

Pugwash Conferences on Science and World Affairs

1995 Nobel Peace Prize

www.pugwash.org

*Contact: C. Vaughn
Rome Pugwash Office
cvaughn@pugwash.org
+39-333-456 6661*

THE POSTPONEMENT OF THE NPT REVIEW CONFERENCE. ANTAGONISMS, CONFLICTS AND NUCLEAR RISKS AFTER THE PANDEMIC.

6 May 2020

The new coronavirus pandemic (COVID-19) has already inflicted great damage on a number of nations and on the world at large, resulting not only in many tens of thousands of deaths but also in economic, financial and social crises. It also forced the international community to cancel or postpone a number of important meetings, including big international conferences. One such victim, unfortunately, is the 10th Conference to review the operation of the Treaty on the Non-proliferation of Nuclear Weapons – a central pillar in the current architecture of nuclear arms control and disarmament.

The 10th NPT Review Conference was scheduled for April 27 to May 22 of this year. However, the designated President of the Conference, Gustavo Zlauvinen, recently announced that the Review Conference has been postponed to a date not later than April 2021, depending on the state of the pandemic. This was, of course, an appropriate and necessary reaction to the COVID-19 crisis.

Ironically, the postponement represents an opportunity to address mounting pressures within the NPT regime. The risks for the Conference and, ultimately, for the Treaty itself, have been multiplying. There is a large list of serious worries and problems: the renewal of the nuclear arms race; the crisis in the architecture of nuclear arms control treaties; the crisis in the relations among nuclear weapon powers; new setbacks with regard to the Iranian nuclear deal and the proliferation crisis in North-East Asia; and growing antagonisms between nuclear-weapon-possessor and non-possessor states. It is therefore essential that the parties to the NPT use the time between now and the start of the Review Conference to look for ways to ensure substantive progress. If nothing is done, the situation is likely to become even worse.

Over the next year, COVID-19 apart, many damaging, dangerous, or counterproductive things can happen in the area of nuclear disarmament and nuclear risks. To start with, the only remaining element of the US-Russia arms control system, the New START agreement, is going to expire. Will it be extended or replaced? Will there be any further discussion about promoting new arms control agreements? And how will the possible further disregard of Art. 6 of the NPT impact the NPT member states at large? Will there be an increase in the dangerous feeling of disappointment about the role of the NPT itself, 50 years after its entering into force? What will be the global impact, and the impact on regional situations, including Europe, of the decision by the US president to exit the INF (Intermediate Nuclear Forces) treaty?

While arms control frameworks are eroding or disappearing, the nuclear weapon states are vigorously modernizing their nuclear forces, including the adoption of advanced technology. Examples include new hypersonic missiles and a new generation of cruise missiles. More generally, states possessing nuclear weapons and states hosting nuclear weapons on their

territories keep reinforcing the message that nuclear weapons are important and legitimate instruments for their defense.

While the nuclear weapon states cling to their steadily modernizing force postures and increasingly reject arms control, much of the world is moving in the opposite direction. The clearest indication of this is the Treaty for the Prohibition of Nuclear Weapons (TPNW), adopted on July 7, 2017. Supported by 122 states in the UN General Assembly, it has 81 signatories and 36 ratifications (still short of the 50 ratifications needed for its formal entry into force but with the expectation that the treaty will gradually attract the required number of ratifications). This schism between the nuclear haves, committed to the indefinite retention of nuclear weapons, and the nuclear have-nots, most of whom supported a treaty banning nuclear weapons, represents a dangerous fault-line in the NPT and is sure to produce friction at the NPT Review Conference.

The coming year will continue to be marked by regional tensions and serious nuclear risks. A major concern is the greatly increased tension in South Asia between the two nuclear-armed states India and Pakistan. Also worrisome is the failure to make any meaningful progress in dealing with the nuclear risks in North East Asia. Further, the US decision to exit the agreement on the Iranian nuclear program (JCPOA) and the American implementation of secondary sanctions against institutions and companies that do not respect the reinstated US sanctions against Iran, has created a tense environment in which the risk of conflict seems very real. In the midst of this confrontational reality, there is a humanitarian catastrophe in the making because the sanctions against Iran are exacerbating the situation in a country that is also heavily hit by COVID-19.

The NPT's one-year postponement also brings into play domestic political considerations in some key countries. For instance, in November 2020 there will be Presidential elections in the US and in 2021 there will be Presidential elections in Iran. There could be a new American president and there certainly will be a new Iranian president. The results of these internal political processes could have a large impact on the fortunes of the 2021 Review Conference.

It is highly desirable to use the time made available by the postponement of the NPT Review Conference to work on and hopefully to make progress on these issues that are sure to complicate and possibly undermine the conference. However, the overwhelmingly urgent crisis of the moment is the COVID-19 pandemic. At present, COVID-19 is not only the main (if not only) topic discussed by the international press, it is also the main topic discussed by the Governments and political institutions of most countries. So it is reasonable to expect that for some time the issues of nuclear disarmament and the NPT will be put aside. But if this trend continues over the coming year, it will be very difficult to have a "successful" conference.

Another potential barrier to progress in promoting restraint and reducing nuclear risk is the international friction and contention that may be caused by the pandemic. The medium- and long-term consequences of the pandemic are certainly yet to be understood, but it is possible that this crisis will cause or intensify conflicts, especially in the context of existing global and regional tensions. If this occurs, the pandemic will contribute to an environment that will have a negative effect on the prospects for nuclear disarmament, for progress in the NPT regime, and on hopes for reducing nuclear risks.

There are some positive signs in the midst of this terrible crisis. There undoubtedly have been initiatives of solidarity among nations in order to face the common enemy of mankind, i.e. the disease. Countries, in various and different ways, exchanged and are exchanging equipment,

knowledge and medical workers in order to deal with the disease. Such cooperation is particularly critical to assist poor countries that have more difficulties in getting proper equipment (such as personal protective equipment, respirators, etc.) and often do not possess the medical infrastructure that is needed to deal with the pandemic. In a striking reaction to COVID-19, the UN Secretary General called for a global ceasefire, given the critical situation of mankind in the times of the virus. There has been, for example, formally a provisional ceasefire in the war in Yemen and also in Syria, Libya, Sudan, and Ukraine (although several countries did not support the ceasefire call). Global cooperation has been imperfect, but nevertheless this international solidarity movement is, in its own way, contributing to peace and collaboration around the globe.

Even if the picture is not completely bleak, the pandemic will have a number of adverse consequences that may make it difficult to manage the period ahead. The human cost of the coronavirus is considerable, including above all the extensive loss of life. But in addition, the very heavy limitations on the transfer of people both across international borders and within countries themselves have brought to almost zero the political and human interactions of the majority of people.

The pandemic will also, obviously, have profound and inescapably important economic effects. The total lockdown of many activities in most countries has created almost everywhere a dramatic economic crisis whose effects are still to be fully understood but will surely be massively negative. The economic crisis will certainly be a global one, even if we will have significant differences between various countries and various regions. Facing the severe economic situation, countries and regions will try to rebuild economic activity and will be naturally inclined to think to their own narrow, specific, nationalistic interests. Unfortunately, there will be a strong temptation to put aside the need to cooperate and to express solidarity with others. In fact, the common attitude of “blaming others” is already evident in many places; indeed, the US and China have blamed each other for the start of the pandemic. It will be difficult to cooperate in this tense and pressured situation, as already witnessed in Europe, where we have seen difficulties in finding an agreement on how to define shared instruments to promote a general economic recovery.

In short, the economic calamity will haunt international politics. Cooperation is desirable and probably also necessary, but will be hard to achieve. We have to expect that economic difficulties will bring about a climate where many different antagonistic attitudes could arise or could be enhanced. These antagonistic attitudes will be of particular concern in countries that have a previous history of hostilities or rivalry with other countries and/or where religious or ethnic or political antagonisms are strong. It is also possible that new hostilities will arise.

The precise consequences of the above considerations are of course yet to be seen. But we should be concerned that the new post-COVID-19 political climate may increase the risk of war in various parts of the globe. With about 14,000 nuclear weapons still in the hands of the nuclear weapon states, the risk of the use of these weapons (or other weapons of mass destruction) will still be with us.

If we want to look at a crucial example from the past, where the long-term effects of an economic crisis brought war, we should think back to the worldwide economic crisis after 1929 and particularly to Germany in the 1930s. In Germany, the crisis created a political climate where the extremist Nazi movement took over and the consequences, in terms of antisemitism and war, are well known. In the present times extremism has already shown a potential for growth when people look for “saviours” and strong leaders.

On the other hand, we should not forget one simple lesson from the current COVID-19 crisis: it has hit a lot of countries hard – big and small, some will suffer more, some less. But, in any case, the investments that some countries have been making in nuclear weapons, their new delivery systems and in military solutions for today’s security problems at large, have proved to be useless in terms of protecting their security and their people from this new unprecedented danger. The difficulties in addressing the impact of the virus on the population are also a reminder of the enormous humanitarian consequences that mankind would face in the case of even a “limited” use of nuclear weapons.

In conclusion, Pugwash’s goals are probably more critical than usual in the current challenging moment: helping bridge the divides in critical regions; supporting conflict resolution; and promoting nuclear arms control and disarmament measures globally and regionally. Now the public debate and the media are dealing predominantly with the dangers of COVID-19. But we should expect that in the coming phases of this crisis, and in particular as we move into the reconstruction phase, antagonistic attitudes will become more relevant and more at the center of the public debate. It is easy to foresee that in the future, the need to defuse antagonistic attitudes, strengthen instruments of international cooperation and, in particular, reduce and eliminate nuclear risks will be greater than ever.

A final comment is in order concerning biological weapons. As we know, no international monitoring institution has been established since the entry into force of the Biological Weapons Convention. The COVID-19 pandemic has shown the big impact of a pandemic on the life of the world population. Even if it is clear that the virus of COVID-19 was not the result of the work of any laboratory in any state done for the purpose of spreading a pandemic, the idea of building a biological weapon may look now more “attractive” to some, after seeing the consequences of the present disease. The virus of COVID-19 is not, by itself, a “model” for a biological weapon since this virus has generated a pandemic, while a biological weapon should be “confined” to the territory of the enemy. But there are other viruses that could become more “effective” biological weapons. It is very important that an international monitoring system should be created in due time, so as to avoid a biological weapons spread in the future. On this point the international scientific community should give suggestions on how to proceed and Pugwash should help promoting such activity.

* * *

10 May 2020: The people listed below have signed this document on a *purely* individual basis. The affiliation associated with each name is only for identification purposes, and does not indicate any agreement or support on the part of the institution.

PC = Member of the Pugwash Council

1. **Ershad Ahmadi (Afghanistan)** Former Deputy Foreign Minister of Afghanistan; President of Kabul Compass-Strategy and Analysis
2. **Amb. Qayyum Kochai (Afghanistan)** Former Ambassador of Afghanistan to Russia
3. **M. Abdul Ahrar Ramizpoor PC (Afghanistan)** Former Lecturer, Kabul University
4. **Omer Safi (Afghanistan)** CEO, TM4-Security and Risk Management; Head of Foreign Relations, Afghanistan Governors' Association
5. **Amb. Omar Zakhilwal (Afghanistan)** Former Ambassador of Afghanistan to Pakistan
6. **Irma Arguello (Argentina)** Head of Secretariat, Latin American and Caribbean Leadership Network (LALN)
7. **Dr. Veronica Garea (Argentina)** Executive Director, INVAP Foundation, San Carlos de Bariloche
8. **Prof. Karen Hallberg PC (Argentina)** Professor of Physics, Instituto Balseiro, Bariloche
9. **Amb. Alfredo Morelli (Argentina)** Member, Argentine Council for International Relations
10. **Gen. Hayk Kotanjian (Armenia)** President Emeritus, Political Science Association of Armenia; Professor of Strategic Studies
11. **Dr. Vahram Petrosyan (Armenia)** Chair, International Relations and Diplomacy, Yerevan State University
12. **Benjamin Poghosyan (Armenia)** Executive Director, Political Science Association of Armenia
13. **Dilara Efendieva (Azerbaijan)** Director, Armenia-Azerbaijan Civil Peace Platform
14. **Prof. Tom Sauer (Belgium)** Associate Professor of International Politics, University of Antwerpen
15. **Dr. Jean Pascal Zanders PC (Belgium)** Independent consultant, The-Trench.com
16. **Amb. Jorio Dauster (Brazil)** Former Ambassador to the EU; former President of the Companhia Vale do Rio Doce
17. **Prof. Nelida Del Mastro (Brazil)** Institute of Nuclear Energy Research (IPEN), University of Sao Paulo; President of WIN Brazil
18. **Dr. Odilon Marcuzzo Do Canto (Brazil)** Former Executive Secretary, ABACC (2007-2016)
19. **Amb. Sergio Duarte PC (Brazil)** President, Pugwash Conferences; former UN Under-Secretary of Disarmament, NY
20. **Dr. Leonam Dos Santos Guimarães (Brazil)** President (CEO), Electronuclear; Member, Advisory Groups of IAEA, SAGNE and INLEX
21. **Dr. Monica Herz, PhD (Brazil)** Associate Professor, Institute of International Relations, Pontifical Catholic University (PUC), Rio de Janeiro; former Member of UN Secretary General's Advisory Board on Disarmament Matters
22. **Prof. Lucas Carlos Lima (Brazil)** Professor of International Law, Federal University of Minas Gerais
23. **Dr. Laercio Antonio Vinhas (Brazil)** Former Permanent Representative of Brazil to the IAEA and CTBTO; former Chair, Board of Governors, IAEA; former Director of Safety, Security and Safeguards at the Brazilian National Nuclear Energy Commission (CNEN)
24. **Prof. Cristian Ricardo Wittmann (Brazil)** Professor of International Law at UNIPAMPA and SEHLAC
25. **Dr. Adele Buckley PC (Canada)** Steering Committee of Canadians for a Nuclear Weapons Convention, and of Canadian Network to Abolish Nuclear Weapons
26. **Dr. Peter Jones PC (Canada)** Executive Director, Ottawa Dialogue, University of Ottawa
27. **Amb. Paul Meyer (Canada)** Former Canadian Ambassador for Disarmament; Professor of International Studies, Simon Fraser University; Chair of the Canadian Pugwash Group
28. **Tariq Rauf (Canada/Pakistan)** President, Global Nuclear Solutions; former Head, Verification and Security Policy, International Atomic Energy Agency (IAEA)
29. **Douglas Roche (Canada)** Former Canadian Senator
30. **Dr. Jennifer Simons PC (Canada)** Founder and President, The Simons Foundation Canada; Senior Fellow, Simon Fraser University Centre for Dialogue, and Adjunct Professor, SFU School for International Studies
31. **Amb. Alfredo Labbe (Chile)** Vice President of International Humanitarian Fact Finding Commission (IHFFC); former Special Envoy for Nuclear and International Security
32. **Prof. Li Bin PC (China)** Professor, Department of International Relations, Tsinghua University
33. **Prof. Shen Dingli (China)** Professor, Institute of International Studies, Fudan University, Shanghai
34. **Dr. Tong Zhao (China)** Senior Fellow, Carnegie-Tsinghua Center for Global Policy
35. **Anissa Hassouna PC (Egypt)** Member of the Egyptian Parliament
36. **Dr. Katariina Simonen PC (Finland)** Senior Ministerial Advisor; Adjunct Professor, National Defence University

37. **Dr. Nicolas Delerue (France)** CNRS, Irene Joliot-Curie Laboratory Orsay
38. **Dr. Venance Journe PC (France)** CNRS-Researcher, Laboratoire de Météorologie Dynamique, Paris
39. **Gen. (ret.) Bernard Norlain (France)** retired Air Force General
40. **Prof. Annik Suzor-Weiner (France)** Professor Emeritus, University Paris Saclay (Orsay)
41. **Amb. Ruediger Luedeking (Germany)** Ambassador, Permanent Representative of the Federal Republic of Germany to the UN and other International Organizations, Vienna (2008-12); Ambassador, Permanent Representative of the Federal Republic of Germany to the OSCE, Vienna (2012-15); Ambassador of the Federal Republic of Germany to the Kingdom of Belgium (2015- 2018)
42. **Dr. Goetz Neuneck PC (Germany)** Professor, University of Hamburg; former Deputy Director at IFSH, University of Hamburg
43. **Prof. Erzsébet N. Rózsa (Hungary)** Professor, National University of Public Service, Budapest
44. **A.S. Dulat (India)** Former Special Director, Indian Intelligence Bureau, and former Chief of RAW
45. **Dr. Happymon Jacob PC (India)** Associate Professor, Jawaharlal Nehru University, New Delhi, India
46. **Prof. R. Rajaraman PC (India)** Emeritus Professor of Theoretical Physics, School of Physical Sciences, Jawaharlal Nehru University
47. **Amb. K.C. Singh (India)** Columnist and Strategic Analyst; former Secretary MFA; former Ambassador of India to Iran and the UAE
48. **Col. (ret.) Ajai Shukla (India)** Consulting Editor, *Strategic Affairs*
49. **Prof. Siddiq Wahid (India)** from Kashmir; Professor & Scholar in Residence, Shiv Nadar University
50. **Dr. Kayhan Barzegar (Iran)** Director, Center for Middle East Strategic Studies, Tehran
51. **Prof. Nasser Hadian (Iran)** Professor of International Relations, Tehran University
52. **Prof. Saideh Lotfian PC (Iran)** Professor, Faculty of Law and Political Science, University of Tehran; Chair of the Pugwash Council
53. **Ali Akbar Salehi (Iran)** Head, Atomic Energy Organization of Iran (AEOI); Vice-President of Iran
54. **Amb. Bozorgmehr Ziaran PC (Iran)** Secretary of the Comprehensive Nuclear Test Ban Treaty Organization Preparatory Commission (CTBTO PrepCom)
55. **Dr. Hussain Al Shahrastani (Iraq)** Former Minister of Higher Education of Iraq; former Deputy Prime Minister of Iraq; former Minister of Energy of Iraq
56. **Gen. Shlomo Brom (Israel)** Former Director of the Strategic Planning Division of the General Staff; Head of the program on Israeli-Palestinian relations at INSS
57. **Prof. David Menashri PC (Israel)** Professor Emeritus, Tel Aviv University
58. **Aharon Zohar PC (Israel)** Independent consultant, regional planning and environmental protection
59. **Prof. Francesco Calogero PC (Italy)** Professor of Theoretical Physics (Emeritus), Physics Department, University of Rome; Member, SICA group, Italian National Academy of Sciences; Member, Scientific Council, Italian Union of Scientists for Disarmament (USPID)
60. **Prof. Paolo Cotta Ramusino PC (Italy)** Secretary General, Pugwash Conferences; Professor of Physics, University of Milan; Member, SICA group, Italian National Academy of Sciences; Member, Scientific Council, USPID
61. **Prof. Francesco Forti (Italy)** Professor, Department of Physics "E. Fermi", University of Pisa; Secretary General, USPID
62. **Dr. Francesco Lenci PC (Italy)** Research Associate, National Research Council (CNR) Italy; former Research Director at CNR; Member, SICA group, Italian National Academy of Sciences; Member, Scientific Council, USPID
63. **Prof. Luciano Maiani (Italy/San Marino)** President, SICA group, Italian National Academy of Sciences; former Secretary General, CERN (Geneva); former President, INFN and Italian CNR
64. **Dr. Emilio Parisini (Italy)** Latvian Institute of Organic Synthesis, Riga
65. **Prof. Alessandro Pascolini (Italy)** Senior Scholar, Physics Department, University of Padua; Member, SICA group, Italian National Academy of Sciences
66. **Prof. Carlo Schaerf (Italy)** Director, International School on Disarmament and Research on Conflicts (ISODARCO); Professor of Physics (ret.), University of Rome; Member, SICA group, Italian National Academy of Sciences; Member, Scientific Council, USPID
67. **Dr. Gianpiero Siroli (Italy)** Department of Physics and Astronomy, University of Bologna; expert in cybersecurity
68. **Amb. Carlo Trezza (Italy)** Head, Italian section, European Leadership Network; former Ambassador of Italy to South Korea; former Head, Missile Technology Control Regime; Member, Scientific Council, USPID
69. **Prof. Michiji Konuma (Japan)** Professor Emeritus of Physics, Keio University, Tokyo
70. **Prof. Yoshiko Kurita PC (Japan)** Professor, Chiba University
71. **Dr. Tatsu Suzuki PC (Japan)** Director and Professor, Research Center for Nuclear Weapons Abolition (RECNA), Nagasaki University; former Vice Chairman of the Japan Atomic Energy Commission and former Associate Vice President, Central Research Institute of Electric Power Industry

72. **Prof. Takao Takahara (Japan)** Director, International Peace Research Institute, Meiji Gakuin University - PRIME
73. **Amb. Wael Al-Assad PC (Jordan)** Senior Adviser to the National Committee for the Prohibition of Weapons, Qatar, former Director, Disarmament & Multilateral Relations Department, League of Arab States, Cairo, Egypt
74. **Dr. Talatbek Masadykov (Kyrgyzstan)** Senior Analyst, Independent Research and Analysis Centers of Kyrgyzstan and of Kazakhstan
75. **Dr. Eldar Mamedov (Latvia)** Foreign Policy Adviser for the Social-Democratic Group in the European Parliament
76. **Dr. Olga Pellicer (Mexico)** Professor and Researcher, ITAM; former Permanent Representative of Mexico to the IAEA
77. **Prof. Alejandro Pisanty (Mexico)** Universidad Nacional Autonoma de Mexico; Chair, ISOC-Mexico
78. **Jan Theodoor Hoekema (Netherlands)** Head of the Dutch Pugwash Group; former Ambassador for International Cultural Cooperation; former Member of Parliament
79. **Prof. Bob van der Zwaan PC (Netherlands)** Professor, TNO and University of Amsterdam, The Netherlands
80. **Amb. Tim Caughley (New Zealand)** Former New Zealand Disarmament Ambassador
81. **Sverre Lodgaard PC (Norway)** Senior Research Fellow and former Director (1997–2007), Norwegian Institute of International Affairs (NUPI); former Director, UNIDIR (1992-1996)
82. **Amb. Svein Sevje (Norway)** Former Special Envoy to the Middle East and Ambassador to Israel
83. **Ahsan Iqbal Chaudhary (Pakistan)** Former Minister of Interior of Pakistan
84. **Zulfiqar Abbasi (Pakistan)** from Kashmir; Chief Executive Officer, Kohsar Hydro Power Pvt.
85. **Gen. Asad Durrani (Pakistan)** Former Director General of ISI; Political Commentator
86. **Zahid Hussein (Pakistan)** Journalist, writer and television commentator
87. **Amb. Aziz Ahmad Khan (Pakistan)** Former Ambassador of Pakistan to Afghanistan and India
88. **Amb. Riaz Mohammad Khan (Pakistan)** Former Foreign Secretary of Pakistan
89. **Gen. Talat Masood PC (Pakistan)** Former Secretary for Defence Production in the Pakistan Ministry of Defence; former Chairman and Chief Executive of the Pakistan Ordnance Factories Board
90. **Prof. Abdul H. Nayyar (Pakistan)** Professor (ret.), Physics Department, Quaid-i-Azam University, Islamabad; former Visiting Scholar, Princeton University
91. **Amb. Sherry Rehman (Pakistan)** Former Ambassador of Pakistan to the US; President of the Jinnah Institute
92. **Amb. Rustam Shah (Pakistan)** former Ambassador of Pakistan to Afghanistan
93. **Haifa Baramki PC (Palestine)** President, National YWCA of Palestine, Jerusalem
94. **Taghreed El-Khodary PC (Palestine)** Freelance editor/journalist/media consultant, Fanack.com
95. **Hazem Kawasmi (Palestine)** Member of the Palestinian Independent Commission
96. **Samir Shawa (Palestine-Gaza/UK)** Chairman, Alhani Foundation, Gaza, Palestine
97. **Brig. Gen. Hassan Al Nesf (Qatar)** Chairman of the National Commission for the Prohibition of Weapons (NCPW)
98. **Dr. Jungmin Kang (Republic of Korea)** Former Chairman, Nuclear Safety and Security Commission of South Korea
99. **Dr. Chung-in Moon (Republic of Korea)** Vice Chairman and Executive Director, Asia-Pacific Leadership Network for Nuclear Nonproliferation and Disarmament
100. **Mark Suh PC (Republic of Korea/Germany)** Chair, Korean Pugwash Group, former Member, Advisory Council on Democratic and Peaceful Unification of Korea, Seoul
101. **Dr. Alexei Arbatov (Russia)** Member of the Russian Academy of Science
102. **Dr. Nadia Arbatova (Russia)** Deputy Chair of Russian Pugwash
103. **Prof. Vladimir Baranovsky (Russia)** Russian Academy of Sciences, Primakov National Research Institute of World Economy & Int'l Relations-IMEMO
104. **Amb. Serguey Batsanov PC (Russia)** Director, Geneva Office of Pugwash Conferences on Science and World Affairs; former USSR and Russian Ambassador to the Conference on Disarmament
105. **Prof. Alexander Dynkin PC (Russia)** Chair of the Russian Pugwash Committee; President, Institute for World Economy and International Relations (IMEMO), Russian Academy of Sciences
106. **Prof. Alexander Nikitin PC (Russia)** Director of the Center for Euro-Atlantic Security of the Moscow State Institute for International Relations of the Russian MFA
107. **Prof. Irina Zvyagelskaya (Russia)** Head, Center for Middle East Studies, Primakov National Research Institute of World Economy and International Relations-IMEMO
108. **Prof. Nola Dippenaar (South Africa)** Professor Emeritus, School of Medicine, University of Pretoria; CEO, Health Insight SA
109. **Amb. J. Dhanapala (Sri Lanka)** Former President of Pugwash; former Undersecretary General of the UN for Disarmament

110. **Amb. Rolf Ekeus PC (Sweden)** Distinguished Associate Fellow, Stockholm International Peace Research Institute (SIPIRI); Fellow, Royal Swedish Academy of War Sciences; former Ambassador of Sweden to the United States, former Executive Chairman of the UN Special Commission on Iraq (UNSCOM) 1991-97
111. **Dr. Anita Nilsson (Sweden)** Associate Fellow, Chatham House; former Director of Nuclear Security, IAEA
112. **Dr. Trita Parsi (Sweden)** Adjunct Associate Professor, Georgetown University; Founder and former President of the National Iranian American Council
113. **Arnold Luethold PC (Switzerland)** Former Head of the Middle East North Africa Programme, Center for the Democratic Control of Armed Forces, Geneva
114. **Memduh Karakullukçu (Turkey)** Founding Board Member and First President, Global Relations Forum, Turkey
115. **Prof. Dr. Mustafa Kibaroglu PC (Turkey)** Dean, Faculty of Economics, Administrative and Social Sciences, MEF University, Istanbul
116. **Sandra Ionno Butcher PC (UK/USA)**, Chief Executive, National Organisation for Foetal Alcohol Syndrome-UK (NOFAS-UK); former Executive Director of Pugwash Conferences
117. **Amb. Peter Jenkins (UK)** Chair of the British Pugwash Group; former UK Ambassador to the IAEA
118. **Sir Adam Thomson (UK)** Former UK High Commissioner to Pakistan; former UK Permanent Representative to NATO; Director, European Leadership Network
119. **Dr. Christopher Watson PC (UK)** Former Business Development Manager AEA Technology
120. **Dr. Thomas M. Countryman (USA)** Former US Assistant Secretary of State for Nonproliferation
121. **Sen. Chuck Hagel (USA)** Former US Senator, and former US Secretary of Defense
122. **Dr. Ira Helfand (USA)** Co-president, International Physicians for the Prevention of Nuclear War (1985 Nobel Peace Prize)
123. **Prof. John Holdren (USA)** Teresa and John Heinz Professor of Environmental Policy, Harvard University; President Obama's Science Advisor and Director of the White House Office of Science and Technology Policy (January 2009 – January 2017)
124. **Col. (ret.) Christopher D. Kolenda (USA)** Founder Strategic Leaders Academy; former Senior Advisor on Afghanistan and Pakistan to US Department of Defense
125. **Dr. Cliff Kupchan PC (USA)** Chairman and Director of Research, Eurasia Group, Washington, DC
126. **Prof. John Limbert (USA)** Professor (ret) of Middle-Eastern Studies, US Naval Academy; former US diplomat
127. **Gen. (ret.) Douglas Lute (USA)** US Army Lieutenant General; former US Permanent Representative to NATO
128. **Dr. Steven Miller PC (USA)** Director of the International Security Program, Belfer Center for Science and International Affairs, Harvard University; Editor-in-Chief, *International Security*; Chair, Pugwash Executive Committee
129. **Amb. Robin L. Raphel (USA)** Former US Assistant Secretary of State
130. **Dr. Laura Rockwood (USA)** Director, Open Nuclear Network; former Section Head, IAEA Nonproliferation and Policy
131. **Dr. Randy Rydell (USA)** Executive Advisor, Mayors for Peace; retired officer in the UN Office for Disarmament Affairs
132. **Leon Sigal (USA)** Director, Northeast Asia Cooperative Security Project; former International Affairs Fellow, Bureau of Politico-Military Affairs, US State Department
133. **Prof. Sharon Squassoni (USA)** Research Professor, Elliott School of International Affairs, George Washington University
134. **Dr. Ali Vaez (USA)** Iran Project Director, Crisis Group, Washington DC
135. **Prof. Frank von Hippel (USA)** Professor (ret.) Princeton University
136. **Prof. Jonathan Weisman (USA)** London Clay Professor of Biology, The Whitehead Institute and MIT