

Integrity _____ **IN SCIENCE**

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**science, technology
& innovation**

Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA

SACNASP
South African Council for Natural Scientific Professions
Integrity in science



Dr Matshidiso Matabane Pr.Sci.Nat.
Acting Chief Executive Officer

“
SCIENCE,
TECHNOLOGY
AND INNOVATION
ARE FOR EVERYONE.”

MESSAGE FROM THE CEO

As I reflect on the second quarter of the financial year, it has been a period of engagement and reflection for the South African Council for Natural Scientific Professions (SACNASP).

A significant highlight during this period was the launch of the inaugural National Science Month (NSM) 2026, officially launched by the Minister of Science, Technology and Innovation, Prof. Blade Nzimande, on 4 July 2026 at the Vaal University of Technology in Sebokeng, Gauteng. Held under the theme “Science, Technology and Innovation are for Everyone,” the launch marked an important milestone in South Africa’s science engagement landscape.

The introduction of National Science Month represents an expansion of the country’s science engagement initiatives, providing an extended platform to promote public understanding of science, technology and innovation and to demonstrate their relevance to everyday life and national development.

For SACNASP, this milestone presented an important opportunity to reaffirm our role in promoting the natural sciences and strengthening engagement with communities, learners and future professionals. Throughout the month, SACNASP participated in and hosted a range of activities focused on learner development, practical STEM education, career exposure and the professionalisation of the natural scientific professions.

These engagements reinforced the importance of making the natural sciences accessible and relevant to society. They also demonstrated how collaboration across government, academia, industry, professional bodies and communities can create meaningful opportunities for young people to engage with science and consider careers within the natural scientific professions.

As we look to the future, SACNASP recognises that advancing science engagement is a shared responsibility. I therefore encourage our registered natural scientists and recognised voluntary associations to partner with SACNASP in expanding opportunities that promote greater public understanding of the natural sciences and inspire the next generation of scientific professionals.

As we continue to celebrate the achievements of National Science Month 2026, let us remain committed to championing the contribution of the natural sciences and ensuring that their value and benefits are experienced across all sectors of society.

Dr Matshidiso Matabane Pr.Sci.Nat.
Acting Chief Executive Officer



ADVANCING SCIENTIFIC EXCELLENCE THROUGH COLLABORATION AND INNOVATION

As we continue to advance the mandate of the South African Council for Natural Scientific Professions (SACNASP), we are reminded of the important role that natural scientists play in shaping a sustainable, innovative, and resilient future for our country.

At SACNASP, our commitment remains steadfast to uphold professional standards, support the development of natural scientists, and strengthen public confidence in the profession.

Through our regulatory functions, professional development initiatives, and stakeholder engagements, we strive to create an environment where scientific excellence can flourish and where professionals are empowered to make meaningful contributions to society.

This edition highlights SACNASP's participation in the DSTI led initiative National Science Month an annual celebration that promotes awareness and appreciation of science, technology, engineering, and mathematics (STEM).

Editor's Desk

Ms Lientjie Mogano, Project Leader

INSPIRING THE NEXT GENERATION THROUGH STEM

NATIONAL SCIENCE MONTH 2026 ENGAGEMENTS.

SACNASP played an active role in National Science Month through a range of engagements across the country. These activities focused on learner development, practical STEM education, career exposure, science engagement and the professionalisation of the natural scientific professions.

Among the initiatives was the University of Cape Town MCBEngage Job Shadowing Programme, which provided learners with exposure to scientific and professional environments. SACNASP also participated in the SheSTEAM CAPS Practical Readiness Programme in Cape Town, supporting initiatives that encourage young people, particularly learners, to explore opportunities in STEM-related fields.

The National Science Month Science Discovery Day, hosted in partnership with the University of Zululand Science Centre, provided another platform for learners and communities to interact with science in an accessible and engaging manner.

In Durban, SACNASP participated in the SAAFoST KZN Smart Science – Safe Food 2026 Workshop, contributing to engagement around the application of science and scientific knowledge in food safety and related areas.

Further STEM engagement was undertaken in partnership with the Siyafunda Education Foundation and the Northern Cape Department of Education – Namakwa District, extending science engagement opportunities to learners in the Northern Cape.

These activities demonstrated the value of partnerships in expanding access to science engagement and creating opportunities for young people to connect scientific knowledge with real-world challenges and potential career pathways.

National Science Month 2026 provided an important platform to reinforce the message that science, technology and innovation are for everyone. For SACNASP, the programme also reaffirmed the importance of continued collaboration with registered natural scientists, recognised voluntary associations, educational institutions, government, industry and other stakeholders in strengthening the natural scientific professions and inspiring future generations.

STEM ACTIVATION | NAMAKWA EDUCATION DISTRICT, NORTHERN CAPE

Siyafunda Education Foundation and Northern Cape Department of Education – Namakwa District collaborated with SACNASP for the STEM activation with the schools. There were practical STEM workshops using everyday materials to demonstrate scientific concepts, making science accessible, engaging and relevant while encouraging learners to pursue STEM subjects and careers.

SACNASP partnered with the Siyafunda Education Foundation and the Northern Cape Department Education Department to deliver an engaging hands-on STEM Activation for learners in the Namakwa District Municipality.

Using simple, low-cost materials, learners explored fundamental scientific principles through interactive activities including balloon hovercrafts, straw rockets, balloon-powered cars and paper racers. These practical experiments introduced concepts such as forces, motion, friction, energy transformation and engineering design, while encouraging creativity, critical thinking and problem solving.

A key feature of this National Science Month event was that learners could recreate each experiment at home using everyday materials, extending the learning experience beyond the classroom and reinforcing that science is accessible to everyone.

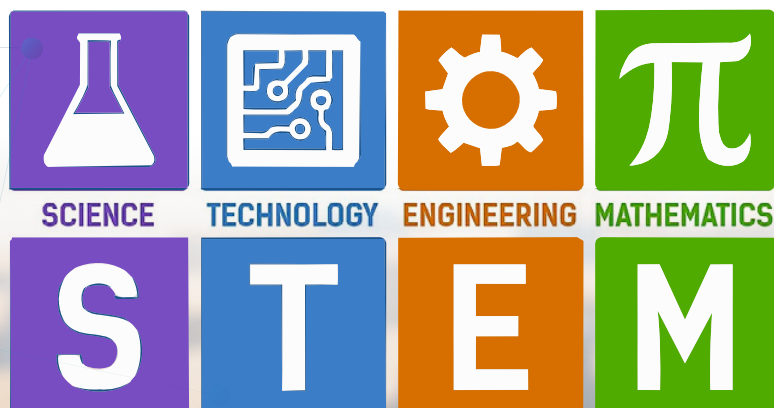




Fig 1. National Science Month 2026 engagements in the Namakwa District, Northern Cape showcasing SACNASP's participation in learner development, science engagement, stakeholder collaboration initiatives.

SACNASP also participated in a series of engagements aimed at strengthening the pipeline from early science exposure through to professional scientific practice.

Collectively, the engagements demonstrated the value of approaching science engagement as a continuum: inspiring learners to participate in science, providing practical exposure to scientific environments,

connecting students to career pathways, and ultimately promoting professional registration, lifelong learning and ethical scientific practice.

The programme also strengthened SACNASP's partnerships with universities, science centres, industry and other organisations involved in developing South Africa's future scientific workforce.



Fig2. National Science Month 2026 engagements showcasing SACNASP's participation in learner development, science engagement, professionalisation and stakeholder collaboration initiatives.



Fig3. Learners participating in the UCT MCBEngage Job Shadowing Programme, gaining hands-on exposure to bioscience research, laboratory techniques and scientific career pathways.



UCT MCBENGAGE JOB SHADOWING PROGRAMME, CAPE TOWN

SACNASP partnered with the University of Cape Town Faculty of Science in the three-day MCBEngage Job Shadowing Programme. The programme provided high-school learners with immersive exposure to biosciences and scientific careers.

Learners participated in laboratory activities including DNA extraction, microscopy and microbiology investigations. They interacted directly with researchers and industry professionals and explored the growing role of artificial intelligence in scientific research. The programme also included a visit to Afrigen Biologics, providing learners with first-hand exposure to South Africa's biotechnology industry and the translation of scientific research into real-world innovation.

Fig4. Grade 12 learners participating in the SheSTEAM CAPS Practical Readiness Programme through practical laboratory activities designed to strengthen STEM competencies and examination preparedness.

NATIONAL SCIENCE MONTH SCIENCE DISCOVERY DAY – UNIVERSITY OF ZULULAND SCIENCE CENTRE, RICHARD'S BAY

SACNASP partnered with the University of Zululand Science Centre to host a National Science Month Science Discovery Day, bringing together 240 Grade 11 and Grade 12 learners from South Africa and the Kingdom of eSwatini.

The programme included live science demonstrations, interactive exhibitions, a blitz quiz, water-safety awareness and science career guidance. The activities provided learners with practical insight into opportunities within the natural sciences while highlighting the role of science, technology and innovation in improving lives and contributing to societal development.

The event also celebrated the University of Zululand Science Centre's 40 years of science engagement, recognising its longstanding contribution to inspiring young people and promoting public understanding of science.



Fig 5. Learners participating in the National Science Month Science Discovery Day hosted by the University of Zululand Science Centre, promoting science awareness, career exploration and STEM engagement.

SOUTH AFRICAN ASSOCIATION FOR FOOD SCIENCE AND TECHNOLOGY (SAAFoST) KZN SMART SCIENCE – SAFE FOOD 2026 WORKSHOP, DURBAN

SACNASP concluded its National Science Month engagements through participation in the SAAFoST KZN Smart Science – Safe Food 2026 workshop. The event brought together industry, academia, regulators and students from Mangosuthu University of Technology who are part of the SACNASP Student Enrolment Programme.

SACNASP delivered a presentation titled “Beyond Compliance: Professionalising Food Scientists for South Africa’s Future.” The presentation highlighted that food safety extends beyond regulatory compliance and depends on competent,

ethical and accountable scientists who protect public health, strengthen consumer confidence and ensure that science is applied in the public interest.

The presentation further explored future skills required by food scientists, lifelong learning, professional registration and the role of professional scientists across the food value chain, from research and manufacturing through to regulation and the consumer.



Fig 6. SACNASP participating in the SAAFoST KZN Smart Science – Safe Food 2026 Workshop, promoting professionalisation, lifelong learning and future skills within the food science sector.

CITY OF CAPE TOWN – FROM RESEARCH TO PROFESSIONALISATION, CAPE TOWN

SACNASP partnered with the City of Cape Town to host the National Science Month engagement “From Research to Professionalisation”, bringing together postgraduate researchers, academics and science professionals to explore how scientific research can be translated into meaningful societal impact.

The engagement highlighted the importance of stronger collaboration between government, academia, industry and professional bodies in addressing societal challenges.

SACNASP delivered a presentation titled “Science in Service of Society: Professionalisation, Future Skills and National Impact,” focusing on how professionalisation can bridge the gap between research and public value through trusted scientific advice, evidence-based decision-making and practical societal impact.

“bridging the gap between research and public value,”



Fig 7. Postgraduate researchers, academics and science professionals participating in the City of Cape Town ‘From Research to Professionalisation’ dialogue on translating scientific research into societal impact.

YOUTH MONTH

SACNASP participated at the South African Qualification Authority (SAQA) Career Day in Phagameng High School, Modimolle on 16 June 2026. The event was well attended with two schools participating and 250 community members benefiting from the information and support offered.



Learners from Phagameng High School in Modimolle at the South African Qualification Authority (SAQA) Career Day on Youth Day

AYANDA NGUBO



Ayanda Ngubo is a Professional Natural Scientist registered with SACNASP, his journey began in a village called Etsheni, in Pietermaritzburg, KwaZulu-Natal. From a humble beginning, he has built a career rooted in resilience, education, leadership, and service to society. He holds a Master of science in Chemistry, a Post-graduate Certificate in Education, specializing in Mathematics and Physical Science Teaching, from the University of KwaZulu-Natal, a certificate in operations management from the University of Cape Town and currently serves as a Process Scientist graduate in training at Rand Water Scientific Services. His work contributes to sustainable water management through applied research, technology evaluation, pilot-scale studies, process optimization, and scientific reporting, with focus areas including ammonia removal using natural material, membrane technologies, and contaminant removal process efficiencies. Ayanda has shared his research and technical insight through conference presentations at water sector platforms such as WISA, and AWSISA, and through scientific publications, including work on water quality, and emerging treatment solutions. Beyond the Laboratory, Ayanda has demonstrated leadership in professional, community, and social platforms, including serving as Vice-Chairman of the Rand Water Scientific Services Young Professionals Forum, Vice-chairman of Rand Water Corporate Hiking Club, Treasurer of the Rand Water Vereeniging Soccer Club, and in student leadership roles. In 2020, he also co-founded and chaired First-Choice E-hailing Association in Pietermaritzburg, an association established on the principles of uniting the e-hailing and taxi industries and helping to prevent violence that was brewing between the two sectors. Ayanda's story reflects the power of perseverance, life-long learning, and purpose-driven leadership. He is passionate about leadership, knowledge sharing, community uplifting, and using science to create practical solutions that improve lives and strengthen South Africa's water future.

» What Inspired my journey into the natural sciences?

My journey into the natural sciences began long before I entered a laboratory and a university lecture room. It began back in the village, where I grew up seeing how deeply science is connected to everyday life. In disadvantaged communities like mine, clean water, quality of education, and access to opportunities are not abstract ideas; they are real needs that affect families, schools, health, and dignity. Those early experiences shaped my curiosity and gave me a strong desire to understand problems at their root and contribute to solutions that could improve people's lives. Science became a pathway to serve, to uplift, and to prove that where you come from does not have to limit how far you can go. My passion for chemistry and water treatment continues to be driven by the belief that scientific knowledge must be used to create practical, meaningful change for communities.

» What key trends should scientists be paying attention to?

I believe scientists should pay attention to trends that will define both the future of science and the future of the society. In the water sector, this may include climate change resilience, water scarcity, emerging contaminants, advanced treatment technologies, membrane processes, retrofitting of natural-based solutions in our current treatment systems, artificial intelligent, digital water systems, waste management, and circular economy approaches. These trends are important because they remind us that science must respond to real human needs. For me, the most important trend is the movement from research that only remains on paper to research that becomes a practical solution for communities, treatment plants, municipalities, and industries. As Scientists, we must also pay attention to communication, ethics, and collaboration, because the challenges we face today cannot be solved by working in silos. The Scientists of the future must be innovators, problem-solvers, communicators, and leaders who use knowledge responsibly to protect people and the environment.

» **How do I see the relationship between SACNASP and Rand Water contributing to skills development and the profession?**

I see the relationship between SACNASP and Rand Water as a powerful opportunity to shape scientists who are not only technically competent, but also ethical, accountable, and ready to serve society. Rand Water gives young professionals like me exposure to real water-sector challenges, where scientific theory meets operational reality. It is in this kind of environment that I have learned how research, compliance, technology evaluation, process optimisation, stakeholder engagement, and public service come together for a common goal. SACNASP complements this by strengthening professional identity, promoting registration through collaboration in professional registration webinars, encouraging continuous professional development, and reminding scientists that our work carries responsibility. SACNASP and Rand Water can help build a stronger pipeline of skilled professionals who understand both the science and the public value of their work. For us young Scientists, this level of engagement provides mentorship, confidence, professional discipline, and a clearer pathway from academic training into meaningful scientific practice.

» **What advice would I give to young or emerging scientists entering the field today?**

My advice to young and emerging scientists is to believe in the value of their journey, even when the path is not easy or straightforward. Do not allow your background, financial challenges, rural upbringing, or temporal setbacks to make you doubt your potential. I come from a village where opportunities were not always visible, but I have learned that discipline, faith, resilience, mentorship, and hard work can open doors. As a young scientist you must remain curious, humble, and willing to learn from every environment you enter. Build strong technical skills, but also develop communication, leadership, teamwork, and emotional intelligence. Your story, especially if it comes from struggle, can become a source of strength and inspiration to others.



Do not allow your background, financial challenges, rural upbringing or temporal setbacks to make you doubt your potential"



UPCOMING EVENTS

The Science Forum South Africa 2026 will take place from 2 to 4 December 2026 at the CSIR International Convention Centre, Pretoria, South Africa.

The Forum is proudly co-hosted by the South African Department of Science, Technology and Innovation (DSTI) and the Science Diplomacy Capital for Africa (SDCfA) initiative. The SDCfA promotes science collaboration across Africa and beyond towards leveraging and connecting technology innovation with humanity. Collaboration that embeds a culture of learning – underpinned by sound governance.

The theme for the Forum is “Igniting Conversations about Science – From Research to Impact”.

The objective of the Forum is to ignite vibrant discussion on the role of science in society, between all stakeholders, the scientific community, government, industry and civil society at large.

For more information, please go to their website:

<https://www.sfsa.co.za/> and register if you will be attending.



CLOSING WORD

SACNASP is entering a new phase of strengthening registration systems and creating platforms for meaning engagement and dialogues amongst stakeholders. Central to this journey is our commitment to enhancing our registration processes, strengthening our Continuing Professional Development frameworks and advancing our digital transformation initiatives. These efforts are aimed at improving accessibility, transparency and service delivery, while ensuring that our systems and services remain responsive to the needs of the profession. Through collaboration and continuous improvement, we remain committed to building an natural scientific profession that is well positioned to contribute meaningfully to South Africa's future.

GENERAL INFORMATION

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