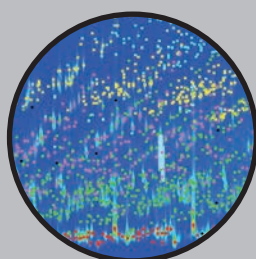


Workshop on analytical techniques for a comprehensive and detailed chemical analysis of petroleum and petroleum products in industry

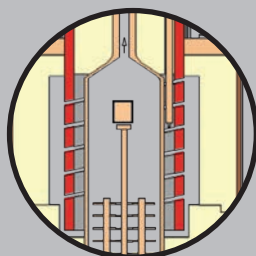
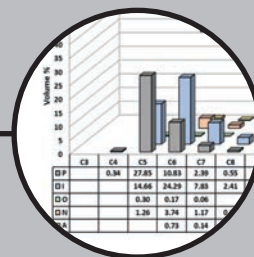
Date: 14th and 15th June 2018
Venue: Munich / Augsburg (Germany)

The Joint Mass Spectrometric Centre of the University Rostock and the Helmholtz Zentrum Munich (JMSC) in cooperation with Analytik Service Gesellschaft mbH (ASG) will held a workshop on analytical techniques for a detailed chemical and comprehensive analysis of petroleum.



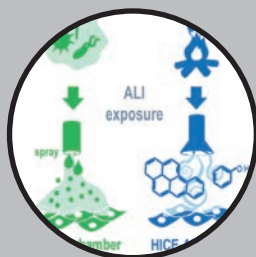
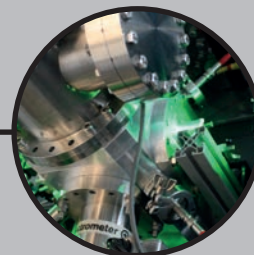
Detailed qualitative and quantitative analysis of middle distillates and higher boiling point cuts: *Comprehensive two-dimensional gas chromatography nominal/ high resolution mass spectrometry**

Fast and detailed analysis of gasoline blends and feeds: *Gas chromatography vacuum ultraviolet absorption spectroscopy**



Analysis of high boilers and vacuum residues: *Thermo gravimetry and direct insertion probe**

Process analysis and hyphenation of mass spectrometry: *Photoionization and high resolution mass spectrometry*



Linking chemical signatures to biological response: *examples for petroleum powered combustion engines (Air liquid interface and multiomics approach)*

The workshop will address the perspectives of these techniques and methods for industrial applications (R&D and specification lab) in the field of petroleum and related industries. The seminar part will be supported by lab demonstrations and hands-on (*).

The participation of the workshop will be free-of-charge. (Transportation and accommodation are not included) The number of attendee is limited. Please place your enquiry to Angela Hoffmann (agnela.hoffmann@helmholtz-muenchen.de)

We gratefully acknowledge