
STUDENT RESEARCH PROJECTS AS A POINT OF COLLABORATION BETWEEN HIGH SCHOOL AND RESEARCH INSTITUTES

Kanateva A.¹, Koliasnikov O.², Morozova N.², Sigeev A.^{2,3}, Smolyanskii A.⁴

¹ A.V. Topchiev Institute of Petrochemical Synthesis of Russian Academy of Sciences (TIPS RAS), 29, Leninsky prospect, Moscow, Russia

² Advanced Educational Scientific Center (faculty) – Kolmogorov’s boarding school of Moscow State University n.a. M.V. Lomonosov (AESC MSU), 11, Kremenchugskaya street, Moscow, Russia

³ A.N. Nesmeyanov Institute of Organoelement Compounds of Russian Academy of Sciences (INEOS RAS), 28, Vavilova street, Moscow, Russia

⁴ Branch of JSC Karpov Institute of Physical Chemistry (Branch of JSC KIPC), 3-1/12, b. 6, Obuch lane, Moscow, Russia

Research activity is a powerful method for engaging students in science and it allows bridging a gap in curricula between the 2nd (high school) level and the 3rd level of chemistry education. It is the reason to stimulate a laboratory research work at the level of high school.

MSU has a long story of teaching talented high school students. They have been studying in university’s high school founded by A.N. Kolmogorov (AESC MSU) for over half a century. During the last decade a system of supporting chemistry education via research activity was elaborated. An important part of the system is collaboration with research institutes to involve students to work together with qualified chemists on actual problems of current science with modern laboratory equipment.

The institutes are stimulated to work with younger students to attract them to continue their career in their field of science. Researchers of institutes have a possibility to work with highly motivated high school students. AESC MSU has partnership contacts with institutes of Russian Academy of Science (INEOS RAS, TIPS RAS) and State Corporation Rosatom (Branch of JSC KIPC).

Tens of AESC students have performed individual research projects in these organizations in the last years. They usually present the projects at school conference. The students with more successful researches have a possibility to acquire a skill of presentation of their results at the advanced level. Many times they were awarded at contests, made reports at conferences and took part in exhibitions of student projects, including international ones. Most of them have chosen the education in chemistry-related areas at the university level and have early publication activity in comparison with their peers.

Thus, the collaboration of AESC MSU with research institutes is very effective and allows realizing the early introduction to science for students as well as rejuvenation of the institute's teams of researchers.

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