

Dear Colleagues,

It so happens that this is our last issue before the New Year; however, we are going to review this year in the sixth issue of INEOS OPEN in 2020, which is in progress. Perhaps, it is better this way as it will give us some distance necessary for evaluation. For now, let us focus on pre-holiday work. The pandemic has been exceedingly tiresome for all of us, and now, finally, the vaccination has begun. The situation with the vaccine is highly illuminating. The authorities have unexpectedly discovered that under-reformed and publicly criticized science is not dead yet and is still capable of a lot. Unquestionably, the PR, advertising, and organization of the manufacturing process are the results of the new structures in action, but the vaccine itself is fundamental science! And it's not just the vaccine. The only anti-viral drug that has a serious effect on the new virus, Triazavirin, has been created by our Ural colleagues—the full members of RAS O. N. Chupakhin and V. N. Charushin and the corresponding member of RAS V. L. Rusinov, the members of the Chemistry and Materials Science Department of the Academy. This shows the power of a fundamental scientific school at work. There can be no vaccines or drugs without a solid fundamental basis. It is too soon to draw conclusions; however, this pandemic has clearly given a powerful impetus to the reanimation of the old medical infrastructure and creation of the new one. In essence, our government is fully capable of responding to the present-day challenges, be it an issue of the military or medical security of the nation. This brings the question of what kind of disaster must happen for them to remember the field of chemistry. Was not the ecological catastrophe at the Usol'e-Siberskoe plant, which had to be remedied by the efforts of military chemists, enough to bring the understanding that it is past time to prioritize the development of chemistry on the state level and to reanimate the old chemical infrastructure and create the new one in the country?

As I wrote earlier, the Consortium of chemical institutes and RAS aims at unifying the efforts on the development of a new vision for the problem of urgent chemization of the national economy in every area: science, education, and industry. It is necessary to create the principles of chemization that would be associated with the concepts of life, health, healthy environment, and healthy eating, in other words, all the concepts that are integrated into the name of our favorite magazine—"Chemistry and Life". The first meeting, held over Zoom under the chairmanship of the vice-president of RAS and leading researcher of our Institute—the full member of RAS A. R. Khokhlov, focused on accepting new members—the Consortium is growing! The meeting focused mainly on the organizational issues of cooperation with mass-media and general approaches to working with the younger generation. The strategic questions had not been discussed, and the meeting was held under the general slogan "we are for everything good and against everything bad". It is obvious since we must first develop a format for discussing the issues of further development of chemistry and for preparing proposals that the Consortium will submit to the Academy, the Ministry, and the scientific community. It is good that all these preliminary discussions had been held in the parting year so that the

new year can begin with developing the strategy for producing optimal solutions to the work process of the institutes involved in the Consortium, as well as the best methods for cooperation with the relevant section, the Ministry, and development institutes.

The Russian Foundation for Basic Research was consolidated with the Russian Science Foundation—a decision made despite numerous objections of the Presidium of RAS as well as many informal scientific coalitions. The objecting scientific community had been given the reassurance that all main programs and grants would be safe, and it was only a matter of controlling them better from a single center to avoid overlapping (oh, how scared we are of overlapping). In all actuality, any overlap can be transformed, with minimal adjustments, into relay cooperation where projects would be moving from one fund to the other and, thus, be subject to two independent expertise evaluations. It would be important then that the funds differ in the scale of support they offer as well as its target. This could be well explained in military terms. Small groups conducting exploratory (heuristic) research would be analogous to sending a small scouting party into unknown territory. If they had survived and discovered something of value, we proceed to the next stage—contact reconnaissance, which would be the level of a battalion in the army and the level of a grant for a laboratory here. If they are successful and have developed clear objectives, we bring in major forces, or, in our case, we include the topic into the fundamental research program, which would enable certain institutes, selected on a competitive basis, to participate in the research. The contest would be held by the highest expert council of the Academy and would be supported by the Ministry. It would be as simple as truth—each fund focuses on its own level of support that it provides, and thus, they do not compete with each other but cooperate instead. For example, if one has a successfully fulfilled grant from RFBR, he or she would have an advantage when applying for an RSF grant because it has already passed one expert evaluation. There is nothing complicated about it, and instead of overlapping, we get cooperation. All in all, the impression is that the absorption of RFBR is a temporary measure, and it will be reborn again, probably with a new name, while the old one will be remembered in the history of Russian science as having belonged to an institute that had played a major role in the preservation of science during an administrative overhaul.

Let me back to science. The Institute has taken part in the 8th Bakeev Blitz-Conference. This year it was held under the motto "The Polymers of the Future". The conference was a huge success; the level of plenary reports was high, as always, and the traditional discussions held over Zoom were dynamic and informative. We were used to the fundamental reports of Prof. Moeller (an INEOS employee and a foreign member of RAS), who spoke about the mechanisms of self-healing (the results of Mega-grant), and Prof. S. Sheiko, but the reports of the young plenary speakers, namely, I. Elmanovich (INEOS RAS) and N. Sedush (ISPM RAS) were a revelation in terms of the depth of the analysis and evaluation of the prospects of development of their respective areas. The lecture of Prof. E. R. Badamshina (IPCP RAS) on the prospects of phosgene-free polyurethanes left a deep impression. The young Doctor of Sciences S. Yu. Khashirova

delivered a great review on 3D-printing using heat-resistant thermoplastics. INEOS has actively participated in the Conference with both oral presentations and video posters. The participants experienced the Conference as a breather amidst self-isolation, while the organizers were left with newfound wisdom that, if they give only ten days to submit abstracts, they will, in fact, get more presentations than what they normally get during a usual six-month timeframe.

In conclusion, we offer Season's Greetings from the editorial staff to the members of the editorial and advisory boards, authors, and readers of INEOS OPEN! Health will remain the most coveted resource in the upcoming year, so we wish you to have it in such overwhelming abundance that you would never experience its lack. May the New Year bring new discoveries in every area of life, may those discoveries be happy and filled with potential! In short, live long and prosper! Happy New Year!

Sincerely yours,

Editor-in-Chief

Prof., Full Member of RAS

Aziz M. Muzafarov