



GLOBAL CLIMATE CHANGE: FINDING WAYS TO SAVE OUR WORLD

POST-CONFERENCE REPORT

2022

**HOSTED BY THE CENTRE FOR
CLIMATE CHANGE RESEARCH
TORONTO, CANADA**

**PREPARED BY
Esther Somanader & Aashi Kalra**





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ABOUT THE CENTRE FOR CLIMATE CHANGE RESEARCH

The Centre for Climate Change Research was established to conduct research in the environmental sector with the purpose of developing new technologies to mitigate climate change impacts. We have diverse partnership programs globally, including, universities, private companies, research bodies, global corporations, and non-governmental organizations. Researchers involved with this Centre and members of our board are internationally renowned experts in the environmental field.

As part of our commitment to producing and disseminating scientific research, the Centre for Climate Change Research hosted our first, international, virtual conference titled, "Global Climate Change: Finding Ways to Save Our World" on May 30th and 31st of 2022.

PROGRAM DETAILS

May 30th, 2022	General Session
10:00 a.m. – 11:30 a.m.	Keynote Speaker Session
11:30 a.m.– 12:00 p.m.	Networking Session
May 31st, 2022	Scientific Session
10:00 a.m. –12:00 p.m.	Invited Speakers and Student Researchers
12:00 p.m.–12: 15 p.m.	Awards Ceremony



OPENING REMARKS

"Good morning, thank you everyone for being with us here today. Before we begin, as an affiliated organization with the University of Toronto, I would like to acknowledge that the land on which we gather is the traditional territory of the Wendat, the Anishnaabeg, Haudenosaunee, Métis, and the Mississaugas of the Credit First Nation.

My name is Dr. Azizur Rahman and I am the President and CEO of the Centre for Climate Change Research and A.R. Environmental Solutions. One of our commitments at the Centre for Climate Change Research is the dissemination of knowledge. We believe that research should not only be limited to the scientific community, but should be made available to the general public, especially regarding issues at the forefront of our society—such as climate change. Climate change has and will impact every aspect of our daily lives. Whether it be food security, our supply chain, or our wildlife, climate change has gone from a distant concern to a global crisis. The purpose of our conference, Global Climate Change: Finding Ways to Save Our World, is to hear from researchers and professionals working in the environmental sector and discuss what they consider to be focal points in the fight against climate change.

Our conference will take place today and tomorrow, from 10am-12pm EST. Today, we will be hearing from our Keynote Speakers in our first session, and you will have an opportunity to network with some of them in our second session. Our Keynote Speakers for today include, Kevin Nilsen, the CEO & President of ECO Canada, Professor Dale Sanders, Group Leader & Director of the John Innes Centre and Fellow of the Royal Society, Professor Lewis Ziska, a professor of Environmental Health Sciences at Columbia University, and Professor Hermann Ehrlich, a professor in Biomineralogy & Extreme Biomimetics and Group Leader at the Institute of Electronic and Sensor Materials. Thank you to all our speakers for taking the time to be here with us today and we look forward to your presentations.

Before we get into the presentations, I wanted to first thank our sponsors, the publications Agriculture, Polysaccharides, and COVID. Agriculture, COVID, and Polysaccharides are international, scientific peer-reviewed open access journals published monthly and quarterly online by MDPI, respectively. If you want to learn more about our sponsors, please check out our Expo booth in our virtual lobby.

I would also like to express my appreciation to our conference committee members, Esther, Aashi, and Parnian for all the work they put into the creation of this conference. Finally, thank you again to all our attendees for joining us here today and we hope that you are able to learn a lot and make the most of this conference. Without further ado, let's get into the presentations."

Dr. Azizur Rahman

CONFERENCE COMMITTEE



DR. AZIZUR RAHMAN

CONFERENCE CHAIR
PRESIDENT & CEO OF THE
CENTRE FOR CLIMATE
CHANGE RESEARCH,
TORONTO, CANADA



**ESTHER
SOMANADER**

PROGRAM RELATIONSHIP
MANAGER & RESEARCH
ASSOCIATE, CENTRE FOR
CLIMATE CHANGE
RESEARCH



AASHI KALRA

PRESIDENT'S ASSISTANT
& RESEARCH ASSOCIATE,
CENTRE FOR CLIMATE
CHANGE RESEARCH



**PARNIAN
BAHARLOUEI**

STUDENT RESEARCH
COORDINATOR & RESEARCH
ASSOCIATE, CENTRE FOR
CLIMATE CHANGE
RESEARCH

SPEAKERS



KEVIN NILSEN
(KEYNOTE SPEAKER)



PROFESSOR DALE SANDERS
(KEYNOTE SPEAKER)



PROFESSOR LEWIS ZISKA
(KEYNOTE SPEAKER)

KEVIN NILSEN
PRESIDENT & CEO OF ECO CANADA
PRESENTATION: *ENVIRONMENTAL EMPLOYMENT
IN THE DECADE AHEAD.*

PROFESSOR DALE SANDERS
**GROUP LEADER & DIRECTOR OF THE JOHN
INNES CENTRE AND FELLOW OF THE ROYAL
SOCIETY**
PRESENTATION: *FEEDING 10 BILLION
SUSTAINABLY IN AN
ERA OF GLOBAL CLIMATE CHANGE.*

PROFESSOR LEWIS ZISKA
**PROFESSOR OF ENVIRONMENTAL HEALTH
SCIENCES AT COLUMBIA UNIVERSITY**
PRESENTATION: *CLIMATE, CO₂ AND FOOD
SECURITY:
CHALLENGES AND CHOICES.*

SPEAKERS



**PROFESSOR HERMANN
EHRlich
(KEYNOTE SPEAKER)**

**PROFESSOR HERMANN EHRlich
A PROFESSOR IN BIOMINERALOGY &
EXTREME BIOMIMETICS AND GROUP LEADER
AT THE INSTITUTE OF ELECTRONIC AND
SENSOR MATERIALS**

PRESENTATION: *MARINE SPONGES AND THEIR
RESPONSE TO GLOBAL CLIMATE CHANGE.*



**DR. AZIZUR RAHMAN
(KEYNOTE SPEAKER)**

**DR. AZIZUR RAHMAN
PRESIDENT & CEO OF THE CENTRE FOR
CLIMATE CHANGE RESEARCH AND A.R.
ENVIRONMENTAL SOLUTIONS**

PRESENTATION: *FIGHTING AGAINST CLIMATE
CHANGE AND CHANGING THE WORLD.*



**PROFESSOR FULU TAO
(INVITED SPEAKER)**

**PROFESSOR FULU TAO
PROFESSOR AND RESEARCH TEAM HEAD AT
THE INSTITUTE OF GEOGRAPHIC SCIENCES
AND NATURAL RESOURCES RESEARCH AND
THE UNIVERSITY OF CHINESE ACADEMY OF
SCIENCE**

PRESENTATION: *BUILDING GREEN AND
CLIMATE-RESILIENT AGRICULTURE: CASE
STUDIES IN CHINA.*



STUDENT RESEARCHERS FINALIST

Name	Abstract Title
Dr. Muhammad Tahir Khan	Marine natural compounds as potents inhibitors against the main protease of SARS-CoV-2.-a molecular dynamic study
Dr. Atikur Rahman	Effects of Climate Change on Citrus Irrigation Requirements in Arid and Semi-Arid Environments
Mr. Dafydd Phillips	Ambient Air Quality Synergies with a 2050 Carbon Neutrality Pathway in South Korea
Miss Pritha Datta	Do Farmers Perceive Climate Change Clearly? An Analysis of Meteorological Data and Farmers' Perceptions in the Sub-Himalayan West Bengal, India
Miss Jade Arsenault Lewis	The effects of salt concentration and water temperature on the abundance of Cyanobacteria in Lake Simcoe, Ontario
Miss Sajitha Siril	Homegardens- a sustainable micro landscape solution for climate change: a meta-analysis
Miss Shahina Nowshad	A global tool for climate change mitigation with special reference to India

WINNERS OF SCIENTIFIC SESSION



1ST PLACE WINNER: DAFYDD PHILLIPS

PRESENTATION TITLE: AMBIENT AIR
QUALITY SYNERGIES WITH A 2050
CARBON NEUTRALITY PATHWAY IN
SOUTH KOREA



2ND PLACE WINNER: DR. MUHAMMAD TAHIR KHAN

PRESENTATION TITLE: MARINE
NATURAL COMPOUNDS AS POTENTS
INHIBITORS AGAINST THE MAIN
PROTEASE OF SARS-COV-2.-A
MOLECULAR DYNAMIC STUDY

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agriculture



polysaccharides



COVID

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SUMMARY AND FUTURE DIRECTIONS

Through our conference, attendees were able to learn about environmental and climate change impacts regarding marine life, agriculture, public health, food security, and employment from both professionals and researchers in the environmental sector. We had presentations from our keynote speakers, networking opportunities, and an awards ceremony for the winners of our Scientific Session over the course of two days. The combination of research and practical applications allowed for a diverse program and accessibility to a more general audience. Going forward, we recommend that there should be more partnerships with academic institutions and corporations to allow for growth in funding and advertisement of the conference. Furthermore, advertisement of the conference should start a few months prior to the conference to allow for more registrants and potential partnerships. We also recognize the importance of disseminating scientific research to a general audience and ensuring that our audience hears from diverse voices in both the professional and academic realm. For future reference, we will be inviting more speakers that have diversified backgrounds and experiences to our conference.

Due to the virtual nature of our conference, the management of "Global Climate Change: Finding Ways to Save Our World" was limited to Zoom Events. We hope to hold our next conference in-person, which would require more funding in regards to advertisement, location, and accommodations. While our attendees and speakers were able to communicate effectively through our virtual platform, the magnitude of our conference will be greater once it is in-person. We believe that through this conference, we have achieved our goals of disseminating scientific research, providing a platform to student researchers, and translating theoretical concepts into practical solutions. Overall, "Global Climate Change: Finding Ways to Save Our World" was carried out successfully and we look forward to expanding the knowledge gained from our conference in the subsequent years.