



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

The Petroleum-Gas University of Ploiești (UPG), an institution with a prestigious tradition of nearly 80 years, continues to be a strategic pillar for the energy sector. In the 2023-2026 period, its research portfolio is strongly oriented toward **sustainability**, focusing on **improving equipment performance** and **reducing the carbon footprint** of the oil and gas industry. Here are the description of the major research domains and the associated contracts:

1. Renewable Energy and Carbon Footprint Reduction

This domain represents UPG's commitment to the energy transition. Research focuses on identifying alternative resources and technologies for capturing and storing emissions, leveraging decades of technical expertise in the fossil fuel sector.

- **Key Directions:** Deep geothermal energy, hydrogen storage, biodiesel additive synthesis, and CO₂ sequestration.
- **Relevant Contracts:**
 - **6463/2023:** Characterization of glycerin for biodiesel additives.
 - **12036/2023:** Study on the opportunity of using deep geothermal energy.
 - **34003/2025:** Study on hydrogen storage (DEPOGAZ).
 - **12064/2026:** Valorization/storage of Biogenic CO₂.
 - **17002/2026:** Impact of installing photovoltaic parks on existing oil well sites.

2. Technological Efficiency and Equipment Modernization

Building on its long-standing engineering tradition, UPG collaborates with major manufacturers to optimize the design and durability of industrial components, thereby reducing energy consumption and operational risks.

- **Key Directions:** Assisted constructive design, Finite Element Analysis (FEA), and improving the reliability of drilling installations and bearings.
- **Relevant Contracts:**
 - **14468/2022, 27437/2023 & 34296/2025:** Constructive design and database development (Timken Partnership).
 - **8795/2023:** Failure analysis of bearings in 100-ton drilling rigs.
 - **19039/2023:** FEA analysis for process vessels.
 - **34157/2025:** Development of intelligent agents for automating industrial plant design information.

3. Environmental Protection and Emission Monitoring



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These research projects are essential for minimizing the direct environmental impact of petroleum operations, focusing on leak detection and the reduction of hydrocarbon losses.

- **Key Directions:** Determination of Volatile Organic Compounds (VOCs), reduction of flash-gas emissions, and decontamination of polluted soils.
- **Relevant Contracts:**
 - **6793/2024:** Analysis of total hydrocarbon content in contaminated soils.
 - **14827/2024 & 5686/2026:** Measuring VOC concentrations in technological and fugitive emissions.
 - **8940/2025:** Study on reducing crude oil volume (flash-gas) and converting it into lower specific emissions.
 - **20308/2026:** Atmospheric dispersion studies and operational scenarios in unfavorable weather.

4. Materials Science and Structural Integrity

To ensure the safe and long-term operation of critical infrastructure (pipelines, tanks), the university performs complex resistance, corrosion, and mineralogical tests.

- **Key Directions:** X-ray diffraction (XRD) investigations, corrosion engineering, and testing the behavior of materials during welding and fatigue.
- **Relevant Contracts:**
 - **797/2023 & 11249/2024:** Mineralogical investigations via X-ray diffraction on rock/core samples.
 - **8679/2023:** Welding behavior studies for tubular metal samples.
 - **10949/2023 & 13028/2024:** Corrosion engineering and pipeline protection.
 - **16442/2024:** Testing of tubular steel and polyethylene materials for gas transport.

5. Risk Management and Operational Optimization

UPG provides high-level expertise for operational safety, developing best practice guides and software solutions to prevent technological accidents and improve thermal efficiency.

- **Key Directions:** Risk analysis for gas pipelines, drilling operation manuals, and energy efficiency in transport.
- **Relevant Contracts:**
 - **13394/2023:** Manual for drilling operations (ROMGAZ).
 - **16211/2023:** Technical-economic efficiency for replacing oil heating systems with heat pumps.



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

- **10133/2024:** Risk analysis for connecting new energy groups to the National Gas Transmission System.
- **62/2026:** Development of customized software for risk analysis of natural gas pipelines.

Conclusion: Through this comprehensive portfolio, the Petroleum-Gas University of Ploiești demonstrates that its historical expertise is the engine of responsible innovation. Its research does not only aim for economic efficiency but is decisively oriented toward **"greening" the industry**, ensuring that tomorrow's equipment operates with a significantly reduced carbon footprint and maximum safety.

Research Contracts – 2023

Contract No.	Topic / Beneficiary	Contract Value
14468/05.12.2022	Constructive design - Product drawings with Development, Modification, Cancellation, and Advancement of Timken Databases / TIMKEN ROMÂNIA S.A	250,000 LEI + VAT
797/17.01.2023	Mineralogical investigations via X-ray diffraction on rock/core samples / NEWPARK DRILLING FLUIDS EASTERN EUROPE SRL Bucharest	1,000 LEI / sample + VAT
6463/31.03.2023	Characterization of glycerin for the synthesis of biodiesel additives / NIUCROM PROD COM SRL Bucharest	10,000 LEI + VAT
7901/27.04.2023	Analysis of materials used and flue gases within the ROHYD pilot project / SNTGN TRANSGAZ SA MEDIAȘ	138,000 LEI + VAT
8729/08.05.2023	Impact study regarding the height regime of the Residential Complex (45B București Blvd, Ploiești) on the 20-inch Ploiești Ring natural gas transmission pipeline / ROMANA MILEX RESIDENCE SRL PLOIEȘTI	3,000 LEI + VAT
8679/08.05.2023	Studies to determine the welding behavior of tubular metal samples / S.C. ROMINSTA S.R.L. Cristești, Tg. Mureș	10,000 LEI / sample + VAT
8795/09.05.2023	Failure analysis of bearing SL04160-D-PP from the crown block sheave of the HH 100-ton drilling rig / S.C. FORAJ SONDE S.A. CRAIOVA	7,380 LEI + VAT
8796/09.05.2023	Determination of fatigue behavior for reinforcing meshes / S.C. PROCEMA RWP SRL BUCHAREST	10,000 LEI / sample + VAT



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

Contract No.	Topic / Beneficiary	Contract Value
9370/16.05.2023	Testing technical specifications of carbon black / Testing technical specifications of briquettes produced from carbon black / IQS INNOVATIONS S.R.L. Ion Roată, Ialomița	Based on order
9585/22.05.2023	Analysis of pipes from the tube bundle of a heat exchanger / S.C. CONFIND S.R.L. CÂMPINA	4,000 LEI + VAT
10716/31.05.2023	Research and reporting study regarding the technological consumption of Dacian Petroleum / DACIAN PETROLEUM S.A. Blejoi	144,000 LEI + VAT
10841/06.06.2023	Research on obtaining technical parameters of the biomaterial subject to patent A202300003/06.01.2023 / CAHM EUROPE S.A. PĂULEȘTI NOI	50,000 LEI + VAT
10949/07.06.2023	Study on steel corrosion in ATICA TZ 1 de-icing solution / S.C. ATICA CHEMICALS S.R.L. Râmnicu Vâlcea	700 LEI + VAT
12036/21.06.2023	Study on perimeter characteristics regarding the opportunity of using deep geothermal energy / NETGAS RESEARCH & DEVELOPMENT S.R.L. Ploiești	16,400 LEI + VAT
12591/29.06.2023	Impact study of the TRANSGAZ MEDIAȘ pipeline crossing land in Florești Commune, village Florești, cadastral number 26.589 / FLOREȘTI COMMUNE MAYORALTY	10,000 LEI + VAT
12816/03.07.2023	Establishing the purity of isobutane-refrigerant gas R600a / RUBIX RO S.R.L. CLUJ-NAPOCA	400 LEI + VAT
13394/05.07.2023	Drilling Operations Manual / SNGN ROMGAZ SA MEDIAȘ	132,000 LEI + VAT
16211/04.08.2023	Design services and development of a technical-economic efficiency calculation for replacing the current crude oil heating system in CONPET-Rampa Biled tanks with a system using heat pumps / SC CONPET SA Ploiești	298,500 LEI + VAT
18218/18.09.2023	Establishing the purity of isobutane-refrigerant gas R600a / RUBIX RO S.R.L. CLUJ-NAPOCA	400 LEI + VAT
19039/26.09.2023	FEA analysis of vessels project K461: 590F0004, 590F0012, and 590F0020 / S.C. CONFIND S.R.L. CÂMPINA	10,000 LEI + VAT
24050/02.11.2023	Study on the analysis of environmental factors favoring petroleum product losses in the company's activity / OIL TERMINAL SA CONSTANTA	35,000 LEI + VAT
25411/15.11.2023	Analysis of base material and welded joint of a DN 400 steel pipe / S.C. P.M.T. HAAG S.R.L. BRAȘOV	6,000 LEI + VAT
26026/27.11.2023	High Collapse Testing / Liberty Ostrava SA Czech Republic	60,000 EUR



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

Contract No.	Topic / Beneficiary	Contract Value
27437/12.12.2023	Constructive design - Product drawings with Development, Modification, Cancellation, and Advancement of Timken Databases / TIMKEN ROMÂNIA S.A	250,000 LEI + VAT
27496/13.12.2023	Study on risk assessment and establishment of safety distances due to gas pipeline proximity to planned residential buildings in BUFTEA-EST / SC AVICOLA BUFTEA SA	5,000 LEI + VAT

Research Contracts – 2024

Contract No.	Topic / Beneficiary	Contract Value
26026/27.11.2023	High Collapse Testing / Liberty Ostrava SA Czech Republic	60,000 EUR
27437/12.12.2023	Constructive design - Product drawings with Development, Modification, Cancellation, and Advancement of Timken Databases / TIMKEN ROMÂNIA S.A	250,000 LEI + VAT
1603/22.01.2024	Determination of properties for certain petroleum products / NEWPARK FLUIDS SYSTEM Bucharest	1,600 LEI + VAT / sample
2976/02.02.2024	Determination of main mechanical characteristics of steel samples / TECHNO MONTAJ SRL Braşov	2,400 LEI + VAT
3447/09.02.2024	Mineralogical investigations via X-ray diffraction on construction material samples / DVI PRODUCTION SRL, Caragiale-DB	1,000 LEI + VAT / sample
6793/27.03.2024	Analysis of total hydrocarbon content in contaminated soils / DISTRIGAZ SUD REŢELE SRL Bucharest	8,500 LEI + VAT
10133/13.05.2024	Risk analysis necessary for finalizing the Feasibility Study and documentation for connecting the new 470MW GT group to the National Gas Transmission System / ALRO SA SLATINA	60,000 LEI + VAT
11249/29.05.2024	Mineralogical investigations via X-ray diffraction on rock/core material samples / NEWPARK DRILLING FLUIDS EASTERN EUROPE SRL	1,000 LEI / sample + VAT
13028/19.06.2024	Corrosion engineering and corrosion protection of pipelines / SNTGN TRANSGAZ Mediaş	38,000 LEI + VAT
14827/10.07.2024	Determination of VOC (Volatile Organic Compounds) concentration in technological and fugitive emissions at petroleum product tanks equipped with internal floating roofs with double seals at OMV PETROM Brazi / SC PETRODESIGN SA Bucharest	4,000 LEI + VAT
16321/23.07.2024	Particle size (granulometric) analysis / ANVERGO SRL, TÂRGU MUREŞ	700 LEI / sample + VAT



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

Contract No.	Topic / Beneficiary	Contract Value
16324/23.07.2024	Mineralogical investigations via X-ray diffraction on sieve/rock material samples / ANVERGO SRL, TÂRGU MUREȘ	1,000 LEI / sample + VAT
16442/24.07.2024	Testing tubular material made of steel and polyethylene (PEHD100 SDR11 gas) / ENGIE ROMANIA / DISTRIGAZ SUD REȚELE	24,500 EUR + VAT
17557/31.07.2024	Testing welding samples / SC REPEDE PRESSURE CONTROL SRL Bucharest	Based on order
23007/07.10.2024	Best practice guide for production testing, interventions, workovers, capital repairs, and special well operations / SNGN ROMGAZ SA Medias	183,000 LEI + VAT
24861/22.10.2024	Technical examination of samples and specimens via destructive mechanical testing / SC DOSCO PETROSERVICES ROMÂNIA SRL	10,000 LEI / sample + VAT
28068/12.11.2024	Destructive testing examination / SC SOURCE INSTAL SRL, BĂICOI	10,000 LEI / sample + VAT
29191/26.11.2024	Mineralogical investigations via X-ray diffraction on solid material samples / SOCERAM S.A. CÂMPINA	1,000 LEI / sample + VAT
30416/06.12.2024	Determination of Material Characteristics of samples through testing and analysis / SC FLEXON-ALL, PLOIEȘTI	10,000 LEI / sample + VAT
30891/12.12.2024	Constructive design - Product drawings with Development, Modification, Cancellation, and Advancement of Timken Databases / TIMKEN ROMÂNIA S.A	250,000 LEI + VAT

Research Contracts – 2025

Contract No.	Topic / Beneficiary	Contract Value
30891/12.12.2024	Constructive design - Timken Databases / TIMKEN ROMÂNIA S.A	250,000 LEI + VAT
2049/29.01.2025	Evaluation of oxidation resistance for lubricating oils / BUREAU VERITAS SRL BUCHAREST	Based on order (420/sample)
3117/06.02.2025	Analysis and support in implementing the AWS international standard in production activities with environmental impact, modernization, and special operations in wastewater treatment at BAT Ploiești / BAT ROMÂNIA INVESTMENT S.R.L.	50,000 LEI + VAT
3214/07.02.2025	Evaluation of lubricating oil quality regarding oxidation resistance / BUREAU VERITAS SRL Bucharest	Based on order (420/sample)



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

Contract No.	Topic / Beneficiary	Contract Value
3668/13.02.2025	Establishing characteristics for absorbent/fertilizer products for soils contaminated with petroleum products / PHOENIX SLAG SERVICES SRL Galați	4,000 LEI + VAT
5828/06.03.2025	Mechanical tests / COMREP SA Ploiești	10,000 LEI / sample + VAT
6604/17.03.2025	Mineralogical investigations via XRD on construction material samples / DVI PRODUCTION SRL I.L. Caragiale	1,000 LEI / sample + VAT
6854/20.03.2025	Probe analysis / RESILUX PACKAGING SOUTH EAST EUROPE SRL	1,300 LEI + VAT
7325/27.03.2025	Laboratory tests / CONFIND SRL CÂMPINA	20,000 LEI + VAT
8725/10.04.2025	Expertise regarding the gradual removal of CFR Soceram Doicești zone restrictions and well closure / SOCERAM S.A. CÂMPINA	126,000 LEI + VAT
8940/14.04.2025	Study on crude oil volume reduction (flash-gas) and its conversion into specific emissions in petroleum operations at OMV Petrom / OMV PETROM S.A.	534,000 LEI + VAT
11489/20.05.2025	Mechanical tests / S.C. CARSTAR S.R.L. Boldești-Scăieni	10,000 LEI / sample + VAT
11730/22.05.2025	Analysis of the needs within the Ploiești community / PRAHOVA COMMUNITY FOUNDATION	9,000 LEI + VAT
12000/26.05.2025	Mechanical tests / FORAJ SONDE S.A. CRAIOVA	8,000 LEI + VAT
12258/28.05.2025	Welding sample tests for procedure authorization and welders / S.C. UZTEL S.A. Ploiești	10,000 LEI / sample + VAT
13288/04.06.2025	Technical expertise of tubular material with laboratory tests and trials / CONPET SA ROMÂNIA, Ploiești	8,175 LEI + VAT
17323/10.07.2025	Shock-test KV bending test / COM GAZ STEEL SRL PLOIEȘTI	10,000 LEI / sample + VAT
18354/18.07.2025	Design and implementation of a semantic matching model based on natural language understanding for automated assistance / NEO WAVE EUROPE SRL	51,000 LEI + VAT
19502/28.07.2025	Analysis of foam concentrate for fire extinguishing / OMV PETROM S.A. BUCUREȘTI	2,000 LEI / sample
20321/07.08.2025	Technical study regarding the safe operation of the 55,000 mc tank at Oil Terminal S.A. Constanța / S.C. ELLIS'92 S.R.L. PLOIEȘTI	125,000 LEI + VAT



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

Contract No.	Topic / Beneficiary	Contract Value
20578/25.08.2025	The Joy of Science in the South-Muntenia Region / UEFISCDI/UNIV VALAHIA, TÂRGOVIȘTE	125,000 LEI
30974/11.11.2025	Mechanical tests / S.C. UZUC S.A. PLOIEȘTI	10,000 LEI / sample + VAT
32020/24.11.2025	Mechanical tests / S.C. INSPET S.A. PLOIEȘTI	10,000 LEI / sample + VAT
32119/25.11.2025	Extrajudicial expert report to analyze the coexistence of gas installations and electrical installations / REȚELE ELECTRICE ROMÂNIA S.A.	4,950 LEI + VAT
33054/03.12.2025	Analysis and determination of the condensate correction/contraction factor on the Caragele structure / S.N.G.N. ROMGAZ S.A. Mediaș	73,500 LEI + VAT
33205/04.12.2025	Laboratory analyses to verify tubular material quality for Lot 3 PIC 6.20.T. / S.N.G.N. ROMGAZ S.A. Ploiești Branch	60,900 LEI + VAT
34003/16.12.2025	Hydrogen storage study / S.N.G.N. ROMGAZ S.A. - DEPOGAZ Ploiești	51,000 LEI + VAT
34157/17.12.2025	Development of intelligent agents for automating information extraction for industrial plant design / BIM REVIEW S.R.L. Ploiești	51,920 LEI + VAT
34296/18.12.2025	Constructive design - Timken Databases / TIMKEN ROMÂNIA S.A	250,000 LEI + VAT
34773/22.12.2025	Study regarding the valorization of ash from non-ferrous metal recovery for road construction materials / PRODUCT NEFER S.R.L.	55,000 LEI + VAT

Research Contracts – 2026

Contract No.	Topic / Beneficiary	Contract Value
62/08.01.2026	Custom software development services for risk analysis of natural gas pipelines / SNGN ROMGAZ S.A. Mediaș	268,000 LEI + VAT
3041/04.02.2026	Mineralogical investigations via XRD on solid material samples / SOCERAM S.A. Câmpina	1,000 LEI + VAT / sample
5686/06.03.2026	VOC (Volatile Organic Compounds) concentration measurements in gasoline fraction emissions at tank 109N at OMV Petrom Brazi / S.C. PETRODESIGN S.A. Bucharest	1,500 LEI + VAT
5878/10.03.2026	Study of technological gas consumption / OMV PETROM SA	67,500 LEI + VAT



Research contracts Petroleum-Gas University of Ploiesti 2023 – 2026

Contract No.	Topic / Beneficiary	Contract Value
7330/30.03.2026	Technical expertise for securing well F7 and improvement of water capture/transport system in Amara / AMARA TOWN MAYORALTY	131,250 LEI + VAT
8295/02.04.2026	Quality verification tests for 2 welded joints / S.C. GAZPET INSTAL S.R.L. Ploiești	10,000 LEI + VAT
8504/06.04.2026	Technical simulation services and analyses / REȚELE ELECTRICE ROMÂNIA S.A. Bucharest	90,000 EUR + VAT
10612/06.05.2026	Research on sieve/rock samples for granulometric composition / ANVERGO S.R.L. Târgu-Mureș	700 LEI / sample + VAT
10715/07.05.2026	Mineralogical investigations via XRD on rock/core samples for mineralogical composition / ANVERGO S.R.L. Târgu-Mureș	1,000 LEI / sample + VAT
11195/18.05.2026	Analysis of foam concentrate for fire extinguishing / INDUSTRIAL CRUMAN S.R.L. Ploiești	2 samples x 2,220 LEI / sample + VAT
11505/21.05.2026	Study regarding the tribological characteristics of transmission belts from plastic materials / S.C. PIKANORE S.R.L. Negoiești-Brazi	8,200 LEI + VAT
11506/21.05.2026	Asphalt pavements in the context of the circular economy / S.C. ROAD INFRASTRUCTURE INDUSTRY S.R.L. Blejoi	8,200 LEI + VAT
12064/28.05.2026	Development of a study for Biogenic CO2 Valorization / Storage / ROSERV GREEN ENERGY S.R.L. Onești	51,894 LEI + VAT
17002/13.07.2026	Technical expertise on existing wells (1963) with impact on a photovoltaic park project / OMV PETROM S.A. Bucharest	51,894 LEI + VAT
15935/07.07.2026	Laboratory mechanical tests / INTERPIPE ROMAN S.A. ROMAN, NEAMȚ	10,000 LEI / sample + VAT
20308/02.09.2026	Atmospheric dispersion study update and operational scenarios study in unfavorable conditions / OMV PETROM S.A. Bucharest	40,000 LEI + VAT

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