Constructions and Structures»	205
Authors of the published works receive one copy of journal at the personal reference in editorial office	Abstracts	
<i>In case of reprints the reference</i> to the	Submitting materials requirements	
"Bulletin of Civil Engineers" is obligatory On the cover one can see the monument to the Emperor Nicholas I whose name was appropriated to the Institute of Civil Engineers (nowadays SPSUACE) on December, 17th, 1892	Subscription rules	220