



S.E.T. for socio-economic growth

National Science and Technology Forum (NSTF)

media release

World Cities Day 2023: Leading expert Prof Andrew Thatcher champions green solutions for sustainable urban development

It is crucial to improve the effectiveness of managing urban development through better collaboration between different levels and sectors of government in South Africa, and to work with the communities themselves as urban areas rapidly expand. NSTF-South32 Award winner Prof Andrew Thatcher worked with his team to design a grey-water system in Alexandra Township in Johannesburg, demonstrating that it's critical to work with the community and the natural landscape to make urban areas habitable during rapid urbanisation.

World Cities Day, 31 October: The United Nations (UN) General Assembly designated 31 October as World Cities Day, by its [resolution 68/239](#). The Day is expected to greatly promote the international community's interest in global urbanisation, push forward cooperation among countries in meeting opportunities addressing challenges of urbanisation and contributing to sustainable urban development around the world. World Cities Day 2023 is observed under the theme, 'Financing sustainable urban future for all', will explore how we can unlock transformative investment in urban planning and achieve adequate fiscal decentralisation.

[World Habitat Day](#) was also recently commemorated, on 2 October, under [UN-Habitat](#). Its theme for 2023 is 'Resilient urban economies. Cities as drivers of growth and recovery'. There is a 'green recovery framework' for increased investment into climate-neutral economies in a post-COVID world. This is an opportunity to highlight green economy solutions in urban areas.

Prof Andrew Thatcher, [winner](#) of a 2023 NSTF-South32 [Green Economy Award](#) is passionate about sustainable urban development. In the Setswetla informal settlement of Alexandra (Johannesburg) his team looked into nature-based solutions to collect and treat grey water as part of the Urban Informal Townships (URBWAT) project. But they quickly had to adapt their thinking as new houses went up every couple of weeks, and the sewerage system kept breaking. Prof Thatcher and his team worked with the community to design and build small wetlands for greywater treatment, but also to redirect sewage away from people's houses. The intervention addressed other community needs too, like flood water protection, raised pathways, and cleaning areas that were more ergonomically suitable.

He is a Professor: Psychology Department, School of Human and Community Development, at the University of the Witwatersrand (Wits). Prof Thatcher states: “We were trying to fix a grey water problem but you’ve got raw sewage running through people’s houses.” He received the prestigious [2023 NSTF-South32 Award](#) for his work on extending our understanding of Human Factors Ergonomics or “green ergonomics” to consider the entire Earth system, which has included theoretical developments, empirical investigations, and systematic reviews of the impact of these activities leading to mutually supportive human-natural environment systems.



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References/Sources:

<https://www.un.org/en/observances/cities-day>

<https://urbanoctober.unhabitat.org/wcd>

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The National Science and Technology Forum (NSTF), established in 1995:

- is a broadly-representative stakeholder body for all science, engineering and technology (SET) and innovation organisations in South Africa
- gathers stakeholders around burning issues of national and global interest, across the public and private sectors, including matters of public policy
- includes a network of professional societies in SET and STEM education (STEM = science, technology, engineering and mathematics) - the NSTF proSET membership sector.
- recognises, awards and profiles the outstanding contributions of individuals and groups to SET and innovation through the prestigious NSTF Awards
- runs and supports collaborative projects and youth outreach, including recognition of top performance in mathematics and science, role modelling, bursary and STEM career information
- runs and supports the STEMulator.org which attracts youth and educators to Explore>Discover>Learn the world of STEM including careers. (Established by NSTF proSET)

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