

Auretek



GUI for data acquisition and analysis



Portable backend with dedicated electrical and optical modules



Compact handheld confocal probe

Next-Generation Smart Skin Analyser



Fast and accurate skin depth profiling



Wideband spectrum, rich information



Comprehensive skin biochemical database



NON-INVASIVE

No need removal of tissue as traditional biopsy



FLEXIBLE

Easy access to various body parts



REAL TIME

On-the-spot data analysis to quantify skin constituents



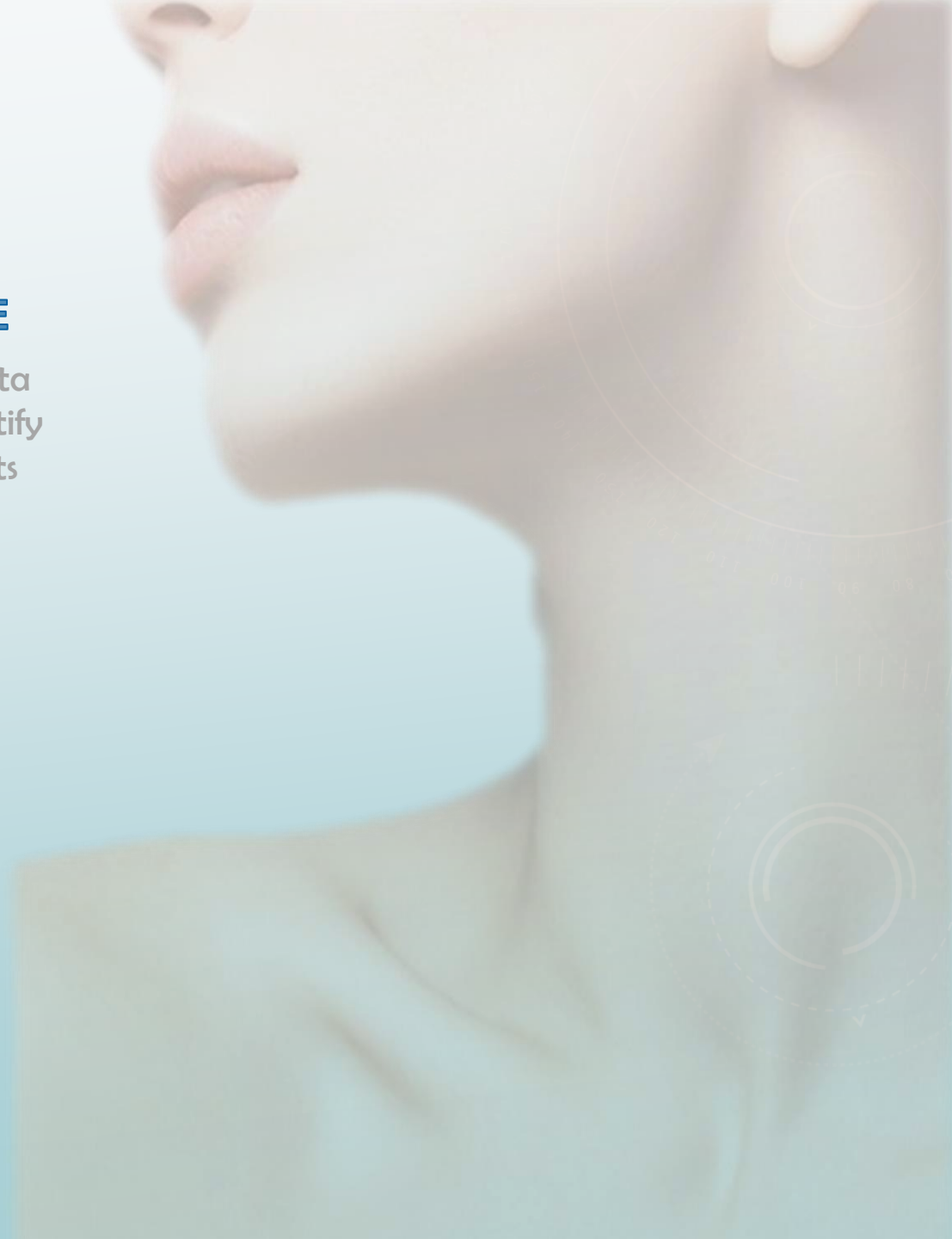
USER-FRIENDLY

Easy operation and result display with GUI



WIDE APPLICATIONS

Skin disease diagnosis, treatment monitoring and cosmeceutical product evaluation



STEP 1

STEP 2

STEP 3

STEP 4



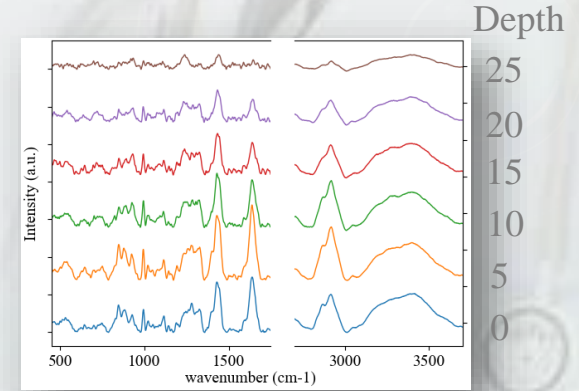
Switch on the system



Put the probe on desired measurement site



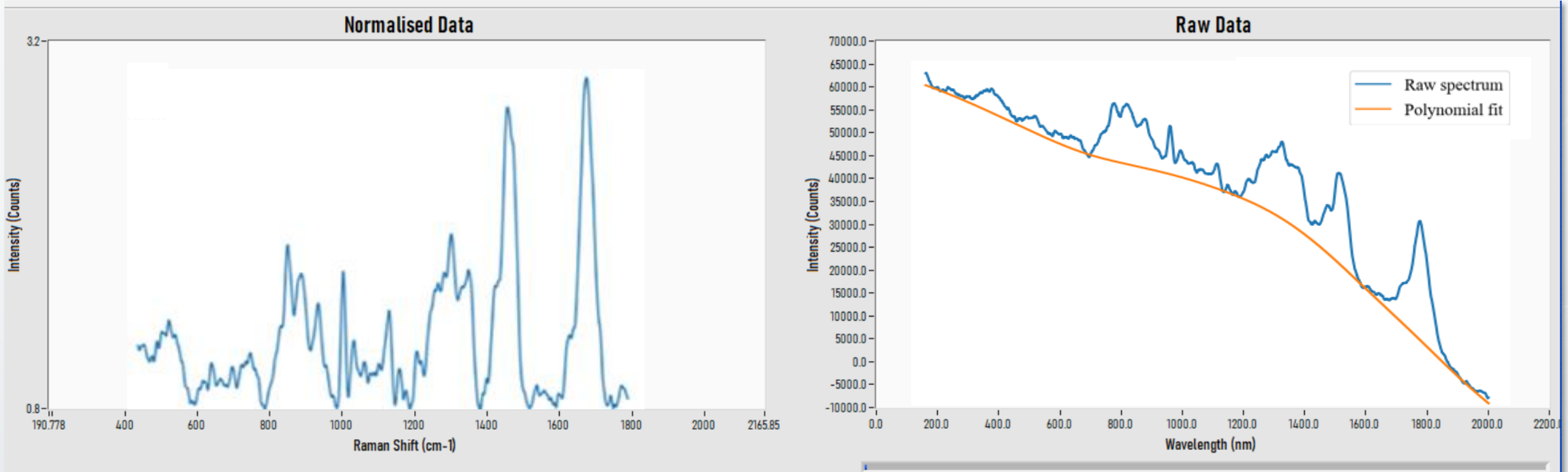
Set up measurement in GUI and START



Depth	10um
Water %	23
Melanin	0.29
Urea	0.004
Ceramide	0.03
NMF	0.05

Data analysis by Auretek software

Auretek software for automatic skin data acquisition at all depths



Laser Wavelength	Motor	Exposure Time	Save Measurement	Live Measurement
NIR <input type="text" value="671"/> nm IR <input type="text" value="784.95"/> nm	Step Size <input type="text" value="1"/> μm Current Position <input type="text" value="61"/> <input checked="" type="checkbox"/>	Set Exposure Time <input type="text" value="1.00"/> s	No. of steps <input type="text" value="17"/> Step Size <input type="text" value="0"/> μm <input type="button" value="Abort"/> Path <input type="text" value="% C:\...\Desktop\Test Data"/> Data to save <input type="text" value="785 nm"/> <input type="button" value="Save"/> <input type="text" value="0"/>	<input type="button" value="START / STOP"/>

Centre Wavelength nm Current Temperature

Auretek software for on-the-spot skin constituents analysis

File Edit

SUBJECT SELECTION

rzfinger_30_5
rzfinger_30_6

Import

Remove

Process

Save

COMPONENTS

- Free Amino Acids Ceramide
- Pyrrolidone Carboxylic Acid
- Urocanic Acid Lactic Acid
- Water Melanin Urea

CURRENTLY VIEWING

rzfinger_30_5

006_20180515_1430_1_1
006_20180515_1430_2_1
007_20180515_1500_1_1
007_20180515_1500_2_1
008_20180522_1530_1_1
008_20180522_1530_2_1
009_20180522_1620_1_1
009_20180522_1620_2_1
010_20180528_1350_1_1

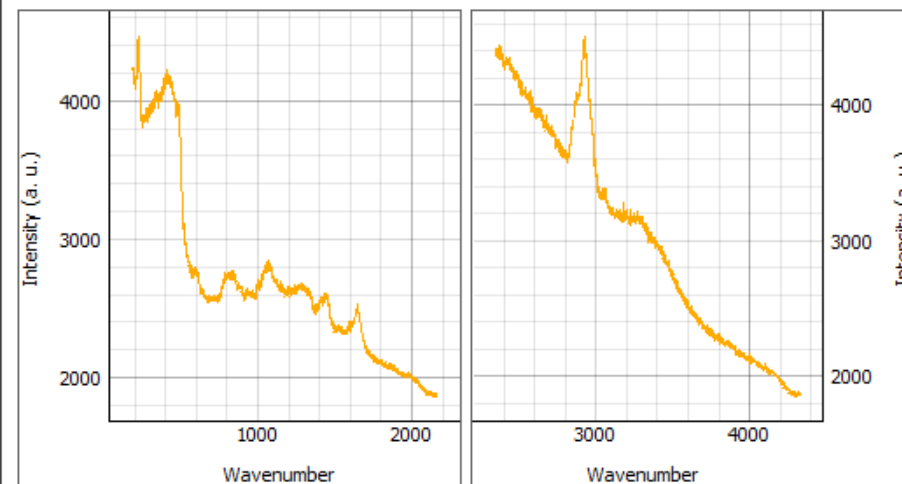
COMPONENT BREAKDOWN

● Depth Profile

	Coeff (a. u.)	Coeff (%)	AUC
PCA	0.0	0.0	0.018
Glutamic Monohydrate	0.005	0.011	0.054
Ceramide	0.028	0.057	0.366
Glutamine	0.006	0.011	0.025
Alanine	0.0	0.0	0.0
Urea	0.004	0.008	0.031
Glycine	0.0	0.0	0.031
Tryptophan	0.0	0.0	0.01
Aspartic Acid	0.004	0.007	0.114
Leucine	0.0	0.0	0.118
Phenyl-alanine	0.0	0.0	0.004
Tyrosine	0.006	0.011	0.018
Lactic Acid	0.02	0.042	0.131
Water	0.297	0.608	5.729
Urocanic Acid	0.001	0.002	0.014
Histidine	0.008	0.016	0.087
Melanin	0.099	0.204	0.377
Serine	0.011	0.023	0.221
Water Percentage	22.441		

VIEWING AT DEPTH: skin surface

RAW SPECTRUM



PROCESSED & FITTED

