

## Rebuilding Research, Education, and Innovation in Ukraine: A Workshop

*Virtual Workshop Dates: September 21-23*

### Speaker and Planning Committee Bios

#### PLANNING COMMITTEE

**Rita Colwell**, *Professor, University of Maryland Chair (Workshop Chair)*

Rita Colwell is distinguished university professor in the Center for Bioinformatics & Computational Biology at the University of Maryland at College Park and at Johns Hopkins University Bloomberg School of Public Health, senior advisor and chairman emeritus at Canon US Life Sciences, Inc., and founder and CEO of CosmosID, Inc. She is a microbial ecologist. Her research interests focus on global infectious diseases, water, and health. Dr. Colwell has studied the metabolism, systematics, evolution, and ecology of aquatic bacteria and viruses. Currently, she is developing an international network to address climate change and infectious diseases and water issues, including safe drinking water for both the developed and developing world. Other interests include K-12 science and mathematics education, graduate science and engineering education and the increased participation of women and minorities in science and engineering. Dr. Colwell served as the eleventh director of the National Science Foundation (NSF) from 1998 to 2004. In her capacity as NSF director, she served as co-chair of the Committee on Science of the National Science and Technology Council. She is the recipient of the National Medal of Science, Stockholm Water Prize, Order of the Rising Sun, Japan, Legion of Honor, France, and the Vanevar Bush Award, and has served on countless NAS committees. Dr. Colwell earned her Ph.D. in oceanography from the University of Washington.

**Oleksiy Kolezhuk**, *Head of Science Committee, National Council for Science & Technology Development (Workshop Vice-Chair)*

Oleksiy K. Kolezhuk is physicist and is the Head of the Science Committee at the National Council for Science & Technology and Development. He is also a professor of physics at the Institute of High Technologies of Taras Shevchenko National University of Kyiv (since 2010). He is also a leading Research Fellow at the Institute of Magnetism of the National Academy of Sciences of Ukraine (part-time). Currently, he is a Visiting Scholar (supported by a fellowship from the Alexander von Humboldt Foundation) at the Johannes Gutenberg University Mainz. He

has been head of the Scientific Committee of the National Council of Ukraine on Science and Technology Development since 2019. His primary research is in the field of condensed matter theory (low-dimensional spin systems). He has been a corresponding member of the National Academy of Sciences of Ukraine since 2021. He received a M.Sc. in 1988 at Kyiv State University; PhD in 1991 from the Institute of Metal Physics in Kyiv; Dr. habil. in 2001 from Hannover University; D.Sc. in 2004 from the Institute of Magnetism, Kyiv. He had the Heisenberg Fellowship of DFG (2004-2009) and research stays at Hannover University, Harvard University, and RWTH Aachen.

**Oleksandra Antoniuk**, *Deputy Director for Science and Innovation, Kyiv Academic University / Leading Researcher, Institute of Mathematics, National Academy of Sciences of Ukraine*

Dr. Habil. Alexandra Antoniuk is the Deputy Director for Science and Innovation at Kyiv Academic University, as well as Leading Researcher in the Institute of Mathematics of the National Academy of Sciences of Ukraine. Dr. Antoniuk is a Fellow of Alexander von Humboldt Foundation, received different research and social activity awards, including the 2015 AvH award "Innovation Networking Initiative," National Academy of Science of Ukraine Honors "For Professional Achievements" (2020), Diploma of the Verkhovna Rada of Ukraine "For services to the Ukrainian people" (2021). Dr. Antoniuk is an author of more than 40 articles, published in leading scholarly journals in mathematics and its applications. She is a specialist in the field of differential equations in partial derivatives of the finite and infinite number of variables. Its main activities concern the evolutionary behavior of systems describing models of statistical mechanics with an infinite number of interacting particles. She was a leader of the Ukrainian part of several EU projects in particular FP-7 Marie Curie Actions IRES "EU-Ukrainian Mathematicians for Life Sciences" (2012-2016), Horizon-2020 "Approximation Methods for Molecular Modelling and Diagnosis Tools" (2016-2019) and was a head organizer of different international multi-disciplinary conferences among them: "Mathematics for Life Sciences" (2012-2017), KAU Data Science School (2018-2021).

**E. William Colglazier**, *Senior Scholar, Center for Diplomacy, American Association for the Advancement of Science / Editor-in-Chief, Science & Diplomacy (moderator)*

E. William Colglazier is Editor-in-Chief of *Science & Diplomacy* and Senior Scholar in the Center for Science Diplomacy at the American Association for the Advancement of Science (AAAS). He served as the fourth Science and Technology Adviser to the Secretary of State from 2011 to 2014. From 1994 to 2011, he was Executive Officer of the National Academy of Sciences and the National Research Council where he helped to oversee the studies that provide independent, objective scientific advice on domestic and international public policy issues. Dr. Colglazier received his Ph.D. in theoretical physics from Caltech in 1971, and prior to 1994 worked at the Stanford Linear Accelerator Center, the Institute for Advanced Study in Princeton, the Center for Science and International Affairs at Harvard's Kennedy School of Government, and the University of Tennessee. He is a past chair of the Forum on Physics and Society and the Committee on International Scientific Affairs of the American Physical Society (APS) and a Fellow of the AAAS and APS. In 2015 he received the Joseph A. Burton Forum

Award from the APS for “outstanding contributions to the public understanding or resolution of issues involving the interface of physics and society” and the Order of the Rising Sun, Gold Rays with Neck Ribbon from the Government of Japan for “contributing to science and technology exchange and mutual understanding between Japan and the United States.” From 2016 to 2018, Dr. Colglazier served as co-chair of the Ten Member Group appointed by the U.N. Secretary General to advise on science, technology, and innovation for achieving the 17 Sustainable Development Goals of the UN 2030 Agenda.

**Robin Grimes**, *Foreign Secretary, The Royal Society (moderator)*

Robin Grimes is Professor of Materials Physics at Imperial College London and Foreign Secretary for The Royal Society. Grimes’ primary research interest is the application and development of computer simulation techniques to predict structural and dynamic properties of inorganic materials. He has used computer modelling to predict the structural and dynamic behavior of ceramics, metals, and semiconductors for energy applications. This has allowed him to identify ways in which atomic scale defects modify materials properties. He has investigated a wide range of properties, including thermal conductivity and how materials deform and how atoms are transported through solids. While best known for modelling nuclear materials, he has worked as much on electrochemical systems, optical, and electronic materials. Prior to joining Imperial College, Grimes was assistant director of the Davy Faraday Research Laboratory at the Royal Institution, and he spent the year 2000 at Los Alamos National Laboratory as Bernd T. Matthias Scholar. Dr. Grimes served as chief scientific adviser to the UK Foreign Office from 2013 to 2018. In that position he mainstreamed science as a tool in the UK’s diplomatic tool box, using science evidence and science networks to place science collaboration at the heart of key international relationships. He maintains a leading role in the nuclear energy academic community as Ministry of Defence Chief Scientific Advisor on nuclear science and technology matters since 2017. Grimes received a Ph.D. in material sciences from Keele University in 1988.

**Anna Plater-Zyberk**, *Head, Office of International Cooperation, Polish Academy of Sciences*

Anna Plater-Zyberk is the head of the Office of International Cooperation at the Polish Academy of Sciences. Prior to joining the Academy, from 2011 to 2017, she was responsible for establishing and coordinating the Office of International Cooperation at the National Science Center, a Polish basic research funding agency, set up in 2011. Dr. Plater-Zyberk is an expert in science management and international cooperation in science. She is responsible for recommendations on the international policy of the PAS, coordination of bilateral and multilateral programs, and overseeing the activities of PAS’s representation centers in six countries. She is also a secretary of the PAS Advisory Group on COVID-19, and she coordinates the PAS Central Office’s support programs for Ukrainian scholars, launched in solidarity with Ukraine. For her work in the PAS’s COVID-19 Advisory Team, Dr. Plater-Zyberk has been awarded the Copernicus Medal; the highest award given by the Presidium of the Polish Academy of Sciences. In 2022, she was selected by the J. William Fulbright Foreign Scholarship Board for the Distinguished Humphrey Fellowship program sponsored by the United States Department of State. She holds a BA in Management, an MA in anthropology and translation studies, and a PhD in cognitive linguistics. She conducted her research at the Metaphor Lab in

Amsterdam and completed a doctorate in conceptual metaphor theory at the Jagiellonian University, Kraków.

**Nataliya Shulga, Co-Founder and CEO, Ukrainian Science Club**

Dr. Nataliya Shulga retired from her last appointment as deputy director of the Gennadii Udovenko Diplomatic Academy of Ukraine at the MFA of Ukraine. She served as Vice Rector for the Strategic Planning and Professor of the Dragomanov NPU, National Expert at the EU “Horizon 2020” NCP framework program; Vice President for Strategic Development of the NAUKMA, professor and the head of Ecology Chair; Co-founder and appointed CEO of the NGO “Ukrainian Science Club”.

She is a results-driven strategic organization development executive, specializing in higher education innovative approaches, education and science reforms and an environmentally conscious agenda. She has a background as an accomplished scientist within the molecular and cell biology field.

She was elected twice as a member of the Kyiv City Council responsible for education, science, and innovation. Was instrumental to triple the education budget. She has served on numerous committees and boards related to education and science reforms in Ukraine. Member of AAAS. Dr. Shulga received her M.S. from T. Shevchenko KNU, and Ph.D. from IMBG of NASU. She earned multiple certificates of professional training spanning from the technology transfer (UofR) to “training of the trainers” by the European Commission.

**Alfred Watkins, Founder and Chairman, Global Solutions Summit (moderator)**

Alfred Watkins is the Founder and the Chairman of the Global Solutions Summit (GSS), which focuses on promoting the large-scale deployment in emerging markets of commercially viable, financially sustainable development solutions. Prior to founding the GSS, Dr. Watkins worked for more than 23 years at the World Bank and served as the World Bank’s Science and Technology Program Coordinator and head of the World Bank’s Science, Technology and Innovation Global Expert Team. He has extensive on-the-ground experience leading science, technology, and innovation capacity-building programs in Africa, Asia, and various countries in the Former Soviet Union, including Russia, Ukraine, Kazakhstan, and Latvia. Dr. Watkins organized two World Bank Global Forums on Science, Technology and Innovation Capacity Building for Sustainable Development (one in 2007 and another in 2009) and four Global Solutions Summits which convened at the US Department of State (2014), Clinton Presidential Library (2016), and UN Headquarters (2018 and 2019). Before joining the World Bank, he also served as a legislative assistant/staff economist in the U.S. Congress and was an assistant professor at the University of Texas at Austin. In March 2017, United Nations (UN) Secretary-General António Guterres appointed him to a 3-year term on the Governing Council of the Technology Bank for the Least Developed Countries (LDCs). He was reappointed to a second 3-year term in January 2020. Dr. Watkins received his Ph.D. in Economics from the Graduate Faculty of the New School University.

**Yaroslav Yatskiv**, *Member of the Presidium, National Academy of Sciences of Ukraine*  
(Workshop Planning Committee)

Dr. Yaroslav Yatskiv is a Member of the Presidium of the National Academy of Sciences of Ukraine. He was the First Deputy Minister of Education and Science in 2000-2001, and Director of the Main Astronomical Observatory of the NASU. Currently, he is a member of the Special Group for Renovation of Science and Innovation in Ukraine, and a member of the International Astronomical Union of which he was vice-president from 1982 to 1988. He received the EU Descartes Price in 2003.

## **SPEAKERS AND MODERATORS**

**Anatoly Zagorodny**, *President, National Academy of Sciences of Ukraine*

Anatoly Zagorodny was born on January 29, 1951 in the village of Velika Bagachka, Poltava region. He graduated from Kharkiv University (1972) and since then has been working at the Institute of Theoretical Physics of the National Academy of Sciences of Ukraine (since 1989 — deputy director, since 2003 — director), 1992 — 2005 — also a professor at the Kyiv-Mohyla Academy, since 1996 — Kyiv University. From 2009 to 2011, he was the chief academic secretary of the National Academy of Sciences of Ukraine. Scientific works in the field of theoretical and mathematical physics, plasma theory, statistical physics. He developed the statistical theory of spatially limited plasma-molecular systems; consistent kinetic theory of dusty plasma and formulated strict microscopic equations and a chain of Bogolyubov equations for such a plasma; developed the theory of bremsstrahlung radiation in plasma-molecular systems.

**Marcia McNutt**, *President, U.S. National Academy of Sciences*

Marcia McNutt is a geophysicist and president of the National Academy of Sciences. From 2013 to 2016, she served as editor-in-chief of the *Science* family of journals. Prior to joining *Science*, she was director of the U.S. Geological Survey (USGS) from 2009 to 2013. During her tenure, the USGS responded to a number of major disasters, including earthquakes in Haiti, Chile, and Japan, and the Deepwater Horizon oil spill. McNutt led a team of government scientists and engineers at BP headquarters in Houston who helped contain the oil and cap the well. She directed the flow rate technical group that estimated the rate of oil discharge during the spill's active phase. For her contributions, she was awarded the U.S. Coast Guard's Meritorious Service Medal. Before joining the USGS, McNutt served as president and chief executive officer of the Monterey Bay Aquarium Research Institute (MBARI), in Moss Landing, California. During her time at MBARI, the institution became a leader in developing biological and chemical sensors for remote ocean deployment, installed the first deep-sea cabled observatory in U.S. waters, and advanced the integration of artificial intelligence into autonomous underwater vehicles for complex undersea missions.

**Yulia Bezvershenko, CDDRL Visiting UELP Scholar (2021-22), Stanford University**

Yulia Bezvershenko is a Ukrainian policy-maker who works on science and innovation (S&I) policy with a specific focus on institution building, promoting science, and creating a knowledge-based economy and society in Ukraine. During 2020-2021, she served as a Director-General of the Directorate for Science and Innovation, Ministry of Education and Science of Ukraine. It is a unit responsible for national-level S&I policy development, implementation of S&I programs, and international S&I cooperation. As a scientist and activist, Bezvershenko has been deeply involved in the Ukrainian S&I reform since 2014, co-authoring a new version of the Law on Scientific and Technical Activity, advocating its approval, and working on its implementation. In addition, she has been a co-founder and Vice-President of the NGO Unia Scientifica and the Young Scientists Council of the National Academy of Science of Ukraine (till 2019). Yulia Bezvershenko is a Ukrainian Emerging Leaders Program 2021-2022 Fellow at the Center of Democracy, Development, and Rule of Law, Stanford University. In 2022 she co-facilitated the Subgroup on Science of the National Council for the Recovery of Ukraine from the War. Bezvershenko holds a Master of Public Policy and Governance from the Kyiv School of Economics, a Ph.D. in Theoretical Physics from the Bogolyubov Institute for Theoretical Physics, and an MSc in Physics from the National University Kyiv-Mohyla Academy.

**Curtis “BJ” Bjelajac, Executive Director, Science and Technology Center in Ukraine (STCU)**

Curtis “BJ” Bjelajac is the Executive Director and Head of Diplomatic Mission of the intergovernmental Science and Technology Center in Ukraine (STCU), headquartered in Kyiv, Ukraine. Bjelajac is the STCU’s sixth Executive Director, having been appointed to this position in 2014. STCU works to prevent the spread of WMD technical know-how through cooperative activities with scientists and technicians who have weapons-usable expertise. STCU membership includes the European Union, Ukraine, the United States of America, Azerbaijan, Georgia, and Moldova. From 1999 until 2014, Bjelajac was the Chief Financial Officer of STCU, responsible for managing over \$20 million per year in financial transactions, as well as supervising the STCU Financial Office of project accountants and IT systems staff. Previous to this, Bjelajac also was a senior business consultant for Arthur Anderson LLP, leading and executing a blend of process, technology, financial, and innovative implementation methodologies creating sustainable competitive advantages for over 15 clients within the entertainment, manufacturing, banking, and property management industries. Bjelajac graduated with a bachelor’s of science degree in accounting from California State University Long Beach and an M.B.A in Entrepreneurial Studies from the Anderson School of Management at the University of California Los Angeles.

**Lidia Borell-Damián, Secretary-General, Science Europe**

Lidia Borrell-Damián the Secretary-General for Science Europe and Director for Research and Innovation at the European University Association (EUA), an association representing more than 800 universities and national rectors’ conferences in 48 countries. With a doctorate in Chemistry, she has worked as an Associate Professor at the Universitat de Barcelona and the Universitat Politècnica de Catalunya. She spent time as a Visiting Scholar at North Carolina State

University, USA, and The University of Western Ontario, Canada. She has also worked in the private sector as R&D Deputy Director at a chemical company in Spain and Director of the Research Area at the Universitat Pompeu Fabra.

**Cathy Campbell, CRDF Global (Retired) (moderator)**

Cathy Campbell is a retired executive specializing in international science and technology programs, policy, and management. Previously, she led U.S. science and technology initiatives, primarily with the USSR, Ukraine, Russia and other Eurasian states, at the White House Office of Science and Technology Policy, Department of Commerce, and Department of State. In 2016 she retired from CRDF Global, where she served as President and CEO. Cathy is an elected Fellow of the American Association for the Advancement of Science (AAAS) and was a Visiting Scholar at the AAAS Center for Science Diplomacy in 2017–18. She currently is a member of the NASEM Roundtable on Global Science Diplomacy, the Board of Governors of the US-Israel Binational Science Foundation (BSF), and the Advisory Board of the Penn State University School of International Affairs. Cathy co-chairs the informal NASEM Working Group on Rebuilding Engineering, Science, Education and Technology in Ukraine (RESET Ukraine). Cathy earned a B.S. in Russian from Georgetown University and a M.A. in Russian and East European Studies from George Washington University.

**Ana Mari Cauce, President, University of Washington**

As the president of one of the world's great public universities, Ana Mari Cauce is leading the University of Washington in advancing its mission in four key areas: providing a leading-edge student experience, conducting research and scholarship that has a global impact, upholding the UW's dedication to its public mission and infusing the entire university with a commitment to innovation. A member of the UW faculty since 1986, Cauce became interim president in March 2015, having previously served as provost and executive vice president, and the UW Board of Regents selected her to become the UW's 33rd president at a special meeting Oct. 13, 2015. Throughout her career, Cauce has championed access to higher education, including through the Husky Promise, which provides full tuition to eligible Washington students who otherwise could not attend college. As part of her strong belief in ensuring access to higher education for all, just one month into her role as interim president she engaged students in an honest discussion about race and equity, launching an effort to create a more just and diverse community.

**Mark W.J. Ferguson, Chair of the Board, European Innovation Council; Former Director General, Science Foundation Ireland**

Mark W.J. Ferguson is Chair of the Board of the European Innovation Council (EIC) for the European Commission. Previously (2012 – 2022) he was Director General of Science Foundation Ireland and was Chief Scientific Adviser to the Government of Ireland. He also served in Ireland's response to the COVID-19 pandemic, e.g., as a member of NPHET (the National Public Health Emergency Team). Ferguson was Chair of the European Commission Pilot Advisory Board

for the European Innovation Council, a member of the Governing Boards of the Global Research Council and of the European Commission Joint Research Centre and a founding member of the Small Advanced Economies Initiative. He served on the EU High Level Group on the impact of H2020 and chaired international committees reviewing the Research and Innovation systems of Denmark, Hungary and Canada. Previously, a Professor and Dean of Biological Sciences at The University of Manchester (since 1984), he was co-founder and CEO of Renovo Group Plc. (1998 – 2011). Ferguson is the recipient of numerous international research prizes and awards, including the 2002 European Science Prize (jointly), author of 329 papers and book chapters, 61 patent families, author/editor of eight books, supervised 77 PhD students and has been awarded over £70 million in competitive research grants and approximately £100 million in start-up company equity funding. He has contributed to a number of scientific films, documentaries, TV and radio programmes and held offices in 16 international scientific societies, including President of the European Tissue Repair Society. He has wide ranging research interests in cellular and molecular mechanisms in scarring and wound healing, developmental mechanisms in normal and cleft palate formation, alligator and crocodile biology including temperature dependent sex determination.

**Roman Gladyshevsky**, *Vice-Rector for Research, University of Lviv*

Roman Gladyshevsky is a Ukrainian chemist, academician of the National Academy of Sciences of Ukraine, Doctor of Chemistry, professor, and Vice-Rector for Research at the University of Lviv. He holds a doctorate in chemistry from Lviv University.

**Andy Hopper**, *Treasurer and Vice-President, The Royal Society / Professor, Department of Computer Science and Technology, University of Cambridge*

Andy Hopper is a British-Polish technologist and entrepreneur. He is Treasurer and Vice-President of the Royal Society, Professor of Computer Technology at the University of Cambridge, and Chairman of lowRISC CIC. Hopper has pursued academic and industrial careers simultaneously. He was Head of the Department of Computer Science and Technology (2004-2018) and a Trustee of the University of Cambridge (2011-2014). In the industrial context he co-founded thirteen start-ups, three of which floated on stock markets, and was CEO of an industrial research laboratory. Hopper received the BSc degree from the University College of Swansea (1974) and the PhD degree from the University of Cambridge (1978). He is a Fellow of the Royal Academy of Engineering (1996) and of the Royal Society (2006). He is a recipient of the Royal Academy of Engineering MacRobert Award (2013) and the Royal Society Bakerian Medal (2017). He was appointed a CBE (2007) and awarded a knighthood in the Queen's Birthday Honours (2021).

**Pavlo Kartashov**, *CEO, Ukrainian Startup Fund*

Pavlo Kartashov is the CEO of the Ukrainian Startup Fund (USF) — a state fund launched in 2018 with the aim of developing the Ukrainian startup ecosystem. Under the leadership of Pavlo Kartashov, the Fund gained a reputation as an ecosystem builder and won the Impact of the



Year nomination of the all-Ukrainian competition Ukrainian IT Awards 2020, Ukrainian FinTech Award in nomination the Best Seed Finance Fund for Fintech 2021. During 3 years of activity, USF became the largest angel investor in Ukraine and Eastern Europe. Key directions of the fund's activities include Grant and Acceleration programs (as a result of which more than 250 startups have been financed in the amount of more than 6.3 million US dollars) as well as the Innovation Vouchers program in the framework of which more than 100 startups were represented at such events as WebSummit, Collision, SXSW, VivaTech, etc. More than 60 partnerships of USF led to 200+ joint partner events with key stakeholders of the innovation ecosystem (EBA, ACC, WNISEF, USAID, GIZ, AWS). Pavlo Kartashov has professional experience in diplomacy, entrepreneurship and innovations.

**Jerzy Duszynski**, *President, Polish Academy of Sciences*

Jerzy Duszynski has been the president of the Polish Academy of Sciences since 2015. He is a Member of the Polish Academy of Sciences since 2007 and a professor at the Nencki Institute of Experimental Biology. Duszynski's research interests focus on bioenergetics, the role of mitochondria in cell functioning and neurodegenerative diseases. In 2008 -2009 he served as Deputy Minister responsible for science at the Ministry of Science and Higher Education. He was elected to the Academia Europaea and a foreign member of the Chinese Academy of Sciences. He is a Member of the Board of Trustees at Barcelona Institute for Research in Biomedicine. His recent activities include chairing the interdisciplinary COVID-19 advisory team at the Polish Academy of Sciences and programs supporting Ukrainian scholars in Poland.

**Maria Leptin**, *President, European Research Council*

Maria Leptin is the President of the European Research Council (took office from 1 November 2021). Prior to that, Leptin served as Director of EMBO from 2010-2021. She also established a research group in Heidelberg at the European Molecular Biology Laboratory (EMBL). The group studies the mechanics of shape determination during development. After completing her studies in mathematics and biology at the University of Bonn and the University of Heidelberg, Leptin worked for her PhD at the Basel Institute for Immunology, Switzerland (1979-1983) studying B-lymphocyte activation under the supervision of Fritz Melchers. In 1984 she moved, as a post-doctoral fellow (1984-1987) to the Laboratory of Molecular Biology (LMB), Cambridge, UK, where she started her research on the embryonic development of Drosophila, joining the laboratory of Michael Wilcox. This work laid the foundations for her future work in the field of molecular morphogenesis. In 1988, she was appointed as staff scientist at the same institution. As visiting scientists in Pat O'Farrell's lab at the University of California, San Francisco (UCSF) she began her work on gastrulation which became the core of her research interests at the Max Planck Institute for Developmental Biology in Tübingen, Germany, where she worked as group leader (1989-1994). In 1994, Maria Leptin became Professor at the Institute of Genetics, University of Cologne, Germany, where she still leads a research group. She spent sabbaticals as a visiting Professor at the École Normale Supérieure, Paris, France (2001) and as visiting scientist at the Wellcome Trust Sanger Institute, Hinxton, UK (2004-2005).

**Ella Libanova**, *Director of the Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine*

Ella Libanova is involved in a new and very important research area in Ukraine: human development and primarily its socio-demographic aspects. Among other things she is a permanent co-author of the reports about human development in Ukraine, prepared under the auspices of the UN. As a member of the International Union for the Scientific Study of Population, Libanova regularly participates in prestigious international workshops and conferences. Over 200 scientific papers by Libanova appeared in Ukrainian and foreign journals, more than 30 of them in the publications of UN, World Bank, UNICEF, ILO and other authoritative international organizations. Libanova pursues the active work of an expert and a researcher as a member of the Committee for State Awards of Ukraine in Science and Technology and Deputy Chairman of the corresponding section of the Coordination Centre for pension reform implementation, Committee for economic reforms under the President of Ukraine, and Coordinating Council for the competitiveness recovery of the national economy.

**Mike Molnar**, *Director, Advanced Manufacturing Office, National Institute of Standards and Technology*

Mike Molnar is the founding director of the Advanced Manufacturing National Program Office, the interagency team responsible for the Manufacturing USA program. Mike also leads the NIST Office of Advanced Manufacturing and serves as co-chair of the National Science and Technology Council, Subcommittee on Advanced Manufacturing – the team responsible for the National Strategic Plan for Advanced Manufacturing. Prior to joining federal service in 2011 Mike had a successful industry career, including 25 years leading manufacturing and technology development at Cummins, a U.S. based global company that designs, manufactures, and distributes engines and power generation products. Mike has had a breadth of experience in technology development, sustainable manufacturing, environmental policy, advanced manufacturing processes, flexible automation, precision metrology, quality systems, and capital management. He earned a Bachelors in Mechanical Engineering and Masters in Manufacturing Systems Engineering from the University of Wisconsin, and an Executive MBA from the University of Notre Dame. He is a licensed Professional Engineer, Certified Manufacturing Engineer, was elected Fellow of ASME and SME, and is a member of the Senior Executive Service.

**Ihor Mryglod**, *Chief Researcher, Institute for Condensed Matter Physics, National Academy of Science of Ukraine*,

Ihor Mryglod is a chief researcher at the Institute for Condensed Matter Physics of the National Academy of Sciences of Ukraine (ICMP NASU). He obtained his PhD in 1988 and defended his doctoral thesis in 2000. In 2012 he was elected as a full member of the NASU in physics of liquid state. Between 2006 and 2021 he worked as director of the ICMP NASU. His main research relates to phase transition phenomena, non-equilibrium statistical theory, and fluid dynamics.

**Olga Polotska, Executive Director, National Research Foundation of Ukraine**

Olga Polotska is a Ukrainian philologist, Associate Professor, and Executive Director of the National Research Foundation of Ukraine. Senior leader with 15+ years of managerial experience in the field of research, education, and international partnerships. Experienced in leading large teams (60+ people) through all stages: forming, storming, norming, performing, and closure. Unique combination of creative problem-solving and disciplined project management expertise with aptitude for analytics and passion for measuring business results. Thanks to communication skills had created a structured approach in stakeholder and project management as well as the ability to build relationships with people from various backgrounds. 1997 – Degree in Philology (area of specialization – English Language and Literature; qualification: philologist, teacher of English language and literature, German language, translator) completed at Kharkiv State University. Had worked as a teacher of English till 2000 when started a career at V. N. Karazin Kharkiv National University and progressed from a Lecturer to Senior Lecturer, Associate Professor, and Head of the English Department at the Faculty of Foreign Languages. In 2008 received her Ph.D. in Philological Sciences in the field of Germanic languages. In 2011, was granted the Associate Professor's title. Since January 2019, worked as Head of the Overseas Clients Department at Gryshchenko Clinic-IVF. In 2020 was appointed Executive Director of the National Research Foundation of Ukraine by the Prime Minister of Ukraine.

**Richard Roush, Dean, College of Agricultural Sciences, Penn State University**

Richard “Rick” Roush has served as the Dean of Penn State's College of Agricultural Sciences since October 1, 2014. His career in sustainable agriculture spans research, teaching, regulatory, and administrative appointments in both the USA and Australia. Trained as an entomologist in the University of California, Roush earned his Ph.D. at UC Berkeley (1979). Prior to joining Penn State, Roush served as Dean of the Melbourne School of Land and Environment at the University of Melbourne (2006-2014), Director of the University of California's outreach-oriented Integrated Pest Management and Sustainable Agriculture Programs (2003-2006), and Director of the Australian National Weed Management Centre (1998-2003), after serving as an Associate Professor at Mississippi State and Cornell Universities. At Penn State, Roush has particularly focused on key issues facing agriculture and rural communities in Pennsylvania, including water quality, diversification and expansion of agriculture, workforce, food safety regulation, and drug addiction.

**Gerson Sher, National Science Foundation and CRDF Global (Retired) (moderator)**

Gerson S. Sher is a retired civil servant and foundation executive who has devoted his career to the intersection of scientific cooperation, international affairs, and global security, primarily with the countries of the former Soviet Union. He was Program Coordinator for U.S.-Soviet and East European Programs at the National Science Foundation, from which he is retired; Chief Operating Officer of George Soros's International Science Foundation (on assignment from NSF); Founding President of the U.S. Civilian Research and Development Foundation for the Independent States of the Former Soviet Union (now CRDF Global); and President of the United

States Industry Coalition. Sher is currently serving as co-chair of an informal working group on Rebuilding Engineering, Science, Education, and Technology in Ukraine (RESET Ukraine) created by the US National Academies of Sciences, Engineering and Medicine. Sher's publications include *From Pugwash to Putin: A Critical History of US-Soviet Scientific Cooperation* (Bloomington: Indiana University Press, 2019; Chinese translation 2022 through China Science and Technology Press) and other books and articles on US-Soviet and post-Soviet scientific cooperation, Marxist intellectual history, and nuclear security and safety. He received a B.A. in Russian Studies from Yale University and a Ph.D. in Politics from Princeton University. In June 2008, Sher was awarded an Honorary Doctorate from the Moscow Engineering-Physical Institute (now the Russian Federal Nuclear University).

**Oleksii Shkuratov**, *Deputy Minister of Science and Education of Ukraine for European Integration*

Oleksii Shkuratov is the Deputy Minister of Education and Science of Ukraine on European Integration. Previously, he was Vice-Rector for Research and Innovative Development of Kyiv National University of Construction and Architecture. Between 2012-2021, Shkuratov has held various roles at the National Academy of Agrarian Sciences of Ukraine, most recently as the Head of the Department of Experimental Design of Land Use "Innovation Center." He holds a PhD in Economics from Tavriya State Agrotechnological University.

**Tarmo Soomere**, *President, Estonian Academy of Sciences*

Tarmo Soomere is the president of the Estonian Academy of Sciences. He holds a Ph.D. in physics and mathematics and a D.Sc. in mathematics. Having led a distinct scientific and academic career in marine sciences and engineering, he has received both international and domestic recognition as an Academia Europaea member and as president of the Estonian Academy of Sciences since 2014. He is a member of the domestic interinstitutional working group for the Arctic Council observer application of Estonia.

**Yehor Stadny**, *Vice-Rector, Kyiv School of Economics*

Yehor Stadnyi is a vice rector at Kyiv School of Economics. He served as the Deputy Minister of Education and Science of Ukraine in 2019-2020. Before that, he worked at the Cedos think tank (Kyiv, Ukraine) and as a consultant for the World Bank dealing with public policy analysis in the education sphere.

**Rebecca Taylor**, *Executive-In-Residence, Austin Technology Incubator*

Rebecca (Becky) Taylor is Executive-In-Residence at the Austin Technology Incubator, and Industry Fellow at UT-Austin's Ethics Project. Ms. Taylor is a senior level executive with 35 years' experience inventing new technologies, forming startups, building committed teams and raising funds. She has led advanced development and strategy efforts at organizations from very small start-up companies to large multinationals including the launch team at Shell Technology Ventures, and senior advisory roles at the U.S. Department of State. She served as

an Entrepreneur-In-Residence at the University of Texas at Austin 2009, advising the University on commercialization alternatives for promising research. Taylor has advised dozens of startups in the course of her professional career, helping them with funding strategies, technology planning, and negotiations. Taylor is a mentor and very much enjoys presenting to diverse audiences, large and small. She has had a lifelong commitment of raising money and awareness for important community needs. Taylor is a Senior Member of the Institute for Electrical and Electronics Engineers (IEEE), and serves Vice Chair of the IEEE-USA Government Relations CommITtee. She holds a BS in Computer Science from Iowa State University and a Master of Public Affairs from the University of Texas' LBJ School of Public Policy.

**Andrii Vitrenko**, *First Deputy Minister, Ministry of Education and Science of Ukraine*

Andrii Vitrenko is the First Deputy Minister at the Ministry of Education and Science of Ukraine. He previously served as Deputy Minister of Education and Science of Ukraine. From 2004 to 2020 he held various teaching positions at Taras Shevchenko University of Kyiv, eventually serving as Deputy Dean for Research and International Collaboration in the Faculty of Economics. He has a PhD in Economics.

**Mikhail Zgurovsky**, *Rector, Kyiv Polytechnic Institute*

Michael Zakharovich Zgurovsky (30.01.1950 Skala-Podilska Ternopil region) - Ph.D., Professor, Rector of NTUU "KPI" (since 1992), director of the Institute for Applied Systems Analysis MES and NAS of Ukraine (since 1997), Member of the National Ukrainian Academy of Sciences (elected: 14.04.1995, specialty: computer science and computer systems) and the Academy of Pedagogical Sciences of Ukraine (1995), Honored Scientist of Ukraine, three times winner of the State Prize of Ukraine in science and Technology (1990, 1999, 2005) , winner of the Glushkov Prize of National Academy of Sciences of Ukraine (1994), Prize of B. Michalevic NAS of Ukraine (2000). He was awarded the Order "For Merit" III (1996), II (1998) and I (2005) degrees, honorary distinction of the President of Ukraine (1996), as well as state awards in Vietnam, Italy, France, Estonia, Japan. In 1986-1987, he worked as deputy head of the research work of the Ministry of Higher and Secondary Special Education of the Ukrainian SSR. In 1994-1999, he was the Minister of Education of Ukraine.