

POLLUTANT EMISSION MONITORING OF DIFFERENT INDUSTRIAL EQUIPMENTS & TECHNOLOGICAL UNITS, ACCORDING CONTRACTS WITH DIVERSE ECONOMIC AGENTS, BASED ON THE RENAR ACREDITATION OF THE LACIEDIN LAB OF UPT

Goal of the project

- Goal of all cooperation contracts is to identify the ecological performances of different technological processes and units, based on emission monitoring of species such as: NO_x, CO, SO₂, particles, VOC, CO₂, in addition O₂ and physical parameters control.
- The LACIEDIN laboratory, as unique university laboratory for air quality monitoring in the region, offers support to detect potential polluting sources and elaborates diverse technical bulletins, according the measurements.
- Main clients of our lab are indicated in the followings: SC CENTRALA ELECTRICA DE TERMOFICARE HIDROCARBURI S.A. ARAD; COMBINATUL AGROINDUSTRIAL OLARI; SPUMOTIM S.A. TIMISOARA; FRIGOGLASS SRL PARTA, SC ELBA SA TIMISOARA, SC PORKPROD IRATOSU, CASADEVALL ROMANIA SRL, VOESTALPINE ROTEC COATING SRL, UTTIMISOARA, PLASESS ROMANIA SRL CHISODA, KIMBALL ELECTRONICS ROMANIA SRL REMETEA MARE, SMART WOOD ROMANIA SRL TIMISOARA, 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: 1. Specific tests for identification of the concentration of specific gaseous and solid pollutants, according legislation and standard methods,

2. Physical tests.

SCOPE: 1. Determination of the potential polluting effect of specific technologies and industrial units

2. Development of the laboratory

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

- Preparation of the measuring points (measuring plan) and identification of representative technological regimes
- 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 of different sources



Applicability and transferability of the results

- Development of a strategy of monitoring, according to the specific needs of the client and support for future developments.
- Raising the visibility of UPT on the free market concerning the collaboration with industrial units.
- Offering to our students of a possibility to be part of the research activity of the teachers.
- 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 standards & quality for RENAR accreditation.
- Developing skills and knowhow for all personnel involved, including students.



Financed through/by

- diverse frame contracts: 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; BC62/10.06.2019; BC65/18.06.2019, BC 125/09.12.2019; BC120/05.12.2019; BC 121/05.12.2019, BC 33/20.03.2015, 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-and-equipments-transpo_109_en.html

Through the RENAR accredited laboratory LACIEDIN www.mediu.ro



Research team

Ioana IONEL
Ramon Mihai Balogh
Delia Gabriela TRIF TORDAI
Daniel BISORCA
Virgil STOICA
Gabriela NAGY
Gavril BRATEANU

Contact information

Prof. Ioana IONEL, PhD
Faculty for Mechanical Engineering/ LACIEDIN in the Research Centre for Thermal Machines and Equipments, Transportation and Environmental Pollution Control,
Mihai Viteazu No. 1, Postal Code 30222, Timisoara, Romania
Phone: (+40) 256 403670
Mobile: (+40) 723349337
E-mail: ioana.ionel@upt.ro
Web: www.mediu.ro