“UNDERWATER MOBILE FORENSICS”
Real Case:

MOBILE PHONE THROWN INTO THE WATER

DRUG TRAFFIC
A speedboat coming from Morocco that is charged of hashish is intercepted. The occupant throws his mobile phone to the water strip but is retrieved by the officers.
The goal: Recover the information in the cell phone so that researchers could dismantle the criminal organization.
Evidence submitted to the laboratory

Mobile Phone Nokia model 1280
Procedure:

Disassembly

First Ultrasonic Bath

Deionized water cleaning under the microscope

Second Ultrasonic Bath

Chip Off

Memory reading

Obtaining the binary archive

Data interpretation

Report writing
“Rust and corrosion”

Arturo Rodríguez Olmedo
ULTRASONIC BATH:
REQUIRED TO REMOVE WASTE

Manufacturer: Aoyue
Model: 9050
http://www.aoyue.com/
Manufacturer: Optika
Model: B-500
http://www.optikamicroscopes.com

Manufacturer: Askania
Model: GSZ 2T
http://www.askania.de
REWORK STATION:

CHIP OFF

IS CRAFTSMANSHIP!

Manufacturer: JBC
Model: AM 600

www.jbctools.com

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Manufacturer: Up&Up
Model: UP-2008-256
http://www.up48.com
A binary file may be decoded using various tools. Many tools may be used for forensics, including Python, FTK, EnCase, Cellebrite, Internet Evidence Finder, and Photorec. These tools can be open source or proprietary, and their use depends on the specific requirements of the forensic investigation. After decoding, the report must be prepared.
Outcome:

All of the contents of the phone were retrieved including deleted data:

- List of calls
- Text messages
- Phone book contacts
- Pictures
- Etc.
SAME METHOD:

“Problem with encrypted data and interpretation”
MANY THANKS FOR YOUR ATTENTION

Q&A?

Q&A?

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