

Dream Chemistry Award 2019 goes to Yujia Qing of University of Oxford

Prague, 5 December 2019 -- Yujia Qing of University of Oxford has won the 2019 Dream Chemistry Award, an international competition for young scientists that took place on December 2 and 3, 2019, at the Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences (IOCB Prague). In addition to the Dream Chemistry Award statuette, the winner also received two monetary prizes totaling €11,000.

The [Dream Chemistry Award](#) is a competition for young scientists up to 37 years of age who have defended their doctorate within the last eight years and have been nominated by respected scientists from around the world. The nominees submitted proposals for visionary projects in the field of chemistry or on the borderline between chemistry and other natural sciences with the ambition and potential to effect positive change in the world.

The authors of the five best projects received the Dream Chemistry Top 5 award together with a monetary prize of €1,000 and an invitation to participate in the finale at IOCB Prague, where they presented and defended their projects before a panel of experts and competed for the highest honors and prize money of €10,000.

“The dreams of the young researchers of today shape the science of tomorrow, and I am glad that IOCB and IPC recognize this,” says the competition’s founder and co-organizer Prof. Robert Holyst of the Institute of Physical Chemistry of the Polish Academy of Sciences (IPC PAS).

“As in previous years, we heard beautiful presentations from five super-bright young researchers who will be shaping modern areas of chemistry in the years to come, and again it was extremely hard to pick the ultimate winner, the one who struck the right balance between dreams and reality, their head high in the clouds but with their feet planted firmly on the ground,” explains Prof. Pavel Jungwirth of IOCB Prague, organizer of the Czech branch of the competition, in assessing this year’s finalists.

In the end, the 2019 Dream Chemistry Award went to Yujia Qing of the Hagan Bayley Group at University of Oxford, UK. She is currently working on the development of transmembrane signaling systems for synthetic cells and tissues. She prevailed in the competition with a project called “Sequencing Life”, in which she is pursuing the creation of a universal tool for parallel sequencing and analysis of multiple polymer structures present in biological matter. Such a tool would be of great value in all the research of the molecular basics of life.

“I am grateful and honored to have won the Dream Chemistry Award,” says Yujia Qing. *“It has provided a unique stage for us to talk about our bold and ambitious proposals for unmet chemistry challenges. The event also allowed us to interact with top scientists in chemistry and related fields, who provided constructive feedback in shaping and realizing our dreams.”*

Among the finalists were **Emiliano Cortés** from Ludwig Maximilian University in Munich, Germany, with a project entitled “Lighting Up Chemical Reaction Pathways”, **Jeffrey D. Martell** from the University of Wisconsin-Madison, USA, with a project called “DNA Nano-Scaffolds for Rapid Discovery of Enzyme-Mimicking Catalysts”, **Hannes Mikula** from Vienna University of Technology in Austria with his project “Double-targeted In Vivo Synthesis of Drugs at the Site of Disease”, and **Yoeri**

van de Burgt from Eindhoven University of Technology, Netherlands, with a project entitled “Brain-Inspired Organic Modular Lab-on-a-Chip for Cell Classification | Neuromorphic Computing”.

The Dream Chemistry Award competition was established in 2013 by the Institute of Physical Chemistry of the Polish Academy of Sciences (IPC PAS) in Warsaw. In 2017, IOCB Prague came on board as a co-organizer, and since then the competition has alternated each year between Prague and Warsaw.

The main partner and sponsor of the 2019 competition was the company [IOCB Tech](#).

The [Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences / IOCB Prague](#) is a leading internationally recognized scientific institution whose primary mission is the pursuit of basic research in chemical biology and medicinal chemistry, organic and materials chemistry, chemistry of natural substances, biochemistry and molecular biology, physical chemistry, theoretical chemistry, and analytical chemistry. An integral part of the IOCB Prague’s mission is the implementation of the results of basic research in practice. Emphasis on interdisciplinary research gives rise to a wide range of applications in medicine, pharmacy, and other fields.

The [Institute of Physical Chemistry of the Polish Academy of Sciences / IPC PAS](#) was established in 1955 as one of the first chemical institutes of the PAS. The Institute's scientific profile is strongly related to the newest global trends in the development of physical chemistry and chemical physics. Scientific research is conducted in seven scientific departments. CHEMIPAN R&D Laboratories, operating as part of the Institute, implement, produce and commercialise specialist chemicals to be used, in particular, in agriculture and pharmaceutical industry. The Institute publishes approximately 200 original research papers annually.