V International Conference

“CURRENT PROBLEMS OF CHEMICAL PHYSICS”

25-29 September 2018
Yerevan
Dear Colleagues

Organizing Committee invites you to participate in the V International Conference “Current problems of chemical physics”, which will be held in Yerevan (Armenia) on September 25-29, 2018.

Conference Organizers
National Academy of Sciences of the Republic of Armenia
State Committee of Science of MES RA
Division of Chemistry and Earth Sciences NAS RA
A.B. Nalbandyan Institute of Chemical Physics NAS RA
N.N. Semenov Institute of Chemical Physics RAS

Honorary Chairman: Martirosyan R.M., academician, President of NAS RA
Chairmen: Berlin A.A., Scientific Manager of N.N.Semenov Institute of Chemical Physics PAS RF
Tavadyan L.A., academician-secretary of the Division of Chemistry and Earth Sciences of NAS RA, Director of A.B.Nalbandyan Institute of Chemical Physics NAS RA

Honorary Organizing Committee
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Local Organizing Committee
Chairman: Tavadyan L.A. (NAS RA)
Deputy Chairman: Harutyunyan A.B. (ICP NAS RA)
Secretary: Manukyan Z.H. (ICP NAS RA)
Members of Organizing and Programme Committee

Scope
Up-to-date problems of chemical physics and perspectives of the progress in priority directions of chemical physics, fundamental and application issues of controlling chemical reactions and obtaining new materials will be discussed. Main attention will be given to the following topics:

1. Kinetics and Mechanism of Chemical Reactions
2. Catalysis, Nanocatalysis
3. Chemical Physics for Medicine and Biology
6. Structure of Materials
7. Mathematical Methods and Modeling in Chemical Physics
8. Ecology and Chemical Safety
9. Green Engineering. Recovery of Metals from Natural or Urban Mines
10. Macrokinetics, Reactor for Chemical Processes
11. Chemical Physics of Polymers and Composites
12. EPR in Chemistry, Biology and Medicine.

The Conference program will include:
- plenary lectures;
- oral presentations;
- poster presentations.

Duration of plenary lectures – 30 min, oral presentations – 15 min. For illustrations Power Point programs MS Office 2003 or 2007 are recommended.
In the framework of the Conference a competition among young scientists and experts (under 35) for the best presentation will be organized. Final decision on the form of presentation will be announced by the Organizing and Programme Committee. The Program of Conference and Book of Abstracts will be published and delivered to the participants upon their registration.

**Abstract Template**

**NUMERICAL ANALYSIS OF KINETIC MODELS OF OXIDATION REACTIONS**

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Abstract should include the title, name(s) of author(s), organization, address and e-mail address of the speaker (with the name underlined), body text (no more than 2 pages with figures, photos and tables) and references [1,2]. The text should be 1.5 spaced on A4 paper with 1-inch margins. Use 12 pt Times New Roman font for the body text.

**References**


**Abstract submission**

Abstracts should be submitted via e-mail as an attached file in MS Word format to the Conference secretariat: `ichph_conf@ichph.sci.am` (secretary of the Organizing Committee, Z.H. Manukyan). In the “Subject” of the message please point out the number of topic, which in a greater extent comply with the abstract content.

**Language**

Official languages of the Conference: English, Russian
**Conference location**

Opening Ceremony and Conference sessions will be held in the Presidium of the National Academy of Sciences of Armenia: 24, Marshall Baghramian Avenue, 0019, Yerevan.

**Deadlines**

Abstract submission - 01 May 2018
Notice of Abstract submission and presentation form – 15 June 2018
Tentative Program of the Conference – 01 September 2018

**Registration Fee**

Registration fee is $400 for full delegates and $200 for accompanying persons and graduate students. Fee will cover: publication of the Conference Program and Book of Abstracts, information data, coffee-breaks, lunches and trips. Trip program includes guided tours in Yerevan: visits to Matenadaran (museum of ancient manuscripts), Yerevan Brandy Company and some historical sites of Armenia: Garni Hellenistic Temple, Geghard cave-monastic complex and high-altitude Lake Sevan (with boat sailing).

**Hotel**

Organizing Committee suggests a list of comfortable and reasonably priced hotels not very far from the National Academy of Sciences, where all sessions of the Conference will take place:

- **Opera Suite Hotel** (web-site: www.operasuitehotel.com),
- **Bass Boutique Hotel** (web-site: www.bass.am),
- **Villa Ayghedzor Hotel** (web-site: http://www.hotels.am/villa-aygedzor-hotel),
- **Silk Road Hotel** (web-site: www.silk-road.am),
- **Cascade Hotel** (web-site: wwwCASCADEHoteL.am).

Alternatively, participants of the Conference may find many hotels in Yerevan themselves. At the same time Organizing Committee suggests to choose hotels located not very far from the center of Yerevan, that will enable more efficient organization of tours and departure of participants from the airport “Zvartnots”.

**Airport and pick-up**

Modern and passenger friendly newly build terminal of Zvartnots International Airport (airport web site: www.zvartnots.aero) is just 12 km away from the center of the capital of Armenia - Yerevan. The conference organizers will pick up the participants from and to the airport “Zvartnots”.

5
Currency Rates

Weather
The weather in Yerevan in the end of September usually is fair, sunny, with daily average temperature about 20°C.

Contacts:
Conference Secretariat address: 5/2, P. Sevak str., Yerevan, 0014, Armenia, A.B. Nalbandyan Institute of Chemical Physics NAS RA. Tel.: +(374 60)623-581, e-mail: ichph_conf@ichph.sci.am - secretary of the Organizing Committee, acting scientific secretary of the Institute of Chemical Physics NAS RA Z.H. Manukyan.
Current information about the Conference will be allocated in the site of the Institute of Chemical Physics NAS RA: http://chph.sci.am/conference/IChPh2018.html.
Tour Program

1. Yerevan: Capital of Armenia

Yerevan is the capital and largest city of Armenia (population is about 1.08 mln, 2017, area – 223 km²), located along the Hrazdan River in Ararat Valley. The height above sea level changes from 900 to 1300 m.

Yerevan is one of the world's oldest continuously inhabited cities. The history of Yerevan dates back to the 8th century BC with the founding of the fortress Erebuni in 782 BC by King Argishti I. The "birth certificate" of Yerevan is a cuneiform inscription left by King Argishti I on a basalt stone slab about the foundation of the fortress Erebuni.

Cuneiform Inscription Left by King Argishti I, 782 BC

Yerevan is Armenia's political, economic, cultural and scientific center, as well as the most important transportation hub in the country. There are over 100 hotels in modern Yerevan, many of them meeting world standards. A number of hotel chains, such as Marriott International, Golden Tulip, Ramada, Golden Palace, Best Western, Metropol etc. are represented in Yerevan. Excellent restaurants for all budgets and tastes, museums, monuments, parks, shopping, market squares and other places to visit are available in Yerevan.

In October 2018 the 2800th anniversary of Yerevan's foundation is planned to celebrate.

Yerevan Panorama
2. Matenadaran

The Mesrop Mashtots Institute of Ancient Manuscripts, commonly referred to as Matenadaran, is a repository of ancient manuscripts, a research institute and a museum. As of 2015, Matenadaran has a collection of nearly 17,000 manuscripts and 30,000 other documents which cover a wide array of subjects such as theology, philosophy, history, geography, grammar, art history, medicine and science not only in Armenian, but also in Arabic, Persian, Hebrew, Latin, Greek, Georgian, Russian, Indian Japanese and many other languages. Matenadaran has an open museum for attendees.
3. Yerevan Brandy Company

The Yerevan Brandy Company was founded in 1887 by the wealthy first guild merchant Nerses Tairyan (Tairov). The winery reached its heyday in 1899, when it was leased to the Russian businessman Nikolay Shustov, who was a well-known vodka and liqueur producer in Russia at the end of the 19th century.

The first Armenian vintage cognac made by M. Musinyants in 1902 was presented in France and win recognition due to its supreme quality. In the early 20th century Shustov's company "Shustov and Sons" became the main supplier of the Imperial Majesty's court of Russia.

From 1953 to 1991 Yerevan Brandy Factory was the only factory licensed as a monopolistic producer of Armenian cognac. In 1998 Yerevan Brandy Factory was privatized and incorporated into the French company "Pernod Ricard".

Within the factory area, the company also runs the "Ararat Heritage Center Museum and Shop", which is open for public tours.
4. Garni Hellenistic Temple

Garni historical and architectural complex is located near the village having the same name, in the gorge of the Azat River, 28 km away from Yerevan. Garni Temple is the only extant monument in Armenia related to the era of Paganism and Hellenism.

The building differs from most other Greco-Roman buildings in being constructed with basalt: the use of such a material probably required the employment of Armenian craftsmen skilled in the technique of carving such hard rocks.
The Temple was almost entirely destroyed in the great earthquake of 1679, but well restored between 1966 and 1975. Ruins of ancient fortress and royal palace, as well as a bathhouse built in 3rd century AD remain near the Temple.

Azat River Gorge: View from Garni Temple

5. Gegard Monastery Complex

Geghard (meaning "spear") is a monastery complex: a unique architectural building located about 40 km away from Yerevan. The monastery had been originally named Ayrivank meaning "the Monastery of the Cave". The name commonly used for the monastery today, Geghard or Geghardavank in full, meaning "the Monastery of the Spear", originates from the spear which had wounded Jesus at the Crucifixion, allegedly brought to Armenia by Apostle Jude, called here Thaddeus, and stored amongst many other relics. Now it is displayed in the Echmiadzin treasury.

The spectacular towering cliffs surrounding the monastery are a part of the Azat River gorge and are listed together with the monastery among the UNESCO World Heritage Sites. Some of the churches within the monastery complex are entirely dug out of the cliff rocks.

The monastery was founded in the 4th century, according to tradition by Gregory the Illuminator, at the site of a sacred spring arising in a cave, hence one of the names by which it was known, Ayrivank (the Monastery of the Cave).

Gegard Monastery Complex: Outside View

Gegard Cave Monastery
6. Lake Sevan

Ancient relict Lake Sevan, the pearl of Armenia, is one of the largest freshwater high-altitude (alpine) lakes in the world. This real wonder of the nature is located at the height of 1,900 m in a huge mountain bowl framed with picturesque peaks.

The clear water in Sevan may change the color marvelously: on a sunny day the water often has a deep turquoise color, in windy weather it's severe grey and silvery at night. The territory around Sevan is involved in the National Park as a protected area.

Severe and original beauty of Lake Sevan is usually sealed in people's memory for a long time, especially as it is surrounded by numerous churches built in the unique style of Armenian architecture.