



NETWORK4SUSTAINBLE
NANOTECHNOLOGY

INTERNATIONAL NETWORK 4 SUSTAINABLE NANOTECHNOLOGY (N4SNANO)

ANNUAL REPORT

2021

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Preface

The International Network for Sustainable Nanotechnology (N4SNano) ventures to bring about a healthy sustainable future by advocating for safe use of nanotechnology and through connecting global leaders of nanotechnology and sustainability to collaborate and support the United Nations Sustainability Goals.

This is a critical moment for the world as seen by the many activities of national leaders, including the 2021 United Nations Climate Change Conference (COP26) summit and the cascade of activities that followed such as the Glasgow Climate Pact, WHO Guidelines for Healthy and Sustainable Living and an updated UNSDG agenda for 2025, to name a few. Nanotechnology is on the precipice of scientific advancements, and as such, there is a duty for this multi-disciplinary field to bridge barriers and work towards a better and more sustainable future.

As a consortium of leading organizations in the field of nanotechnology representing institutes, universities, non-profit and governmental agencies, N4SNano collates diverse stakeholders to co-design and collaborate cutting-edge nanotechnology use for sustainable growth and development. We are proud to say that as a community, we are driving forward instrumental movements in the Nanotechnology sector which are vital for obtaining a healthier and more sustainable tomorrow.



Message from the — Joint Secretariat

We are so thankful for and proud of the achievements of Network4Sustainable Nanotechnology (N4SNano) members, partners, and professional staff for their efforts to navigate the difficult personal and professional circumstances of the pandemic. Since our first conference in November 2020, we have chartered an exciting path working with our founding members and network supporters to ensure that we bring tremendous opportunities to our nanotechnology community by presenting a collective vision of creating a better world for tomorrow.

Despite the global challenges we faced, we have remained keenly focused on our Networks mission to create a collaborative network of nanotechnology institutes and centres, industry, government agencies, not-for-profit organizations, and the end-user community, to champion nanotechnology solutions for a sustainable future. In 2021 we saw the successful launch of our website for N4SNano, Twitter account and the widening of our Network as we invited five Academic Members. We are excited by the future growth of this Network and welcome expressions of interest which can be accessed via our website: <https://network4sustainablenano.org/eoi/>.

The ongoing pandemic has altered some of our plans. However, we find ourselves well aligned with the outcomes of COP26, the release of the UNSDG 2022-2025 Strategic Plan and 2021 has brought a keen focus on sustainability, global unity, and better health outcomes. As such, we are happy to inform you that the launch event of the Global Summit on “Nanotechnology for a Healthier and Sustainable Future” will take place during Feb. 22nd – 23rd (Waterloo, Canada) and Feb. 23rd – 24th (Sydney, Australia), 2022, which will build the momentum for the 2022 Global Summit, to be held later in 2022. Both the early launch event and the Global Summit will host international and multidisciplinary perspectives on Nanotechnology as it applies to Health and Sustainability. We welcome you all to participate in the launch event and let us work collectively to create a successful 2022 Global Summit.



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About N4SN

The International Network for Sustainable Nanotechnology (N4SN) is a consortium of leading organizations in the field of nanotechnology representing institutes, universities, non-profit and governmental agencies.

The network provides a platform for international collaboration and a wealth of capabilities, skills, and Nano-Safety Awareness. Each year, a Global Summit will be held and welcomes nanotechnology institutes and centres, industry, government agencies, not-for-profit organizations, and the end-user community, for discussion and Codesign of Nanotechnology applied to at least one of the United Nation Sustainability Goals (UNSDG). Aligned with the global demands for climate change health impacts, 2022 welcomes the exciting discussion of the UNSDG #3: Good Health and Wellbeing.

The Network originated from the International Workshop on Nanotechnology for a Sustainable Future, a virtual event held in November 2020, co-organized by the University of Waterloo and the Consulate of the Netherlands in Canada. The workshop featured 26 speakers from five countries spanning four continents and was attended by 250 people from 15 different countries. Follow-up discussions with the workshop organizers led to the formation of this network.

Founding members of the Network are from the Waterloo Institute for Nanotechnology (WIN) in Canada, MESA+ Institute for Nanotechnology from the Netherlands, the University of Sydney Nano Institute (Sydney Nano), and the University of California Los Angeles (UCLA). The Japan Science & Technology Agency (JST) has been a supporting member since its inception.

The Vision of N4SNano is to be a global leader, innovator, educator, and influencer (ie, thought leader) for the advancement of nanotechnology for a sustainable future.

Its Mission is to create a collaborative network of nanotechnology institutes and centres, industry, government agencies, not-for-profit organizations, and the end-user community, to champion nanotechnology solutions for a sustainable future.

Our Members



Founding Members



MESA+ Institute |
University of Twente



The University of
Sydney Nano Institute



UCLA



Waterloo Institute for
Nanotechnology

Academic Members



Botswana Institute for Technology
Research & Innovation



London Centre for
Nanotechnology

Supporting Member



Japan Science and
Technology Agency



Centre for Sustainable
Nanomaterials Innovation
(CESNI)

University of Guelph Centre for
Sustainable Nanomaterials
Innovation (CESNI)



Mauritius Center for
Biomedical and Biomaterials
Research (CBBR)



Bar-Ilan Institute of
Nanotechnology &
Advanced Materials (BINA)

2022 Events

Following the successful 2020 International Workshop in “Nanotechnology for a Sustainable Future”, we are excited to announce that 2022 brings two unique opportunities for further depth into UN SDG #3 – with an early launch event of the 2022 Global Summit, in February 2022 with “Nanotechnology for a Healthier and Sustainable Future” followed by the larger 2022 Global Summit event later in the same year.

The Launch Event of the Global Summit in February is a unique opportunity to join the discussion early and will provide insight into two topics as they relate to Nanotechnology applied to Health and Wellbeing: (Day 1) Digital Health and AI Diagnostics, and (Day 2) Nanomedicine. Each day will host global leaders, key-note speakers, followed by a wider panel discussion.

The Launch event will be held on the 22-23 February 2022 (EST)/23-24 February 2022 AEDT, (approximately two hours each day) with event details circulated to members and the wider audience early in the new year. Details of the Full Global Summit will follow.

By attending, you can expect to uncover the latest scientific discoveries in these priority areas, alongside the key industry developments, projected global demand trends, the key regulatory frameworks at play, and the relationship between these areas to the achievement of supporting the UNSDGs.



Summit Steering Committee

Chair: Emmanuel Ho (WIN)

Co-Chair: Wojciech Chrzanowski (Sydney Nano)

Hien Duong (Sydney Nano)

Scott Hopkins (WIN)

Nicholas Hunt (Sydney Nano)

Markus Muellner (Sydney Nano)

Scott Taylor (WIN)

Pegah Varamini (Sydney Nano)

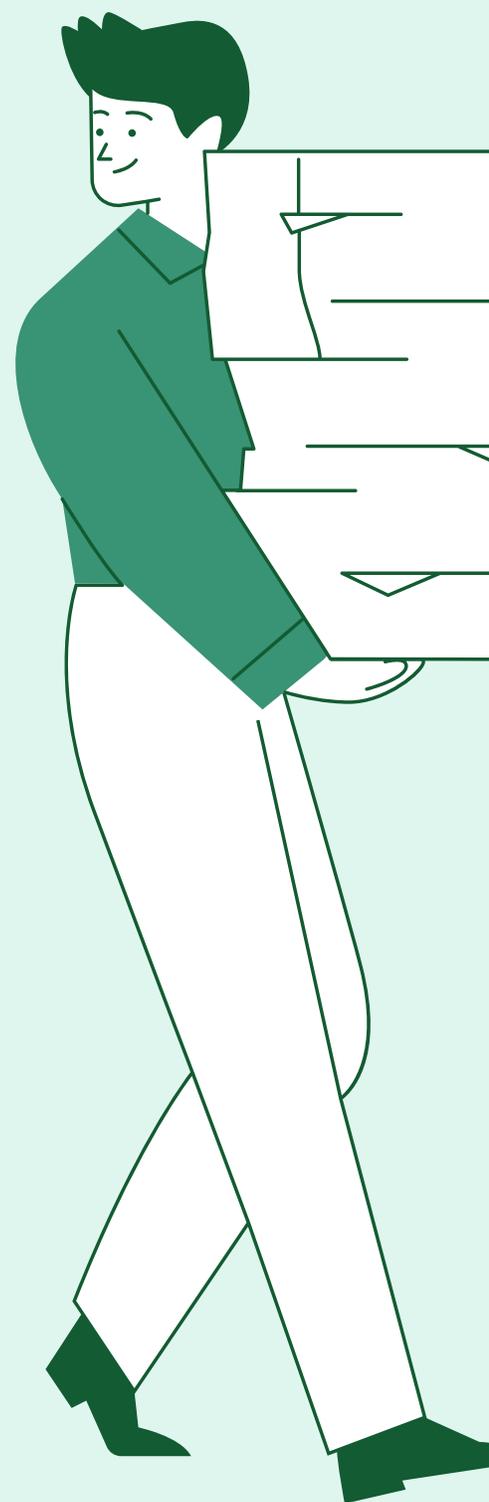
Evelyn Yim (WIN)

Boxin Zhao (WIN)

Editorial Article on Nanotechnology for a Sustainable Future

In 2021, an editorial article titled “Nanotechnology for a Sustainable Future: Addressing Global Challenges with the International Network4Sustainable Nanotechnology” was co-authored by members of the founding institutes in the initial partner countries, as well as representatives from the Japan Science and Technology Agency and invited speakers at the 2020 International Workshop. This editorial outlines the advances in nanotechnology research that are linked to the UN SDGs and how nanotechnology serves Society 5.0 and all its fundamental aspects.

Posted on December 15, 2021, at
<https://pubs.acs.org/doi/10.1021/acsnano.1c10919>



Conclusion

Together, we can bring about the positive change envisioned by the United Nations Sustainable Development Goals for a more equitable and resilient future, with Nanotechnology at the forefront.

We thank you all for your support of this Network, and we look forward to welcoming you at the Global Summit events in 2022!



Contact

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