“Investment in Women and Girls in Science for Inclusive Green Growth”

11 - 12 February 2019

United Nations Headquarters, New York City
Resolution adopted by the General Assembly on 22 December 2015

[on the report of the Second Committee (A/70/474/Add.2)]

70/212. International Day of Women and Girls in Science

“We celebrate the achievements of women, known and unknown, remembered and forgotten, who have forged the way for those of us in science today, and to give an opportunity for children: girls and boys, to choose role models in science.”

— Princess Nisreen El-Hashemite, BSc MSc MD PhD
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From Dream to Reality
The idea for an International Day of Women and Girls in Science was generated during the first High-Level World Women's Health and Development Forum organized by the Royal Academy of Science International Trust (RASIT) and the United Nations Department of Economic and Social Affairs (DESA), and held on 10-11 February 2015 at the United Nations Headquarters, with the participation of government Ministers and representatives, UNESCO, UN-Women, WHO, UNRWA, UNICEF, UNFPA, Every Woman Every Child Initiative, etc. Most of the distinguished guests and speakers at the Inaugural Forum, whether at ministerial, intergovernmental, diplomatic, academic or professional levels, were Women in Science.

The Outcome Declaration of the Inaugural World Women’s Health and Development Forum, which the participants contributed to and approved by acclamation, and presented officially at the Closing Ceremony to the Deputy Executive Director of UN Women, reflects an ambitious global action agenda and serves as a Road Map for women’s health and development.

In implementing one of the points of the Inaugural World Women’s Health and Development Forum Declaration, RASIT’s Executive Director HRH Princess Dr Nisreen El-Hashemite wrote a letter on 30 April 2015 to H.E. Mr. Sam Kutesa, President of the 69th Session of the UN General Assembly, requesting on behalf of all participants at the Inaugural World Women’s Health and Development Forum — governments, intergovernmental organizations, civil society, academic institutions, professionals, youth and non-governmental organizations, that he kindly take the necessary steps to set in motion the mechanisms for the UN General Assembly to declare 11 February an International Day for Women in Science.

As soon as we communicated to President Kutesa concerning next steps in creating the foundation for the proposed International Day of Women in Science, RASIT sought the further counsel of the Office of the President of the General Assembly, which provided suggestions for consideration of a proper orientation for a way forward.

RASIT, and in close collaboration and partnership with the Government of the Republic of Malta, sought the leadership of the Permanent Mission of Malta to the United Nations to facilitate the consultations that would lead to the introduction of a draft resolution in the Second Committee under Agenda Item 22(b), Globalization and interdependence: science and technology for development.
During October and early November, the Permanent Mission of the Republic of Malta facilitated a series of informal consultations with Member State delegates for the purpose of perfecting the draft resolution of creating an annual commemoration to be inscribed on the official UN Calendar of Observances for an International Day for Women and Girls in Science. A representative of RASIT served as an informal consultant to the Permanent Mission of Malta throughout the consultations.

As informal consultations proceeded, a number of Member States decided to join the list of co-sponsors. On Friday, 4 December, a dream became a reality, when the Second Committee adopted without a vote draft resolution, A/C.2/70/L.4/Rev.1, proclaiming annually on 11 February a commemoration of the International Day of Women and Girls in Science.

On 22 December 2015, an historic moment was reached in which the 70th Session of the United Nations General Assembly adopted resolution 70/212 at 16.00 (USA EST) proclaiming February 11th annually the International Day of Women and Girls in Science. The adoption of the resolution was watched by women in science from around the world. The sponsorship of more than 65 countries and the approval of all Member States to the resolution signals the global community's interest in transforming our world through achieving gender parity in educational opportunity and scientific participation and preparation.

The partnership between the Royal Academy of Science International Trust (RASIT) and the Government of the Republic of Malta illustrates Sustainable Development Goal 17, which is Strengthen the means of implementation and revitalize the global partnership for sustainable development.
Women have literally played a role with men through 4,000 years of recorded history in terms of science. There have been many women scientists in all fields, very often relegated to footnotes in history.

The Logo, designed by Bilal Wazir, shows that great women in science who initially paved the way for those who come later in every walk of life will encourage girls to see women role models in order to find the inspiration to enter into science. The Logo color shows equality, equity and parity of science, and that science belongs to all citizens, male or female, rich or poor, young or old.

The Royal Academy of Science International Trust organized the first commemoration of the International Day in close collaboration with the United Nations Department of Economic and Social Affairs (UN-DESA); and second commemoration in close partnership with the Government of Malta.

The participation of the highest levels of the UN system agencies and programmes, Inter-governmental Organizations and Member States, demonstrates the continuing resolve and commitment of international community to eliminate gender inequality in science, employment, opportunities and education.

“The real solutions for world’s problems like global warming will be invented by girls like me. Girls have a lot to share that adults do not think about, so when we talk, listen”

—Rebecca Jhagian, 1st International Day of Women and Girls in Science, UNHQ 2016

“Take the vision and wisdom from scientists; given the fact that I will be a future woman in science, thus take the vision and the wisdom from me”

—Tulya Ozdemir, 2nd International Day of Women and Girls in Science, UNHQ 2017
In 2018, the third commemoration was organized by RASIT, the Government of Malta, the United Nations Conference on Trade and Development (UNCTAD) and the Permanent Representations of Costa Rica, Hungary and Vietnam to the United Nations; with the co-sponsorship of the Permanent Representations of Argentina, Australia, Colombia, Cyprus, Georgia, Paraguay, Portugal, Rwanda and San Marino to the United Nations; as well we the International Labour Organization (ILO), the World Intellectual Property Organization (WIPO), International Telecommunication Union (ITU) and the International Union for Conservation of Nature (IUCN).

The third Forum featured the First Panel of Girls in Science. There, girls from all over the world, including from Costa Rica, China, Canada, Peru, India, Turkey, Egypt, the US, Israel, and other countries came together to discuss solutions to achieve gender equality in the sciences. Following the panel discussion, Girls in Science created a list of recommendations, which were presented at the closing ceremony and were approved by acclamation.

The Third Forum held on 8-9 February 2018 in New York UNHQ lead to an outcome document entitled “Equality and Parity in science for Peace and Development” endorsed by 23 Member States.

Paragraph 12 of the Outcome of the third international day of Girls and women in Science:

“Welcome innovative approaches to catalyze additional domestic and international, private and public resources for the creation, development and diffusion of innovation and technologies and associated know-how, including transfer of technology on mutually agreed terms, in order to promote the access and participation of women and girls, throughout their life cycle, in particular in developing countries.”
International Day of Women and Girls in Science

11 - 12 February 2019

United Nations Headquarters, New York City

Investment in Women & Girls in Science
for Inclusive Green Growth
I warmly welcome you to join us for the fourth International Day of Women and Girls in Science Forum, to be held from 11 – 12 February 2019 at the United Nations Headquarters in New York.

Since its inception in 2016, the International Day of Women and Girls in Science Forum has been one of the flagship events of the United Nations and a key event for women and girls in science, science experts, policymakers and diplomats to gather and share their vision, expertise and best practices to achieve Equality and Parity in Science for Sustainable Development.

For the 2019 Forum, the Program Committee aims to develop a technical program that will showcase best practices and solutions to move Investment in Women and Girls in Science for Inclusive Green Growth into the mainstream discourse, and to identify implementation gaps and create an International Framework and Action Plan for Investment in Science for Inclusive Green Growth.

Interventions are required at several stages and with policy tools as well as focused programs to shift priorities, investments, perceptions on women’s and girls’ place in STI, and institute practical measures that directly respond to barriers that hinder women’s and girls’ success. The Forum will explore innovative ways to ensure coherence among the thousands of initiatives that are mushrooming to ensure scale and value added.

To this end, interventions relating to best practices and innovative solutions are highly welcomed. We hope the International Day of Women and Girls in Science Forum will be a platform for you to share your ideas and experiences with peers around the globe, and to contribute towards the common goal of Equality in Science for Sustainable Development.

Looking forward to meeting you on 11 and 12 February 2019 at the United Nations Headquarters.

HRH Princess Nisreen El-Hashemite, BSc MSc MD PhD
Executive Director, Royal Academy of Science International Trust
Founder President, Women in Science International League
Over the past 25 years, the United Nations and its agencies have drawn the attention of the international community to the serious gender gap that affects science. The role that women should play in science at all levels has thus become a priority on the agendas of many national and international political institutions. Yet, the advancement of women and girls in science has not only stalled, but has started regressing with a widening of the gender gap in science. Reversing this trend and recognizing the rightful role of women in science both as change agent and recipient of support in science will be indispensable in order to achieve the 2030 Development Agenda.

Based on research for the Hamilton Project at the Brookings Institute, women are underrepresented throughout the innovation pipeline. Women earn 57 percent of all college degrees, but only 35 percent of STEM degrees. As such, females represent only 22 percent of the STEM workforce and just 16 percent of patent holders. Nothing matters more for progress, strong sustainable economies and quality living standards than innovation.

As we enter the fourth industrial revolution, we are in uncharted waters that offer unprecedented opportunities for wealth creation to those who can help solve the world’s biggest challenges. It is the first time in history that governments, businesses and civil societies across the globe are aligned in what the problems are and in committing resources to co-creating attractive markets to address them under Agenda 2030. Some women, with their deep understanding of the needs and problems of the underserved, are uniquely positioned to help solve them. To do so, these women must acquire the problem solving skills usually developed in STEM disciplines or have access to STEM resources. They will also need productive assets like financial capital, and networks to capitalize on their knowledge and build wealth.

Female talent pipeline for high-growth sectors and geographies should be the main investment target so we can magnify their wealth-creating potential. The World Bank and United Nations have proven that investing in women is smart economics and can help accelerate sustainable development since women more than men reinvest in their earning in their families and communities. While the problems addressed by the SDGs exist all over the world, developing countries with booming populations have significantly greater needs and opportunities; thus STEM businesses could have greater impacts and deliver higher returns on investment. By 2025, 97% of worldwide population growth will occur in the developing countries. Emerging markets with no legacy systems and infrastructure can leapfrog the developed countries by adopting new best in class technologies like blockchain and Internet-of-Things enabled micro– and pico- grids and decentralized small water purification systems, accelerating the adoption of solutions that raise the quality of life for the disadvantaged. Solutions developed for the poorest in emerging economies, the “pro-poor bottom up” innovations, can also be translated into profitable innovations for richer populations.
The Fourth International Day of Women and Girls in Science Forum is focusing firmly on:

“Investment in Women and Girls in Science for Inclusive Green Growth”

The Royal Academy of Science International Trust (R.A.S.I.T) welcomes Women and Men Experts and leaders to share their best practices, strategies and applied solutions which address the challenges and provide opportunities under the following domains:

♦ Review of UN Secretary-General’s Strategy on New Technologies, relevant United Nations and other international organizations’ plans and programmes of action pertaining to the situation of Science, Technology and Innovation.

♦ Understanding Investment in women and girls in science for inclusive green growth through capacity building, provision of funds, cooperation and data governance (gap in statistics, data to address policy concern, stakeholder coordination, data sharing/ exchange, etc.)

♦ Promoting Integrated Policies for Investment in Inclusive Science for Achieving Implementation of the 2030 Agenda through a “One UN” lens.

♦ Framework that aims to ensure women capture at least 30% of the world’s resources to be created through implementation of Agenda 2030 to bring balance to decision making and power with purpose, creativity, and compassion.

♦ Specific topics and applications could include inter alia (i) evaluation of the economic and social impact of Women in Science in Sustainable Development Programmes, (ii) measurement of SDGs indicators related to investment, equality and parity in science, technology and innovation.

The focus of this Forum is on high quality presentations, discussions with thought leaders, investors, technical support agencies, diplomats, governmental bodies, and debates with peers on practical approaches that address current challenges and emerging issues.
The Fourth International Day of Women and Girls in Science Forum, is organized by the Royal Academy of Science International Trust (RASIT) in close collaboration with the United Nations Conference on Trade and Development (UNCTAD), and the Permanent Missions to the United Nations of the Slovak Republic, Portugal and Hungary with the co-sponsorship of: United Nations Institute for Training and Research (UNITAR), World Intellectual Property Organization (WIPO), International Telecommunication Union (ITU), the International Labour Organization (ILO), The African Union, Organisation Internationale de la Francophonie, and the Permanent Missions to the United Nations of: Hungary, Poland, Saint Vincent and the Grenadines, Viet Nam, San Marino, the Philippines, Cyprus, Tonga, Guatemala, Kenya and Zambia, as well as the Ministry of European Affairs and Equality of the Republic of Malta.

The purpose of this Forum is to harness the strategies, expertise and resources across the broadest spectrum of policy-makers, professionals, civil society and the private sector to move investment in women in science for inclusive green growth into the mainstream discourse, and to identify implementation gaps and co-create action plans. It is anticipated that this will spark sustained public demand for lasting political action within the UN Intergovernmental processes and other international, regional and national fora.
Guest Speakers

Professor Frances Corner OBE
Head of London College of Fashion,
Pro-Vice-Chancellor, University of the Arts London

Ms. Tahira Raza
CEO & President, First Women Bank Limited, Pakistan

Ms. Shelly Porges
Co-Founder, Managing Partner, The Billion Dollar Fund for Women

Mr. Ildar Kreutter
CEO Finance Norway

Professor Christine Anne Royce
President, National Science Teachers Association (USA)

Professor Elaine Monica Davis
Trinidad and Tobago

Mr. David Teten
Managing Partner, Managing Partner - HOF Capital

Professor Snezana Savić
Vice-dean for research and international collaboration
Faculty of Pharmacy - University of Belgrade

Professor Sun Xuefei
Beijing Institute of Fashion Technology, China

Enke Bashllari, Ph.D.
Managing Director, Adolift Ventures

Dr. Mariana Boresan
Co-Founder & President, Acta4 Foundation
Chair of Renove

Mr. Josh Cohen
Co-Founder & Managing Partner
City Light Capital and Co-Founder Impact Network

Dr. Amal Qattan
School of Medicine and Health Sciences,
Georgetown University

Marie Claire Daveu
Chief Sustainability Officer and Head of International Institutional Affairs, Kotting

HRH Prince Zain El-Hashemite
Founder
"V 4 X" Initiative for Equity in Science

Galila Khosr Makhkamova
Founder and Board Chair
National Association of Business Women of Tajikistan
Programme Agenda

Monday February 11

10.00 – 13.00:
10.00 - 10.45: Opening Segment

Moderator: Miss Julie Levey (USA), 16-year-old Aspiring Medical Doctor

Remarks:

- H.E. Ms. María Fernanda Espinosa, President of the 73rd Session of the General Assembly (tbc)
- H.E. Mr. António Guterres, United Nations Secretary-General (tbc)
- H.E. Ambassador Inga Rhonda King, President of the Economic and Social Council (tbc)
- HRH Princess Dr. Nisreen El-Hashemite, Founder President of Women in Science International League and the Executive Director of the Royal Academy of Science International Trust

Woman in Science: Suhad Abdulrahman Yasin (Iraq)

Girls in Science: Miss Sthuthi Satish (India) and Miss Huaxuan Chen (Canada)

“Y 4 X” Movement Remarks: HRH Prince Zain El-Hashemite

10.45 – 13.00:

High-Level Panel on: Investment in Women and Girls in Science for Inclusive Green Growth

Science, research and innovation play vital enabling roles in the 2030 Agenda for Sustainable Development and in transforming society’s prosperity and economy. The challenges facing the world’s countries – its prosperity and economy, creativity, exchange, equity, and opportunity – will be met only if increased investment in Science, Technology and Innovation (STI) is met.

This Panel will focus on

- The current public-sector financing of science, the future financing of science specifically as it pertains driving inclusive green growth.
- Investing in Women in Science to attract and retain high caliber researchers and build the capability of existing researchers.
- Investing in research that aligns to a State’s priorities.
- Building strategic international partnerships – to increase international collaboration in research and development, and to promote increased investment in research that strengths economy.
- Investing in strategic infrastructure – to ensure gender- and community- equality in science,
research and innovation community as well as access to the equipment, facilities and infrastructure needed to undertake industry relevant research.

- the Role of Laws, Regulations and Incentives to Fuel Investment in Women and Girls in Science

13.00 – 14.45: Lunch Break

15.00 – 18.00:
High-Level Panel on Investment in Science for Inclusive Green Growth: Multi-stakeholder Engagement

Industry collaboration, entrepreneurship and commercialization – to strengthen the links between education, research and industry is of importance to improve translating research into new products and services.

The Panel will focus on the private sector financing of science & innovation pipeline, specifically as it pertains driving inclusive green growth.

This Panel aims to mobilize and connect the diverse funders and investors of the innovation pipeline and science with women in science (life / applied or social sciences). These include aid agencies, financial institutions, philanthropies, alliances in support of women entrepreneurs and women with expertise from a wide range of disciplines that can contribute to achieving the sustainable development goals.

Tuesday February 12

10.00 – 13.00:
High-level Panel on Investing in Science Education for Shaping Society’s Future

Scientists contribute greatly to the economic health and wealth of a nation. However, worldwide, the levels of participation in science and technology in school and in post-school education have fallen short of the expectations of policy-makers and the needs of business, industry, or government.

The continuing concern to find the reasons why young people decide not to study science and technology is a critical one if we are to solve the underlying problem. Furthermore, while science and technology play key roles in today’s global economy and leveling the playing field among various demographics, young people particularly girls are turning away from science subjects. Clearly, raising interest in science among young people is necessary for increasing the number of future science professionals, as well as, providing opportunities for all citizens of all countries to understand and use science in their daily lives.

To achieve sustainable development throughout the world, education policy makers need to allocate high priority and considerable resources to the teaching of science and technology in a manner that allows students to learn science in a way that is practiced and experienced in the real world by real scientists and engineers. Furthermore, to accomplish this goal, sustained support is needed to increase and improve teacher training and professional learning for STEM educators. By meeting these two needs, we can better accomplish the ultimate aim which is to educate the scientists, technologists, technicians, and leaders on whom future economic development is perceived to depend over a sustained period of time.

In line with the 2019 High-Level Political Forum, this session will discuss
- SDG 4 with special focus on Science Education.
- Reforming the science curriculum to promote learning science the way it is practiced and experienced in the real world by real scientists and engineers.
- Providing quality and prepared teachers for every child to include increasing the number of women and other underrepresented demographic role models for students.
- Considering how science education provides us with a scientifically adept society, one ready to understand, criticise and mould the future of research, as well as, serving as an integral part of feeding into the pipeline for future scientists.
- Identifying factors influencing participation in science, engineering and technology as underrepresented populations including young girls make the transition from school to higher education.

Parallel Panel: 10.00 - 13.00

Girls in Science for Sustainable Development: Vision to Action

This Session will be convened by young change-makers and passionate girls-in-science advocates from around the world to present their vision on how they can utilize science to achieve sustainable development goals. Further, girls in science will experience interacting and debating with UN Officials, Diplomates, women in science and corporate executives.

This session strives to empower, educate and embolden the potential of every girl. The aim of this Panel is give girls the opportunity to gain core leadership skills, training in community-building and advocacy.

In line with the 2019 United Nations High-Level Political Forum, Girls in Science will focus around:

- SDG 4 aims to promote lifelong learning opportunities for all. How can we improve science education around the world? What resources or opportunities would be effective in achieving this goal? And How can we use technology to improve science education and opportunities for students around the world?
- Nearly ½ of the world population live in poverty. SDG 8 aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. What is the importance of STEM for girls and women for economic growth and how do we encourage and implement this? What role does science and technology play in reducing poverty around the world?
- SDG 10 aims to reduce inequalities around the world. What are some current inequalities that girls are facing and what can be done to ameliorate this?
- Following the Paris Agreement a few years back, climate change has become an increasingly discussed topic; SDG 13 focuses on climate action. What is the significance of this Sustainable Development Goal today and what contribution does women and girls in science make on this issue?
- What is being done in your communities to solve the SDGs in this respect? Has it been effective? Why or why not? Would it be effective in other countries? What are some issues you or people you know face in your country in relation to these concerns?

13.00 – 14.45: Lunch Break
15.00 – 16.30:

**High-Level Panel on The Science of Fashion for Sustainable Development**

Fashion embodies human pleasure, creativity, social codes and technologies that have enabled societies to prosper, laid burdens on the environment and caused competition for arable land. No single actor, action nor technology is sufficient to shift us away from the environmental and social challenges embedded in the fashion industry - nor to meet the demands for sustainable development of society at large. However, scientific and technological developments are important for progress towards sustainable fashion.

This Panel aims to shed light on the role of science, technology, engineering and mathematics skills for fashion and sustainable development programs.

16.45 – 18.00:

**Closing Session**

- Summary of Panels and Sessions by Chairs and Moderators
- Introducing the Outcome Declaration for Member States to Approve and Adopt
- Announcing the Global Fund for Women and Girls in Science
“I urge commitment to end bias, greater investments in STEM education for all women and girls as well as opportunities for their careers and longer-term professional advancement so that all can benefit from their ground-breaking future contributions.”

---- António Guterres, 11 February 2017