

# ATR-Loop InfraRed Fiber Optic Probes

ATR-Loop Infrared PIR-fiber probe was the first in **FlexiSpec®** product line designed for use with FTIR and other Mid IR spectrometers. ATR-Loop PIR-fiber probes are perfect for remote analysis of composition of liquids, pastes and soft surfaces with no need for sample preparation.

Loop fiber probe is the simplest one in the **FlexiSpec®** product family to enable low cost ATR-spectroscopy.

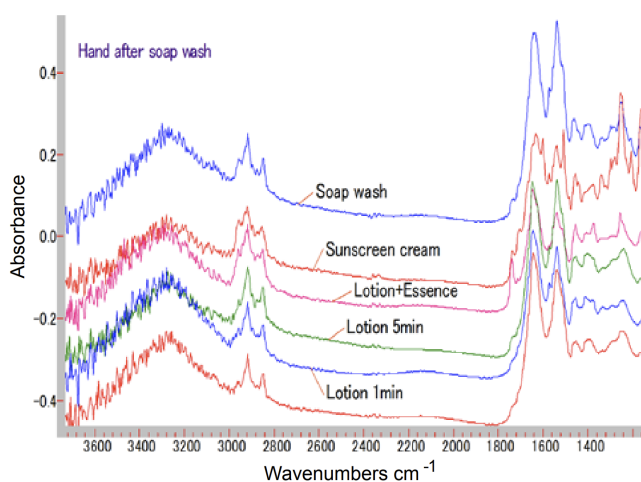


## Applications:

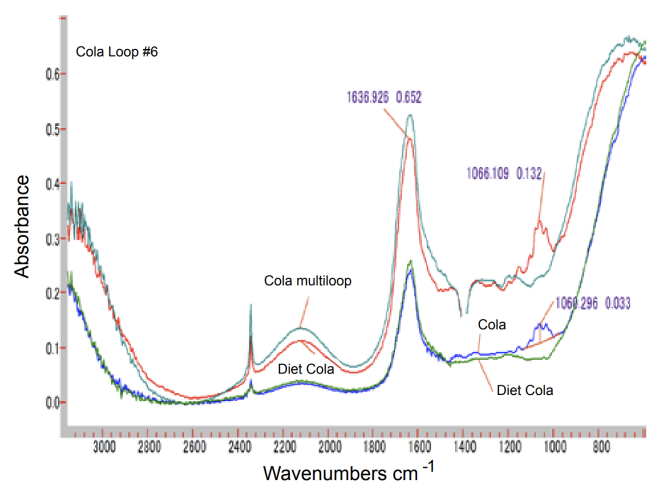
- ✓ Remote evanescent absorption (ATR-) spectroscopy in-citu
- ✓ Multiple ATR-spectroscopy by immersion of fiber loop in liquid
- ✓ In-vivo molecular spectroscopy for medical diagnostics by simple touch of ATR-Loop to skin or tissue

## Features:

- ✓ High throughput at Mid InfraRed range
- ✓ On-line absorbance spectroscopy of liquids, pastes & soft solid surfaces
- ✓ Compatible with all FTIR, QCL and IR- Filter spectrometers
- ✓ Cost effective alternative to more expensive ATR-IR-fiber probes
- ✓ Replaceable ATR Loop PIR-Fiber Tips



Skin Absorbance Spectra with ATR Probe



Cola Spectra with DLP-Probe

UV

VIS

NIR

MIR

Working Range

3-17  $\mu\text{m}$

## Specifications

Probe Type	Chalcogenide-IR (CIR)	Polycrystalline-IR (PIR)
Transmission Range	6500 – 1700cm <sup>-1</sup>	2500 – 600cm <sup>-1</sup>
Fiber Type	Chalcogenide glass (As-S)	Silver Halide (AgCl:AgBr)
Temperature Range	≤ 90°C	≤ 100°C

## Parameters of standard Polycrystalline fibers

Total Length	1m (opt.: PIR up to 5m, CIR up to 10m) *
Shaft Length	120mm *
Shaft Diameter	10,6mm
Shaft Material	PEEK
Protective Tube Material	PEEK
Input/Output Connectors	Long SMA-905 (opt.: any other type)
Detachable PIR fiber Loop	Loop: Multi-Loop (Double-, Triple-Loop, etc..)

\* Customized dimensions are available on request

