SERSTECH

Johan Raneke

Chief Sales Officer

Legal or illegal?

Go or no go?

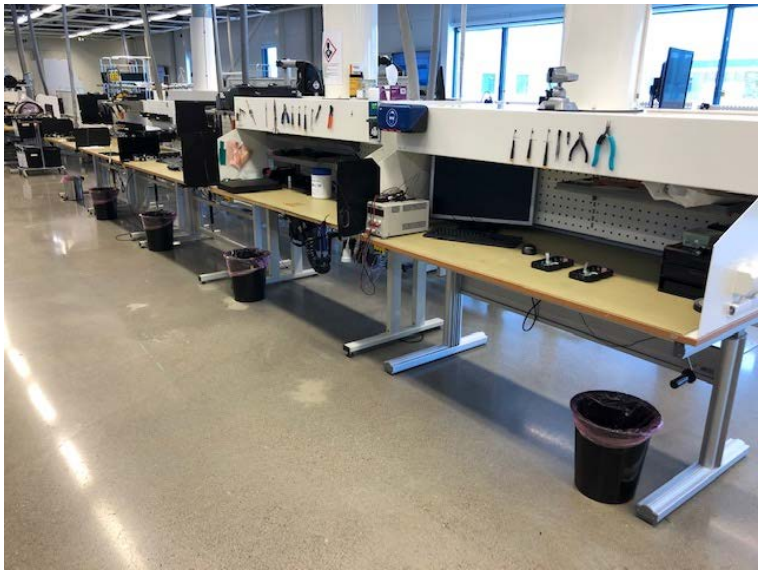
SERSTECH

Border police in Malmö, Sweden with Serstech 100 Indicator

Serstech

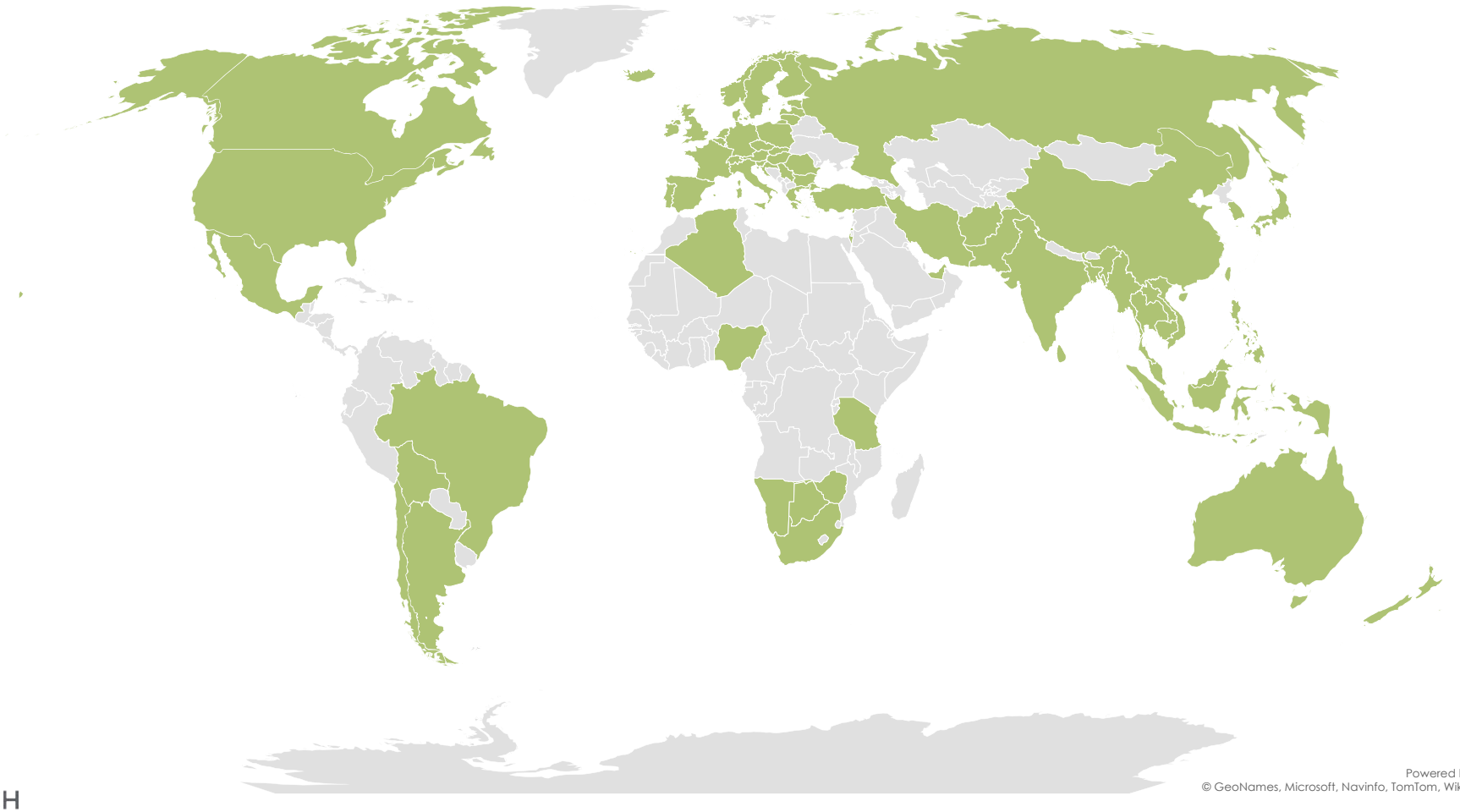
- Founded in 2006
- HQ in Lund, Sweden
- Listed at Nasdaq First North Growth Market
- Rapid growth since 2015 – ranked 28 of 500 in Europe*
- Fully focused on handheld Raman **solutions**
- All production in Sweden
- Close Cooperations
  - Swedish Police, National Forensics Center
  - Swedish Defense Research Agency (FOI)
  - Lund University
  - Several other organizations globally to develop libraries

Production in Sweden



SERSTECH

Global Sales and Support Network



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SERSTECH

Customer References

Coast Guard
USA

CIA
USA

Prison and Police
Indonesia

DEA
Philippines

Customs
Ireland

Korean
National Police Agency

Singapore
Central Narcotics Bureau

Royal Thai Navy

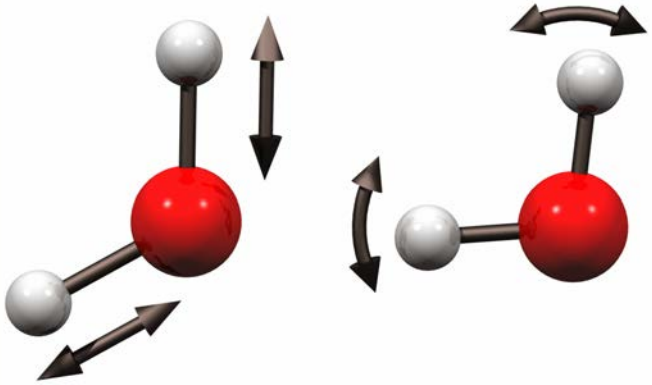
Australian Coast Guard

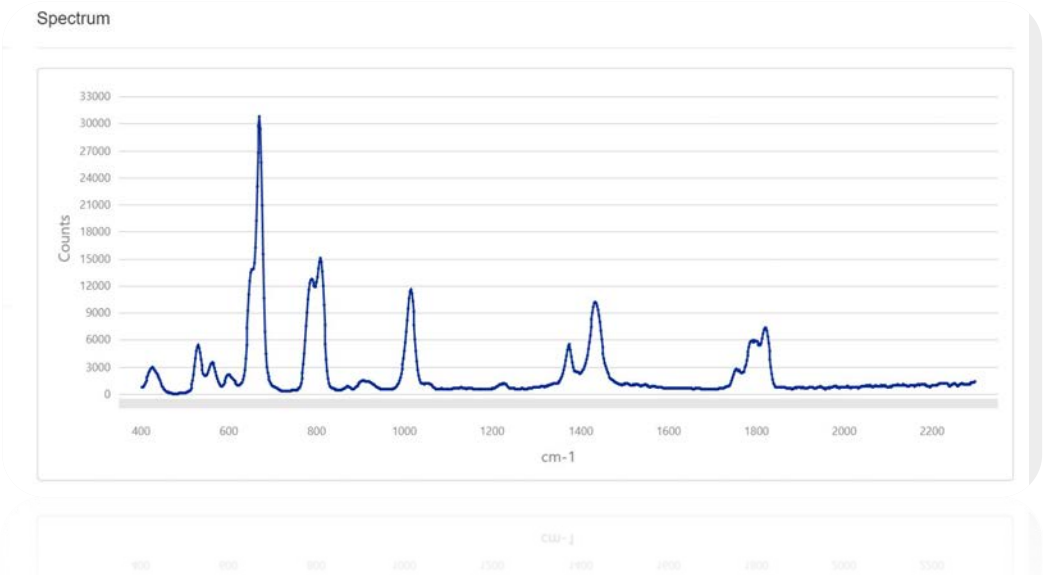
World Customs Organization

United Nations

Raman spectroscopy

- A laser adds energy to the sample
- The molecules start to vibrate
- Vibrational signals are sent back to the instrument
- The instrument reads the spectrum (fingerprint) of the sample
- The spectrum is matched against reference libraries

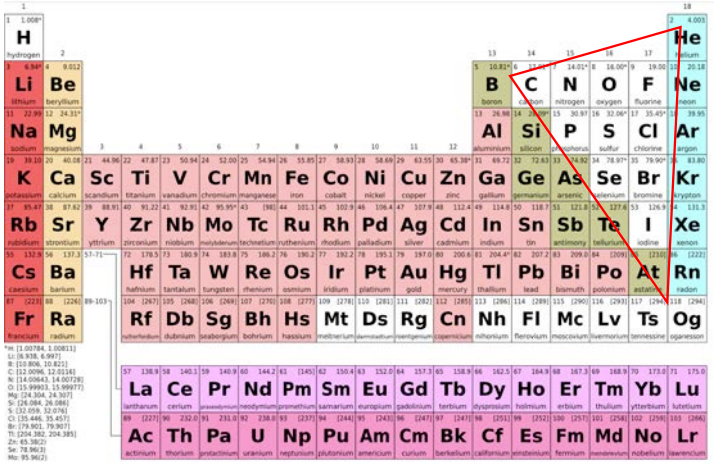




Raman Advantages

- No instrument maintenance
- Non-destructive analysis – the sample is not consumed
- The sample is not altered in any way
- Analysis can be performed through glass and plastic containers
- Not sensitive to water
- No consumables
- No sample preparation
- Raman cannot be deceived – simulants will be identified

Serstech Arx



Elements forming molecules with covalent bonds

Main potential users

- The Serstech 100 Indicator is making the every-day work safer, easier and more efficient for:
  - First responders / HazMat teams
  - Police / Bomb squads / Antinarcotics
  - Prison authorities
  - Forensic lab
  - Customs / Border control
  - Fire departments
  - Rescue and safety teams
  - CBRNE teams
  - Events control & security
  - Reference labs (Military & Civil)
  - Pharmaceutical companies
  - Industrial and chemical companies
  - Environmental protection agencies

Our Solution

Handheld Raman instruments

100 Indicator/Indicator+

Arx/Arx+

PC Software

ChemDash 2.0

SERS-kit

Libraries

Serstech 100 Indicator

Great performance at competitive price

- Results in seconds, easy to use
- Competitve price, truly handheld, selectable libraries
- IP67, MIL-STD-810G, 21 CFR Part 11 compliant

and more

Serstech Arx & Arx+

Next generation Raman spectroscopy

- SharpEye™ (AutoFocus), algorithms 2.0
- User interface, Quick Access™
- IP67, MIL-STD-810G, 21 CFR Part 11 compliant, WiFi, customizable workflows

and more

Serstech Arx+

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Serstech Arx & Arx+

Next generation Raman spectroscopy

SharpEye™
Quick Access ™
\+ Algorithms 2.0

Game Changer

Serstech Raman Instruments

	100 Indicator	100 Indicator+	Arx	Arx+
Weight	650 grams		600 grams	
Laser wavelength	785nm		785nm	
Laser output power	max 300mW		max 300mW	
Algorithm platform	1.0	1.0	2.0	2.0
IP67, MIL-STD-810G	Yes	Yes	Yes	Yes
Selectable libraries	Yes	Yes	Yes	Yes
Create custom libraries	Yes	Yes	Yes	Yes
Quick Access™	-	-	Yes	Yes
SharpEye™ Autofocus	-	-	Yes	Yes
Integrated WiFi	-	-	Yes	Yes
Customizable workflows	-	-	Yes	Yes
Barcode reader	-	-	Yes	Yes
21 CFR Part 11 compliant	-	Yes	-	Yes

Serstech Libraries

World class validated libraries

- Validated, GHS-symbols and CAS-number
- Updated and expanded several times a year
- Narcotics, Explosives, Hazardous chemicals, Pharmaceuticals, CWA and General chemicals

and more

Serstech SERS kit

Adding a new dimension to handheld Raman

- Patented 3D measurement for exceptional results
- Identifies very low concentration samples
- Quick and easy to operate in the field

Serstech ChemDash

The heart of the solution

- Administrate users, devices, libraries etc.
- Analyze and compare spectra
- Export measurements, create and share reports

and more

Serstech ChemDash

	ChemDash Lite	ChemDash Pro	ChemDash Pro+
Connectivity	USB	USB, WiFi	USB, WiFi
Standard reports	Yes	Yes	Yes
View measurements	Yes	Yes	Yes
Measurement export	Yes	Yes	Yes
Device update tool	Yes	Yes	Yes
Manage custom libraries	Yes	Yes	Yes
Import/Export custom libraries	-	Yes	Yes
Customize reports	-	Yes	Yes
Customized workflows	-	Yes	Yes
Customize device settings	-	Yes	Yes
Advanced user management	-	Yes	Yes
21 CFR Part 11 compliant	-	-	Yes
Number of devices	1	Multiple	Multiple

Why Serstech

Complete offering

Made in Sweden

WORLD CUSTOMS ORGANIZATION

AUSTRALIAN VOLUNTEER COAST GUARD

References

SERSTECH

Thank you for listening!

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