Developments in 2015

2015 was a year of hectic activity on the international stage, much of which had relevance to the concerns of British Pugwash. Landmarks of particular significance to us included confirmation by the Organisation for the Prohibition of Chemical Weapons that the destruction of Syria’s chemical weapons was complete (4 January 2016) and the signature of the Joint Comprehensive Plan of Action (JCPOA) agreement on Iran’s nuclear programme on 14 July 2015. Much less welcome news was the negative outcome of the NPT Review Conference in New York (27 April-22 May), which set back progress on disarmament and non-proliferation. Equally unwelcome have been the developments in the Ukraine, the Middle East (especially Syria), Asia, and the growing ISIL-inspired terrorist attacks worldwide.

In the UK context, the election on 7 May of a Conservative government appears to have further reduced the salience of disarmament as a goal in official circles. The future of the Trident nuclear submarine fleet may be expected to remain a matter of heated political debate throughout the British Isles. This creates opportunities for British Pugwash, and other organisations with which we cooperate, to push forward new research projects. It also challenges us to make our contribution to the debate in government and the public arena, especially among young people.

Faced with this range of international and national security concerns, British Pugwash has sought to retain its focus on issues where it has a track record:

- addressing the threats from nuclear, biological and chemical weapons
- participating in debates on the development of energy policy in the UK and worldwide
- engaging with international bodies on the ethical implications of scientific developments

In 2015 we celebrated the 60th anniversary of the publication of the Russell-Einstein Manifesto and the 20th anniversary of the Roblat/Pugwash Nobel peace prize, reminders that many of the concerns that formed the basis of the Pugwash movement are still with us.

- promoting the scientific and public education of upcoming generations.

We also seek to keep abreast of current issues of international concern, especially where these have a scientific dimension – for example: cyber warfare, terrorism, migration, water and other resource shortages – and we raise such issues in our public meetings.

Our two largest projects, the Weapons of Mass Destruction Awareness project (WMDA) and the British International Nuclear Disarmament Institute (BRINDI), have both encountered the problem facing NGOs in the UK and worldwide – the current shortage of grant funding for charitable projects. In both cases we are seeking to maintain momentum in an unfavourable financial climate. In these and other key areas we have been participating (and making presentations) at national, European and international conferences, and producing reports aimed at providing information for policy-makers in government, political parties and the scientific community.

This year we have supported efforts to revive Student Young Pugwash groups in the UK. We hope to expand this key element of our work with the help of our new coordinator, Alexandra Tsamados, appointed in May.
Changes at British Pugwash

In September 2015 we conducted a strategic review which, while it did not change our current focus and direction, suggested ways in which we might enhance our effectiveness as an organisation.

During the year, British Pugwash has also been engaged in deliberations about its system of governance. At a time when the governance of UK NGOs is subject to increasing scrutiny, it is important that our procedures should be fully defensible.

After much discussion, the British Pugwash Group is proposing, subject to AGM confirmation, that it should apply to the Charity Commission to become a registered charity (as the British Pugwash Trust already is). We believe that this will not affect our freedom to publish information relating to our areas of expertise, and to seek to educate public opinion on our core areas of work, while ensuring that we do not adopt a party political position (which we never have done).

In July 2015, BPG Executive Committee elected a new member – Ian Stewart. He is a senior research fellow in the Department of War Studies at Kings College London where he runs the Alpha project, concerned with understanding and countering proliferation-related trade. Previously he was employed as an analyst by MoD concerned with its work on non-proliferation and the UK nuclear deterrent.

Projects

Nuclear Weapons/Trident

Pugwash UK continues to participate in the Nuclear Weapons Policy Liaison Group. The group comprises expert members of the UK nuclear disarmament community acting in an individual capacity to discuss and strategise how to engage and work with parliamentarians, the press and each other to shape debate on UK nuclear weapons policy and the Trident replacement programme.

This informal network plays a vital role by facilitating the disarmament community’s cohesion and effectiveness. The Group is chaired by Paul Ingram, Executive Director of the British American Security Information Council (BASIC), with active participation from a number of British Pugwash Executive Committee members.

Hay Festival 2015

The 11th annual Rotblat Lecture at the Hay Festival was given this year on 30 May by the distinguished journalist and broadcaster Jon Snow, who asked ‘What happened to Trident?’ He described the atmosphere and the excitement of witnessing history in the making as Reagan and Gorbachev worked out the way forward to a world without nuclear weapons. Fast forward to Friday 22nd May 2015 when, in Jon’s words, “the latest Nuclear Non-Proliferation Treaty conference collapsed in ignominy in New York”. He speculated that Joseph Rotblat would have been both angered and unsurprised. Since those heady days with Reagan and Gorbachev, he concluded, the issue of nuclear disarmament has never been seriously discussed.

Support for the NPT

Non-proliferation & disarmament, the NPT RevCon and BRINDI

British Pugwash had made substantial progress during 2014 towards the realisation of its proposal that the UK should establish a British International Nuclear Disarmament Institute (BRINDI) dedicated to the ultimate achievement of a nuclear weapons-free world. In November 2014 we held a launch meeting of the BRINDI Working Group, with a membership drawn from government, NGOs and universities, at which a set of tasks were agreed. We were grateful to MoD for making a participant available to this Working Group.

Following this meeting, we drafted a ‘Concept Note’ which suggested that our BRINDI initiative might be helpful to the UK government in its preparations for the 2015 NPT RevCon, bearing in mind the concerns expressed by many NPT signatories about the apparent reluctance of the P5 countries to honour their disarmament commitments under Article 6 of the NPT in a timely manner. However it became
clear from an FCO briefing meeting for NGOs, immediately after the P5 meeting held in London on 4-5 February 2015, that the P5 had agreed on taking an uncompromising stance on disarmament at the forthcoming NPT RevCon. Further confirmation of the official UK stance on disarmament emerged when the government published its National Security Strategy and Strategic Defence and Security Review in November.

At the 2015 NPT Review Conference itself, many NPT signatories reiterated their concern about the stance of the P5 countries on disarmament, and it was unsurprising that the meeting ended in failure. Notwithstanding these negative developments, British Pugwash, together with the BRINDI Working Group, has made a major effort in 2015 to develop plans for the future of BRINDI:

- reviewing the Prospectus written in November 2014
- drafting a Constitution which might form part of an application to register BRINDI as a charity
- devising a list of research projects which BRINDI might undertake in the near future
- developing plans to find new sources of funding for this initiative.

This work is expected to be completed by mid-2016, and will hopefully encourage further support for the project.

Science and ethics

John Finney has continued to support Pugwash President Ambassador Jayantha Dhanapala as a member of the Steering Group of the Campaign to Stop Killer Robots and as the Pugwash representative on the UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (COMEST).

Autonomous weapons

Discussions within the UN system on the problems raised by lethal autonomous weapons have continued in 2015. A second expert meeting of the Convention on Certain Conventional Weapons (CCW) in April brought together representatives from 90 countries, from UN agencies and the International Committee of the Red Cross. A delegation of 50 campaigners included Nobel Peace Laureates, roboticists, scientists, academics, lawyers, military veterans, and industry representatives. This strong and diverse participation resulted in one of the richest and most in-depth deliberations held to date on this issue, with an encouragingly high level of engagement and interest by an even larger number of states than at the first meeting in 2014. Particular attention was given to the need for ‘meaningful human control’. States returned to this notion throughout the week, indicating its central relevance as a ‘touchstone’ for addressing fully autonomous weapons. This concept has emerged as a point of convergence, helping to set a clear direction for future discussions.

A report on the deliberations was delivered to the annual CCW meeting in November 2015, when nations agreed to hold another meeting in April 2016. An encouraging aspect in the 2016 mandate is a statement that the April meeting ‘may agree by consensus on recommendations for further work for consideration by the 2016 Fifth Review Conference’, perhaps implying the experts group is working toward a concrete outcome, and that work will continue after the Review Conference. More information at: http://www.stopkillerrobots.org

COMEST

Since John Finney raised the ethics of robotics at the 2012 meeting of COMEST, the Commission has continued to discuss its attitude to the issue. We are particularly pleased that in September 2015, COMEST set up a working group on the ethics of robotics. This group, of which John Finney is a member, will be progressed at a workshop in Paris in May 2016.
Energy policy and Climate Change

This topic has been a focus for British Pugwash work over the past five years. In 2013 we published an expert report, *Pathways to 2050: Three possible UK Energy strategies*, and in 2014 we collaborated with colleagues in the European Physical Society Energy Group on the development of a Position Paper on European Energy policy. This was finally published in the journal *Nature* in September 2015 (https://c.ymcdn.com/sites/eps.site-ym.com/resource/resmgr/policy/eps-pp-EuropeanEnergyPol2015.pdf). We also made a presentation at the EPS Energy Conference in Karlsruhe in May, in which we highlighted the weaknesses in the current EU energy policy. More recently, we collaborated on a paper presented at the Congresso Società Italiana di Fisica in Rome on 23 September, which addressed the subject up to the global level, recognising that the UK (and even the EU) make only rather small contributions to the worldwide greenhouse gas emissions.

The starting point for this paper was the recent publication by UK Department of Energy and Climate Change (DECC) of the software project entitled ‘Global Calculator’. This Calculator has been developed in cooperation with a world-wide team of experts to predict emissions from developing patterns of industrial, agricultural and domestic behaviour and then to predict global average mean surface temperature rises from those emissions.

This software is now in the public domain, and can be run by any user to design a ‘Pathway to 2100’ by setting values for ~50 ‘levers’ which define his/her chosen pathway. The model then computes the resulting input and output energies along all the trajectories, and the resulting cumulative greenhouse gas emissions and the associated temperature rise. DECC has also published 26 pathways which were defined by reputable experts in this field (ranging from Shell and the World Nuclear Association to Friends of the Earth).

This was published before the United Nations Conference on Climate Change in Paris in December 2015 (COP21) agreed on targets for the maximum temperature rise of 2 degrees C, without indicating the means by which these targets would be met. Interestingly, only four out of the 26 pathways published by DECC meet this 2 degrees C target.

In our Rome paper, we tried to find three pathways (respectively ‘high nuclear’, ‘high renewable’ and ‘intermediate’) which would meet the Paris target without causing undue social disquiet. We have not yet succeeded, though we have found three which keep the temperature rise below 2.5 degrees C, and we are rather confident that with further optimisation we could get them below the Paris limit.

Student/Young Pugwash

Since June 2015, the British Student/Young Pugwash Group has become very active on university campuses, in national and international conferences as well as on social media. Two new student societies were created at the University of Warwick and at SOAS University of London while a project on Nuclear Disarmament was launched at King’s College London. Work is in hand to encourage other UK universities to become more active.

These groups have recruited over 160 new students and have hosted since the beginning of the 2015 academic year (September) four events in their universities. The topics of the events ranged from ‘The Syrian conflict and its consequences’, to ‘Britain’s nuclear power’ and the ‘Legal and ethical challenges posed by new technologies in conflict’ and offered a unique platform to bring new and young voices into the debates and develop a forward-thinking mentality.

Building upon these successful events on their respective campuses, the above-mentioned groups, together with the long-established Oxford Pugwash group, have decided to launch a British Student/Young Pugwash Conference on an annual basis. The conference will seek to provide a space for students, young researchers, professionals and scholars to engage in a dialogue and exchange ideas concerning national, regional, and global security while interacting with the Nobel Peace Prize winning Pugwash Conferences on Science and World Affairs.

The first Annual British Student/Young Pugwash Conference, will be held in March 2016 in London and discussion will cover Climate Change and Energy Security/Policy, Security challenges in the Middle East, the New Security context in Europe, Nuclear Governance in the United Kingdom and the Impact of New Technologies in Warfare. Students will be asked to present short research papers and some
of the best papers will gathered to create an online catalogue that we will publish on the British Pugwash website. In doing so, we seek to demonstrate the in-depth knowledge of our students and give them an opportunity to develop critical thinking skills while receiving feedback on their original research.

Hosted Projects

WMD Awareness (WMDA)

At the start of 2015, WMD Awareness’ Young Ambassadors continued to promote #Talking Trident, a national debate to raise awareness of the issues surrounding defence and Trident renewal. In March they launched the #Talking Trident booklet, compiled from the views expressed by young people across the country, containing their charter for nuclear disarmament, which was distributed to prospective MPs. They also held four #Talking Trident events with BASIC’s ‘Next Generation’ project in different parts of the UK, and supported one Ambassador to organise and carry out a speaking tour among student groups in the North.

The culmination of the #TalkingTrident debate was a day of action on 7 March, in which the Ambassadors took to the streets armed with their manifesto, hearing and capturing the views of the general public. Thisfilmclipsums up the work.

With support from staff, the Ambassadors also held two film screenings in London and one spoken word event, ‘Start Words Not Wars’, which was so successful that they organised a second night in December. All were well attended and included a lot of people who were new to the issue.

The programme of capacity building continued, with Ambassadors attending the conference in Vienna on the humanitarian impact of nuclear weapons in December 2014, and participating in a strategy day: training in filming, running events and using social media.

Later in the year, the Ambassadors, with support, have succeeded in raising £3,000 through a crowd funding campaign to organise a ‘Nuke FilmFest’, a series of film screenings around the country, raising awareness about nuclear weapons. The headline London event will take place on Friday 1 April 2016, and will be the biggest Ambassador event. http://www.wmdawareness.org.uk/

At the 2015 Edinburgh Fringe WMDA put on an interactive exhibition, ‘Popular Culture and the Bomb’, for the 70th anniversaries of the bombings of Hiroshima and Nagasaki, featuring iconic pictures, music, films, books, anime, computer games and artefacts and a donated piece of wire from Greenham Common that participants added to during the week. The exhibition has since been on display in Bristol.

PeaceJam UK

Sally Milne reports: For the first time we held our annual youth conference at the University of Winchester on 7/8 March. Our Laureate was Jody Williams who won the Peace Prize in 1997 for her work as founding coordinator of the International Campaign to Ban Landmines, and was only the tenth woman in its almost 100-year history to receive the prize. Jody Williams spent a lot of time with the students and was a tremendous inspiration. It was an excellent conference with groups from around the country and beyond including groups from Jersey and Greece. We are delighted to be able to report that the success of the conference has led to the university agreeing to host the conference for a further two years with a review at the end of that time.

In keeping with our policy of encouraging youth-led activities as much as possible, we train undergraduate university students to act as mentors and to facilitate youth groups at the conferences and one-day Slams. Since the conference in March, students from the University of Winchester have been delivering workshops to local schools and groups both locally and in the North. We also have student mentors at the
universities of Bradford and Cardiff, and will shortly be training students at the University of York who will be coming down to mentor at next year’s conference.

Western responses to Russian activities in Ukraine

Events in Ukraine have contributed to the gravest crisis in Russia-West relations since the end of the Cold War. On 16 April, Dr Ian Kearns, Director of the European Leadership Network, explored what has gone wrong, how the West has responded and what it should do next to both resist Russian behaviour and set relations on a more positive footing.

Read more at [http://wp.me/p6lGki-M3](http://wp.me/p6lGki-M3)

Discussion meetings

The use of chemical weapons in Syria: misleading narratives and ongoing consequences

On 1 July 2015, Richard Guthrie and Dr Caitriona McLeish explored the highly contradictory themes and narratives developed about the Syrian chemical weapons programme and the international responses to it. The use of these weapons and attempts to eradicate them have had many ongoing consequences, not least the continuing use of chlorine in barrel bombs which could weaken the taboo against the use of poisons as weapons.

Read more at [http://wp.me/p6lGki-Of](http://wp.me/p6lGki-Of)

International Pugwash

Christopher Watson is a member of the Pugwash Council, while Robert Hinde serves as a trustee of the Geneva-based Pugwash Foundation. Sandra Ionno Butcher is Director of the Pugwash History Project.

Nagasaki Conference

International Pugwash currently holds a major international conference approximately every two years. In 2015, this meeting was held in Nagasaki, and was hosted by the Japanese Pugwash Group.

There were 192 participants from 34 countries (including 30 students from 19 countries), and there was a strong representation from British Pugwash (four members and two students).

Among the key presentations, were:

- ‘The path towards a nuclear-weapon-free world’: speakers Anita Friedt (US State Department) and Mikhail Ulyanov (Russian MFA) were both very upbeat on recent progress towards this goal.

- ‘Nuclear risks in South Asia’: Lt Gen. Khalid Kidwai (former head of Pakistan’s Strategic Plans Division, and controller of its NW) gave a keynote address on strategic planning in Pakistan. He saw Pakistan’s expansion of its nuclear arsenal as a response to the Indian threat, and added that “in both countries, the nuclear confrontation is a political issue, which can’t be solved by military to military talks alone. Our populations don’t understand the horrors of nuclear war.”

- ‘Moving forward the CTBT’: Bozorgmehr Ziaian of the CTBTO reminded us that the 20th
anniversary of the CTBT will be in June 2016. It can only come into force when eight non-signatories have signed it. He suggested that a way to overcome the current deadlock might be for the UN Security Council to adopt a resolution under the UN Charter.

‘Risk of Civil Use of Nuclear Energy’: Prof Ramamurti Rajaraman (India) reminded us that in 2005 India foresaw a need for 50-60 GWe of nuclear power. This plan was initially impeded by sanctions, but following the deal with the US in 2008, India was enabled to negotiate purchases of Westinghouse, Rosatom, CANDU and Areva-supplied reactors. It currently has a further 4.3 GWe of foreign (Russian and Canadian) reactors under construction, and plans a further 40 GWe to be operational by 2025. The Fukushima disaster has not deflected this policy. Their construction programme is, however, still modest compared with that of China.

‘Twelve Years of the Iranian Nuclear Controversy and Negotiations – Lessons Learned’: H.E. Ali Akbar Salehi (Vice President of Iran, and Head of the Atomic Energy Organization of Iran) gave a fascinating Iranian view of the steps within Iran and outside it that eventually led to the JCPOA. He supported the establishment of a NWFZ in the Middle East, and regarded Israel as the main obstacle to this.

In addition to the conference sessions, there were expeditions to the Nagasaki Peace Park, the Atomic Bomb Museum, and the Shiroyama Elementary School (one of the few buildings remaining as it was immediately after the bomb blast). We were also able to hear from several of the Hibakusha (survivors of the bomb blast) about their experiences at the time, and their subsequent thoughts.

**European Pugwash meeting in Berlin**

Two meetings of European Pugwash have already taken place: the first, hosted by Netherlands Pugwash, was held in Noordwijk in 2013; and the second, hosted by Russian Pugwash, in Moscow in 2014. The third meeting, on 23-25 October 2015, was hosted by German Pugwash in Berlin and was linked to a workshop on ‘Cyberwar & Cyberpeace’. The main themes discussed were disarmament (including particularly tactical nuclear weapons), cyberwar, and regional cooperation. These meetings are in line with a recent development in thinking within International Pugwash to support a more ‘federal’ structure for the organisation, and to give greater autonomy to national and regional groups.

**Celebration of Pugwash History**

This year has seen two major Pugwash anniversaries: the 60th anniversary of the publication of the Russell-Einstein Manifesto in 1955, and the 20th anniversary of the award of the Nobel Peace Prize jointly to Joseph Rotblat and the Pugwash movement in 1995.

On 18 December, International and British Pugwash held a joint commemoration of these events at the Royal Society, which included a talk by H.E. Hussain Al-Shahristani, Iraq’s Minister for Higher Education, entitled ‘Fighting Against Weapons of Mass Destruction and Extremism in the Middle East: A Personal Journey, A Regional Imperative’. This event was the first occasion on which a webcast was made available on the International Pugwash website.

**Pugwash photo archive**

The Pugwash photo archive, based at British Pugwash, continues to develop in collaboration with Sandra Ionno Butcher, Director of the Pugwash History Project. We aim to organise, index and digitise the collection and eventually make it available to Pugwash members and the public through a searchable database. In spring 2015, interns Harriet Hall, Samantha Lao and Andrew Yap, all from UCL, completed their six-month internships, having made great strides in cataloguing and researching the photographs; and in October we welcomed Andreas Tsamados, a new intern from King’s College, London to continue the work. Visit the photo archive blog.
British Pugwash Trust
Trustees 2015

Sir Michael Atiyah OM, FRS, FRSE, FAA
Professor John Finney FInstP, FRSC (chair)
Professor Christopher Hill FInstP, FIEE
Professor Robert Hinde CBE, FRS, FBA
Lord Rees of Ludlow OM, FRS
Dr Tom Milne
Edward S Ross (treasurer from June 2015)

British Pugwash Group
Executive Committee 2015

Chair: Dr Christopher Watson
Hon. Secretary: Dr Nick Ritchie
Hon. Treasurer: Dr Ian Crossland (from 1 April 2015)
Dr Julia Amos
General Sir Hugh Beach, GBE, KCB, MC
Richard Guthrie
Professor Christopher Hill FInstP, FIEE
Amb. Peter Jenkins
Dr Patricia Lewis
Dr Caitriona McLeish
Professor Arthur Petersen
Professor John Simpson OBE
Ian Stewart

For the British Pugwash Trust: Professor John Finney
For International Pugwash: Dr Christopher Watson
For PeaceJam: Sally Milne
For WMD Awareness: Carol Naughton; Hannah Cornford (to August 2015)

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