

# Workshop on nano-biosensing with portable/handheld Raman systems: From food products, toxins, safety and molecular contaminants to knowledge transfer to economic partners - With practical demos!

## Program

- 11:00-11:05 Opening and welcome - Dr. Csilla Molnar (INCDTIM)
- 11:05-11:25 Latest developments in analytical equipment and their capabilities - Cecilia MERTICARU (Total Spectrum)
- 11:25-11:35 Latest developments from Bruker TXRF and HHXRF – elements quantification from F to U in food, cosmetics, packages, environmental stewardship, RoHS regulation

## Application topics

- 11:35-11:45 *From nano-biosensing to knowledge transfer* - Professor Dr. Habil. Simona CÎNTĂ PÎNZARU (UBB)
- 11:45-11:55 *Fast SERS sensing for food control and toxins detection* - Dr. Csilla MOLNÁR (INCDTIM)
- 11:55-12:05 *Raman spectroscopy for edible oils analysis* - Dr. Camelia GROȘAN (INCDTIM)

## Coffee break

- 12:15-12:30 *Electrochemically assisted SERS for detection of pharmaceutical pollutants* - Rebeca MOLDOVAN/ Dr. Bogdan-C. IACOB (UMF)
- 12:30-12:40 *Self-assembled nanostructured SERS substrates* - Dr. Cosmin FARCĂU (INCDTIM)
- 12:40-12:50 *SERS of propranolol: Au vs Ag* - Dr. Alexandra FĂLĂMAȘ (INCDTIM)
- 12:50-13:05 *Official control of water intended for human consumption*, Chim. pr. Carmen PĂRĂU (DSP)

## Coffee break

- 13:15-14:30 Practical demonstrations  
Portable Raman equipment  
(Wasatch Photonics)

## Acknowledgements

- PD51/07.08.2020
- 359PED/23.10.2020
- 354PED/23.10.2020
- 477PED /23.10.2020
- 377PED/01.11.2020

## Contact

Molnár Csilla [csilla.molnar@itim-cj.ro](mailto:csilla.molnar@itim-cj.ro)  
Cosmin Farcău [cosmin.farcrau@itim-cj.ro](mailto:cosmin.farcrau@itim-cj.ro)  
Covaciu Florina [florina.covaciu@itim-cj.ro](mailto:florina.covaciu@itim-cj.ro)



**When?** October 6, 2022, at 11<sup>00</sup> a.m

**Where?** Conference room - INCDTIM,  
67-103 Donat Street, Cluj-Napoca, Romania

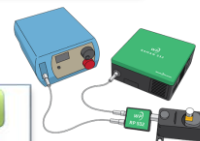
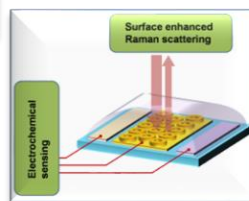
**Participation free of charge!**

## Main objective and topics

- ✓ Target the innovative analytical methods using Raman technology for food control, quality assessment, toxins detection, public awareness, knowledge transfer to stakeholders;
- ✓ New sensing substrates for fast detection of molecular compounds related to the water bodies and food quality; pharmaceutical pollutants, pesticides;
- ✓ Demonstrations of new capabilities of the sensing technology using portable/ handheld Raman instruments.



Wasatch Photonics



WP-532-A-SR-IC

BRUKER

