Response letter of $\langle RSI19\text{-}AR\text{-}01677 \rangle$ Based on the Referees' Report

D. Malan S.J. van der Walt E.R. Rohwer January 31, 2020

Chin-Tu Chen Associate Editor Review of Scientific Instruments

Revision of the paper $\langle RSI19\text{-}AR\text{-}01677 \rangle$ submitted to the Review of Scientific Instruments, entitled "A high-repetition-rate, fast temperature programmed gas chromatograph and its on-line coupling to a supercritical fluid chromatograph (SFC×GC)", based on the referees' report.

Dear Chin-Tu Chen:

Thank you for your email dated 30 January 2020 enclosing the reviewers' comments. We have carefully reviewed the comments and have revised the manuscript accordingly. Our responses are given in a point-by-point manner below.

We hope the revised version is now suitable for publication and look forward to hearing from you in due course.

Yours sincerely, D. Malan Department of Chemistry University of Pretoria

Comments by Reviewer #1

will [give an] acceptable

The sentence was corrected.

middle paragraph. The sentence construction is complicated with the nested parentheses.

The parentheses were removed and a sentence providing more detail was added.

Also the text describes a micro union brazed onto the block, but the figure shows a drilled and tapped hole.

Although the relevant figure was intended to be conceptual in nature, we agree that a difference between the text and the figure can be confusing. The figure was changed to match the text.

 $\ensuremath{\mathsf{p}} 11$ digital to analog converter converter . converter is repeated.

The repeated word was removed.

p15. Chromatographically, would it be better if the warmer side of the column was towards the detector or towards the inlet?

A sentence and a citation was added to show a possible benefit if the warmer end of the column was towards the inlet.