Research Report ই



AIR QUALITY MONITORING IN DIFFERENT LOCATIONS, ACCORDING CONTRACTS WITH DIVERSE ECONOMIC UNITS, BASED ON THE RENAR ACREDITATION OF THE LACIEDIN LAB

Goal of the project

- Goal of all cooperation contracts is to focus on the potential pollution episodes. The air quality has a huge importance for the health of the population, as well the environment, in general, and assures the quality of life as well.
- The LACIEDIN laboratory, as unique university laboratory for air quality monitoring in the region, offers, long term measurements' campaigns, that are absolute necessary to attest the quality of air in the region. It measures: CO, NOx, VOC's, particles, O3, benzene, etc. The goal of the projects is to offer a data base concerning air quality and specific other information, attested by a RENAR qualified laboratory.
- main clients of our lab are indicated in the followings: SC CENTRALA ELECTRICA DE TERMOFICARE HIDROCARBURI S.A. ARAD; INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU ENERGIE – ICEMENERG BUCURESTI (as subcontractor for RETEAUA ELECTRICA DE TRANSPORT LEA – ST TIMISOARA); COMBINATUL AGROINDUSTRIAL OLARI; COMSA SA BARCELONA – SUCURSALA BUCURESTI; SPUMOTIM S.A. TIMISOARA; FRIGOGLASS SRL PARTA, SC PORKPROD IRATOSU, STERICYCLE ROMANIA SRL, and others.
- One expresses respect & appreciation for all industrial partners, and thank for the opportunity to serve their interest.

Short description of the project

TESTS according legislation and standard methods:

- 1. Gravimetric tests (dust) affecting air quality,
- 2. Specific tests for specific gaseous pollutants in air,
- 3. Physical tests.
- SCOPE: 1. Determination of air quality in different regions —rural or urban & industrial sites
 - 2. Identification of potential impact of several polluters upon the air quality and future strategies

Implementation period

The periods are indicated in the different contracts signed by UPT. They cover long term cooperation.

Project implemented by

LACIEDIN of UPT (Laboratory for Fuel Analysis, Ecological Investigation and pollutants' Dispersion of the Politehnica University of Timisoara) www.mediu.ro is fully implementing standard 17025/2018.

Main activities

- Identification of the most representative regimes for measuring
- Identification of the safety conditions for the workers
- Preparation of the measuring points (measuring plan)
- Calibration of the instruments
- Measurements and verification of the results
- Calculations
- Conceiving the report (Technical Bulletin) in accordance with the RENAR specifications.

Results

• Technical Bulletins elaborated are attesting the level of pollution in the areas, and generally can be used to inform the population as well, if the client is giving its approval..





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Applicability and transferability of the results

- Development of a strategy of monitoring, according to the specific needs of the client.
- Raising the visibility of UPT on the free market concerning the collaboration with industrial units.
- Offering to our students of a possibility to analyse real pollution episodes and develop information based on own experience.
- Offering to the members of the team a modality to perform, also in industrial cooperation, in addition to the main duties as researcher or university teacher.
- Maintaining the quality for next RENAR accreditation.
- Developing skills and knowhow for all personnel involved, including students.



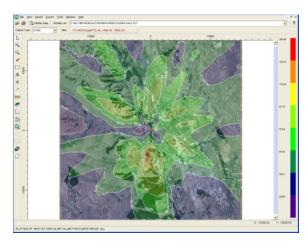
Financed through/by

 Diverse frame contracts such as: BC16/ 25.02.2019; BC36/09.04.2019; BC 78/26.07.2019; BC 79/29.07.2019; BC 82/31.07.2019; BC 101/04.10.2019, BC 26/ 21.03.2019 and few more.

Research Centre

Research Centre for Thermal Machines and Equipments, Transportation and Environmental Pollution Control, http://www. upt.ro/Informatii_-research-centre-for-thermal-machines-andequipments-transpo_109_en.html

Through the RENAR acreditet laboratory LACIEDIN www.mediu.ro



Research team

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