The 12th Workshop on "FT-IR Spectroscopy in Microbiological and Medical Diagnostics", organised by the Robert Koch-Institute, Berlin, and the International Society for Clinical Spectroscopy (CLIRSPEC), took place on October 10-11, 2019.

The meeting attracted ~ 100 registered participants from 19 countries and 4 continents (Europe, North America, Asia, Australia) and the programme was comprised of two days of lectures, encompassing 29 oral presentations, and a poster session with 39 poster presentations, for which three poster prizes were awarded.

The 2019 workshop continued the tradition of highlighting the relevant fields of applications of biomedical vibrational spectroscopy and brought together scientists from around the world to discuss, network & encourage the application of IR and Raman spectroscopy for the characterisation and differentiation of intact microbial, plant, animal or human cells. Following the lines of the previous workshops, major points of discussion were the progress in vibrational spectroscopic research, recent applications in various fields of microbiology, biomedicine and new technological developments.

Topics included:
- Vibrational spectroscopy of microbial colonies, biofilms, population analyses and for single cell investigations
- Diagnostic applications of IR and Raman spectroscopy in bio-medicine
- Microspectroscopic studies of individual human cells
- Vibrational spectroscopy for studying cell/drug interactions and for antimicrobial resistance testing
- Epidemiological studies, maintenance of culture collections, therapy control, investigation of infection chains, hygiene control
- Microbiological analyses in the pharmaceutical, food, and water supply industries, and in biotechnology
- New trends of spectral data analysis

For more details regarding the workshop, please review the descriptions on the website https://www.ftir-workshop.org