

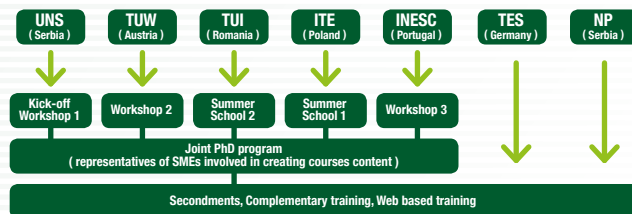
## RECRUITMENT

In order to provide a new pool of highly motivated researchers in the field of sensors/RF transceivers and remote measuring, this project envisages recruitment of 16 early-stage researchers and 4 experienced researchers.

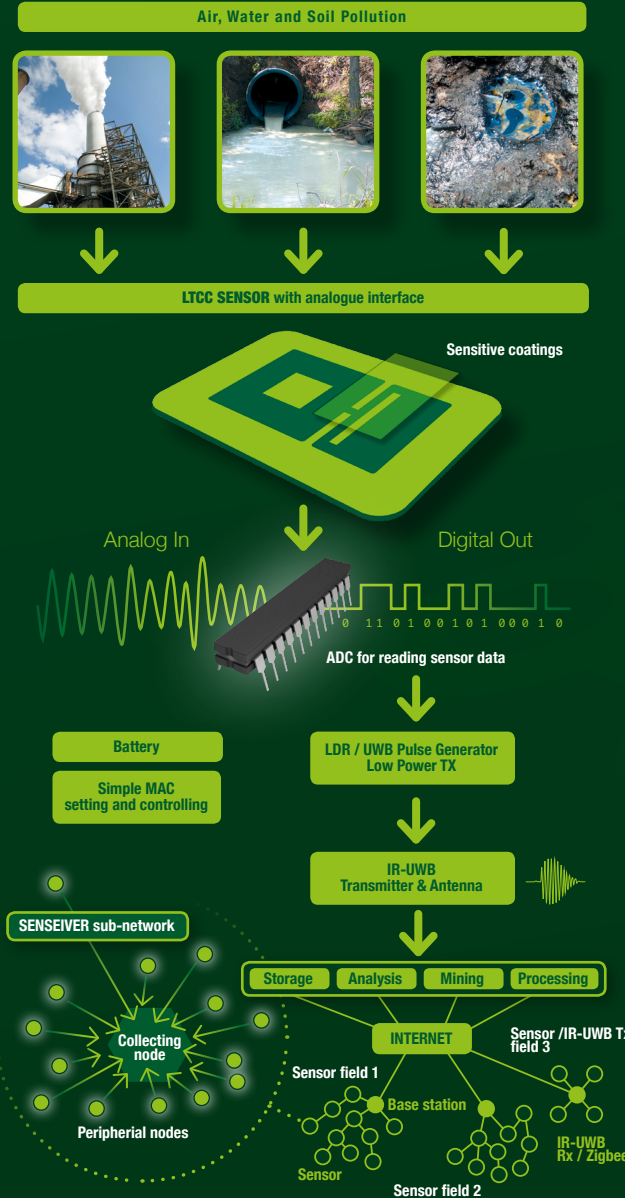
Network Partner	Early-stage and experienced researchers to be financed			
	Early-stage researchers (ESR) (person- months)		Experienced researchers (ER) (person- months)	
	Months	Researchers	Months	Researchers
UNS	96	3	0	0
TUW	72	2	0	0
TUI	48	4	9	3
ITE	72	2	12	1
INESC	72	2	0	0
TES	72	2	0	0
NP	24	1	0	0
<b>TOTAL</b>	<b>456</b>	<b>16</b>	<b>21</b>	<b>4</b>

## NETWORK-WIDE TRAINING ACTIVITIES

The partners of the network have long-term experience in training young researchers at all stages of their scientific career. SENSEIVER will offer exceptionally wide, high-quality and well-coordinated training possibilities in the scientific, technical and practical training. The network-wide training activities shared among the ITN partners to complement the local training at each of the participating organization are planned.



## PROJECT CONCEPT



### Contact information:

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**senseiver**

Low-cost and energy-efficient LTCC sensor/IR-UWB transceiver solutions for sustainable healthy environment  
 Project Reference: 289481  
 Start Date: 01/12/2011  
 Duration: 48 months

Low-cost and energy-efficient  
**LTCC**  
 transceiver  
 sustainable of environment  
 healthy solutions

[www.senseiver.com](http://www.senseiver.com)

**SENSEIVER**  
 environmental dimension of technology

## SHORT PROJECT DESCRIPTION

This multi-site network has been formed in order to provide excellent training opportunities to young researchers in the field of wireless sensors and transceivers for application in environmental parameters monitoring.

This initial training network is composed of five academic/research participants, two industrial partners and three associated partners. The main goal of the network is to improve career perspectives of early-stage and experienced researchers from involved organizations, to structure initial research training at the EU level and to spread knowledge and skills in the field of new sensors, materials, transceivers and data acquisition systems.

The SENSEIVER ITN will reinforce the relevant technical bases by providing remarkable training opportunities to young researchers through:

1. development of innovative and cost-effective sensors and their fabrication in LTCC (Low-Temperature Co-fired Ceramics) technology,
2. synthesis of new sensitive materials as coating layers for unique LTCC microsensors platforms,
3. development of highly energy-efficient UWB (ultra wideband) transmitters technologically compatible with designed LTCC sensors, and
4. design of intelligent systems for acquisition, processing and displaying data relevant to soil, air and water quality.

## PROJECT PARTNERS

Full network partners (beneficiaries) are:

1. University of Novi Sad (UNS), Faculty of Technical Sciences (FTS), Serbia responsible person: *Prof. Goran Stojanović*
2. Vienna University of Technology (TUW), Institute of Sensor and Actuator Systems, Department of Applied Electronic Materials, Austria responsible person: *Dr. Goran Radosavljević*
3. “Gheorghe Asachi” Technical University of Iasi (TUI), Romania responsible person: *Prof. Cristina Schreiner*
4. Instytut Technologii Elektronowej (ITE), Poland responsible person: *MSc Krzysztof Zaraska*
5. Instituto de engenharia de sistemas e computadores do porto (INESC) responsible person: *Dr. Vitor Manuel Grade Tavares*
6. TES Electronic Solutions GmbH (TES) responsible person: *Dr. Veselin Branković*
7. North Point (NP) Ltd. responsible person: *Dr. Slobodan Gajin*

Associated partners do not recruit any researchers, but provide research and complementary training and secondment opportunities. Three associated partners are included:

1. Ministry of Education and Science, Serbia;
2. Foundation for promoting advanced research “New Wave Science Mates”, Romania;
3. Municipal Waterworks and Sewer Enterprise in Kraków Joint Stock Company, Poland.

## WORK PACKAGES

The SENSEIVER work plan is divided into nine coherent work packages:

- WP1:** Project management and coordination
- WP2:** Recruitment of researchers
- WP3:** Sensors design, modeling and simulation
- WP4:** Development of new materials
- WP5:** Sensors fabrication and characterization
- WP6:** IR-UWB Rx and Tx design, characterization and testing
- WP7:** Data acquisition and processing
- WP8:** Training and mobility activities
- WP9:** Dissemination and promotional activities.

The project management and coordination work package, WP1, is devoted to the overall coordination and administration of the network.

WP2 is devoted to the selection and appointment of eligible researchers for initial training. WP3 – WP7 are research oriented work packages which follow steps from design, simulation and modeling of wireless passive sensors, development of new LTCC materials for sensor fabrication, and finally the design of RF (IR-UWB) transceivers and application of fabricated sensors in real conditions for monitoring of all important parameters concerning sustainable healthy environment reviving. WP8 describes the numerous training activities foreseen within this ITN. WP9 is envisaged to present SENSEIVER achievements and results to the national, regional and international research community, by means of web presentations, newsletters, distribution of brochures, booklets, organization of info-days, participation in industrial and science fairs, etc.

Low cost and energy-efficient LTCC transceiver solutions sustainable for healthy environment

