

## British Pugwash

# Annual Report of the Executive Committee 2022

### Developments in 2022

From a Pugwash perspective, 2022 was an even darker year than the four or five that preceded it. War, one of the two threats to the survival of the human species identified in the 1955 Russell-Einstein manifesto, which inspired the launch of Pugwash, broke out in Ukraine. The odds on a conventional conflict leading to a devastating nuclear exchange between Russia and the United States – the other threat to survival identified in the manifesto – shortened for the first time in 60 years.

Concerning that risk, the messages from Moscow were mixed. On 21 September President Putin said that if the territorial integrity of Russia were threatened, the government would certainly use all the means at its disposal to defend Russia and its people. And on 30 September he said: “We will defend our land with all forces and resources”, adding that the United States had created a precedent for nuclear use at Hiroshima and Nagasaki.

On the other hand, the relevant deputy foreign minister assured a Russian TV audience that there had been no change in Russian nuclear weapon use doctrine. According to this doctrine Russia only envisages use in response to the use of nuclear weapons and other weapons of mass destruction against it and (or) its allies, as well as in the case of aggression against Russia using conventional weapons when the very existence of the state is threatened.

The uncertainty left by these messages was whether Moscow would consider a successful Ukrainian/US attack on Crimea – or indeed attempts to reconquer one or more of the other four Ukrainian provinces annexed by Russia – as a threat to the very existence of the Russian state.

At the end of 2022 New Start was still in force. But worse was to come.

Relations between the United States and China also worsened, as Washington multiplied hints that it would go to Taiwan’s defence if China were to resort to force to re-integrate Taiwan into what the United States used to acknowledge to be “one China”, and as China’s nuclear warhead holding continued to expand. Western intelligence estimates suggest that China may now be capable of deploying more than 400 warheads and is aiming at a holding in excess of 1000, perhaps even 1500. For decades China had been content with a holding in the region of 250.

The year passed without revival of the 2015 confidence-building agreement with Iran known as the JCPOA. The main stumbling block appeared to be Iranian insistence that the International Atomic Energy Agency abandon an investigation into uranium traces that are suspected of stemming from undeclared use of nuclear material prior to 2004, when Iran was conducting nuclear weapon research. The trashing of the JCPOA by the Trump administration, at Israeli prompting, has led to Iran enriching significant quantities of uranium to 60%; but Western intelligence continues to estimate that Iran’s leaders are still holding back from any attempt to acquire a nuclear weapon.

North Korea continued to develop and test ballistic and cruise missiles, in defiance of UN resolutions, but refrained from any further nuclear tests. Denuclearising the Korean peninsula continued to seem a utopian goal. Domestic political pressure for South Korea to acquire a nuclear deterrent grew.

With regard to chemical weapons, allegations continued that declarations required of Syria under the Chemical Weapons Convention (CWC) in relation to past activities had been incomplete. Investigations into the alleged use of chemical weapons by Syria continued, most notably by the Investigation and Identification Team (IIT) established in 2018 within the Organization for the Prohibition of Chemical Weapons (OPCW). These allegations, together with unresolved issues around the use of nerve agents in poisonings in the UK and Russia, have divided the membership of the CWC. There are few expectations that a consensus outcome will be achieved at the Fifth CWC Review Conference, scheduled for May 2023.

The Ninth Review Conference for the Biological Weapons Convention (BWC) was held during November and December of 2022. While it was able to reach agreement on a Final Document, almost all substantive decisions were deferred to a Working Group to meet for 15 days a year during the coming years. The BWC has no verification arrangements to underpin compliance with its provisions. During 2021 the United States, the country most associated with a block on verification or compliance provisions, had indicated a new willingness for such measures to be discussed. The Working Group will consider measures that have since been proposed, as well as many other issues, including measures for reviewing scientific and technological developments relevant to the Convention.

In April the International Panel on Climate Change warned that climate commitments made in Paris in 2015 and redeclared in Glasgow in 2021 were not being met. Far from being on track for limiting the average increase in global temperatures to 1.5°C above pre-industrial levels, or “well below 2°C” (the twin Paris targets), the world is on course for a catastrophic average increase of 3°C.

A decline in the impact of the Covid-19 virus in the early months of 2022 allowed a wider range of activities than in 2020 or 2021. These are detailed below.

## Projects

### Student / Young Pugwash

In 2022, SYP-UK transitioned from a university-focused model into a national board-centred one, in the spirit of International Student/Young Pugwash (ISYP). The change has been a challenging one, accompanied by the need to broaden our network base beyond university societies and seek new ways to engage STEM students. However, it has also allowed the group to expand its scope beyond just undergraduate students and target more effective programming and messaging at young professionals who aren’t liable to graduate and disengage after three years. The first national board took this uncertainty on in good spirit and are laying the foundations for SYP-UK to continue as a successful national group model for years to come. Notably, and regrettably, it remains among the very last SYP groups worldwide, making this goal all the more important.

With in-person events still affected by the remnants of the pandemic, most success in 2022-23 has come from online gatherings. The virtual 2022 Annual Conference was centred around the theme of ‘Technology and Peace’ and was co-hosted with the University of Leicester’s Third Nuclear Age project. Other online webinars, panels, and speaking engagements covered themes from the intersections of video games and nuclear weapons to opportunities in arms control for young professionals, and the legacy of Joseph Rotblat on Young Pugwash. Equally as crucially, new, strong

partnerships were developed beyond academia. These include Atomic Reporters and the Cambridge Centre for the Study of Existential Risk. Each has, or will, provide new opportunities for students and young professionals in the UK to engage across a wide variety of topics in the WMD space.

Report prepared by Shane Ward, Coordinator, Student Young Pugwash

### Report from Peace Jam

This year has been a quietly constructive one and at the beginning of 2022 we set up a number of working groups: monitoring and evaluation; PDF resources for teachers; website and social media; youth teams; finance and governance. We have made progress on a number of these, in particular the Board of Trustees commissioned a monitoring and evaluation report. Rather than develop a specific blueprint for change, the report has sought to provide a meta-review of the M&E evidence in order to increase organisational understanding about what the current evidence base says and how such evidence has been gathered.

Within the limitations of the evaluation work we have already done, the report has brought forward new ideas: new themes connected to the impact of PeaceJam UK's work, new recommendations for adjusting programmes, and new suggestions for short and long-term organisational M&E development. The work was carried out by four researchers based at the University of Cambridge, William McNerney, Carlotta Ehrenzeller, Oudai Tozan and Dr. Kerry Mackereth who identified key themes and shared reflections and recommendations to support future programme development and organisational M&E practices which we will take forward.

With regard to the young people who work with us, our youth teams both in the UK and in Europe have been very active, meeting regularly and planning events for young people in person and on-line here in the UK and planning a youth-led conference in Romania. The UK team has also been delivering sessions in schools as part of the Generation Change programme. The war in Ukraine has been causing considerable anxiety and a dialogue with Ukrainian students was set up.

We have also participated in a number of very varied events. We were invited to take part in a meeting for Mayors for Peace on the anniversary of the Nagasaki bomb on 9 August; we led two workshops for fifty young people from the Football for Peace organisation in Bradford, which offers football training to young people from deprived areas and offers peace studies as well; and we participated in the York Human Rights Festival in February when we showed a film about the life of Archbishop Desmond Tutu and led a Q&A session afterwards.

Report prepared by Sally Milne, British Pugwash Group Executive Committee

### UK / Kazakh Pugwash workshop on nuclear risk reduction

On March 30 and 31, British Pugwash and the Pugwash Committee of Kazakhstan held a joint workshop (made up of two sessions) to discuss analysis, ideas and past experiences pertinent to nuclear risk reduction.

The sessions were chaired by Dr Timur Zhantikin (Pugwash Committee of Kazakhstan) and Sergey Batsanov (International Pugwash).

Videos of presentations are available here:

<https://britishpugwash.org/uk-kazakh-pugwash-workshop-on-nuclear-risk-reduction>

### Climate change and coastal infrastructure

On 6 April, Nuclear Free Local Authorities (NFLA) hosted a webinar about the potential impacts of climate change on coastal nuclear infrastructure. The event considered how climate change impacts (e.g. sea-level rise, extreme weather) could affect both civil and military nuclear sites in the UK.

Speakers included Dr Sally Brown, a geomorphologist and climate change adaptation scientist working at Bournemouth University, who wrote the recent Pugwash report *Risks of sea-level rise to ports and associated facilities aligning with the Trident programme*. The other speaker was Pete Roche, Director of Edinburgh Energy and Environment Consultancy and former nuclear campaigner for Greenpeace. The session was chaired by Councillor David Blackburn, of Leeds City Council and the Chair of NFLA.

A video of the event is available here:

<https://britishpugwash.org/event-climate-change-and-coastal-nuclear-infrastructure/>

### Meetings and events

#### Science & Diplomacy, with Sir Christopher Llewellyn Smith

On 1 March, Oxford Student/Young Pugwash hosted Prof. Sir Christopher Llewellyn Smith for a talk and discussion about the relationship between science and diplomacy. Sir Christopher is a theoretical physicist and was knighted 'for services to particle physics' in 2001. He is currently leading a Royal Society study of large-scale electricity storage and is interested in all aspects of energy supply and demand.

More information on the event is available here:

<https://britishpugwash.org/event-science-diplomacy-with-sir-chris-llewellyn-smith-1st-march-2022/>

#### Small Modular Reactors, Dr Mamdouh El-Shanawany

On 26 April, British Pugwash hosted a talk and discussion on Small Modular Reactors, covering issues including costs, security and safeguards. The talk was given by Dr Mamdouh El-Shanawany, Chief Nuclear Advisor at Lloyd's Register and formerly the Head of Nuclear Safety Assessment Section at the International Atomic Energy Agency.

A video of the event is available here:

<https://britishpugwash.org/annual-general-meeting-and-smr-discussion-26th-april/>

#### Dr Dominic Lieven at Hay Festival of Literature and Arts

On 29 May, Professor Dominic Lieven gave the annual British Pugwash Lecture at the Hay Festival of Literature and Arts. He presented his latest work *In the Shadow of the Gods*. This is an account of the men (and occasional woman) who led the world's empires. The book probes the essence of leadership and power through the centuries and around the world.

Video of the lecture is available via a subscription to the Hay Festival's online streaming service:

<https://www.hayfestival.com/p-18806-dominic-lieven.aspx>

#### Nuclear arms control, disarmament, and the future of the NPT

On 29 September, the UK Ambassador to the Conference on Disarmament, Aidan Liddle, and Dr Rebecca Johnson, spoke on the current challenges involving nuclear arms control and disarmament. The speakers reflected on how the 10th Review Conference of the Nuclear Non-proliferation Treaty (NPT), held in August 2022, was not the disaster some expected, and came close to adopting a final outcome document. All NPT states-parties, with the exception of Russia, were prepared to do so, to bolster the treaty.

### **The Pugwash Nobel Peace Prize 27 Years On: Reflections and Outlook**

On 10 December 1995, Pugwash Conferences on Science and World Affairs and Sir Joseph Rotblat, the youngest original signatory of the Russell-Einstein Manifesto, received the Nobel Peace Prize in Oslo “for their efforts to diminish the part played by nuclear arms in international politics and, in the longer run, to eliminate such arms.”

This was the first Nobel Peace Prize jointly awarded to an individual and an organisation. Its award reflected optimism in post-Cold War Europe about the future of nuclear arms control and the imperative of ending nuclear weapons testing. Today, that optimism is in short supply.

To commemorate the award, on 9 December 2022, three speakers who knew Professor Rotblat personally shared memories of his progression from young scientist to influential Pugwashite to champion of student and young Pugwash voices. The presentations included rare videos and first-hand accounts from the Nobel ceremony. They underlined the need for dialogue across divides in times of international tension, and the importance of engaging a new generation of scientists and arms control advocates.

A video of the event is available here: <https://youtu.be/24YOmgt-xdk>

### **Nuclear weapons, the Ukraine conflict and beyond**

On 14 December, speakers at this webinar discussed nuclear threats and doctrine concerning the Ukraine conflict, nuclear weapons modernisation, the prospects for nuclear arms control, and ideas on nuclear risk reduction. The panel included: Shannon Bugos, Senior Policy Analyst at the Arms Control Association, Dr Tim Street, Secretary of British Pugwash, and David Cullen, Director of Nuclear Information Service.

A video of the event is available here: [https://youtu.be/OY\\_hU5LrOss](https://youtu.be/OY_hU5LrOss)

## **British Pugwash developments**

- Andrew Gibson resigned from the post of British Pugwash Secretary to take up a post at Manchester University. Dr Tim Street was appointed Secretary in August 2022.
- The Executive Committee welcomed Shane Ward and Harry Spencer as co-opted members from Student Young Pugwash.

### **Membership growth**

In 2022 British Pugwash gained 24 new members. 16 of these were in the Student or Under 30s categories.

**British Pugwash Executive Committee**

**Chairman:** Peter Jenkins CMG

**Hon. Treasurer:** Dr Ian Crossland

Dr David Ellwood

Dr Mamdouh El-Shanawany

Harry Spencer

Shane Ward

**For the Joseph Rotblat Memorial Trust:**

Dr Richard Guthrie

**For Peace Jam UK:** Sally Milne

**Secretary:** Dr Tim Street

**Honorary members:** Prof. C. R. Hill FInstP, FIEE,  
Prof. John Simpson OBE

**Joseph Rotblat Memorial Trust Trustees**

**Chair:** Dr Richard Guthrie

**Hon. Treasurer:** Mark Ingram

Professor John Finney FInstP, FRSC

Scarlett McGwire

Dr Tom Milne

Lord Rees of Ludlow OM, FRS

Professor Moritz Riede

### Obituary

Dr Christopher Watson

Dr Christopher Watson, a distinguished long-term member of British Pugwash, and a former chairman of the Executive Committee, passed away in August 2022.

Christopher had a career spanning 35 years in the UK nuclear industry, including 17 years at Culham, working on Controlled Fusion research (culminating in 5 years on the JET project). He then worked as a research manager, first in Offshore Technology and then in Nuclear Robotics, before becoming the Business Development Manager for AEA Technology in Russia, a task which involved developing collaborative programmes with Russian colleagues in the management of the nuclear legacy of the Former Soviet Union. Following his retirement in 2002, he was a consultant to the UK government in a range of aid programmes, including its programme on the nuclear legacy in NW Russia (nuclear submarines and their spent fuel and radwaste) and the Closed Nuclear Cities Partnership programme.

Christopher started participating in Pugwash meetings in 1969, was a member of the British Pugwash Executive Committee from 2002 to 2022, and was chairman from 2011 to 2017. In that role, notably, he helped British Pugwash to diversify into Energy Policy and explored the feasibility of creating a British Disarmament Institute to harness non-governmental expertise to the promotion of global nuclear disarmament in accordance with the Nuclear Non-Proliferation Treaty. He represented British Pugwash on the International Pugwash Council from 2013 to 2022.

An obituary can be found here: <https://britishpugwash.org/dr-christopher-watson/>

### British Pugwash

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