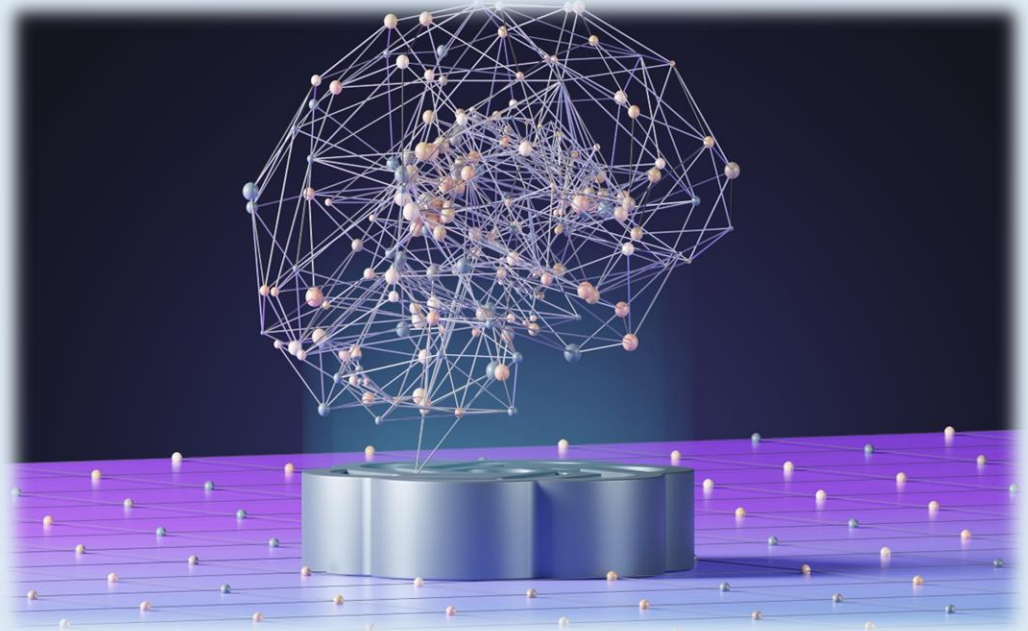




ZAMBIA ACADEMY OF SCIENCES



INSIDE

Page 2

[Science News](#)

Page 3

[Member Focus](#)

Page 4

[Opportunities](#)

ZaAS NEWS

Esteemed Members,

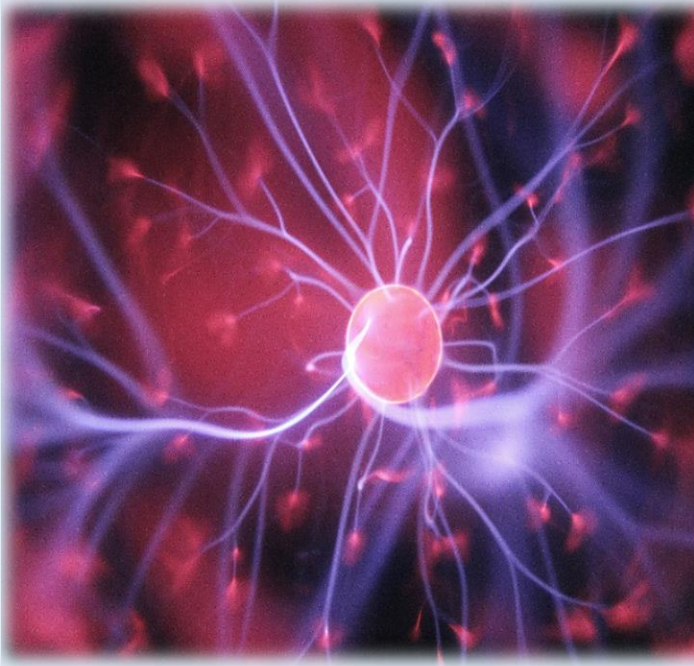
We are pleased to inform you that the 2024 Zambia Academy of Sciences General Assembly is scheduled for **19 April 2024**. Kindly make a note of this date, and the venue details will be communicated to you in due time.

In consideration of enriching our engagement, the Governing Council is contemplating the addition of a one-day Science Conference to the General Assembly, potentially extending the event to **18 April 2024** as well. **We kindly request you to mark these dates on your calendars.**

This General Assembly holds special significance as it will be an elective assembly. Some members of the current Governing Council will have completed two terms, opening up opportunities for new leadership. Your active participation is crucial for shaping the future of the Zambia Academy of Sciences.

Furthermore, we invite you to nominate distinguished scientists whom you believe would contribute significantly to our academy. Nomination forms for both [Academy Membership](#) and the [Governing Council](#), along with [Election Guidelines](#), are available for your convenience.

Your involvement and contributions play a crucial role in the success of the Zambia Academy of Sciences. We look forward to your participation in April.



SCIENCE NEWS

IMF Urges \$7 Trillion Shift from Fossil Fuel Subsidies to Combat Climate Change

IMF Managing Director Kristalina Georgieva has emphasized the urgent need for countries to redirect approximately \$7 trillion in annual subsidies for fossil fuels towards financing the global fight against climate change. Speaking at the World Economic Forum in Davos, Switzerland, Georgieva specified that this sum encompasses both direct government subsidies (\$1.3 trillion) and indirect subsidies, such as the failure to adequately price carbon emissions. She proposed setting the carbon price at \$85 per ton by 2030. Georgieva outlined that pricing carbon at 25% of this rate could generate \$800 billion, while a 50% rate could yield \$1.5 trillion. The funds generated, she argued in a climate panel alongside World Bank President Ajay Banga, could play a crucial role in mitigating the impacts of climate change. ([Read More](#))

NASAS Parker Solar Probe's Historic Journey: Racing Toward the Sun at Unprecedented Speed

In a historic moment for space exploration, NASA's Parker Solar Probe is set to achieve an unprecedented feat by racing past the Sun at a staggering speed of 195 km/s (435,000 mph) on 24 December 2024. The probe will approach within 6.1 million km (3.8 million miles) of the Sun's surface, marking the closest any human-made object has ever been to the star. Launched in 2018, the audacious mission aims to gather crucial data on solar processes, particularly the mysterious workings of the Sun's outer atmosphere, the corona. ([Read More](#))

2024 Charles Stark Draper Prize for Engineering Awarded by National Academy of Engineering

The National Academy of Engineering (NAE) has named Stuart Parkin from the Max Planck Institute for Microstructure Physics as the recipient of the 2024 Charles Stark Draper Prize for Engineering. Parkin is being acknowledged for his pioneering work in spintronic technologies, specifically the development of three novel spintronic technologies for massive data memory and storage. His spintronic reading devices, which can detect increasingly smaller bits of magnetically stored information, have played a crucial role in the digital world by enabling the storage of over 70% of all data in massive arrays of magnetic disk drives. Parkin's contributions have been instrumental in the creation of vast digital server libraries, commonly referred to as cloud storage, facilitating universal access to information and supporting advancements in various fields. ([Read More](#))

Quote

“There is no law except the law that there is no law”

- John Archibald Wheeler

MEMBER FOCUS

DR. ALICK MUVUNDIKA – TREASURER/CHAIRPERSON FOR THE COMMITTEE ON FINANCE

Dr. Alick Muvundika (PhD) is a researcher at the National Institute for Scientific and Industrial Research (NISIR). He is an environmental scientist and an international expert in waste and climate change. Dr. Muvundika's research interests are in water, energy, waste management, and climate change mitigation and has published papers in these fields. He has served on various environmental and climate change committees both locally and internationally. Currently, he is the chairperson of the Zambia Designated National Authority (DNA) - a body that looks at projects aimed at reducing greenhouse gas (GHG) emissions into the atmosphere as required under the Paris Agreement of 2015. He is one of the many global scientists who participated in the preparation of the Fifth Assessment Report (AR5) on climate change under the Intergovernmental Panel on Change for Climate Change (IPCC). Dr. Muvundika represents the African Group of Negotiators (AGN) on the Supervisory Body for the Article 6.4 Mechanism of the Paris Agreement. Dr. Muvundika is also the interim Chair for the African Group of Negotiators up to June, 2024.



PUBLICATIONS

Greenland's Glacier Retreat: Unveiling Decades of Change and Global Climate Impacts

Recent research reveals that almost every glacier in Greenland has experienced thinning or retreat over the past few decades, resulting in accelerated glacier movement, heightened sea-level rise, and broader climate impacts globally. The study, combining over 236,000 observations from 1985 to 2022, indicates that the Greenland Ice Sheet has lost approximately 5,091 square kilometres of area (± 72 km²). Additionally, the study estimates that this loss corresponds to the retreat of approximately 1,034 gigatons (Gt) (± 120 Gt) of ice. These results highlight the significant impact of calving-front retreat on the Greenland Ice Sheet and its contribution to global sea-level rise ([Read More](#)).

Women in Informal Trade Amidst COVID-19: SOA Market Cameroon

In 2019, SARS-CoV-2, known as severe acute respiratory syndrome coronavirus 2, became a global health emergency. Although the pandemic reached Africa in 2020, it had already caused significant disruptions in other parts of the world. With the onset of COVID-19, trade restrictions were implemented, impacting traders across the continent, with particularly severe consequences for women engaged in informal trade due to their limited fallback options. This study focused on assessing the effects of COVID-19 on women traders in the SOA market of Yaoundé and underscores the necessity for Africa, to develop robust risk management strategies to address the vulnerabilities of informal women traders during crises, ensuring their economic resilience and well-being. ([Read More](#))

HEALTH AND WELLBEING

Tips to Boost Heart Health:

1. **Exercise Regularly:** Engage in various forms of exercise, including brisk walking, swimming, running, or cycling. Aim for at least 150 minutes of activity per week.
2. **Strength Training:** Strengthening your muscles can reduce the strain on your heart, allowing for easier engagement in aerobic exercises. Incorporate weight lifting, resistance bands, or bodyweight exercises into your routine.
3. **Maintain a Healthy Weight:** Check your waist measurement, aiming for it to be less than half your height. This can help assess if you are within a healthy weight range.
4. **Healthy Diet Choices:** Opt for a diet rich in fruits, vegetables, whole grains, and lean proteins. Watch out for salt and sugar intake, and avoid processed foods.
5. **Limit Alcohol Consumption:** Keep alcohol intake within recommended limits to protect your heart. If you choose to drink, do so in moderation.
6. **Quit Smoking:** Smoking increases the risk of heart disease by causing the clogging of coronary arteries. Quitting smoking is one of the best things you can do for heart health.
7. **Manage Stress:** Adopt stress management techniques such as yoga, meditation, mindfulness, or spending time outdoors.
8. **Regular Health Check-ups:** Attend regular health check-ups, especially if you are over 40.
9. **Know Your Numbers:** Understand your baseline blood pressure to notice any changes over time.

Source: [The Telegraph](#)

OPPORTUNITIES

ISC Opportunities

Join the ISC's roster of experts to contribute your expertise on 20 priority topics shaping the 2024 UN agenda, including foresight, science diplomacy, and global digital cooperation. Your participation is vital for the ISC to provide timely inputs, share your knowledge through high-level briefs, and influence global policy and action. Express your interest by completing the [online form](#) by **29 February 2024**.

Opportunities: Fellowship

Chatham House Senior Research Fellow - Innovation and Sustainability

Chatham House, the Royal Institute of International Affairs opened applications for a Senior Research Fellow - Innovation and Sustainability. This role will lead in crafting engagement approaches (both in convening and research) to address sustainability challenges through innovative solutions that can be successfully implemented. ([Read More](#)).

Chatham House Senior Research Fellow – Cyber

Chatham House, the Royal Institute of International Affairs, one of the world's leading independent policy institutes has advertised for a Senior Research Fellow – Cyber to work under the International Security Programme which provides innovative, policy-relevant research in international security and defence issues. ([Read More](#))

Professional Fellows Program - Advancing Young Women in Agribusiness

The Advancing Young Women Professional Fellows Program is sponsored by the U.S. Department of State Bureau of Educational and Cultural Affairs and is administered by Michigan State University (US), University of Rwanda (Rwanda), University of Pretoria (South Africa), University of Zambia (Zambia) and Chinhoyi University of Technology (Zimbabwe). The goal of the program is to build Fellows' capacity and skills in agro-entrepreneurship and agri-food system innovation and advance their ability to support women's economic empowerment. ([Read More](#))

Open Calls

- [Call for case studies](#) on Safeguarding Intangible Cultural Heritage and Climate Actions from Asia-Pacific by the Integrated Research on Disaster Risks (IRDR) and UNESCO (**deadline: 30 January**)
- [Call for nominations](#) for the 2024 IUPAP Magnetism Award and Néel Medal (**deadline: 31 January**)
- [Apply](#) to participate in the second external review of the IPBES transformative change assessment (**deadline: 31 January**)