Annual Young Scientists' Conference Call for Abstracts

Jointly hosted by the:

Academy of Science of South Africa (ASSAf)
South African Young Academy of Science (SAYAS)
TWAS Sub-Saharan Africa Regional Partner (TWAS-SAREP)
National Research Foundation (NRF)
Human Sciences Research Council (HSRC)
South African National Space Agency (SANSA)

Date: 13-14 October 2025

Theme: Climate Change and Well-being

Venue: Anew Hotel, O.R. Tambo, Johannesburg















1. Introduction

The Academy of Science of South Africa (ASSAf), and the South African Young Academy of Science (SAYAS), in partnership with the World Academy of Science sub-Saharan Africa Regional Partner (TWAS-SAREP), the Human Sciences Research Council (HSRC), the National Research Foundation (NRF) and the South African National Space Agency (SANSA), will jointly host the Annual Young Scientists' Conference (AYSC) on 13-14 October 2025.

ASSAf and its partners invite applications from young scientists based in South Africa and across Sub-Saharan Africa to participate in the 2025 AYSC. This transdisciplinary conference will serve as a platform for scientific exchange, through collaboration, networking, and knowledge sharing among young African researchers from diverse fields.

2. Background

South Africa's G20 Presidency in 2025 is hosted under the theme *Solidarity, Equality, and Sustainability*. As the world grapples with the interconnectedness of issues such as climate change, inequality, energy poverty, food and nutrition insecurity, unemployment, technological change and geopolitical instability, South Africa's leadership marks a pivotal moment for both the continent and the broader Global South.

The 2024 Sustainable Development Goals (SDG) report warns that progress toward achieving the goals by 2030 is significantly lagging. Just six years out from the deadline, substantial investment and accelerated action are needed to avoid falling short. Obstacles include the lingering effects of the COVID-19 pandemic, escalating conflicts, geopolitical instability, and worsening climate change. The report emphasizes the need for immediate action, especially in tackling climate change, improving peace and security, and reducing inequalities globally. (https://unstats.un.org/sdgs/report/2024/). To achieve the 2030 SDGs, global multilateral platforms such as the G20 must encourage a paradigm shift and accelerate the implementation of practical solutions (https://g20.org/g20-presidency/). With an unwavering focus on inclusivity, quality, and relevance, the continent seeks to harness the boundless potential of its youth, empowering them to shape a future defined by ingenuity and resilience.

South Africa, through ASSAf, is leading the Science 20 (S20) 2025 under the theme Climate Change and Well-being. The S20's focus underscores the critical intersectionality of climate, food and nutrition, water, energy, and land systems in pursuit of actionable, science-based, and evidence-informed solutions to the effects of climate change (https://s20southafrica.org/about-s20-3/). The initiative aims to develop practical, evidence-based solutions for climate change impacts, leveraging scientific collaboration and diplomacy for inclusive and sustainable mitigation efforts that promote both human and planetary well-being.

The 2025 AYSC will adopt the S20 theme of *Climate Change and Well-being* to provide early-career scholars with a platform to engage on the nexus of food, water, land, energy, society and climate change. The conference will promote inclusive, cross-sectoral solutions to build resilience and sustainability. The scientific contributions of early-career researchers are crucial in shaping the future well-being of humans and the planet.

The AYSC serves as a dynamic forum where researchers and innovators converge to exchange ideas, forge collaborations, and chart the course for















scientific advancement in Africa and beyond. Against the backdrop of rapid technological advancement and global interconnectedness, this gathering represents a critical opportunity to harness the collective intellect and creativity of Africa's brightest minds. At the heart of the conference lies a recognition of the multifaceted challenges facing African communities and the indispensable role of science in addressing them. From healthcare disparities to environmental sustainability, technological innovation to socio-economic development, the solutions to Africa's most pressing issues and those of the world at large hinge upon robust scientific ecosystems characterised by curiosity, rigour, and inclusivity.

Moreover, the AYSC fosters scientific collaboration and knowledge sharing by connecting experts with emerging talent and promoting peer mentorship. This supportive network transcends borders and disciplines, embodying Africa's rich intellectual history and future innovation potential.

The conference sub-themes are:

a) Climate Change Impact on Human and Planetary Health

Rising global temperatures and more frequent extreme weather events, such as heatwaves, droughts, floods, and cyclones, are intensifying health risks across the globe, particularly in vulnerable regions like Africa. These impacts include heat-related illnesses, malnutrition due to crop failures, the spread of vector-borne diseases such as malaria and dengue, and the rise of mental health disorders linked to displacement and climate-related stress. Moreover, climate change increasingly threatens planetary health by degrading ecosystems, disrupting water cycles, and endangering biodiversity. This theme underscores the urgent need to integrate climate resilience into public health systems, enhance surveillance and early warning mechanisms, and promote environmental stewardship as a foundation for long-term well-being.

b) Equity in Climate Action

The effects of climate change are not evenly distributed. Low-income communities, women, children, the elderly, and indigenous populations are disproportionately affected due to existing social, economic, and geographic vulnerabilities. An equitable response to climate change requires that policies and interventions are inclusive, fair, and grounded in social justice. This includes prioritising support for those most at risk, ensuring meaningful participation in decision-making processes, and designing climate solutions that consider intersecting inequalities, prioritise social sciences and community-based initiatives. Equity must be a guiding principle in both adaptation and mitigation efforts to avoid further marginalisation and to promote more sustainable and just outcomes for all.

c) Resilience in Adaptation and Mitigation: A Holistic Approach

Building climate resilience calls for a holistic, integrated strategy that bridges adaptation and mitigation. Adaptation involves enhancing the capacity of communities and ecosystems to withstand and recover from climate-related disruptions, through actions such as sustainable water management, protecting food security, and improving access to clean, reliable energy systems. Mitigation, on the other hand, focuses on reducing greenhouse gas emissions by scaling up renewable energy, transforming agricultural















practices, and adopting sustainable transport systems. These dual approaches must be embedded in national and regional climate action plans and driven by collaboration across science, policy, civil society, and the private sector. At the same time, climate solutions should be multi-sectoral and collaborative, involving scientists, policymakers, civil society, and the private sector. Strengthening cross-sector partnerships and investing in local innovation will be essential to drive impactful, lasting climate resilience.

3. Eligibility

Applicants should meet the following criteria to participate:

- Reside within a sub-Saharan African country.
- Be below the age of forty (40) by the deadline date of the call.
- Hold a minimum of a Master's degree, and be either a current PhD candidate,
 PhD Graduate, or a Post-doctoral researcher.
- Demonstrate research interest aligned with one or more of the conference subthemes.
- Commit to attending the full duration of the conference.
- Submit a relevant abstract for an oral or poster presentation.

All applications must be submitted via this link on or before the closing date: <u>AYSC 2025</u> <u>Application Form</u> (please note: A Gmail account is required to access the form, as it includes a file upload feature)

The online application form must be completed in full and submitted by **8 August 2025**. For any inquiries, please contact: Kholani Mbhiza @ <u>kholani@assaf.org.za</u>. There is no registration fee required to attend the conference. Successful applicants will receive further information about the conference via email.

4. Call for Abstracts

4.1. Abstract Format and Submission

The abstracts should follow the format requirements:

- Abstract must not be more than 300 words (excluding Title, Author and Institution) in the attached form
- Abstract must be written in English
- Abstract title must be in boldface, capital letters (lowercase) and centred
- Abstract font must be Century Gothic 11 with A4 set up margins
- Abstract must include the following information:
 - o Title, Author(s), Institution(s)
 - Name of presenting author should be underlined (Please do not underline coauthors)
 - Institutional affiliations, city, province for all authors















- The superscript numbering must be in front of each initial and surname of each author
- Where appropriate, the text may be structured using the following headings:
 - Introduction or Objectives
 - Methods
 - Results
 - Conclusions

Example of an abstract title

Assessment of risk factors associated with maternal mortality in rural Tanzania ← 14 pts,centered, lowercase and bold

¹ <u>E Illah</u>, ²G Mbaruku, ³K Kahn ← **11pts**,centered (presenting author to be underlined, number superscript in front of initial and surname)

¹ KEMRI/CDC Research and Public Health Collaboration, ²Ifakara Health Institute, ³MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt) (number superscript in front of organisation)

4.2. Oral Presentations

All oral presentations will be conducted in English. Detailed instructions for oral presentations will be included in the abstract acceptance letter.

4.3. Poster Presentations

Accepted posters will be displayed at the conference venue. Detailed specifications and presentation requirements will be included in the abstract acceptance letter.

5. Other Presentation formats

Alternative presentation formats that stimulate dialogue and explore key issues through innovative and creative approaches are highly encouraged. These may include Literary works (e.g. drama, poetry, storytelling and prose), performing arts (e.g. dance and music), and visual arts (e.g. film and photography). Interested applicants should clearly describe their proposed format and submit details for consideration to the contact person listed below and indicate any technical requirements. Note: All proposals must maintain relevance to the conference themes while demonstrating innovative engagement methods.

6. General Conference Information

For any further information regarding the conference please contact: Mr Kholani Mbhiza Email: kholani@assaf.org.za

Closing date: 8 August 2025













