

## Near 4,800 pupils from all over Ukraine took part in the national contest “Crystals”

On May 20, 2017, the final stage and winner ceremony of the national contest on crystal chemistry for pupils of secondary schools, “Crystals”, took place in Lviv. The organizers of this, eighth edition of the contest were the Junior Academy of Sciences of Ukraine, the Department of Inorganic Chemistry of the Ivan Franko National University of Lviv, and the Lviv Regional Junior Academy of Sciences. This year the competition officially received the name of its initiator, the outstanding scientist and co-founder of Lviv Scientific School on Crystal Chemistry, Evgen Gladyshevskii (1924-2012).

Near 4,800 pupils from the whole country took part in the contest. During the first stage of the competition, schoolchildren of grades 1-6 had grown crystals from reagents received by mail, and pupils of grades 7-11 had performed scientific observations on the topic “Crystals: the secrets of growth and the art of synthesis”, which were presented in the form of abstracts. During the final stage in Lviv the finalists of the first category personally showed their crystals and those of the second category presented posters and answered questions.

The material prepared by the participants was evaluated by a jury of scientists of different horizons: Zofia Rzączyńska (professor at the Maria Curie-Skłodowska University, Lublin, Poland), Zinoviya Shpyrka (associate professor at the Ivan Franko National University of Lviv), Yaroslav Tokaychuk (senior researcher IFNUL), Nataliya Muts (assistant professor IFNUL), Taras Delenko (PhD student IFNUL), and Danylo Maryskevych (master student IFNUL).



The representatives of the Lviv City Council expressed their conviction that the contest will continue to develop, to the benefit of the city and the country as a whole.

Lyudmyla Hayday greeted the participants on behalf of the Junior Academy of Sciences of Ukraine.

She emphasized that all the participants of the second round were already winners, because they had passed a selection of more than four and a half thousand students. Ivanna Borodchuk (Lviv Regional Junior Academy of Sciences) underlined that this competition brings together schoolchildren, their parents, and teachers around a scientific topic.

Zofia Rzączyńska, chairwoman of the jury, said that the contest is very important for the popularization of science and expressed her satisfaction with the quality of the work.

First to be awarded were the youngest participants of the competition, children of grades 1-6, who competed in the sections “The largest crystal” (winners: Dayana Lezcano from Donetsk Region and Sofiya Krayushkina from Kherson), “The most perfect crystal” (Alina Dmytruk from Lviv and Darya Yatsenko from Dnipropetrovsk Region), “The most original crystal” (Elyzaveta Belousova from Dnipropetrovsk Region and Sofiya Kondratyuk from Khmelnytsky Region), and “Crystal growth” in the form of a video presentation (Valeriya Dzyubynska from Ternopil and Evelina Pelypenko from Donetsk Region).



The pupils of grades 7-11 had conducted thorough and interesting scientific researches. Among all the participants, representing 169 educational institutions in 20 regions of Ukraine, the winner was Anastasiya Melnytska (from Ivano-Frankivsk) for the work “Determination of the refractive index of light in grown crystals”. The second place was taken by Maksym Kindra (Poltava Region) for “Investigation of the growth of copper crystals in the process of recovery of  $\text{Cu}^{2+}$  cations with metallic aluminum in agar gel” and Andriy Polyakov (Donetsk Region) for “Crystals of time”. The third place was won by Volodymyr Belozorov (Zaporizhzhya Region) for “Research of the growth dynamics of crystals depending on the modeled conditions”, Oleksandra

Pyptyuk (Chernivtsi) for “Luminous crystals”, and Sergiy Slivinskyy (Kirovohrad Region) for “Influence of a magnetic field on the growth of crystals of copperas”. A booklet with collected scientific abstracts was published.

The objectives of the national competition for young researchers “Crystals” named after Evgen Gladyshevskii are numerous: stimulate the interest of schoolchildren in chemistry and other natural sciences, encourage the organization of independent and collective activities, promote the formation of

scientific bases and skills for conducting scientific research, contribute to the general level of the pupils, develop their ability to process, analyze, and present scientific information, stimulate creativity, and motivate gifted children to get involved in research activities in youth organizations such as the Junior Academy of Sciences of Ukraine. Based on the large number of participants and the quality of their work, we believe that part of the objectives was reached.

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