

# STAFF PROFILE CONTENT BRIEF

[https://www.dut.ac.za/faculty/applied\\_sciences](https://www.dut.ac.za/faculty/applied_sciences)



## DESIGNATION

### ASSOCIATE PROFESSOR



**Title & Name:** Professor Viresh Mohanlall

**Qualification & Institution:** D. Tech - Biotechnology

**Contact Number:** +2731 3735426

**Email Address:** [vireshm@dut.ac.za](mailto:vireshm@dut.ac.za)

**Campus:** Steve Biko Campus

**Area of Expertise:** Phytochemistry and Drug Development

**Short Bio:** Prof. Mohanlall joined the department in 1996 and is an Associate Professor. His areas of expertise include biochemistry, phytochemistry, indigenous plant knowledge, nanotechnology, drug development and discovery and analytical chemistry. Prof. Mohanlall and the Plant Biotechnology Research Group have isolated new lead compounds from plant species and chemically synthesized analogues of the natural compounds to enhance its biological activity. Current research in the field of synthetic chemistry includes the development of novel benzopyridines and coumarins. The novel synthesized coumarins showed tremendous potential as a treatment for tuberculosis and was filed as a patent application in 2019 (PATENT APPLICATION NO: 2019/05328). In addition to the above, our recent endeavours include chemical synthesis and structural elucidation of analogues that mimic biologic activity of plant metabolites that are known for important pharmacological properties. Current research projects within Prof Mohanlall's group focuses on synthesis and structural elucidation of novel synthetic coumarin scaffolds for their potential pharmacological properties and determination of nutritional composition, phytochemical profile and anti-diabetic properties of *Momordica balsamina*. Other completed projects that have been conducted by B.Tech, MAppSc, PhD and Postdoctoral students within the group include the structural elucidation of the novel secondary metabolites such as alkaloids, cyanogenic glycosides, glycosylates, terpenoids, flavonoids and anthraquinones from indigenous plant species.

**Academic Interests:** Biochemistry and Food Chemistry, Curriculum design and development, Online Teaching and Assessment Strategies and Technologies.

**Research Links:** ORCID ID: 0000-0002-0103-7089  
SCOPUS ID: 14825471800  
Web of Science Researcher ID: AAW-6205-2020