# 

AT THE 20TH ANNIVERSARY OF THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY





A SPECIAL INITIATIVE TO END NUCLEAR EXPLOSIONS



youthgroup.ctbto.org

### The Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans all nuclear explosions.

# It opened for signature on 24 September 1996 in New York.

As of mid-2016, 183 countries had signed the Treaty and 164 had ratified it. Of the 44 nuclear capable States which must ratify the CTBT for it to enter into force (the Annex 2 States), 36 have done so to date while eight have yet to ratify: China, the Democratic People's Republic of Korea, Egypt, India, Iran, Israel, Pakistan and the United States.

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) consists of the States Signatories and the Provisional Technical Secretariat. Among the main tasks of the Commission are to carry out the necessary preparations for the effective implementation of the CTBT. This includes facilitating signatures and ratifications for the CTBT's entry into force and universality – and setting up a global verification regime capable of detecting nuclear explosions underground, underwater and in the atmosphere.

The regime must be operational when the Treaty enters into force. It will consist of 337 monitoring facilities supported by an International Data Centre and on-site inspection measures. As of 17 April 2015 over 85 percent of the facilities at the International Monitoring System (IMS) were operational.

### The CTBTO Youth Initiative

With 20 years having passed since the opening for signature of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), it is clear that the Treaty's entry into force and implementation will be in the hands of the next generation of leaders and policy makers. It is therefore important to provide youth with access to information on the CTBT and its verification regime and enable those interested to effectively convey to others the significance of the Treaty's entry into force as a key step towards nuclear disarmament and non-proliferation.

The CTBTO Youth Group is open to all students and young professionals who are directing their careers towards global peace and security and who wish to actively promote the CTBT and its verification regime.

Participants are provided with access to CTBT educational material, networks and forums and have opportunities to take part in the outreach activities of the organization.

It is up to each individual to make the most of his/her participation by actively engaging with other participants, developing projects and taking initiative.

### **Table of Contents**



- 4 A LETTER FROM THE EXECUTIVE SECRETARY

  Lassina Zerbo on the Importance of Youth Engagement
- 5 THE CTBTO YOUTH INITIATIVE
- 6 YOUTH GROUP JOINT STATEMENT
- 8 THE 46TH SESSION OF THE PREPARATORY COMMISSION Plenary Session and Civil Society Panel
- 10 THE YOUTH RESEARCH INITIATIVE
  A Special Initiative of the Executive Secretary
- 11 ANNEX 2: ENVISIONING THE FUTURE Findings of the Annex 2 Research Group
- 12 THE MIDDLE EAST: A WAY FORWARD Findings of the Middle East Research Group
- 13 FIVE-PARTY TALKS: A PROPOSAL
  A Proposal for China, India, Pakistan, Russia and the United States
- 14 YOUTH AND THE GROUP OF EMINENT PERSONS AT THE CTBTO
- 16 WOMEN AT THE CTBTO
  Empowerment Through Science and Diplomacy
- 18 SUPPORT THE CTBTO YOUTH INITIATIVE



## Lassina Zerbo CTBTO Executive Secretary

Nearly 20 years after its opening for signature, not only is it crucial that we redouble our efforts to obtain the remaining ratifications required for the entry into force of the CTBT, it is also vital to preserve and strengthen the support that already exists for the Treaty. We have a Treaty that is almost universal, which bans nuclear test explosions and has a robust verification regime. Even before entry into force, the Treaty serves as to prevent nuclear testing and is an important first step towards nuclear disarmament.

The CTBT will bring us closer to the ultimate goal of general and complete disarmament under strict and effective international control, and that is why we need to focus our enthusiasm and motivation on finishing the business of achieving a nuclear test free world.

I am convinced that youth engagement is essential for achieving real progress on nuclear non-proliferation and disarmament measures. Investing in education at different levels has to be a fundamental part of the solution, and should be undertaken in an inclusive and collaborative way.

Much like the situation with climate change and the environment, youth today are faced with the consequences of the short sighted decision making of the past.

My generation has the responsibility to ensure that youth are provided with educational opportunities and training that will prepare them to meet the challenges of the future.

This is why I launched the CTBTO Youth Group in February of 2016. Participants are provided with access to CTBT educational material, networks and forums and have opportunities to take part in the outreach activities of the organization.

"In this year where we reflect on the 20th anniversary of the CTBT's opening for signature, I believe that the time has come to bring youth more firmly on board. I wish to invite all students and young graduates who are directing their careers to contribute to global peace and security to join a new CTBTO Youth Group."

- Executive Secretary Lassina Zerbo"

The CTBTO Youth Group is open to students and young professionals from countries all over the world, including countries that have yet to sign or ratify the Treaty. United under the CTBT, youth works together as one.

It is therefore my hope that the strong ties of cooperation developed through the group will continue throughout the members' careers, fostering friendships and cooperation that will eventually lead to better scenarios for regional and international security.

I hope you share my enthusiasm, and my words will further encourage you to work for the entry into force of the CTBT.

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"This has been an unparalleled opportunity to engage with peers in my field. The CTBTO Youth Group has provided us with a platform to grow, learn and hopefully make our own mark in the world."

- Sylvia Mishra, Youth Group Member

### THE CTBTO YOUTH GROUP

With 20 years having passed V since the opening for signature of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), it is clear that the Treaty's entry into force and implementation will be in the hands of the next generation of leaders and policy makers. It is therefore important to provide youth with access to information on the CTBT and its verification regime and enable those interested to effectively convey to others the significance of the Treaty's entry into force as a key step towards nuclear disarmament and non-proliferation.

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#### A SPECIAL INITIATIVE

s part of a Special Initiative hby the Executive Secretary, 13 youth group members from seven of the eight countries that must still ratify the CTBT for the Treaty to come into force spent six weeks working together to find innovative ways to promote its entry into force. They presented their findings at the 46th Session of the Preparatory commission and were able to engage with members of the Group of Eminent Persons. In order to prepare for their discussions, the participants of the initiative, from China, Egypt, India, Iran, Israel, Pakistan, and the United States, traveled to Vienna prior to the conference for two days of collaboration, workshops, and trainings.

#### **GROUP OBJECTIVES**

- Revitalize the discussion around the CTBT among decision-makers, academia, students, expert society and media;
- Raise awareness of the importance of the nuclear test-ban;
- **Build** a basis for knowledge transfer to the younger generation:
- Involve new technologies into promoting the CTBT social media, digital visualization, interactive means of delivering information etc.;
- Place the CTBT on the agenda of the world's most important nuclear-related events.

### **JOINT STATEMENT**

#### OF THE CTBTO YOUTH GROUP

13 June 2016 Vienna, Austria

Members of the CTBTO Youth Group, established earlier this year at the "Science and Diplomacy for Peace and Security: the CTBT@20" symposium, collaborated over the past three weeks and met over the past two days to finalize their joint research projects. They discussed the status of the CTBT, assessed ways to push the Treaty towards entry into force, and considered regional and international security issues relevant to the CTBT.

Members of the CTBTO Youth Group issue the following statement:

"As youth, we are the future leaders of the world, the ones who will inherit and live in the world left behind for us, and the bearers of the hopes and dreams for our children and their children after them.

Twenty years after the opening of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) for signature, we regret that this Treaty, which would establish a legally binding, comprehensive prohibition on nuclear explosive testing, has yet to enter into force.

For so many years, the international community has not been able to secure entry into force of the CTBT despite the diplomatic energies invested into the process. We believe that a change in approach is necessary and recognize that each of the remaining Annex 2 States (China, Egypt, India, Iran, Israel, Democratic People's Republic of Korea, Pakistan, and the United States) has concerns that should be recognized and addressed. We trust in the power of constructive dialogue based on the principle of equality to address and resolve these differences.

We affirm our shared vision for a world free of nuclear weapons. To that end, we hold the CTBT to be a critical next step towards nuclear disarmament and an important component of the international nuclear non-proliferation regime."

### As members of the CTBTO Youth Group:

- 1. We welcome the support of all countries for the CTBTO Youth Group and look forward to continued engagement with government representatives and international civil society experts.
- 2. We extend an open invitation to our fellow youth interested in promoting the CTBT, nuclear non-proliferation, and disarmament to join the CTBTO Youth Group.
- 3. We urge states that have not yet signed and ratified the CTBT, especially those remaining Annex 2 States, to revitalize their efforts towards ratification so that the CTBT may enter into force as soon as possible. Specifically, we call upon remaining Annex 2 States to lead in ratifying the CTBT independently of other countries' efforts to build momentum for CTBT ratification by countries that have not yet ratified. We believe that renewed efforts towards entry into force should be made through constructive engagement and genuine dialogue in the spirit of mutual respect.
- 4. We resolve to do our utmost in promoting the CTBT and its verification regime. We will engage our peers in open dialogue, participate in the education of the general public, encourage scientific research and collaboration, and contribute to the work of the CTBTO Preparatory Commission and the future CTBTO.



"As youth, we are the future leaders of the world, the ones who will inherit and live in the world left behind for us, and the guardians of the hopes and dreams of our children and their children after them... we resolve to do our utmost in promoting the CTBT and its verification regime for a better, safer future."

- Ken-Ben Chao, Youth Group Member Plenary Meeting of the 46th Session of the CTBTO Preparatory Commission



### PLENARY SESSION

On 13 June 2016, over 120 delegations, including Signatory States, non-Signatory States and Observers, heads of International Organizations, members of civil society and media attended the opening of the 20 Years CTBT Ministerial Meeting in Vienna, Austria. The Ministerial Meeting, which coincided with the 46th Preparatory Commission (PREPCOM), brought together high-level officials and policymakers to discuss, review, and revitalize the discussion on the entry into force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT).

The plenary opening featured speakers including Federica Mogherini, High Representative for Foreign Affairs and Security Policy of the European Union, Erlan Idrissov, Minister of Foreign Affairs of Kazakhstan, Sebastian Kurz, Minister for Europe, Integration, and Foreign Affairs of Austria, Lassina Zerbo, Executive Secretary of the CTBTO, Lazăr Comănescu, Minister for Foreign Affairs of Romania and Chair of the 46th PREPCOM, and a video address from Ban Ki-moon, United Nations Secretary-General. The speakers lauded global progress on halting nuclear explosions, though a

sense of urgency was a common thread in remarks

"It is time to redouble our efforts, to never again see the dark cloud of a nuclear explosion [...] Such a dream must translate into concrete action and policies" - Federica Mogherini, High Representative for Foreign Affairs and Security Policy of the European Union

The speakers were also hopeful: "Nuclear tests not only poison the environment, they also poison the political climate. They breed mistrust, isolation and fear," Dr. Zerbo told the audience. "Let's meet again, sometime in the not too distant fu-



anniversaries of the Treaty's entry into force."

### CIVIL SOCIETY

The Civil Society panel, moderated by Professor William Potter of the James Martin Center for Nonproliferation Studies at the Middlebury Institute of International Studies at Monterey, was themed 'The Way Forward - The Role of Civil Society.' The session commenced with comments by Hon. Hans Blix, former Swedish Minister for Foreign Affairs and former Director General of the International Atomic Energy Agency, and Hon. Ellen Tauscher, former Under Secretary of State for Arms Control and International Security and former member of the United States House of Representatives. Their remarks focused on the necessity to engage in advocacy and utilize innovative ideas to ensure that civil society has a palpable impact on decision makers and policy makers in general. Given the fact that much of the decision making has centered on stakeholders and has revolved around national security, the public must be made aware of the sensitivities of nuclear testing and how the detrimental effects of proliferation can warrant for upcoming generations.

The session also included remarks from the Director of the Center for Energy and Security Studies Mr. Anton Khlopkov, Mr. Daryl Kimball, Executive Director of the Arms Control Association and Mr. Kariphek Kuyukov, the ATOM Project honorary Ambassador and artist from Kazakhstan. Amongst other distinguished speakers were the Former United Nations Under Secretary General for Disarmament Affairs, Ambassador Sergio Duarte and Dr. Tariq Rauf the Director of the Arms Control and Nonproliferation Program at the Stockholm International Peace Research Institute. The research findings of the CTBTO Youth Group formed an integral part of the Civil Society session. The Youth Group presentations were divided into three groups: representing the Annex 2 States, the Middle East, and a proposal for multi-lateral engagement.





THE 13 PARTICIPANTS IN THIS PROJECT COME FROM 7 OF THE 8 NON-RATIFYING ANNEX 2 STATES:

CHINA • EGYPT • INDIA • IRAN • ISRAEL • PAKISTAN • UNITED STATES

THEY SPENT SIX WEEKS WORKING TOGETHER ON JOINT RESEARCH TO PRESENT AT THE 46TH SESSION OF THE PREPARATORY COMMISSION

THIS IS THEIR WORK.



### WHAT WILL THE WORLD LOOK LIKE 20 YEARS FROM NOW?

n 1960, U.S. President Dwight D. Eisenhower said "I am of the belief, if you could have a ban on all [nuclear] testing, that everybody could have confidence in, it would be a very, very fine thing to stop this..."

In 1996, Eisenhower's words seemed more prophetic than wistful. But after 20 years on the threshold of this very possibility, our generation has been saddled with the burden of an unfulfilled promise.

20 years ago, did you think we would be here today? Have you thought about where we will be 20 years from now? We have.

In 2016, a group of young people from the Annex 2 States who have yet to ratify the CTBT came together and collectively imagined what a world with the CTBT in force, 20 years from this exact point, could be like.

We believe that in 20 years, an in-force CTBT will provide important benefits for global security and humankind. We envision a world in which countries have recognized that they don't give up their sovereign right to national security and havet recognized that their security interests aren't threatened by this treaty, but enhanced by it; that the treaty is not, nor was it ever meant to be, the solution to global instability, but rather a vital step towards security and peace. It is a step towards increased trust and transparency among traditional rivals, a step towards strengthening the NPT and the international nonproliferation regime, and ultimately a step towards a world free of nuclear weapons.

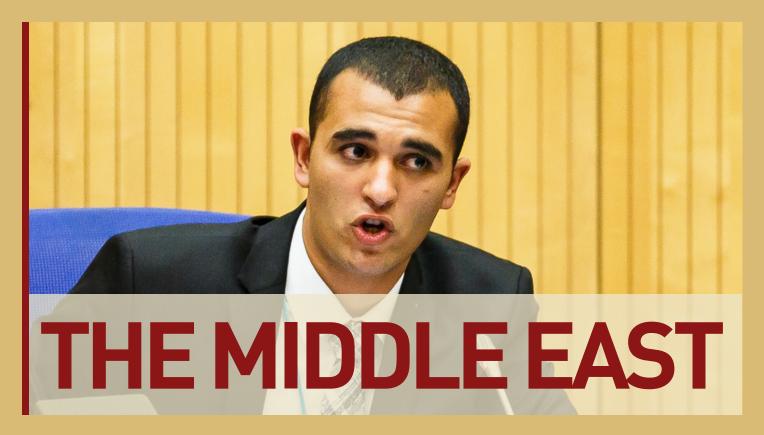
But global security is not the only benefit to be reaped with a legally binding nuclear-testing treaty. International collaboration and exciting new challenges in science would provide opportunities for young scientists and innovative thinkers who are working together on a range of issues. From strengthening the CTBT's International Monitoring System to advancing the analysis of the In-



ternational Data Centre and the Global Seismic Network (GSN), or even helping to develop an individual country's indigenous verification and detection capabilities, these young people would benefit from this new world.

The potential for ancillary benefits to an in-force CTBT are rife; imagine CTBTO detection infrastructure and data providing early warnings for earthquakes in Pakistan or for tsunamis threatening coastal nuclear facilities in China. Imagine an Iran that has an emphasis on investing in early-career scientists, who flock to their peaceful nuclear energy program. These outcomes don't have to be imaginary.

20 years ago, you were probably like us: young, energetic, and idealistic. And now we are here to-day commemorating 20 years of a treaty that has yet to enter into force. The question must be asked again: what do you want our future to look like 20 years from now? For the sake of the generation that will follow in our footsteps, we must do our best to make sure the world they inherit is one in which the CTBT has entered into force.



ne of the most puzzling things about the Middle East is that rational analyses of the region tend to give way to irrational conclusions about the factors driving disagreement. If all parties in the Middle East signed and ratified the CTBT, a rational observer might argue that each of these states would stand to benefit. So why can't these states cooperate? It is only when one abandons binary concepts of cost and benefit and takes up the idea of intangible, human factors that one begins to appreciate the challenge in the Middle East of CTBT ratification.

For this project CTBTO Youth Group members from Egypt, Iran, and Israel analyzed the barriers that hinder CTBT ratification in the region. They found that these barriers are primarily rooted in issues of trust, confidence, and other psychological phenomenon like respect and national pride. Hence, the group's approach to understanding how to advance the CTBT focused on these intangible factors.

An example in Egypt is illustrative of this principle: Although Egypt is bound by the 2006 presidential decree No. 152 that prohibits nuclear testing on Egyptian territories, Egypt has not followed the ratification of the Nuclear Non-Proliferation Treaty (NPT) with similar approval of the CTBT. Egypt insists that Israel join the NPT before taking this step. The fundamental issue for Egypt is not one strictly of security, but of bitter sentiments stemming from Israel's failure to sign and ratify the NPT after Egypt's 1981 ratification. Furthermore,

Egypt felt that Israel had challenged Egyptian leadership in the Middle East. Egypt responded by holding CTBT ratification hostage as a bargaining chip for leverage against a perceived challenge to its leadership role.

Given intransigence by both parties on this and other disagreements, it makes sense to pursue smaller steps on cooperation. Israel is not likely to join the NPT in the near future, but there are other confidence-building measures that can be taken to move towards this larger goal.

Smaller goals could include Israeli mediation between Egypt and Ethiopia to ensure Egyptian water rights or the beginning of discussion on the Egyptian Peace Initiative launched by President Sisi for the conflict between Israelis and Palestinians. Building confidence through such initiatives could result in a foreseeable future where Egypt, Iran and Israel all sign and ratify the CTBT; however, such piecemeal activism is slow and uncertain.

One promising avenue is the youth; as demonstrated in Cairo's Tahrir Square, by the Social Justice Movement in Tel Aviv, and the Green Movement in Tehran, the youth of Egypt, Israel and Iran have enormous capacity to drive change. If small steps count, hopefully the goodwill we have engendered amongst ourselves while working on this project will have an impact. No matter the mechanism, it is important to promote a safer, more prosperous and conflict-free Middle East.



The stale vocabulary of nuclear non-proliferation issues on the southern Asian continent no longer resonates in the region. It is time for old dialogue to be replaced by new action. One way to achieve new progress on regional issues would be to multi-lateralize discussions and disassociate bilateral disagreements from multi-state cooperation. With the aim of bringing new vigor to discussions and sidestepping road-block issues, this working group proposes five-party talks between China, India, Pakistan, Russia, and the United States on nuclear proliferation and nuclear testing.

These talks would be a forum for debates and discussions to be held, with the primary purpose of allaying trust deficits and addressing reservations. It is necessary to appreciate the concerns of the Annex 2 States and to address them in an unprejudiced manner.

For India and Pakistan, multi-lateralizing discussions makes sense - interconnected threat perceptions between the countries have resulted in reservations and barriers to the ratification of the CTBT. China is a critical partner in resolving issues in the region as well. And given their influence in nuclear affairs, the inclusion of both Russia and the United States would help make this body more effective.

Official talks by diplomats would be complemented by working groups consisting of scientists, legal experts and scholars from these countries. These working groups could help identify areas where

members collaborate, thus generating new ideas for the diplomats and the nation states.

The goal is to get the countries to the table... not to convince or dictate, but to sit together, and to talk.

Small steps on nuclear testing and proliferation issues could be achieved as well. For example, addressing the lexicon related to nuclear explosions and other technical details would be a good starting measure to ensure that all the stakeholders are on the same page.

Once these countries have a platform to speak as equals and as partners, tough issues would become easier to solve, as intransigence on single issues could be seen in the wider context of a broad working agenda. Eventually, substantive issues could be broached, helping move the parties towards an end goal of a global nuclear test ban.



### **GROUP OF EMINENT**



#### **GROUP OF EMINENT PERSONS**

To ensure an innovative and focused approach to advance the CTBT's ratification by the remaining Annex 2 States, a group comprising eminent personalities and internationally recognized experts was launched on 26 September 2013 at the United Nations Headquarters in New York. Through their expertise, experience and political standing, this Group of **Eminent Persons (GEM) supports and** complements efforts to promote the Treaty's entry into force as well as reinvigorating international endeavors to achieve this goal.

#### **GEM AND THE YOUTH GROUP**

The CTBTO Group of Eminent Persons (GEM) met with participants of the Youth Group initiative to discuss their research findings. This collaborative interaction between GEM members and the youth group was first of its kind and the session was chaired by William Potter, Director of the James Martin Center for Non-proliferation Studies at the Middlebury Institute of International Studies at Monterey. GEM members, including those in attendance at the meeting (Hans Blix, Jayantha Dhanapala, Sérgio de Queiroz Duarte, Wolfgang Hoffmann, Angela Kane, Ho-Jin Lee, and George Sipho Nene) have been instrumental in re-energizing discussions on the CTBT to get the Treaty into force.

The meeting of CTBTO Youth group with the GEM members was highly productive, as the youth

### PERSONS:



GEM Members pictured, from left to right: Ho-Jin Lee, Principal Vice President of the United Nations Association of the ROK; Hans Blix, former Director of the IAEA; Angela Kane, former UN High Representative for Disarmament Affairs; Sérgio de Queiroz Duarte, former UN High Representative for Disarmament Affairs.

members learned from the extensive experience of GEM members and also enlivened the discussions with their fresh ideas about how to bring the CTBT into force, as well as new thinking on issues of disarmament and verification.



"This organization has no other choice than counting on the next generation... We are the ones who think we [are leading the world] based on our political, diplomatic or scientific positions, but they are leading it from behind, and we have to bring them out front... I insist on the link between the youth and GEM; I want you to learn from their experience and see them as role models."

- Lassina Zerbo, Executive Secretary



### 1POWERING WO

Gender equality has been a crucial driver for sustainable peace and has played a pivotal role in fostering economic growth and social development around the globe. As of 2016, 110 of the CTB-TO's 256 staff members (43%) are women. While women have been a driving force in all areas of the CTBTO, a large number of women especially have been on the front lines of detecting nuclear tests and monitoring huge volumes of data collected by the International Monitoring Systems (IMS). CTBTO Executive Secretary Lassina Zerbo commended the invaluable contribution of women in the buildup and sustainment of the **CTBTO's verification regime:** 

"[Women at the CTBTO] brave the elements in the world's remotest corners to build and maintain our monitoring stations, they work long hours to screen vast amounts of data for suspicious events, and they develop new methods of analysis and management practices. My sincere appreciation and thanks go to all of them, for without them we could not have become what we are today: the world's center of verification excellence."

On June 13-14 2016, the Ministerial Meeting held in the context of the 20th anniversary of the Comprehensive Nuclear-Test-Ban Treaty witnessed the substantial participation of women, including political leaders, dignitaries, scholars, youth, artists and members of the media. Notably, a number of young female leaders concerned about nuclear weapons and the safety of the world and future generations from across the globe also represented the CTBTO Youth Group as members of the youth research initiative.

Women played key roles at the PREPCOM sessions and have taken high-visibility roles in supporting the CTBT. In her comments to the assembled delegations at the meeting, High Representative of EU Foreign Affairs and Security Policy and



### MEN AT THE CTBTO

**VP of the European Commission** Federica Mogherini emphasized that the EU has supported the Treaty with "force" and "conviction" from its inception, and she expanded on the civil and security benefits of the Treaty and its verification regime. U.S. Under Secretary for Arms Control and International Security Rose Gottemoeller delivered a statement from U.S. President Barack Obama, affirming that U.S. dedication to the Treaty is "demonstrated through unmatched monetary and technical support and [a] clear commitment to ensuring that the verification regime is completed, and functions as intended." While Under Secretary of State, Gottemoeller has called every signatory of the Treaty to support the work of the Preparatory Commission to complete the Treaty's verification regime and help enhance



Rose Gottemoeller, U.S. Under Secretary for Arms Control and International Security

the effectiveness of the Provisional Technical Secretariat.

Women involved in the nuclear field were also represented by Pakistan's Ambassador to international organization in Vienna Ayesha Riyaz, and Angela Kane, former UN High Representative for Disarmament Affairs and member of the CTBTO's Group of Eminent Persons (GEM).

In the Youth Group, participants Shervin Taheran (USA) and Aditi Malhotra (India) presented their research findings on behalf of their respective groups for the CTBTO Youth Research Initiative, while Sylvia Mishra (India) was interviewed for a CTBTO documentary project on nuclear weapons testing.

"This has been an amazing experience for us all. Seeing women playing such vital roles on a global scale has inspired me," Mishra said during her interview.

# SUPPORT THE CTBTO YOUTH INITIATIVE

visit youthgroup.ctbto.org or nominate outstanding young leaders



youthgroup.ctbto.org



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PUTTING AN END TO NUCLEAR EXPLOSIONS