

Preface

The South African Sugar Technologists' Association (SASTA) endeavors to promote improvement in the accuracy and rational standardisation of factory chemical control methods. This has been an integral part of the Association's activities since its inception in 1926 and is the responsibility of the Factory Council Advisory Committee under the auspices of the SASTA Council.

Publication of the methods used for factory control in South Africa has been a flagship SASTA publication since 1962 and includes the Official Methods for cane payment as referred to in the South African Sugar Industry Agreement. The 4th edition of the SASTA Laboratory Manual was published in electronic format in 2005, an innovative way of making the methods more accessible to users and in keeping with its objective of improving factory control proficiency.

This 5th edition was launched as part of the 82nd annual SASTA Congress during August 2009 in Durban, and included definitions and new methodologies, such as the calculations involved in mud recycling to a diffuser, that had been introduced to the industry. A new section was created in the analytical methods to incorporate methods used in a back-end or stand-alone refinery. These products include the refinery process streams of melt and liquor, massecuites, run-offs and filter cake, and the methods cover pol, Brix, purity, pH, conductivity, colour, reducing sugars, starch and calcium oxide (lime). Some microbiological methods are also included.

With the introduction of the manual in electronic format, it has become much easier and cost effective to issue updated versions by making them available on this website. It is the intention of SASTA to keep the manual up-to-date, with new methods being uploaded as and when they are approved by the Factory Control Advisory Committee.

From 2009, the manual has been updated to include the Official Methods for the use of NIR polarimetry for unleaded pol analyses in cane payment, as well as NIR spectroscopy used on final molasses, a novel method for the indirect but rapid analysis of multiple parameters in a single scan. Subsequently the manual has also been updated with NIR predictions for other factory streams. The most recent update to the manual was the method for the time account for dual tandem mills.

SASTA members and South African users of the manual are promptly notified when methods are revised. It is suggested that all laboratory audits are to include a check if the latest SASTA methods are being used.

SASTA Council