

How to create and maximise the value of chemical intelligence from the supply chain

Peter Hojerback, CEO















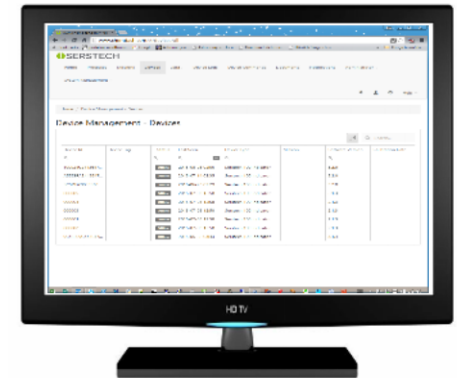
Supply chain challenges

- ⚡ How to ensure authenticity of chemicals?
- ⚡ How to id and keep up with new narcotics?
- ⚡ How to prevent terrorism based on chemicals?
- ⚡ How to see the bigger picture?
- ⚡ Current IT systems and procedurs insufficient
- ⚡ Labs slow from too much (unnecessary) work
- ⚡ No high-level analysis

Our Offer



 **SERSTECH**
“Indicator”
&
“ChemDash”



Measure

Add-value

Share & Act



A system for continuous improvements



A complete productivity solution

- Store, analyse and share chemical data and measurements
- Administrate your instruments
- Build and manage spectral libraries
- Share measurements
- Create reports
- Build missions



Leveraging chemical intelligence

Data focus

Business process scope

Mission focus

End Use Cases



QA control



Illegal substances



Counterfeit



Distribution chain validation

Data values

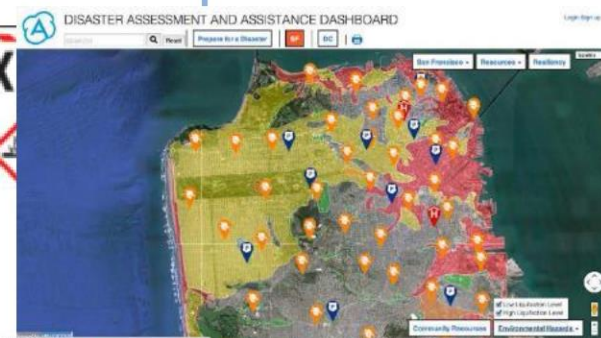
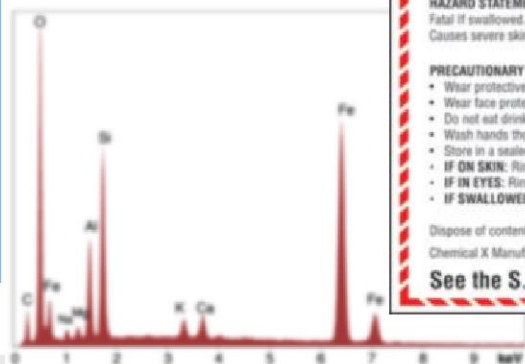
- Device health
- Device configuration
- Secure data
- Validated data
- Trace data

Information values

- Visualization
- Data analysis
- Repositories
- User levels

Awareness values

- Mission services
- Information sharing
- Context analysis
- Business IT integration
- Business adaptations of solutions



ChemDash overview

Cloud infrastructure

- Multi-tenant
- State of the art security
- Customization support
- Cloud or customer in-house deployment options

Integration API

- REST
- JSON

Service enablers

- Databases
 - Device status & configuration
 - Chemical data
- Device management
 - Device discovery & localisation
 - Status monitoring
 - Bulk configuration & management
 - Bulk firmware update
- Mission concept
 - Customer Dashboards

Services potential

- Enterprise IT systems integration
- Control systems & work process integration (e.g. process alarms)
- Spectrum analysis
- Spectrum database integration
- Meta data analysis (e.g. Trends)
- Device tracking

Proven technology platform

- SAAB development partner



https://www.chemdash.co

Serstech AB [SE] https://www.chemdash.com/#/

SERSTECH

Home Missions Processes Events Incidents Documents Notifications Devices Data Device Logs Device Commands Administrator

Help

Welcome admin@serstech.com (administrator)! Selected mission: Narcotics Mission View Mission Search...

Measurements

Add to Incident Show on Map

	Class	Substance	Detected On	↑	Callsign
	Not-categorised	Methanol	2014-09-19 07:57		161-7490
	Not-categorised	Isopropanol	2014-09-19 08:12		131-9410
	Not-categorised	Piperidine	2014-09-19 08:25		161-9220
	Not-categorised	Acetone	2014-09-19 08:35		132-7810
	Not-categorised	Benzonitrile	2014-09-19 08:54		161-9220

Events

Select filter...

Non identified substance

21d, 20h

Trigger

A non identified substance was found. Substance has id: 201-000-9975d4c0-029f-11e5-ba46-5c514f

Incident created

21d, 20h

New Incident

An incoming measurment has created a new incident (Incident001).

Incident updated

21d, 20h

Update Incident

An incoming measurment has updated an incident (Incident002).

Incidents

Create Incident Create Incident Report

	ID	Name	Created On	↑	Status
	Incident001	Incident1	2015-08-26 14:07		New
	Incident002	Incident2	2015-08-26 14:07		New
	Incident-201508261245	2015-08-26 12:45:23	2015-08-26 14:45		New
	Incident-201508261255	2015-08-26 12:55:06	2015-08-26 14:55		New
	Incident-992015314PM	9/9/2015 3:14:13 PM	2015-09-09 17:14		New

Documents

Upload New Download

	Name	Description	Type	Owner	Linked On
	eula.1028.txt	eula.1028.txt File.		admin@serstec...	2015-08-26 14:55
	Document1	Incident1-Repo...	IncidentReport	admin@serstec...	2015-08-26 14:07
	Document2	Förstörandelag...	Other	admin@serstec...	2015-08-26 14:07
	Document3	Kontaktlistor.xls	Other	admin@serstec...	2015-08-26 14:07
	Document4	Bild.jpg	Other	admin@serstec...	2015-08-26 14:07

Confidential

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🔔 👤 ⚙️ ?

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<input type="checkbox"/>	Not-categorised	Isopropanol	2014-09-19 08:12		131-9410
<input type="checkbox"/>	Not-categorised	Pipeline	2014-09-19 08:25		161-9220
<input type="checkbox"/>	Not-categorised	Metacore	2014-09-19 08:35		132-7810
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<input type="checkbox"/>	Document1	Incident1-Repo...	IncidentReport	admin@serstec...	2015-08-26 14:07
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 Confidential



Immediate answers from the world's
most available spectrometer...



"Serstech 100 Indicator"

Serstech 100 Indicator



Three-instruments-in-one

- Screen
- Identify
- Verify

Fast and accurate identification

- Mixture analysis
- Actionable data

Easy to use

- Get started in 5 min
- Intuitive menus

Easy handling of databases

- Several databases available
- Add you own

Connected

- USB-interface
- Smart PC/Mac software

Future proof

- Regular firmware updates
- Add new databases
- Compatible with ChemDash system

Built for field use

- Designed for tough environments
- Waterproof
- No touchscreen – users wear gloves

Screen method

- ⌄ Search ("Screen") for specific categories of substances of interest
 - ⌄ Now Regulated: Narcotics, Explosives
- ⌄ Main purpose is to get "Alert" notification if any substance in the target category(-ies) has been found
- ⌄ Secondly, to get a "Warning" or "Clear" message
- ⌄ Target users e.g:
 - ⌄ Customs and police officers, bomb disposal teams
- ⌄ Supported categories can be expanded over time, e.g. Toxic, Hazardous



Screen result displays

- Regulated substance found:
 - Red screen - **"Alert"**
- Precursor or Masking Agent:
 - Orange screen – **"Warning"**
- Non-regulated or Cutting Agent:
 - Green screen - **"Clear"**
- Uncategorised, Unknown or no substance found:
 - Grey screen – e.g. **"Inconclusive"**



Measurement Reports

- Reports generated for every measurement
- Stored in PDF format

MEASUREMENT REPORT

SERSTECH

OPERATOR INFORMATION

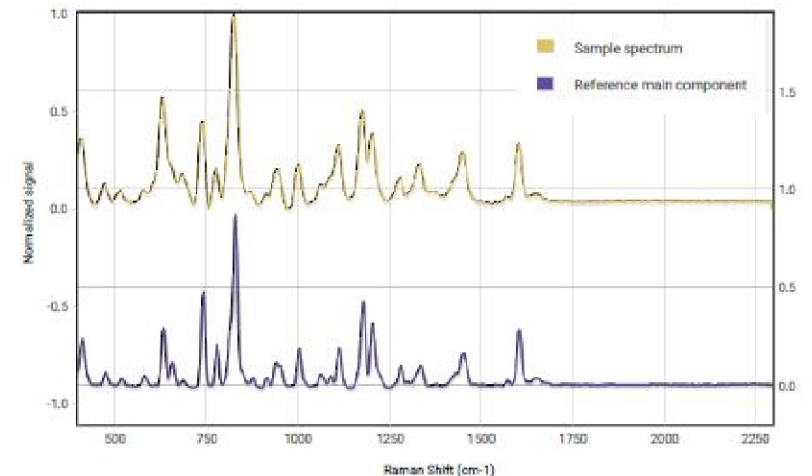
Operator: Default, Admin
Instrument ID: 000000000057
Location:
Contact info:

MEASUREMENT INFORMATION

Measurement type: identify
Reference library:
Exposure time: 5.4 s
Local time: 2015-09-22 12:00:42

✓ MATCH 86.0%

MAIN COMPONENT	IBUPROFEN	86.0%
RESIDUAL COMPONENTS	-	-



User interface languages

- Chinese
- Danish
- English
- French
- German
- Japanese
- Polish
- Russian
- Swedishand more to come



Benefit 1: As fast as the enemy

- ↻ Collaborate!
- ↻ Minimize time from first identification to fully deployed
 - ↻ Within organisation
 - ↻ To partners
- ↻ Use existing IT networks for sharing (eg CEN and IPM)
- ↻ Automate the process (national gatekeepers)
- ↻ Analyse and improve



Benefit 2: Do more with less

- ❖ Build mission to streamline operations
- ❖ Auto-create incidents with reports and tracking, while adding "free text"
- ❖ Manage all your instruments from one place
 - ❖ Updates, measurements, logs, users, etc.



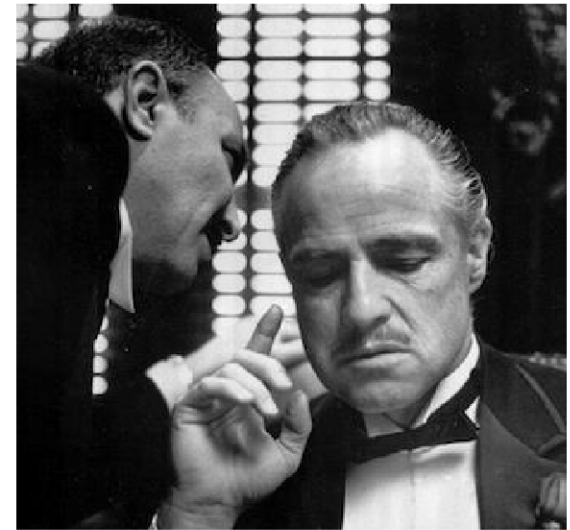
Benefit 3: Leverage data in fight against organised crime

➤ All data in one place (*geo-redundancy*)

- Map incidents
- Apply analytics
- Reporting and statistics

➤ Reduce lab workload

- Focus on in-depth analyses rather than routine



A vision of Chemical Awareness

◀ We envision a world where modern chemistry is a true asset and not a threat. Serstech is the leading supplier of the required chemical awareness.



A mission for better decisions

We create chemical awareness that help those confronted by unknown chemicals make better decisions. We create information and turn it into knowledge.



A company “born global” – with its home in Sweden

- ❖ Founded in 2006, based on research at DTU
- ❖ Ideon Science Park, Lund, Sweden
- ❖ Experienced team and board
- ❖ Listed on Innovation Stock Market in Stockholm



Meet us in booth 44

➤ No more lock-in by suppliers or legacy data – talk to Serstech today and start maximising the value of your chemical intelligence!



Join us to make the world safer and cleaner

