

Prof Bennie C Viljoen (abbreviated CV)

Viljoenbc.sci@mail.uovs.ac.za

ACADEMIC QUALIFICATIONS

BSc in 1983, BSc Hons in 1984, MSc (Cum laude) 1985 and PhD in 1988 at the UFS, Bloemfontein, South Africa.

ACHIEVEMENTS

FRD rating- Y (Young scientist) - 1991 – 1994, FRD rating- C3 - 1995 – 1998, NRF rating- C1 – 1999 – 2003, NRF rating- B3 2004 - ; Selected as representative for South Africa in group F47, Yeasts in the Dairy, in the International Dairy Federation, 1995 - ; Elected as committee member of the International Commission on Food Mycology (ICFM) - 1998 - ; Granted the South African/Hungarian bilateral Scientific and Technological Cooperation (1999- 2006); the Norway/SA programme from 2004 – 2009; Invited as group member of the World Association of Industrial and Technological Research Organisation (WAITRO); Invited as group leader of a program of the International Commission on Food Mycology (2001-2002); Acting as programme co-ordinator on Food Science for the University of Zimbabwe and Zambia, 2001 - 2007; Invited as a member of the Editorial Board of the journal Food Microbiology, Canada (2004 -); Elected as co-editor for International Journal of Food Microbiology for a special edition on: Yeasts in the dairy industry (2001); International Scientific and Organising Committees- Symposium on Yeasts in the Dairy Industry, Copenhagen, Denmark (1996); Symposium on Yeasts in Dairy Products, Bologna, Italia (1999); Symposium on Mycological methods in Yeasts, Spain, Valencia (2002); International Specialized Symposium on Yeasts, ISSY, Pilanesberg, 2002; NRF - Evaluation panel: NRF Food Production and Food Security Programme (1997, 1998, 2000, 2001, 2002, 2003, 2007); Acting as reviewer for International Journals on more than 70 papers.

ACADEMIC INVOLVEMENT

Post-graduate: 23 Hons students, 25 MSc students and 10 PhD students completed their studies. Currently, 1 Hons, 4 MSc and 7 PhD embarked on projects.

Under-graduate: Responsible for the MCB 212 and 232 courses; MKB 334 course on mycology; A new course developed for Hons students on Food Microbiology in 2001.

PUBLICATIONS

Author or co-author on more than 60 International peer reviewed papers, 9 chapters in books and 1 as co-editor of an International book.

PAPERS AT SYMPOSIUMS/ CONGRESSES

Author or co-author on more than 100 papers at national, and 45 at International meetings. Four invited keynotes and one introductory presentation at International Congresses. Session chairman on three occasions at International Symposia.

COMMUNITY SERVICES

Coordinator of a full time support system for the dairy farmers in the Free State region regarding hygiene, quality assurance and microbiological problems. Close co-working is established with the Department of Health and together we strive to assure high quality milk in the region. We acted on numerous cases on behalf of the farmers based on law issues. This service also includes various members of the industry like Clover SA, Dairy Belle Foods, Kimberley Dairies, Simonsberg

and Parmalat. A number of post-graduate studies are based on collaborative projects between the industry and our group. The service also includes training of personnel in the dairy industry based on informal and formal presentations as well as hands on practicals.

Currently we are establishing a quality control system in collaboration with Woolworths and Danisco Cultures (Denmark) for assuring the necessary number of probiotics in yoghurt.

A similar service regarding quality assurance is also catered for the poultry industry. Training, a quality assurance program and solving of microbiological problems are running on a daily basis for Country Bird, Kem Klean, and Syndachem.

RESEARCH SPECIALIZATION

My research focus on **Biotechnological applications of non-conventional yeasts in foods and beverages** with emphasis on the following:

- a) to obtain fundamental knowledge about the growth kinetics, biochemical activities and technological properties of yeasts which might be applied in food processing.
- b) to determine the influence of a range of environmental variables on their growth, their positive and negative interactions with other micro-organisms
- c) their contributions to food quality, safety and shelf-life.
- b) the beneficial role when applied as yeast-probiotics.
- e) and their potential use as bio-control agents against pathogens and undesired contaminants.