



Dr Marie HUBERT-ROUX



Research Engineer

Analysis and modelling team

Mass spectrometry and separation sciences group

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PROFESSIONAL EXPERIENCES

- 2005- University of Rouen, Research Engineer, hold
2000-2005 University of Rouen, Research Engineer, contract
1998-1999 Sanofi-Synthélabo, Longjumeau (91), scientist in the Laboratory of Analytical Development
1998 Centre International de Toxicologie, Evreux (27), scientist in the Laboratory of Analytical Chemistry

EDUCATION

- 1998 PhD Analytical Chemistry (University of Rouen)
1995 MSc Organic Chemistry (University of Rouen)
1992 Bsc Chemistry (DUT, University of Maine)

ADMINISTRATIVE & INSTITUTIONAL RESPONSIBILITIES

- 2016- Operational manager of Carnot I2C – Analysis department
2014- Technical manager in Mass Spectrometry of C2IOrga
2011- Member of the council of CNRS-COBRA Laboratory.

RESEARCH INTERESTS

- Mass Spectrometry
- Ion mobility Spectrometry
- Petroleomics
- Polymer
- Complex organic mixtures

SCIENTIFIC ACHIEVEMENTS

Academic record (h-index: 12)

52 publications, 6 invited lectures (academia & industry)

PUBLICATIONS

1. Le Maître, Johann, Hubert-Roux, Marie, Paupy, Benoit, Marceau, Sabrina, Rüger, Christopher, Afonso, Carlos, Giusti, Pierre "Structural Analysis of Neutral Nitrogen Compounds Refractory to the Hydrodenitrogenation Process of Heavy Oil Fractions by High-Resolution Tandem Mass Spectrometry and Ion Mobility–Mass Spectrometry." *Energy & Fuels*, **2020**, 34, 9328-38, . doi : <https://doi.org/10.1021/acs.energyfuels.0c01160>
2. Lacroix-Andrivet, O., Hubert-Roux, M, Mendes Siqueira, A L, Bai, Y., Afonso, C. Comparison of Silica and Cellulose Stationary Phases to Analyze Bitumen by High-Performance Thin-Layer Chromatography Coupled to Laser Desorption Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry." *Energy & Fuels*, **2020**, 34, 9296-9303 doi : <https://doi.org/10.1021/acs.energyfuels.0c00709>
3. Beaumesnil, M, Mendes Siqueira, A. L., Hubert-Roux, M., Loutelier-Bourhis, C. Afonso, C., Racaud, A , Bai, Y. High Performance Thin Layer Chromatography with Atmospheric Solid Analysis Probe Mass Spectrometry for Analysis of Gasoline Polymeric Additives. , *Rapid Commun. Mass Spectrom.* **2020**, doi : <https://doi.org/10.1002/rcm.8755>
4. Structural analysis of heavy oil fractions after hydrodenitrogenation by high-resolution tandem mass spectrometry and ion mobility spectrometry." Le Maître, Johann, Hubert-Roux, Marie, Paupy, Benoit, Marceau, Sabrina, Rüger, Christopher, Afonso, Carlos, Giusti, Pierre, *Faraday Discussions*, **2019**, 218, 417-430
5. Characterization of polyalphaolefins using halogen anion attachment in atmospheric pressure photoionization coupled with ion mobility spectrometry-mass spectrometry." Mendes Siqueira, A. L., Beaumesnil, M. Hubert-Roux, M., Loutelier-Bourhis, C. Afonso, C., Pondaven, S., Bai, Y. Racaud, A., *Analyst*, **2018**, 143(16), 3934-3940.
6. Determination of multimodal isotopic distributions : the case of a ¹⁵N labeled protein produced into hairy roots” Romain Trouillard, Marie Hubert-Roux, Vincent Tognetti, Laure Guilhaudis, Carole Plasson, Laurence Menu-Bouaouiche, Laurent Coquet, François Guérineau, Julie Hardouin, Jean-Pierre Ele Ekouna, Pascal Cosette, Patrice Lerouge, Michèle Boitel-Conti, Carlos Afonso, Isabelle Ségalas-Milazzo, *Anal. Chem.*, **2015**, 87, 5938-5946.
7. Evaluation of atmospheric solid analysis probe ionization coupled to ion mobility mass spectrometry for characterization of poly(ether ether ktone)polymers, Emilie Cossoul, Marie Hubert-Roux, Muriel Sebban, Florence Churlaud, Hassan Oulyadi, Carlos Afonso, *Analytica Chimica Acta*, **2015**, 856, 46-53.
8. Direct TLC/MALDI-MS coupling for modified polyamidoamine dendrimers analyses, Emma-Dune Leriche, Marie Hubert-Roux, Martin C. Grossel, Catherine M. Lange, Carlos Afonso, Corinne Loutelier-Bourhis, *Analytica Chimica Acta*, **2014**, 808, 144-150.
9. Enantiomers differentiation of aromatic amino acids by traveling wave ion mobility – mass spectrometry, Virginie Domalain, Marie Hubert-Roux, Vincent Tognetti, Laurent Joubert, Catherine M. Lange, Jacques Rouden, and Carlos Afonso, *Chemical science*, **2014**, **5**, **3234-3239**.
10. Identification of tiagabine degradation products using liquid chromatography with electrospray ionization multistage mass spectrometry and ultra-performance liquid chromatography/high resolution mass spectrometry, M. Hubert-Roux, M. Skiba, A. Sughir, M. Lahiani-Skiba, F. Olivier-Chanu, V. Levacher and C. M. Lange, *Rapid Commun. Mass Spectrom.*, **2012**, 26, 287-296.