

CONFERENCE PROGRAM

MONDAY, OCTOBER 14, 2019

NUACA

9.30-10.00

Registration of Participants, opening of the exhibition of creative works of the personnel and students of the NUACA

10.00-10.30

(Auditorium N2023)

Opening of the conference, welcome speeches

- **Doctor of science (engineering), Prof. Gagik Galstyan, NUACA rector, Armenia**
- **Vahagn Vermishyan, Deputy of Urban Development Committee, Armenia**
- **Hovhannes John Mardirossian, Armenian Engineers and Scientists of America, Rutgers University, USA**
- **Doctor of science (engineering), Prof. Qi Chengzhi, Beijing University of Civil Engineering and Architecture rector, China**
- **PhD, Assoc. Prof. Cherednichenko Nadezhda, Director of Institute of Construction and Architecture, MGSU, Russia**
- **Doctor of science (economics), prof. Drozdova Irina, SPbGASU Vice Rector for Science, Russia**
- **Dr Hab. inż. (engineering), Prof. Maciej Major, Czestochowa University of Technology, Poland**
- **Doctor of science (engineering), Prof. Gela Kipiani, Georgian State Aviation University, Georgia**

10.30-10.50

Coffee break

10.50-12.30

(Auditorium N2023)

PLENARY SESSION

Techno-Economic Expediency of Modernization and the Renaissance of Large-Panel House Building in Armenia

Gagik Galstyan

Determination of Weibull modulus of quasi-brittle materials

Chengzhi Qi

Reinforcement Of The Steel Connection Between Column and Binding Joist

Maciej Major

Mid-Rise Light-Gage Multi-Family Structures for Armenia

Stephan Haig Tchorbajian

Basic Principles of Analysis of Thin-Walled Spatial Systems with Discontinuous Parameters

Gela Kipiani

Nonlinear deformations of stiffened reinforced concrete shells

Alexander Panin

13.00-14.30

Lunch

**NUACA
(Auditorium N2024)
15.00-17.00**

SESSION. Architecture

CHAIRMAN: David Qertmenjyan

- 1. On craftsmanship in ancient China from match between Lu Ban and Mo Zi**
Liang Xu
- 2. City Skyline: vertical picture of Yerevan architecture**
Knarik Stepanyan
- 3. Priorities for the development of modern Armenian architecture**
Marietta Gasparyan
- 4. Décor in composition of Cascade Complex in Yerevan**
Mariam Arshakyan
- 5. On some architectural issues based on coroplastic art of ancient Armenia**
Aminia Kanetsyan

**NUACA
(Auditorium N2023)
15.00-17.00**

SESSION. Building materials and technologies of binders, concretes, contemporary materials in architecture

CHAIRMAN: Maciej Major

- 1. Influence of mix fly and bottom ashes from biomass on selected properties of cement mortars**
Jakub Jura, Malgorzata Ulewicz (poster presentation)
- 2. Heat losses through insulated glazing placed horizontally or diagonally**
Zbigniew Respondek
- 3. Influence of cracks on frequency of the self-vibration of reinforced concrete T beam of road bridges**
Sargsyan Artashes, Sargsyan Grigor, Resnik Boris
- 4. Analysis of bored piles' field test results**
Lidiia Kondratieva, Vladimir Konyushkov, Le Van Trong, Vladimir Kirillov
- 5. Damping optimization in seismic isolation systems**
Dmitriy Bondarev
- 6. Theory of seismic sustainability**
Mozhgan Kamizi, Mark Grigorian
- 7. Software processing of the test results of building materials**
Narine Pirumyan, Mihran Stakyan, Gagik Galstyan

NUACA
(Auditorium N2021)
15.00-17.00

8. The use of lightweight concrete effectiveness in volcanic resistant construction

Badalyan Maria, Arakelyan Grigor, Karapetyan Amalya

9. On the stress state of a heterogeneous plate made of a material with a step change in elastic characteristics in the presence of an inclusion system and temperature influence

Kanetsyan Eghine, Mkrtychyan Mushegh, Mkhitarian Suren

10. Application of modern materials in conditions of complete reconstruction of existing buildings

Babajanyan Grigor

SESSION. Environmental engineering

Engineering maintenance of buildings and structures (energy, hydraulic, etc.)

CHAIRMAN: Józef Dziopak

1. Retention canals as an effective mean for controlling of storm water hydraulic transport

Józef Dziopak, Daniel Styś

2. Computer simulation of wastewater eutrophication potential as the base for proper selection of treatment technologies

Elena Neverova-Dziopak, Zbigniew Kowalewski, Michał Preisner

3. Hydrological and financial model of rainwater harvesting system

Daniel Styś, Agnieszka Stec, Józef Dziopak, Beata Piotrowska

4. Prohibited and obsolete pesticides in rivers Sevjur and Qasakh of Armenia

Mariam Avagyan

5. Assessment of irrigation water quality and selected soil physicochemical properties by electrochemical express methods

Gohar Hovsepyan, Tatevik Yedoyan, Armine Bagdadyulyan

6. Danger of generation of hydraulic jump in the plastic gravity pipe and actions taken to eliminate it

Albert Margaryan, Marianna Hakobyan

19.00

Dinner

TUESDAY, OCTOBER 15, 2019

**NUACA
(Auditorium N2023)
09.30-13.00**

SESSION. Architecture

CHAIRMAN: Emma Harutyunyan

- 1. Morphology and structure of the platonic solids from a Chinese interpretation**
Serge Monnot
- 2. Knowledge strategies applied to cultural heritage buildings: the architectural survey for the restoration and the enhancement of Katoghike Tsiranavor Church of Avan in Yerevan, Armenia**
Paola Puma, Emma Harutyunyan
- 3. Vernacular architecture in Armenia, from the travelers' accounts : its consideration in the European context, from the 17th century to the present day**
Suzanne Monnot
- 4. Some of the problems of preservation of monuments in the current legislation of the Republic of Armenia**
Arev Samuelyan
- 5. Armenian diaspora's church architecture**
Arman Torosyan, Emma Harutyunyan
- 6. The promenade in contemporary architecture of Yerevan**
David Kertmenjian
- 7. Architectural-planning features of the cluster reuse of the territories in Syunik province after mine site reclamation**
Lilit Babayan
- 8. Institutional issues of the preservation of the identity of the urban heritage in the process of sustainable development of the environment (7, Makich, Goris)**
Nune Petrosyan, Lilit Babayan
- 9. Self-portraits in the paintings and graphic works of architect and artist Albert Sokhikyan**
Lilit Arsenyan
- 10. Problems of architectural heritage preservation in modern construction of Yerevan**
Kirakosyan Lyuba

**NUACA
(Auditorium N2021)
09.30-13.00**

SESSION. Building materials and technologies of binders, concretes, contemporary materials in architecture

CHAIRMAN: Qi Chengzhi

- 1. ETFE plastic application for reconstruction and preservation of architectural structures in Syunik province, RA**
Babayan Lilit
- 2. New energy efficient technology of cellular glass**
Saakyan Emma, Arzumanyan Artavazd, Galstyan Gagik

3. **Heat-acid-resistant light concretes on the base of volcanic tuff lava and pumice aggregates of Armenia**
Arzumanyan Artavazd, Arzumanyan Avetik, Muradyan Nelli
4. **On the interaction of cracks and stringers with an elastic piecewise-homogeneous wedge-shaped body at an antiplane deformation**
Grigoryan Marine, Yedoyan Vardges
5. **Stress state of a compound elastic layer with a coin-like rigid inclusion under torsion**
Davtyan Zaven, Gasparyan Armine, Melkonyan A.
6. **Stone and brick structure churches composition and structural features**
Ordoukhanian Evlin
7. **On the interaction at anti-flat deformation of stress concentrators of the type of cracks and stringers with regard to the layer manufactured from miscellaneous materials**
Grigoryan Nune, Mkrtychyan Mher
8. **The analytical presentation of possibility of vertical crack propagation on the edge of endless layer**
Ter-Petrosyan Gevorg
9. **Mathematical modeling of the test process of construction materials**
Pirumyan Narine, Stakyan Mihran, Galstyan Gagik

13.00-14.30

Lunch

NUACA
(Auditorium N2023)
14.30-16.00

SESSION. Construction (civil, industrial, hydraulic, transport and underground), construction mechanics

CHAIRMAN: Gela Kipiani, Tigran Dadayan

1. **Constitutive model of marine soil under cyclic loading**
Chen Xiaoben, Qi Chengzhi
2. **Sustainable seismic resistant systems**
Mark Grigorian, Armen Minassian, Mozghan Kamizi
3. **Optimization of earthquake resisting rocking cores**
Mark Grigorian, Hadiseh Mohammadi, Mozghan Kamizi
4. **The history of an exceptional construction investor in Czestochowa at the turn of the 19th and 20th centuries**
Marlena Rajczyk, Jarosław Rajczyk
5. **Fire resistance of reinforced concrete corrosion-damaged columns of the "standard" fire**
Ashot Tamrazyan, Michael Mineev, Aishat Urasheva
6. **Axially-symmetric boundary value problem for uniformly layered composite with parallel interphase disk-shaped cracks**
Vahram Hakobyan, Lilit Dashtoyan
7. **Test of asphalt working from a mill from the frez from the exploded**

	<p>asphaltobetone layers of road surfaces <i>Marlena Rajczyk, Pawel Rajczyk, Jaroslaw Rajczyk</i></p> <p>8. Chemical modification of Kuchak pumice deposit surface <i>Marine Kalantaryan, Gohar Hovsepyan, rmine Meymaryan, Nikolay Chilingaryan</i></p> <p>9. Construction of modern high-rise buildings in accordance with city planning rules and regulations <i>Malkhaz Bediashvili</i></p> <p>10. Elastic-spin waves in magneto-ordered two-layer structures <i>Karo Aghayan, Levon Atoyan</i></p> <p>11. Interruption of crack and inclusions in elastic composition space under anti-flat deformation <i>Karo Aghayan, Vahe Zakaryan</i></p>
	<p style="text-align: center;">SESSION. Geodesy, including cartography and cadaster</p> <p style="text-align: center;">CHAIRMAN: Suren Tovmasyan</p>
<p>NUACA (Auditorium 2021) 14.30-16.00</p>	<p>1. Detecting transportation modes from GPS trajectories using recurrent neural network <i>Guo Maozu, Wang Pengyue, Zhao Lingling</i></p> <p>2. The reference rangefinder <i>Hovsep Petrosyan, Yegisabeth Hayrapetyan, Greta Sargsyan, Edik Baghdasaryan</i></p> <p>3. The results of duration and accuracy relation in GNSS systems using in territory of Republic of Armenia <i>Shahen Shahinyan</i></p> <p>4. Geo Information System (GIS) application in field of brickwork and stone architectural monument preservation and presentation <i>Shahen Shahinyan, Evlin Ordoukhanian</i></p> <p>5. The study of domestic and international experience of passportization of public and multiapartment housing stock <i>Irina Vanyan</i></p>
<p>NUACA (Auditorium 2023) 16.00-16.30</p>	<p>Summary of conference, decision on the venue for the 12th conference, conference closing ceremony</p>
<p>19.00</p>	<p>Dinner</p>
<p>Starting from 09.00</p>	<p>WEDNESDAY, OCTOBER 16, 2019 Introduction of the historical-architectural cultural heritage of Armenia, lunch, dinner during the visit.</p>