**Prof. Ignacio González-Martínez**

Editor in Chief

Journal of the Mexican Chemical Society

Universidad Autónoma Metropolitana,

Unit Iztapalapa, Mexico

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Dear Editor

I have the pleasure of sending you the manuscript entitled “Identification by MALDI-TOF MS of environmental bacteria with high potential to degrade pyrene”, by Hortencia Silva-Jiménez, Cynthia Lizzeth Araujo-Palomares, José Vinicio Macías-Zamora, Nancy Ramírez-Álvarez, Bianey García-Lara and Alma Rosa Corrales-Escobosa, for its possible publication as a research article in the special issue “Modern analytical chemistry in interdisciplinary research” with Katarzyna Wrobel as a guest editor.

The aim of this original research was identified the cultivable bacterial diversity with potential to degrade pyrene employing matrix-assisted laser desorption/ionization (MALDI) coupled to time-of-flight mass spectrometry (TOF MS) in combination with Biotyper software (Bruker, Daltonics). The identification of the isolates by applying a library of clinical origin allowed to detect strains with potential danger to health as well as propose candidates to carry out future studies of PAHs bioremediation in saline environments. Additionally, the applying chemotaxonomic techniques allowed distinguish very minor changes in proteins profile between isolates, which it did in some the strain level classification. In addition, it should be noted that, as far as we know, it is the first report that generates information of on cultivable bacterial diversity in areas impacted with PAHs in the coastal zone of Rosarito Port and in the Baja California Coast.

Therefore, typing of strains using proteomic profiles provided by modern analytical tools as MALDI-TOF MS has provided compelling evidence of diversity in marine environmental in a way of low costs, fast and reliable and it can be considered and tool alternative for conventional biochemical and molecular identification, so this manuscript can fit into the scope of the J. Mex. Chem. Soc.

Paper is containing original research and has not been submitted or published before in any journal and is not currently being considered for publication elsewhere.

I accept the responsibility of including as co-authors all persons appropriate and none inappropriate. All authors have been read and approved the manuscript and have contributed significantly for the paper and declare that there are no known conflicts of interest associated with this publication.

The following file are submitted:

* Silva-Jimenez et al 2017.text………. the main text with two Tables and four Figures
* Silva-Jimenez et al 2017\_ESM…….. electronic supplementary material
* GA…………………………………….Graphical abstract.
* Fig.1…………………………………..JPG
* Fig. 2…………………………………..JPG
* Fig. 3…………………………………..JPG
* Fig.4…………………………………..JPG

Possible Referees:

1. Prof. Dra. Luz Elena Vidales Rodríguez. Laboratorio de Enfermedades Infecciosas. Unidad Académica de Ciencias Biológicas. Universidad Autónoma de Zacatecas. Mexico. Phone: + (52) 492 869 0544. **E-mail:** [luzelenavr@uaz.edu.mx](mailto:luzelenavr@uaz.edu.mx)
2. Professor Vidales-Rodríguez is an expert in environmental microbiology and biorremediacion
3. Prof. Dr. Adolfo López Torres. Chemical Sciences. Tuxtepec Campus. University of Papaloapan. Mexico. + (52) 473 120 08 23. **E-mail:** altorres@unpa.edu.mx.

Professor Lopez-Torres is a specialist in analytical chemistry, he uses mass spectrometry tools and is particularly interested in development and application of analytical procedures oriented to the characterization, identification and /or determination of biomolecules of important chemical in environmental.

1. Prof. Dra. Dra. Judith Amador Hernández. Faculty of Chemistry. Autonomous University of Coahuila. Mexico. Phone: (52) (844) 415 5392 Ext 112. E-mail: amadorjudith@live.com.mx

Professor Amador-Hernández is a specialist in development of analytical methods by techniques spectroscopic and chromatography, Green Analytical and Chemistry Chemometrics.

1. Prof. Dra. Ana María Iñiguez-Martínez. Facultad de Ciencias Marinas. Universidad Autónoma de Baja California. Mexico. Phone: + (52) 646 174 45 70, Ext. 142. **E-mail**: iniguez.ana@uabc.edu.mx

Professor Iñiguez-Martínez is an expert in analytical chemistry and the study of marine bacteria, particularly of Actinobacteria.

Thank you very much for your attention

Sincerely yours,

**Alma Rosa Corrales Escobosa**

Professor of Department of Chemistry,

University of Guanajuato,

Lascurain de Retana N°5, 36000 Guanajuato, Mexico.

Phone: + (52) 473 73 2006, Ext. 5423

E-mail.com: alma\_rce@ugto.mx