

Now It's Impossible to Bring to Life a Technology from "a Garage Next Door"

According to the Rules of the Nanotechnological Society of Russia (NSR), NSR is "an all-Russia self-administrating non-profit and non-governmental organization uniting on voluntary basis scientists, businessmen, industrial specialists, as well as students, working, teaching, or studying in the field of nanotechnologies, nanosciences, or nanomaterials" Here is the interview with the President of the Nanotechnological Society of Russia 2010-2011, Doctor of Science, Victor Bykov.

Mr. Bykov, NSR is a rather young organization, what was it established for?

- Youth, maturity – everything is changeable in this world. The Society was officially registered two years ago, but the activity of enthusiasts in the nanotechnology and nanoscience popped up much earlier of course. For example, 20 years ago there was the "Workshop on Langmuir Films" working in the Shubnikov's Institute of crystallography RAS. It is still active. Molecular films are obviously closely related to nanotechnologies in its current meaning.

As for aims of the Society, they are quite high-minded. First, to provide a platform for specialists to communicate with each other, thus realizing themselves, canalizing their creative potential in a constructive way. Second, the Society is aimed to involve Russia's regions in the discussion, to involve regional specialists and businesses into policy-making in nanotechnologies and nanosciences. And finally, third is to promote the nanotechnology-based industry in Russia.

- How can a "non-profit and non-governmental" community of scientists

Victor Bykov,
President of the
Nanotechnological Society
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promote the industry as a whole notion?

- There are not only scientists among us. For example the Industrial Committee I have the honor to lead unites businessmen as well as specialists from governmental institutions in metrology, certification, intellectual property regulation etc. You know, implementation of new technologies into industry on the federal scale is very complicated and complex problem. One, who is doing Hi-tech business, has to deal with imperfections in laws, taxes,



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accounting, customs, and technical regulations and so on – all what we inherited from Soviet economy and what is not effective any more in market economy. Everything in this list adds risks and lowers the profit for potential investor. And there are no new technologies without investments. Only by fixing institutional errors one by one we can improve the whole economic environment, lower the risks of investments, and finally provide connection between scientists and businessmen on the way of commercialization of nanotechnologies.

- There are many official governmental structures aimed to modernize Russian economy, including nanotechnology-based industry – I mean RUSNANO Corporation. What do you think about governmental efforts on this way?

- Our Society is quite official too. As for RUSNANO Corporation we have Collaboration Agreement with them and it is not just a formal one. We do collaborate very intensively and I would say NSR is good complementation to RUSNANO.

They have money; it opens up a large field of possibilities, along with large limitations too. Money shall return as income. New businesses shall bring profits but it is not so easy – Hi-tech is of high risk as I said earlier. For instance in my own company – NTMDT – some R&D projects are successful and some are not. We lose a lot of money there and I do know how difficult it is, doing profitable Hi-tech business.

So RUSNANO is balancing between Scylla and Charybdis: on the one side they must improve infrastructure for nanotechnologies and on the other side their businesses must generate profits. This is why non-profit organizations can help. For example Nanotechnological Society of Russia can help by an expertise as well as by a wide public discussion of most critical issues in professional community. Professionalism can guarantee that the discussion is on constructive way. We can ask ourselves – what can we do professionally to help in this direction? What can we do now to improve our life?

RUSNANO Corporation in turn helps the Society in its activity. For example a large conference on educational reform was supported by RUSNANO. There was

very interesting experience summarized of usage of new nanotechnology-based equipment in a high school. End-of-year NSR conference in October will be held by partial RUSNANO support.

- End-of-year conference will include the new President Election? Do you plan to ballot for the next period?

- The Rule of the Society is to limit the period by one year only. May be this is not a best solution as one year is too small time for making real changes. As the President I can suggest a plan – preparing the roadmap, no more. But this is the Rule and I have to follow it.

- If summarize – what has been done for this year?

- Everything we have discussed. Social network for professionals has been created - new in terms of new members (1300 up to now), as well as new IT solutions. We developed a new Web site www.rusnor.org and I hope it will connect people all around the world. It is very important to have an access to the most modern technologies worldwide. NTMDT Co. is an example: we use the best components in our microscopes and we have the second position on the world market with extremely high competition.

Important achievement of this year was participation of NSR in development of new laws on innovation activity in Russian Federation.

Collaboration with RUSNANO greatly increased this year.

On the whole this year has been very intense. My efficiency as the President will be evident in a matter of time.

Regional representations

