Sinilevämyrkkytestin referenssinäytöt vientimarkkinoiden avaamiseksi

Satellite image of a Nodularia bloom in Baltic Sea
(Credit: SMHI; EOS 8211; MODIS 2005-07-11, NASA, processed by SMHI8217 oceanography unit.)

Pyhäjärvi-instituutti
Puhdas vesi, paremmat evät

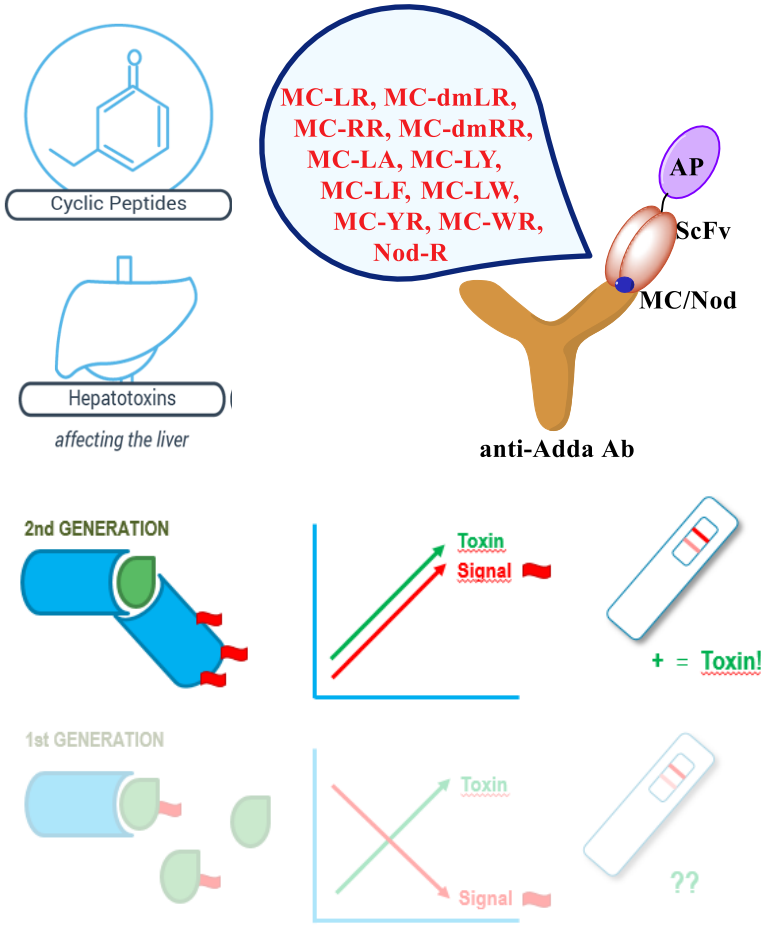
Elinkeino-, liikenne- ja ympäristökeskus

Varsinais-Suomi

Turun yliopisto
University of Turku

Salofa oy

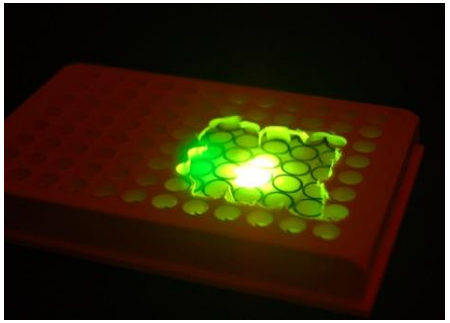
15.3.2019
Sultana Akter



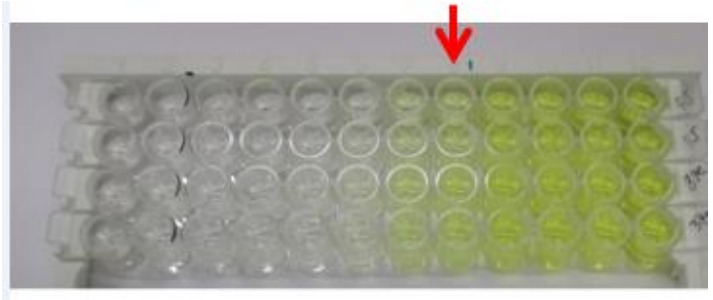
1. Objectives

GOVERNMENT KEY PROJECT

- **Acquiring data** for validation.
- **Verifying the functionality of the test** technology in different test forms with authentic natural water samples.
- **Developing new test forms** for different target segments
- Exploring **market potential**.



High-performance test format (fluorescent label)
Akter *et al* (2016) *Anal Chem* **88**:10080-10087



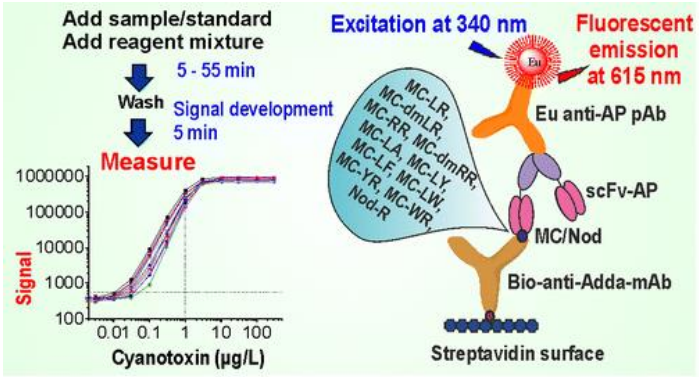
Simple screening test (coloured label; no sophisticated instrumentation)
Akter et al AIOL 2017

- First commercial (Nordic countries & Australia 6/2018) test kit based on **UTU** and **VTT** technologies. Manufactured by **Salofa Oy.**

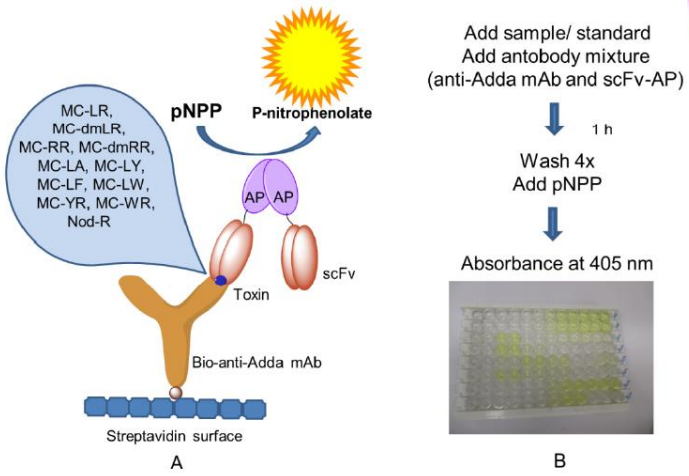
Turun yliopisto
University of Turku

2. Expected impact of the project

GOVERNMENT KEY PROJECT



Akter et al., Anal Chem 2016



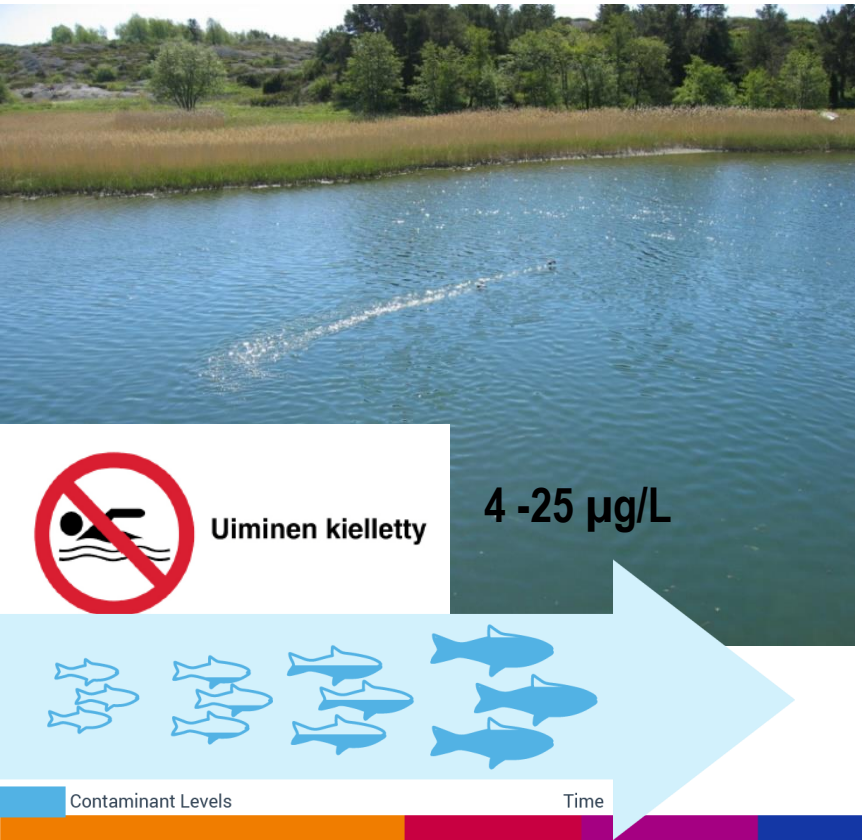
Simple screening test (coloured label; no sophisticated instrumentation)

Akter et al AIOL 2017

- making the test technology as widely known as possible worldwide
- China, Australia, Poland, Spain
- opening up international markets
- availability of the test technology for the wider use
- UTU innovation center is committed to find licensing partners.

UTU, VTT, Salofa

1 µg/L of MC-LR (WHO)



3. How and by whom can the project results be utilized?

Companies/Licence

- The technology is not available to any one else.

Authorities

- **Avoid negative health effect** to public: drinking, recreational

Researchers

- **Toxin profiles and occurrences** of algal blooms
- **Epidemiologic studies**; efficiency of water purification strategies to cut down health problems

Aquafarmers

- Cyanotoxins may **accumulate to fish and shellfish**

Farmers

- Microcystins can **be lethal to livestock**
- The toxins **inhibit the growth of crops**

Tuorist centers

Citizens

- Safety for **recreational use and watering**

Turun yliopisto
University of Turku