

# 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.

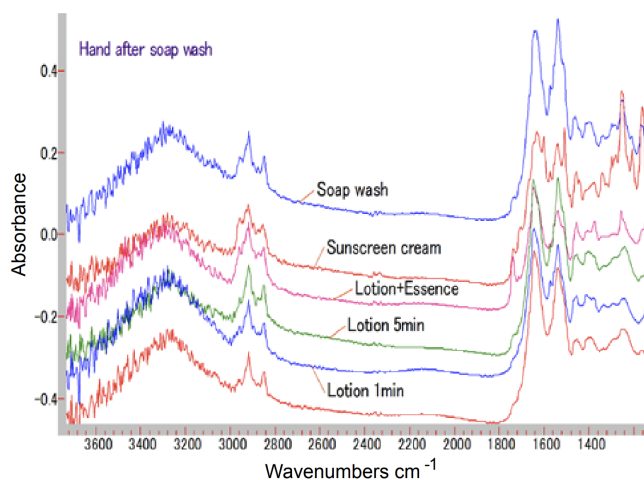


## Applications:

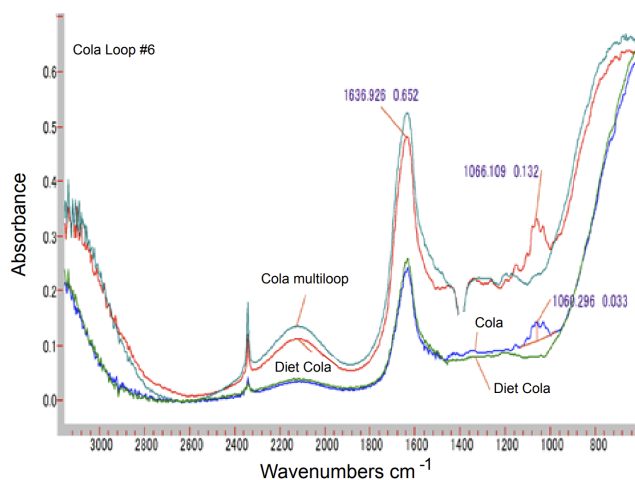
- ✓ Remote evanescent absorption (ATR-) spectroscopy in-citu
- ✓ Multiple ATR-spectroscopy by immersion of fiber loop in liquid
- ✓ In-vivo molecular spectroscopy for medical diagnostics by simple touch of ATR-Loop to skin or tissue

## 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

## 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            | 10mm   |
| 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

