

# ATR-Loop InfraRed Fiber Optic Probes



art photonics



## FlexiSpec<sup>®</sup>

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

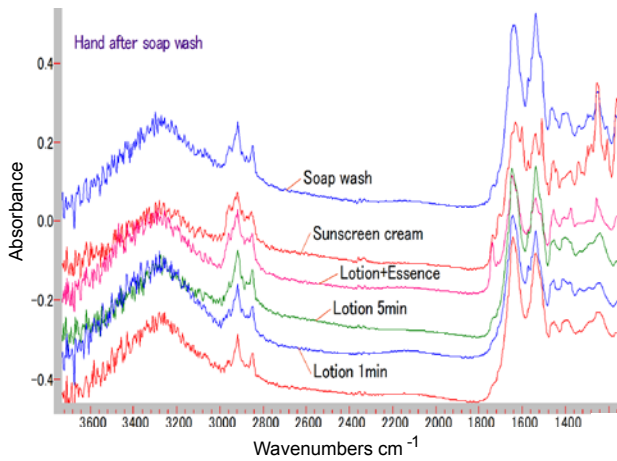
ATR-Loop Infrared PIR-fiber probe was the first in **FlexiSpec<sup>®</sup>** product line designed for use with FTIR and other Mid IR spectrometers. ATR-Loop PIR-fiber probes are perfect for remote analysis of composition of liquids, pastes and soft surfaces with no need in sample preparation.

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

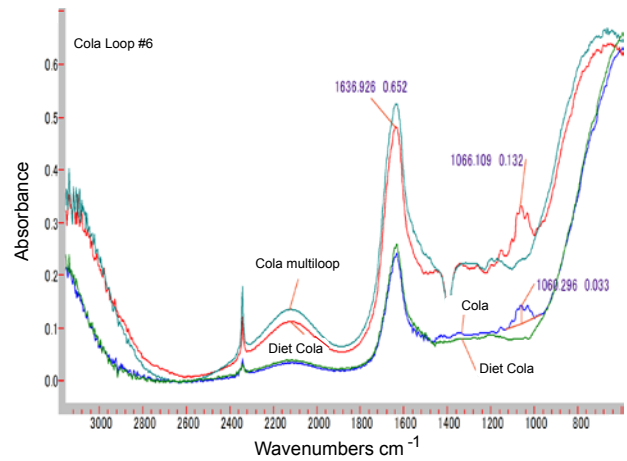
### Applications:

- 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

### Skin Absorption Spectra with ATR-Probe



### Cola Spectra with DLP-probe



### Specification of Fiber Optic ATR-Loop Probes *FlexiSpec*<sup>®</sup>

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

### Common Parameters of Fiber Optic Multi-Loop Probes *FlexiSpec*<sup>®</sup>

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



\*Customized dimensions are available on request



artphotonics.com

**art photonics GmbH**  
Rudower Chaussee 46  
12489 Berlin Germany

Phone + 49 (0) 30-6779 887-0  
sales@artphotonics.com  
www.artphotonics.com

QAS Int. - certified  
DIN EN ISO 9001:2008  
Zertifikat Nr. A1887GER

