



Prof Rohwer is Hoof van die Departement Chemie in die Fakulteit Natuur- en Landbouwetenskappe en is verantwoordelik vir die Massaspektrometrie- en Chromatografie-laboratorium. Sy navorsing is toegespits op die aanwending van chromatografie, massaspektrometrie en laserspektroskopie om die chemiese samestelling van komplekse mengsels te bepaal en om geïsoleerde chemiese stowwe te identifiseer. Die doel hiervan is om navorsingsprobleme aan te spreek op terreine wat strek van ingenieurswese, biologie, geologie en argeologie tot forensiese, omgewings- en voedselwetenskappe. Vir prof Rohwer is die grootste uitdaging die ontwerp van nuwe instrumentasie en om doelgemaakte chemiese ontledingsmetodes te ontwikkel. Onder sy navorsingsgroep se jongste uitvindings tel veeldoelige konsentrasietegnieke wat op silikoonrubber gebaseer is, met gepubliseerde toepassings op die gebiede van lugbesoedeling, die samestelling van aromas en van natuurlike gas. Laasgenoemde het onlangs bygedra tot die formulering van 'n nuwe hipotese om die geheimsinnige kaal kolle in die veld (die sogenaamde 'feëskirkele') in Namibië te verklaar.

Vanweë die deskundigheid en navorsingsbedrywighede van die Massaspektrometrie- en Chromatografie-laboratorium, is dit deur Sasol geïdentifiseer as 'n strategiese nasionale bate wat dié maatskappy se langtermynondersteuning vereis. Prof Rohwer se werk word in vaktydskrifte met hoë impak gepubliseer, onder andere *Analytical Chemistry*, en hy is lid van verskeie professionele liggame. Hy het op die Suid-Afrikaanse span gedien wat deelgeneem het aan die onderhandelinge oor die gedetailleerde terme van die internasionale *Stockholm Convention on Persistent Organic Pollutants* (POPs). Hy het die Von Humboldt-stipendium vir twee jaar ontvang en is in 2002 bekroon as die Shimadzu Chromatografer van die Jaar. Prof Rohwer het sedert 2003 'n B3-gradering van die NNS.

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Prof Rohwer is the Head of the Department of Chemistry, in the Faculty of Natural and Agricultural Sciences, and leads the Mass Spectrometry and Chromatography Laboratory. His research focus is the application of chromatography, mass spectrometry and laser spectroscopy in order to establish the chemical composition of complex mixtures and to identify isolated compounds. This is done to address research problems in fields ranging from engineering, biology, geology and archeology to forensic, environmental and food sciences.

Prof Rohwer finds the greatest challenge in designing new instrumentation and developing customised chemical analytical methods. His research group's latest inventions include versatile silicone rubber-based concentration techniques with published applications in the fields of air pollution, aroma and natural gas composition, the latter recently contributing to a new hypothesis on the origin of the so-called fairy circles in Namibia.

Because of its expertise and research activities, the Mass Spectrometry and Chromatography Laboratory has been identified by Sasol as a strategic national asset that requires its long-term support. Prof Rohwer publishes in high-impact journals including *Analytical Chemistry*, and is a member of several professional bodies. He served on the South African team that negotiated the detailed terms of the international Stockholm Convention on Persistent Organic Pollutants (POPs). He received the Von Humboldt Stipendium for two years, and was selected as the Shimadzu Chromatographer of the Year in 2002. He has had a B3-rating from the NRF since 2003.

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Prof Rohwer ke Hlogo ya Kgoro ya Khemistri ka Lefapheng la Thutamahlale a Tlhago le Temo gomme o etile pele Laporathori ya *Mass Spectrometry Chromatography*. Nepišo ya gagwe ya dinyakišišo ke tirišo ya khromathokrafi, spektrometri sa bontši le spektroskopi sa leisara gore go kgonwe go hlama tlhophišo ya dikhemikhale ya metswako yeo e raraganego go laetša ditwakanywa tšeo di kgaoganego. Se se diretšwe go laola mathata a dinyakišišo ka mafapheng a go tloga go boentšenero, payolotši, tšeolotši le akhiolotši go ya go disaense tša forensiki, tikologo le dijo.

Prof Rohwer o hwetša tlhotlo e kgolo ka go hlameng didirišwa tše diswa le go hlabolla mekgwa ya tebanyothwii ya tshekatsheko ya dikhemikhale. Dihlangwa tša moragorago tša sehlopha sa gagwe sa dinyakišišo di akaretša dithekniki tša tlhokomedišišo tšeo di fetogago tša silikhone tšeo di theilwego go rabara ka ditirišišo tšeo di phatlaladitšwego ka mafapheng a tšhilafatšo ya moya, monkgo le tšhilafatšo ya gase ya tlhago; yeo e boletšwego morago e sa tšwa go thuša go haepothese e mpsha ya ka ga tlhago ya seo se bitšwago mašakana a medimotsane ka Namibia.

Ka lebaka la mešomo ya botsebi le diphatišišo, Laporathori ya Mass Spectrometry and Chromatography e šupilwe ke Sasol go ba kholo ya ditharollo tša bosetšhaba yeo e hlokago thekgo ya yona ya lebaka le letelele. Prof Rohwer o phatlalatša ka ditšenaleng tša tšhušetšo ya godimo go balwa le *Analytical Chemistry*, ebile ke leloko la mekgatlo yeo e fapafapanego ya profesenale. O bile gona sehlopheng sa Afrika-Borwa seo se boledišaneng ka mabaka ao a tšeneletšego *International Stockholm Convention on Persistent Organic Pollutants* (POPs). O amogetše thušo ya mašeleng mengwaga e mebedi gomme a kgethwa go ba *Shimadzu Chromatographer* wa ngwaga ka 2002. O na le maemo a B3 go tšwa go NRF go tloga ka 2003.