

Dr. Adolfo López Torres Institute of Applied Chemistry University of Papaloapan, Circuito Central 200, Parque Industrial, 68301 Tuxtepec, Oax. altorres@unpa.edu.mx November 22, 2017

Subject: Manuscript submission to *Journal of the Mexican Chemical Society* special issue: "Modern analytical chemistry in interdisciplinary research" with Katarzyna Wrobel as a guest editor

Dear, Prof. Ignacio González-Martínez Editor-in-Chief

I am pleased to submit an original full article research entitled "Microwave assisted DNA hydrolysis for global methylation analysis by gas chromatography/tandem mass spectrometry" to be considered for publication in the *Journal of the Mexican Chemical Society*, special issue: "Modern analytical chemistry in interdisciplinary research" with Katarzyna Wrobel as a guest editor.

In this paper, we established a robust and rapid procedure to DNA acid hydrolysis assisted by microwave and determine the global 5-methylcytosine content using GC-TQ-MS/MS in multiple reaction monitoring mode, reaching the lowest detection limits reported to date in GC-MS system. The procedure was applied to determine global DNA methylation in biological samples and results obtained were according to reports being a good alternative to LC-MS/MS procedures.

We consider that this manuscript is appropriate for publication by JMCS because it includes novel developments and applications of analytical chemistry procedures in epigenetics field.

This manuscript or part of this has not been published and is not under consideration for publication elsewhere.

The authors; Karla Viridiana Castro-Cerritos, Julio Cesar Torres-Elguera, Jaqueline Capataz-Tafur, Erick Adrián Juárez-Arellano and Adolfo López-Torres, declare no conflicts of interest to disclose.

The corresponding author Adolfo López-Torres accept the responsibility of include only appropriate persons as co-authors.

We suggest the following reviewers:

Ph.D. Claudia S. Maier, Oregon State University, claudia.maier@oregonstate.edu

Ph.D. Alma Rosa Corrales Escobosa, Universidad de Guanajuato, alma_rce@ugto.mx

Thank you for your consideration of this manuscript.

Sincerely,

Dr. Adolfo López Torres