

Presentation at the Annual Meeting of the Committee of Concerned Scientists

2022-03-27

Dear Colleagues, I thank organizers for arrangement of this extraordinary Annual Meeting of the Committee of Concerned Scientists (CCS) and for invitation to participate it.

In the unleashed war, Putin and supporting him Russians majority are intending to occupy Ukraine and to get total control of Ukraine by means of total annihilation of resistant, national historical, intellectual and spiritual values, to expand “Russian world”.

National Science Center “Kharkiv Institute of Physics & Technology” (NSC KIPT) was considerably destroyed by Germans during the Second World War, then it was reestablished, became famous scientific center. In particular, it escorted the nuclear power engineering, met the challenge thermonuclear fusion; powerful theoretical schools leaded formerly by L. Landau, A. Akhiezer, I. Lifshitz, E. Lifshitz, D. Volkov and others were formed and work here currently. During last decades it is the principal institute in development of the nuclear power engineering of Ukraine. In particular, it currently provides certification and uploading control of the Westinghouse nuclear fuel for reactors of Ukraine and started up the Accelerator Driven Undercritical Neutron Source (ADUNS), supported by the US DOE grant..

Scale of the Institute damages that Russians did during the last weeks is considerably larger than those made by Germans during Second World War (WWII).

Nearly half of the institute staff became refugees or migrants. A help of civilized countries is severely needed. The scientific community of Ukraine looks for cooperation with foreign colleagues and organizations to meet this challenge. Comments on this problem are placed in Box 1.

STATEMENT

by the Scientific Committee of the National Council of Ukraine on Science and Technology Development

1. ON THE RUSSIAN AGGRESSION AGAINST UKRAINE

Russia, having started war against Ukraine under false pretense, constantly resorts to cruel military techniques deliberately targeting civilian objects and resulting in massive casualties and suffering among non-combatants, creates threats to nuclear and ecological safety. With such unprecedented acts of state terrorism, Russia seeks to destroy Ukraine as an independent state, as a nation. Russian leaders openly voiced their denial to recognize Ukraine’s sovereignty as well as the very existence of the Ukrainian language and culture, consequently pursuing the course of eliminating all that is Ukrainian, set centuries ago by the Russian empire.

As much as this war hurts Ukraine, the more important it becomes to realize that it is not only about Ukraine. This is a watershed moment for the entire world, laying down its fate for the next few decades. This is neither an exaggeration nor a rhetorical device: we see that as a straightforward conclusion from recent events and from the lessons taught by history.

The war in Ukraine is just another logical step in the rise of Russian fascism (Russism). It has been largely overlooked as a phenomenon, its dangers were underestimated or deliberately played down by the world’s political and business elite, who preferred to look away and continue a profitable relationship with the nascent evil. Such a comfortable stance was shaken neither by the Russian invasion of Georgia in 2008, nor by the annexation of Crimea in 2014.

But now it is high time to face the truth and call things by their real names. When a propagandist serving the Russian regime speaks about the “final solution to the Ukrainian question”, without shying to use the notorious Nazi wording, this is not a mere slip of the tongue, it is a logical consequence of adopting the fascist ideology. When a nation shifts their attitude towards WWII from “Never again” to “We can do it again”, this is another step in the same direction.

Russism, centered around the idea of a great empire and of a “special historic and moral role” of the Russian nation, cannot and will not stop by itself, it can only be forcefully stopped. And it must be stopped now. Any attempts to win time by delaying the necessary action will only increase the final price of defeating this monster. The fate of the civilized world is decided now in the battlefields of Ukraine, and those who view themselves as part of this world should better realize it in full and take serious action.

2. ON EFFORTS OF ISOLATING RUSSIA IN SCIENCE & TECHNOLOGY

We doubt that the fascist regime in Russia, bent on the use of military force, can be stopped by sanctions alone. But anyway, to be efficient, sanctions must be sufficiently severe to cripple the military capacity of Russia. In the modern world, with information and technological know-how being the most valuable commodities, military power is largely based on the achievements of science and technology. Consequently, it is essential to isolate Russia from any such achievements.

It should be remarked that two decades of increasingly aggressive brainwashing have had a devastating effect on the entire Russian society, which is clearly reflected in polls showing high popular support of the war, as well as in numerous servile statements of Russian prominents, including many scientists and intellectuals.

Since the beginning of the war, many countries have undertaken steps toward cutting Russian scientific organizations and people affiliated with them from access to scientific collaborations, joint research projects, foreign research funding. We support those efforts, but they have to be brought onto a much larger scale. Not only the research funding opportunities should be withdrawn, but access to any scientific publications, any scientific information must be ceased for the Russian academic community.

We are surprised that some renowned academic publishers, including the Nature group and Elsevier, oppose the idea of cutting such access, appealing to humanitarian reasons and academic freedoms. We hope that such views are caused by a mere short-sightedness and not by more mundane motives, such as a desire to continue making money from selling subscriptions on a lucrative Russian market.

It is embarrassing when some prominent Western scientists are pushing the message that “this is not a war of Russia against Ukraine, but a war of Putin against Ukraine”, and therefore one must not “punish the Russian people” by sanctions. With such a logic, WWII was just “a war of Hitler”, so perhaps scientists from Germany, USA, and Soviet Union should have worked together on fascinating problems like nuclear fission in the name of science and academic freedom?

We find it vital to reiterate: if sanctions and embargoes are to have any significant effect, they have to be extraordinarily severe, embracing all spheres without exception, including science, technology, and culture. Anything less is a waste of precious time.

3. ON EFFORTS TO SUPPORT UKRAINIAN SCIENCE

Since the beginning of the war, many initiatives from Western universities and scientific funding bodies have emerged, aimed at providing various forms of support for Ukrainian researchers and academics. We certainly welcome such initiatives, as they give a good chance to survive to those Ukrainian researchers and students who were able to find shelter abroad.

At the same time, we are concerned that the Ukrainian scientific community may suffer a very serious brain drain, which would make the task of post-war recovery even more difficult.

We call on all the parties involved to develop programs aimed at supporting those Ukrainian scientists and educators who stay in Ukraine and continue their work. As part of the same effort, we call on developing a deeper integration between Western and Ukrainian research institutions, universities, and scientific funding organizations. Several renowned Ukrainian research and educational institutions, especially those from Kharkiv, will need help with relocation and restoration. We understand that designing such programs may be hindered by considerable bureaucratic difficulties. We, being a part of the advisory body at the Ukrainian government, express our readiness to mediate to help overcome such difficulties and find acceptable solutions.

About revival of the science in Ukraine in cooperation with USA and other civilized countries

Currently rendered aid of scientists-refugees around the civilized world is a temporary measure to save these people. Measures directed at saving and revival of the national science has to be taken also for incorporation of the Ukrainian science into international cooperation. A targeted portion of the international financial aid has to be foreseeing for that.

Efficient tools of the science & technology projects management are developed in Ukraine. The Science and Technology Center of Ukraine, sponsored by USA and EU, accomplishes competitive selection, monitoring and reporting of projects.

The Supervisory boards of the institutes of NASU, which staffs include recognized scientists, assess the scientific activity of the institutes of NASU and formulate outlooks.

As an example, the staff of Supervisory board of the Institute for Condensed Matter Physics of the National Academy of Sciences of Ukraine is listed:

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| 1. BAKAI Oleksandr | Head of the Theoretical Department of the Akhiezer Institute for theoretical physics of the National Science Center of Kharkiv Institute of Physics and Technology, Full Member of the National Academy of Sciences of Ukraine, Professor; |
| 2. VYSOCHANSKII Yulian | Director of the Institute for Physics and Chemistry of Solid State of Uzhgorod National University, Corresponding Member of the National Academy of Sciences of Ukraine, Professor; |
| 3. Gladyshevskii Roman | Vice-Rector for Research, Head of the Department for Inorganic Chemistry at Ivan Franko National University of Lviv, Corresponding Member of the National Academy of Sciences of Ukraine, Professor; |
| 4. KOZITSKY Yuriy | Head of the Department of Applications of Mathematics, Marie Curie-Skłodowska University (Lublin, Poland), Doctor of Physical and Mathematical Sciences, Professor; |
| 5. KOSTROBII Petro | Head of the Department of Applied Mathematics, Lviv Polytechnic National University, Doctor of Physical and Mathematical Sciences, Professor; |
| 6. KUSHNIR Roman | Director of the Ya. S. Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of the National Academy of Sciences of Ukraine, Chairman of the Shevchenko Scientific Society, Full Member of the National Academy of Sciences of Ukraine, Professor; |
| 7. LAVRENTOVICH Oleg | Professor of the Institute of Liquid Crystals, University of Kent (Kent, USA), Doctor of Physical and Mathematical Sciences, Professor; |
| 8. PIZIO Orest O. | Senior Researcher at the Institute of Chemistry of the National Autonomous University of Mexico (Mexico City, Mexico); |
| 9. FOLK Reinhard | Doctor Emeritus of the Johannes Kepler Linz University (Linz, Austria); |
| 10. CIACH Alina | Professor of the Institute of Physical Chemistry of the Polish Academy of Sciences (Warsaw, Poland); |
| 11. YUKHNOVSKII Ihor | Adviser to the Presidium of the NAS of Ukraine, Full Member of the National Academy of Sciences of Ukraine. |

Box 1

A comment from E. Chudnovsky:

“Thank you very much for attending the CCS meeting! People were greatly impressed by your reporting from the war zone and were influenced by your thoughts.

Regarding to what CCS can do, our board members have various kinds of connections. If you have any concrete suggestions how a concrete U.S. research or funding institution can be of help to KIPT and, more generally, to the Ukrainian science, please, let us now, and CCS will try to facilitate such a connection.

Please, keep me posted of all developments and your personal situation. If I can be of any help personally, do not hesitate to ask. ”