

7th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

5-6 May 2022

VIRTUAL INNOVATION EXHIBIT

A lightning talk series featuring the winners
of the 2022 UN Calls for Innovations



In this session, innovators will describe their cutting-edge initiatives and share insights from their experience implementing development solutions in areas including economic development, vulnerable populations, environment, agriculture, and space applications across 17 countries. They will discuss opportunities for these new technologies to support sustainable and inclusive recovery from the pandemic towards a brighter future.

Facilitated in Partnership By



**United
Nations**



Featuring opening remarks by:

- **Ms. Anita Gurumurthy (Moderator)**, Founding member and Executive Director, IT for Change, Bangalore, India. [Secretary-General's 10-Member-Group]
- **Ms. Quarraisha Abdool Karim**, Laureate of the L'Oréal-UNESCO for Women in Science International Awards. [Secretary-General's 10-Member-Group]
- **Ms. Sophia Huyer**, Gender and Social Inclusion Research Leader for CGIAR Research Program on Climate Change, Agriculture and Food Security

Innovator Lightning Talks

Introduction & Facilitation: Lana Zaman, Associate Sustainable Development Officer, United Nations Department of Economic and Social Affairs

SESSION 1: SPACE APPLICATIONS TO ADDRESS SUSTAINABLE DEVELOPMENT

Moderated by: Anita Gurumurthy (Moderator), Founding member and Executive Director, IT for Change, Bangalore, India. [Secretary-General's 10-Member-Group]

Lightning Talks by:

- **Charles Mwangi**, Research, Education and Outreach Lead, Kenya Space Agency
- **Victor Hugo Ayerdi Bardales of the UVG CubeSat Quetzal-1 Team**, Universidad del Valle de Guatemala (UVG)

SESSION 2: INNOVATIONS TO SUPPORT ECONOMIC DEVELOPMENT AND VULNERABLE POPULATIONS

Moderated by: Quarraisha Abdool Karim, Laureate of the L'Oréal-UNESCO for Women in Science International Awards. [Secretary-General's 10-Member-Group]

Lightning Talks by:

- **Rola Fayyad**, Founder & CEO, ViaVii
- **Tofara Lindsay Chokera**, Founder, TofaraOnline: Digital Marketing and Innovation Consulting Trust
- **Francisco Javier Cardenas Ibarra**, CEO & Founder, Rotamundos
- **Atish Shah**, Founder, Roverlabs

SESSION 3: INNOVATIONS TO ADVANCE ENVIRONMENTAL AND AGRICULTURAL SUSTAINABILITY

Moderated by: Sophia Huyer, Gender and Social Inclusion Research Leader for CGIAR Research Program on Climate Change, Agriculture and Food Security

Lightning Talks by:

- **Gerhard Dust**, Founder & CEO, Polycare
- **Adelaide Njoki**, RepoSand Glass Recyclers Limited
- **James Robert Brown**, Chief Technology Officer, Bondi Bio
- **Rebecca White**, CEO, Pebble Labs Inc.

Innovations Featured at the STI FORUM 2022

The Virtual Innovation Exhibit showcases burgeoning innovators who are addressing sustainability issues in local communities, particularly by developing and scaling up innovations that address multiple SDGs and/or that address the needs of vulnerable communities. This year's exhibit showcases some of the winners from various competitions and challenges throughout the UN System, including:

- WTO's [Digital Champions for Small Business](#)
- UNOOSA's [Human Space Technology Initiative \(HSTI\) Orbital Opportunities](#)
- UNWTO's [Global Rural Tourism Startup Competition](#)
- UNIDO's [Global Call for Innovative Solutions and Technologies vs. COVID-19 and beyond \(2020\)](#)
- [World Food Forum Startup Innovation Awards](#)
- UNECA's [ORIGIN Innovation Challenge](#)

2022 Winners



[TofaraOnline : Digital Marketing and Innovation Consulting Trust](#) – TofaraOnline is a digital Marketing and Innovation Consulting Trust and our main aim is to empower MSMEs and women to adopt digital marketing and emerging technologies for international Trade.



[Polycare](#) – Polycare innovates in the fields of construction materials, building processes and architecture. The research led to the invention of a polymer concrete building block, the Polyblock, by substituting filler materials such as precious sands that are important for our ecosystems and replacing cement as a binder with a very high CO2 footprint.



KENYA SPACE AGENCY
Possibilities beyond our skies

Kenya Space Agency – Project MIDST seeks to develop technical capacity to assist National and County Government organizations in Kenya to use open source tools and data to enhance the utilization of Earth Observation and related space-related technologies to inform the decision making process. MIDST focus on developing products based on pilot studies together with relevant stakeholders across three areas; forests, urbanization and Floods/Landslides.



Rotamundos

Rotamundos – In Rotamundos we are building the new consciousness tourism; a tourism that emphasizes culture, heritage and environment value, supporting local communities and minimizing environmental impacts. Digitalization allows small and independent establishments to obtain tools that help them optimize resources, hyper-connect them and allow them to open up to a borderless market in which to offer their services.



Pebble Labs Inc. – Pebble Labs’ platform technology, Directed Biotics™, delivers safe and effective biological solutions to sustainably protect crop yields and quality by targeting formidable pests and diseases. The key to our Directed Biotics™ technology is delivery: our microbes are precision engineered to safely and effectively provide RNA-based protection against the diseases and pests we are targeting.



BONDI

Bondi Bio – Bondi is a pioneer in Solar biomanufacturing - combining cyanobacteria and synthetic biology to capture and convert CO2 into valuable Natural Products: reducing atmospheric carbon and offering an elegant solution for high value compounds and the generation of substantial revenues.



[Universidad del Valle de Guatemala \(UVG\)](#) – CubeSat Quetzal-1, the first Guatemalan satellite, operated 211 days in space. 84,775 of its data packages were received on Earth. Its impact goes beyond the technical information it provided since it opened the aerospace engineering field in Guatemala.



RIVERLABS

[Roverlabs](#) – Our product(Mono-1), the Low cost 3-D printed myoelectric-hand made locally, will give them the confidence and help to eradicate negative perceptions and bias of the society towards them.



[ViaVii](#) – ViaVii is a central hub which provides customers with opportunities to engage in original local experiences and activities. ViaVii utilizes artificial intelligence (AI) to conduct sentiment analyses which are then used to personalize offerings and provide each customer with the help they need throughout their unique journey.



[RepoSand Glass Recyclers Limited](#) – RepoSand Glass Recyclers is located in Nairobi, Kenya. Our solution addresses two problems: waste glass in minefields and highly-priced construction aggregate. The project reduces environmental waste and benefits waste collectors (bottom of the pyramid community dwellers) by increasing their revenue as it adds to their revenue channels.

