

CONTEMPORARY PROBLEMS OF ARCHITECTURE AND CONSTRUCTION



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*Hydraulic Facilities Engineering, Environmental
Engineering, Transport Problems Civil Engineering,
sustainable construction, materials, structural
mechanics and technologies, Architecture and Urban
Planning;*

**Edited by
Gela Kipiani**



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PREFACE

I would like to thank all researchers, guests, partner universities for their participation. I appreciate the Scientific Committee, Organizing Committee members, Editorial Board and others for their contribution in publishing process of the above mentioned books.

Coordination of up-to-date issues in the field is one of the most important activities in the sphere of science, which unites representatives of different nationalities, exchange their best practices. 9th International Conference on Contemporary Problems of Architecture and Construction is a vivid example of this activity.

Let me give you a brief update on the way we have overcome together and where we are today. In 2008 National University of Architecture and Construction of Armenia initiated and organized the international conference entitled "Contemporary Problems of Architecture and Construction" in Jermuk, Armenia from October 15 to 18 with participants from Russia, Georgia, Syria. In 2010 the 2nd conference was organized in Jermuk, Armenia from September 30 to October 3 with the participation of representatives from China, Russia and Georgia. The 3rd conference was organized in Beijing, China in collaboration with the Beijing University of Civil Engineering and Construction from November 20 to 24, 2011, with the participation of representatives from China, Armenia, Poland, USA, Russia, France, Italy, UK, Georgia, Moldova and Thailand. The 4th conference was held in the Polish city of Czestochowa from September 24 to 27, 2012, as a joint effort of the Czestochowa University of Technology, National University of Architecture and Construction of Armenia, the Beijing University of Civil Engineering and Construction with the participation of representatives from Poland, Armenia, China, USA, Russia, Italy, Georgia, Czech Republic, Germany, Slovakia, Belarus, Ukraine and Hungary. The 5th conference was organized in Saint Petersburg, Russia by the Saint Petersburg University of Architecture and Construction, National University of Architecture and Construction of Armenia, the Beijing University of Civil Engineering and Construction and Czestochowa University of Technology, which took place from June 25 to 28, 2013. The 6th conference was organized at the University of Ostrava in Ostrava, Czech Republic from June 24 to 27, 2014 with efforts of the VSB - Technical University of Ostrava, National University of Architecture and

Construction of Armenia, the Beijing University of Civil Engineering and Construction, Czestochowa University of Technology, Saint Petersburg University of Architecture and Construction. The 7th in Florence, Italy at the University of Florence, November 19 to 21, 2015, with joint efforts of the University of Florence, National University of Architecture and Construction of Armenia, the Beijing University of Civil Engineering and Construction, Czestochowa University of Technology, Saint Petersburg University of Architecture and Construction, VSB - Technical University of Ostrava, with the participation of representatives from Italy, Armenia, China, Poland, Russia, Czech Republic, Kazakhstan, Iran, Georgia, Ukraine, Portugal, USA, Lithuania, Netherlands, Mexico, Philippines, Columbia. The 8th in Yerevan (Armenia) at the National University of Architecture and Construction of Armenia from October 26 to 28, 2016 in cooperation with the partner universities: National University of Architecture and Construction of Armenia; Beijing University of Civil Engineering and Architecture; Czestochowa University of Technology; Saint Petersburg State University of Architecture and Civil Engineering; VSB - Technical University of Ostrava; The University of Florence.

Hence we are proud to guest in Batumi (Georgia) the “9th International Conference on Contemporary Problems of Architecture and Construction”, held from September 13 to 18, 2017 in cooperation with the partner universities:

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This conference reflects the values and missions of our universities in the best way. This is a platform where close, friendly traditions and relations between countries are getting stronger. It gives an opportunity to numerous scientists from Armenia, China, Poland, Russia, Italy, USA, Georgia, UAE, Australia, Canada, Belorussia,

Ukraine, Slovakia etc. submit their contributions and open the space for discussions, scientific exchanges.

Hereby I'm sure that each of us would stay engaged, keep proactive, continue to meet the challenges of our fields and help us shape the future of International Conference on Contemporary Problems of Architecture and Construction more comprehensive and ongoing.

In addition I am very thankful for support of conference to Vice-Prime Minister & Minister of Energy of Georgia Mr. Kakha Kaladze as well as for Chairman of Management Board of JSC Georgian State Electrosystem (GSE) Mr. Sulkhan Zumburidze

*Gela Kipiani,
Guarantor of the Conference
Doctor of Technical Sciences, Professor
Georgian State Prize Winner in Science and Technology*