

PhD in Petroleum, Gas Chemical Engineering – Researcher

Name and family name : **Rami A DOUKEH**

Address: Bucharest – Romania

Mobile Phone: +40 -721676009

Nationalities: Romanian/ Syrian

E-mail: rami.doukeh@yahoo.com
rami.doukeh@upg-ploiesti.ro

BrainMap ID U-1900-061S-8534



 <https://scholar.google.com/citations?user=ZTYGXsUAAAJ&hl=en>

 <https://publons.com/researcher/1781645/rami-doukeh/>

 <https://orcid.org/0000-0001-8010-0885>

Professional Education

- **October 2024 –present – Master's degree in Risk Management and Reliability Engineering of Petroleum and Petrochemical Equipment**, Faculty of Mechanical and Electrical Engineering, Petroleum-Gas University of Ploiești.
- **October 2022-present -PhD student in Mining, Petroleum, and Gas**, Petroleum-Gas University of Ploiești.
- **October 2021-present -PhD student in chemistry**, Department of Chemistry, Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University.
- **October 2022 –September 2024 – Master's degree in Petroleum Production**, Faculty of Petroleum and Gas, Petroleum-Gas University of Ploiești.
- **October 2014 – July 2019- PhD. Degree in Chemical Engineering**, Petroleum-Gas University of Ploiești.
- **October 2018 – 2020 – Master's degree in Computer Aided Chemical Engineering for Refineries and Petrochemistry**, Faculty of Petroleum Technology and Petrochemistry, Petroleum-Gas University of Ploiești.
- **October 2016 – September 2019 - Master's degree in Chemical Process Engineering**, Faculty of Applied Chemistry and Materials Science, Politehnica University of Bucharest .
- **October 2011 – February 2014 – Master's degree in Chemistry of Medicines and Cosmetic Products**, Faculty of Chemistry, University of Bucharest.

- **October 2013 – February 2018 - Bachelor's Degree in Chemical Engineering (Engineering and Informatics of Chemical and Biochemical Processes)**, Faculty of Petroleum Technology and Petrochemistry, Petroleum-Gas University of Ploiești.
- **October 2002 – June 2006 - Bachelor's Degree in Applied Chemistry**, Faculty of Science, University of Damascus, Syria.

Professional Experience

- **Lecturer**, at Faculty of Petroleum and Gas, Petroleum-Gas University of Ploiești- Ploiești-Romania. (March 2024 – present).
- **Lecturer**, at Faculty of Petroleum Technology and Petrochemistry, Petroleum-Gas University of Ploiești- Ploiești-Romania. (March 2020 – March2024).
- **Scientific researcher**, at S.C. MEDACRIL SRL -Mediaș-Romania (October 2021 – november 2022).
- Research assistant at The National Institute of Development Research for Chemistry and Petrochemistry-ICECHIM- Bucharest-Romania (September 2018- June 2020).
- Research assistant, Scientific researcher at The Research Institute Auxiliary Organic Products-Mediaș-Romania (July 2016 - September 2018).

Experience gained as member in the national and international research projects

Title	Period	Function in project
Valorization of oil residue from the RAFO platform through pyrolysis, beneficiary Rosev Green Energy SRL Onești (Research contract nr. 4788/10.06.2022).	June 2022- february 2023	Director
Energy from food waste Nr. 9249/15.05.2023	October 2023- December 2024	Director
Analiza materialelor utilizate si a gazelor arse din cadrul proiectului pilot ROHYD nr.247/7901/21.04.2023	2023-2024	Member of the team
Technology for obtaining glycerol formal, an eco polar solvent used in parenteral drug administration PN-III-P2-2.1-PTE-2016-0062. C 33PTE/2016	September 2016- September 2018	Member of the research team
Conversion of biomass waste into furanderivatives for use as biofuels PN-II-PT-PCCA-2013-4-0635. C.95 / 1.07.2014	July 2016- December 2016	Member of the research team
Energetic efficiency biogas plants improvement by integrated system:biogas-microalgae- biofuels in frame of	September 2018- June 2020	Member of the research team

biorefinery concept (AlgalBiogasConceptEnergy) PN-III-P1-1.2-PCCDI-2017-0541. C.95 / 1.07.2014		
Development of food packaging with no negative impact on the environment AMBAL-INOV	October 2021-Present	Member of the research team

Research Interests and Expertise

In the field of petroleum and gas engineering, the research focuses on underground gas storage in depleted oil and gas reservoirs, including the storage of hydrogen and carbon dioxide (CO₂). This involves process analysis and optimization through the evaluation of key operational parameters and reservoir simulation using advanced tools such as ECLIPSE, OLGA, and CMG. Additional investigations are oriented toward the development of environmentally friendly drilling fluids and the formulation of improved systems for use in oil well drilling operations.

In the field of chemical engineering, the research has been centered on catalysis and thermocatalytic processes, with an emphasis on the development and evaluation of heterogeneous catalysts, kinetic modeling, and process simulation and optimization for various petrochemical applications. These include hydrodesulfurization, reactive desulfurization of aromatic sulfur compounds, aromatic hydrogenation, and hydrocracking. Expertise also extends to the catalytic transformation of biomass into biofuels and other value-added products, as well as the conversion of glycerol into additives for biodiesel and bitumen. This area also covers the formulation of performance-enhancing additives aimed at improving the combustion properties of gasoline and diesel fuels. Advanced process modeling using software such as PRO II, ASPEN, and MATLAB, along with kinetic studies, constitute core components of the research activities. Further investigations include work in the field of biopolymers.