### Арнайы саны

«Cryocrystals and Quantum Crystals» атты 10-шы Халықаралық ғылыми конференцияның тезистері Алматы, Қазақстан, 31 тамыз – 7 қыркүйек

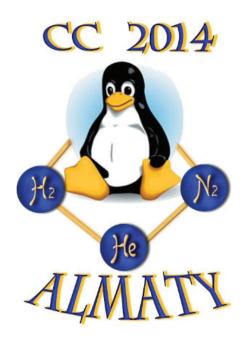
#### Специальный выпуск

Тезисы 10-ой Международной научной конференции «Cryocrystals and Quantum Crystals» Алматы, Казахстан, 31 августа – 7 сентября

### **Special Issue**

Abstracts of the 10th International Conference on Cryocrystals and Quantum Crystals *Almaty, Kazakhstan, August 31-September 7* 

# 10<sup>th</sup>International Conference on Cryocrystals and Quantum Crystals



## August 31-September 7



Almaty 2014



The organizers of the Conference would like to acknowledge the financial support of:











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#### 10th International Conference on Cryocrystals and Quantum Crystals August 31-September 7, Almaty, Kazakhstan

The 10th International Conference on Cryocrystals and Quantum Crystals(CC2014) is organized in Almaty (Kazakhstan) by Ministry of Science and Education of the Republic of Kazakhstan, National Academy of Science of the Republic of Kazakhstan, al-Farabi Kazakh National University, and Scientific Research Institute of Experimental and Theoretical Physics.

The Conference on Cryocrystals and Quantum Crystals (CC) dates back to 1979, when the first national USSR meeting dealing with cryocrystals and quantum crystals was organized in Viljandi, Estonia by V.G. Manzhelii (Verkin Institute for Low Temperature Physics and Engineering NASU) and A.F. Prikhot'ko (Institute of Physics NASU). The subsequent biannual meetings were held in Kharkov (Ukraine), Almaty (Kazakhstan), Donetsk (Ukraine) and Odessa (Ukraine).

The Almaty meeting of 1995 was organized by Kazakhstan National University as an international event. Since then the CC Conference had acquired international status becoming an important international forum for presenting new results on physics and chemistry of atomic and molecular solids. The great merit in achieving of this goal belongs toProf. Vadim Manzhelii and Prof. Horst Meyer, the co-chairs of the first International CC-1995.

The next two CC conferences were held in Poland, in Polanica Zdrój (September 1997) and in Szklarska Poręba (August 2000). The venues of the next CC conferences were Freising (Germany) in 2002, Wrocław (Poland) in 2004, Kharkov (Ukraine) in 2006, Wrocław (Poland) in 2008, Chernogolovka (Russia) in 2010. The ninth CC2012 conference was held in Odessa (Ukraine).

The scope of CC is wide, including, but not limited to,

thermodynamic and mechanical properties of cryocrystals and quantum crystals;

order-disorder phenomena

optical and neutron spectroscopy of cryocrystals
high-pressure studies of cryocrystals and

quantum crystals

charged species in cryocrystals and quantum crystals

- phenomena at the surface of quantum fluids and solids

- impurity-helium condensates

- matrix isolation in cryocrystals

- ultrafast dynamics in crystals

- crystalline and amorphous films, nanoscale systems

supersolid state

- new emerging materials

- technological applications and instrumentation

CC-2014 will be a forum where ideas on various aspects of the physical, chemical and technological properties of solidified gases and other relevant materials can be exchanged and where top experts in the field can meet.

A few Public Lectures are planned to be presented at CC2014. It is expected that majority of the attendees will arrive from outside the host country. In this regard, the Organize Committee is planning to announce a competition among young scientists up to 28 years for conference participation grants (to be announced later).

Please check the Almaty-CC2014.kz home page regularly for updates on pertaining information.

During the preparatory stages of CC-2014, former and would-be CC participants voiced a suggestion to hold the CC-2014 conference as an event in commemoration of Prof. Vadim Manzhelii, who was the main force in the organization of all Cryocrystals meetings.

#### 10th International Conference on Cryocrystals and Quantum Crystals August 31-September 7, Almaty, Kazakhstan

#### Organizers

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