

News

56th Annual Conference of the National Association for Clean Air (NACA), 2025 Bridging Data, Community & Climate for Cleaner Air

Brigitte Language^{ID}¹

¹Chairperson of the NACA Scientific Review Committee, Unit for Environmental Science and Management, North-West University

<https://doi.org/10.17159/caj/2025/35/2.24953>

The 2025 Annual NACA Conference, held in partnership with the Department of Forestry, Fisheries and the Environment (DFFE), marked another important milestone in Southern Africa's ongoing efforts to improve air quality governance. Taking place from October 1–3, 2025, at the East London International Convention Centre in the Eastern Cape, the conference focused on the theme “Bridging Data, Community & Climate for Cleaner Air.” The theme emphasized the growing need to integrate advanced monitoring technologies, community participation, and climate-adaptive strategies to address the region's changing air quality issues. It also reaffirmed NACA's long-standing commitment to turning scientific evidence into effective policy and practice, while highlighting the increasingly interconnected roles of data systems, local engagement, and climate resilience.

The opening keynote was delivered by the Deputy Minister of Forestry, Fisheries, and the Environment, Mr. Narend Singh, whose participation reflected the government's recognition of air quality as both a pressing public health concern and a climate-related priority. His address positioned the conference discussions within the constitutional commitment to environmental rights and emphasized the value of knowledge sharing across scientific, regulatory, and community sectors. A diverse roster of speakers from academia, industry, government, and civil society further enriched the program, reflecting the interdisciplinary nature of the event. Presentation topics included pollutant exposure assessment, emissions quantification, community-based monitoring, advances in atmospheric modeling, mine dust management, health risk evaluation, and the alignment of air quality and climate policies.

Over three days, delegates participated in technical sessions, oral presentations, and thematic discussions examining both ongoing and emerging air quality challenges in South Africa. Several contributions highlighted the growing importance of geospatial analytics, low-cost sensor networks, and the understanding of pollution patterns. Others emphasized the significance of community science and locally grounded data in guiding decision-making and advancing environmental justice. The overall program showcased the rapid progress of air quality research and the increasing need for integrated, cross-sector collaboration to develop practical solutions.

The scientific review process reflected strong engagement from within the air quality community. A total of 62 abstract



submissions were received. Following evaluation by more than 20 expert reviewers, the conference accepted 13 full papers, 8 extended abstracts, 10 posters, and 5 three-minute research talks. This rigorous yet inclusive process upheld NACA's established standards while ensuring representation of a wide range of methodological approaches, disciplinary perspectives, and research contexts. The diversity of contributions showcased ongoing innovation across the sector, from assessment methods and emission reduction strategies to community partnerships and climate-aware interventions.

NACA Awards

Best 3-Minute Research Talk (3MRT)

Anesu Karadzandima, Stellenbosch University

The potential health risks of dust and toxic metals in an industrial hub of South Africa

Best Scientific Poster

Chantelle Howlett-Downing, South African Medical Research Council

A multi-site mortality and morbidity assessment of air pollution in South Africa

Best Scientific Presentation (Non-Student)

B. Koovarjee, University of Cape Town

Mapping Mine Waste Risk: A Spatial Framework for Assessing Environmental Exposure from Tailings Storage Facilities in South Africa's Northern Cape

Best Scientific Presentation (Student)

Philip B. Beynon, University of Cape Town

A Methodology for Quantifying Vehicular Emissions on Freeways in the City of Cape Town, South Africa Using Floating Car Data and Traffic Counts

Best Scientific Paper

Willem De Klerk, Phathutshedzo Mukwevho & Roelof Burger, North-West University
 Exploring Challenges for Emissions Reduction Projects at Eskom Coal-Fired Power Stations

Sponsors

The 2025 conference received generous support from sponsors whose contributions were essential to its success. Sponsors included SACNASP, WSP, C&M Consulting Engineers, Lakes Software, APEX Environmental, Air Resource Management (ARM), Shepstone & Wylie, the NOVA Institute, Airshed Planning Professionals, TESTO, Eskom, and the Mine Dust Network. Their involvement highlighted strong industry commitment to advancing air quality management, fostering collaboration, and strengthening scientific and professional development within the sector.

In summary, the 56th Annual NACA Conference in East London boosted regional momentum toward data-driven, community-focused, and climate-responsive air quality governance. Through expert presentations, evidence-based dialogue, and recognition of scientific excellence, the event fostered important discussions on how South Africa can better understand, manage, and reduce air pollution amid increasing climate pressures. Supported by active delegates, dedicated organizers, and committed sponsors and exhibitors, the 2025 conference reaffirmed NACA's vital role in promoting cleaner air and protecting environmental health across Southern Africa.

For any further information, please visit any of the following sites:

- Website: www.naca.org.za
- Conference website 2025: www.naca.org.za/conferences/naca-2025
- YouTube Channel: www.youtube.com/@NACA-SA

