Petrus Cornelius Schutte: 8 December 1950—28 September 2023

Deon Jansen van Vuuren: SAIOH General Manager

Petrus Schutte (Schu) was a prominent figure in the occupational hygiene and scientific communities. Sadly, he passed away in 2023. In this obituary, we acknowledge the huge contributions that he made to the occupational hygiene profession in southern Africa.

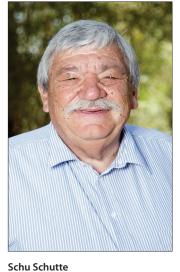
Schu was a giant of a man, not just in size, but also in his work and family life – a true gentleman. I first met Schu at an Intervarsity rugby match in Bloemfontein, where he was playing prop for the PUKKE (University of Potchefstroom) first rugby team. A few years later, when I was enrolled in a BSc Honours degree in industrial physiology, I met him again at the Chamber of Mines Research Organisation (COMRO), where I did my practical work. Our paths continued to cross intermittently and met up again at the (then) Occupational Hygiene Association of South Africa (OHASA), which, 20 odd years later, is now the Southern African Institute for Occupational Hygiene (SAIOH).

Schu was a popular figure in the field of occupational hygiene, and known for his willingness to assist, whether in brainstorming or giving presentations at workshops and annual conferences. He was your 'go-to' man.

While at COMRO, Schu conducted internationally recognised, groundbreaking research on various topics in the mining industry, including heat stress, occupational hygiene, and acclimatisation of workers in deep gold mines. This led to quite a few sessions in the hot and steamy acclimatisation chambers, and exposure to illumination, noise, and self-rescuers (self-contained breathing systems). Schu's career was ever-evolving, and he became an expert in ergonomics and fatigue management. At one stage he even worked for Columbus Stainless in Middelburg as an occupational hygienist, saying "I need some exposure to industry also".

In mid-2023, shortly before his death, Schu facilitated a SAIOH workshop on heat stress management at the Council for Scientific and Industrial Research (CSIR). He had the ability to break down complex technical facts and equations into comprehensible information. In true Schu style, he spent time before, during, and after lunch with the young occupational hygiene practitioners to answer their questions and chat.

It was an immense shock when his wife, Manda, advised that he was seriously ill and in ICU, and even more so when she called to tell me of his death. At his memorial service, everyone had stories to tell of how Father Petrus, later Grandfather Petrus, watched their rugby games, sitting next to the field, even when it was raining, seldom missing a game and always ready with support and good advice.



Photograph: courtesy of the Schutte family

With Schu's passing, messages of condolence came flooding in – a testament of how much he was loved and admired. This is what some had to say about him:

Dr Johan Kielblock, boss, and colleague at COMRO, and the first SAIOH fellow:

"I met Schu Schutte in 1980 when I joined the Chamber of Mines Research Organisation ('COMRO'). We both had a fondness for heat physiology, and the applied research that came from it. Schu was an extremely capable practical researcher and we, as a team, produced excellent work, in my humble opinion. The best example was the creation of a heat screening test, or rather, 'heat tolerance screening' (HTS). With this method, the existing climate chamber acclimatisation process, which was extremely unpopular and even discriminatory, was done away with. After more than 30 years, this

method is still the mainstay of physical screening for working in hot underground mines and is recognised as such by the Department of Mineral Resources and Energy in its official guidance to mines. Schu Schutte made an undeniable contribution in this field."

Cecilia Pretorius, long-time colleague of Schu at CSIR Miningtek, and now with CPRAS (Cecilia Pretorius Research and Advisory Services (Pty) Ltd):

"Schu Schutte was a well-known researcher in the field of occupational hygiene and ergonomics in South Africa and abroad. For more than 40 years he was at the forefront of research on topics such heat stress, ergonomics, fatigue management, human factors, and accident analysis in the mining industry. He was a humble man with a kind heart, who cared about people, especially mining people. He leaves a gap in industry and very few people will be able to fill his shoes! He was always willing to assist and continued to 'help out' even after his retirement. His friends and colleagues in industry will miss his advice and guidance. Above all, they will miss him as a person."

Jodi Pelders, Researcher, CSIR:

"Schu Schutte was my manager when I joined the Human Factors research group at the Centre for Mining Innovation at the CSIR in 2011. He was always kind and supportive and enabled me to contribute to and lead work relating to ergonomics in the southern African mining sector. He was also a co-supervisor of my PhD research at the School of Public Health at the University of the Witwatersrand. He was knowledgeable and a leader in the field of ergonomics and occupational health. His formal qualifications included industrial physiology, and he was a

registered occupational hygienist with the Southern African Institute for Occupational Hygiene (SAIOH). Schu's experience in miningrelated occupational health and safety research and application activities spanned decades (1974 to 2023). These activities included the implementation of heat stress management procedures, the assessment of physiological strain and workplace stress, the development of an operator fatigue management programme, and an ergonomics strategy and programmes for the South African mining industry. He was author or co-author of at least 110 research reports, 12 chapters in handbooks, and 22 papers in scientific or technical publications. Even when retired from the CSIR, Schu was available to assist us with projects. Most recently, was one relating to the use of body cooling garments by rescue team members, completed in 2023. He was committed and willing to give beyond what was required. As far as I am aware, he was content to continue with research until his departure from earth. He made a big impact in the mining industry, and his inputs have a lasting influence on improving the lives of people in the mining industry. He was a loving and caring husband, father, and grandfather. I would like to offer my prayers and condolences to his family and all who knew him."

Vuyo Tsotsotso, Researcher CSIR Environmental Engineering Mining:

"Schu was my mentor, and I got the privilege of working very closely with him on the heat tolerance screening service for the last 3–4 years. I learnt a lot from him to say the least. He was able to impart an immense amount of knowledge to me while conducting occupational health and safety projects and on our long drives across the South African landscape to provide the mines with the heat tolerance screening service. He was an exceedingly kind, accommodating and understanding man whose presence was felt in every room he walked in. He was immensely respected and trusted in the occupational hygiene space and the quality of his work was second to none. I will inherently use his teachings for the rest my career. It is not an exaggeration to say his contributions to the advancement and understanding of heat stress in the mining industry are irreplaceable."

Directors of the occupational hygiene AIA Association forwarded this to their members:

"Morning members. Very sad news. We were informed this morning that Schu Schutte passed away early this morning. Our deepest sympathy goes to his family and friends. Let us keep them in our prayers and thoughts."

Prof. Gill Nelson, Wits School of Public Health, and Editor-in-Chief of *Occupational Health Southern Africa*, wrote this letter to Schu while he was in hospital:

"Dear Schu, I and many of your other colleagues who have happily worked with you for so many years are very distressed to hear about your recent health challenges. On behalf of the Editorial Board and Advisory Panel of Occupational Health Southern Africa, we wish you a speedy recovery. We will keep you and your family in our thoughts and prayers."

The **SAIOH** e-mail notification read:

"Dear SAIOH member, it is with deep sadness and heavy hearts that we at SAIOH inform you of the death of Schu Schutte, who passed away on Thursday 28 September 2023. Schu passed away suddenly after a recent prognosis. Schu was not just our colleague but a good friend as well to many of our SAIOH members. His contribution to occupational hygiene is a huge loss to SAIOH and South Africa."

I would like to end Schu's obituary with these words:

"I was very privileged to know and have worked with Schu. He was such a compassionate person, with big empathy for everyone and I will always remember him as a true gentleman whose love for his wife, Manda, and his family was sacrosanct. I cannot begin to imagine how much we will miss Schu."