



UATL® PRIVATE RESEARCH
UNIVERSITY est.2005

Патент: GB2562215

**CALIBRATED NEUTRON FLUX
SCANNING TECHNOLOGY FOR
REAL-TIME RECOGNITION OF
THE COMPOSITION OF
SUBSTANCES AT THE
MOLECULAR LEVEL**



UATL® PRIVATE RESEARCH UNIVERSITY OFFERS LICENSES FOR DEVICE'S DEVELOPMENT AND CREATION BASED ON THE PRESENTED TECHNOLOGY

APPLICATION SPHERES OF THE DEVELOPED DEVICES



Air



Fuel



Liquid



Blood



Explosives



Detection of any living and dead organisms in real time
in any environment

TECHNOLOGY DESCRIPTION

THE TECHNOLOGY IS BASED ON TWO TECHNIQUES
PRESENTED BELOW

METHODOLOGY №1: NEUTRON DETECTOR

Application for example - Neutron Detector:
Integration into the spreader of container
cranes, scanning containers **in real time**.

Range of action:

The average mean free path of neutrons in air
is **more than 100 m**.

Purpose of application:

Detection of radioactive materials, such as
plutonium, **over long distances**.

Feature:

Building materials used in cranes are practically
transparent to neutrons.

METHODOLOGY №2: MOLECULAR GAS ANALYZER

Application for example - Blood Sugar
Sensor:

An accurate, **non-invasive method** for
controlling blood sugar in diabetes.

Analysis Duration:

On average, it takes **up to 30 seconds**.

Appointment:

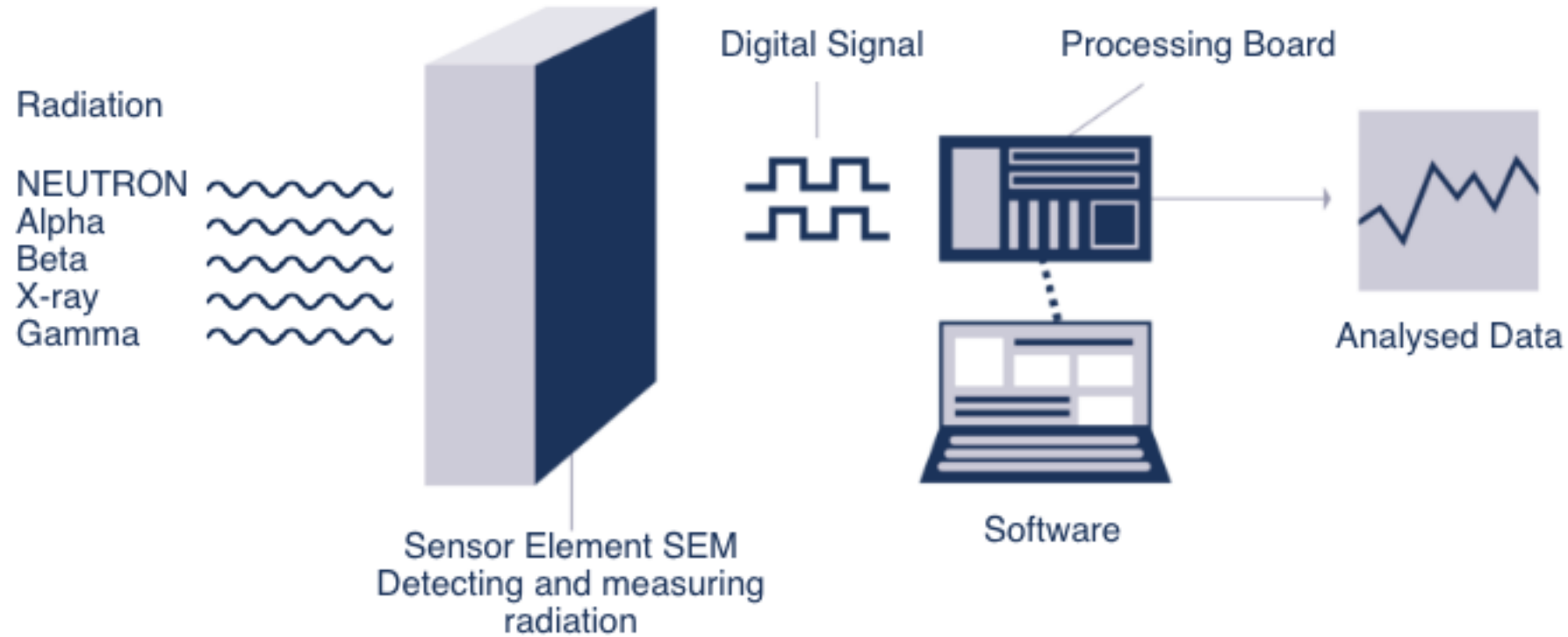
Fast and accurate data acquisition at the
molecular level.

Feature:

For comparison, the classical approach to
the procedure takes from 30 to 120 minutes.

The only non-invasive technology.

HOW TECHNOLOGY WORKS



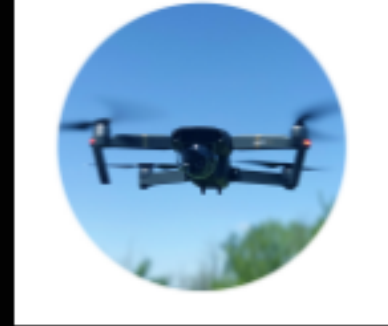
Sensor Element

SEM The proprietary sensor element (SEM) is the core the functionality of Sensed by Sensinite® technology. The element is made of special material which due the its properties can be used in challenging environments whilst still maintaining its performance. It is scalable from large to small and it is free of from form constraints.

TYPES AND CHARACTERISTICS

COMPACT SIZE AND SCALABILITY

The ability to modify the look and / or install in various technological solutions depending on the intended purpose.



FOR OIL SECTOR:

1. The ability to install on the drill. Data will be received in real time at a distance of 5 m around the perimeter.
2. Installation on pipelines to monitor the composition of oil and oil products.



CHARACTERISTICS:

The power source is 1.5 volts.

Wi-fi module (power consumption like a standard module).

The memory module is the accumulation of information on specified parameters with the ability to remove data directly from the device.

Bluetooth module.

APPLICATION IN OIL INDUSTRY

ANALYSIS OF THE PRODUCED AND PUMPED MIXTURE (OIL, GAS, PLATED WATER) **IN REAL TIME FOR THE PRESENCE OF AGGRESSIVE SUBSTANCES AND IMPURITIES**

SCOPES OF APPLICATION:

1. Geology: location of uranium and thorium.
2. Mineral exploration.
3. Oil refining: density measurements and spectroscopy.

DEVICE TYPE:

1. Installation on the drill.
2. Installation of buffer tanks in drain pipes (application of two technologies: neural catcher and gas analyzer).
3. Portable device.
5. Module for ventilation and air conditioning, as well as water supply and sewage.



TECHNOLOGY AS A TOOL OF RISK LIQUIDATION

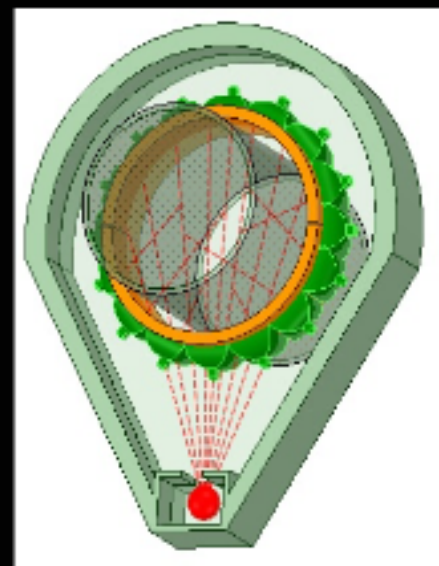
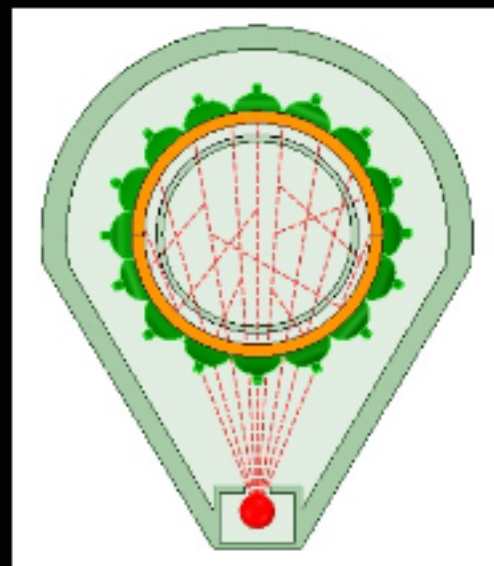
PRESENCE OF AGGRESSIVE SUBSTANCES (E.G. SULFUR, ORGANOCHLORINE COMPOUNDS) LEAD TO THE RAPID DETERIORATION OF EQUIPMENT, PIPELINES, THEIR FAILURE AND OUTBURSTS

PRECEDENT - Druzhba oil pipeline:

1. In April 2019, pollution was detected by organochlorine compounds from oil pipelines from Russia, which led to a halt in its transportation.
2. Lost profits were estimated at \$ 100 million, plus restoration of equipment and suspension of work for 6-8 months.

EXAMPLE:

sensor mounted on a drain pipe



RISKS AND CONSEQUENCES TO BE AVOIDED

EQUIPMENT BREAKDOWN

1. «High corrosive activity.»
2. Damage to heat exchangers.
3. Damage to hydrotreating and reforming gasoline.
4. Replacement of equipment and suspension of work for a long time.

FINANCIAL RISKS

1. Non-execution of transactions and penalties.
2. Lost profit.
3. Legal risks (administrative and criminal liability).
4. Fighting the consequences of risk in order to return to previous positions, recovery in a short time.

OPERATIONAL RISKS

1. Reputational risks.
2. Failure to fulfill contractual obligations.
3. The risk of credit rating changes.
4. The risk of losing positions and in some cases losing in the competition.

OCCUPATIONAL HEALTH AND
SAFETY RISK

DISASTER RISKS

UATL® PRIVATE RESEARCH UNIVERSITY - PATENT AND TECHNOLOGY RIGHTS HOLDER

5 REGISTERED PATENTS
2 PATENTS PENDING
6 TECHNOLOGIES IN THE TEST PHASE

UATL® PRIVATE RESEARCH UNIVERSITY IS **FOUNDED**
IN 2005

Production of prototypes and sensors is carried out on the basis of Sensinite Oy.

Works, research and experiments in the field of accelerator physics of elementary particles.



Watch the video
About Sensinite



Sensinite official
website



UATL Corporation
official website



Mr. Teider's business
card