

Department of Chemistry
Departmental Seminar:
Analytical Chemistry Month

You are cordially invited to a virtual lecture presented by



Dr. Niel Malan

Supervised by Prof Egmont Rohwer

Department of Chemistry, University of Pretoria

Date: Friday, 19 November 2021
Time: 10:30 – 11:20
Venue: **Google Meet**
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Exploiting carbon dioxide technology in next-generation chromatography.

The invention of **comprehensively coupled chromatography** provided analytical chemists with a powerful tool, not only by increasing the separating power of the chromatographic system, but also by creating structured chromatograms. These benefits are maximized when the different separation mechanisms are maximally **orthogonal**. This presentation provides a brief introduction to comprehensively coupled chromatography and then discusses the benefits of comprehensively coupling **supercritical fluid chromatography** (SFC) to **gas chromatography** (GC), to create a functional **SFC×GC** chromatograph. The challenge of developing the necessary technology is discussed and 2D chromatograms illustrating possible application in the fuel industry are shown.