

Rola Houhou

Position: PhD Student
Project: A03
Address: Institute of Physical Chemistry
Lessingstraße, 10
07743, Jena



E-Mail: rola.houhou@uni-jena.de
Tel: +49 (0) 3641 9 - 48339
Fax: +49 (0) 3641 9 - 48302



Research Interests

- Mathematics/Statistics
- Data analysis
- Spectroscopy

Current Project

PhD thesis, working title: “Development of statistical approaches to differentiate between Raman spectra of isotopically labeled bacteria”

In this project, different Raman techniques in combination with microfluidics will be used for the detection and sorting of isotopically labeled single bacteria cells. In this subproject, the Raman and CRS data will be used to establish different adapted chemometric algorithms, in order to differentiate normal from isotopically labeled bacteria. Here, a special emphasis will be on algorithms for the analysis of spectra from multi-labeling experiments. The output of these algorithms will then be used as triggering signal for the microfluidic device.

Curriculum Vitae

10/2017 – now	PhD student at Friedrich–Schiller–University Jena
09/2015 – 06/2016	M.S. Applied Mathematics at Saint-Joseph university Lebanon
10/2008 – 10/2013	M.S. Statistics at Le Cnam Lebanon/Paris
10/2003 – 06/2008	B.S. Pure Mathematics at Lebanese University Lebanon

Publications

Shaban, A. and **Houhou, R.** (2015) “Drought or humidity oscillations? The case of coastal zone of Lebanon.” *Journal of Hydrology*, 529 (3): 1768-1775.

Conference contributions

Houhou, R., Bocklitz, T. and Popp, J. (2018) “Functional data analysis for Raman spectra” – ICORS 2018; 26 to 31 August 2018 at Jeju Island Korea, 03_1121 (Abstract)