## PETROLEUM-GAS UNIVERSITY OF PLOIEȘTI PhD Programme

#### Field of CHEMICAL ENGINEERING

Approved in the CSD meeting	
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Doctoral School Director Prof. habil. PhD. Eng. Mihai Albulescu

# SYLLABUS CHEMISTRY OF CRUDE OIL AND PETROLEUM PRODUCTS

Discipline category: Advanced knowledge

Number of hours for study: **210** Number of credits allocated: **15** 

Evaluation form: **Exam** 

### **CONTENT**

- 1. General elements related to crude oil and petroleum products: definition, chemical composition, formation assumptions, genesis, extraction of crude oil, petroleum derivatives separated by fractional distillation of crude oil
- 2. Physico-chemical properties of crude oil and petroleum fractions
- 3. Methods for characterizing crude oil and petroleum fractions
- 4. The chemical composition of crude oil and petroleum fractions
- 5. Classification of crude oils
- 6. Characteristics of Romanian crude oils
- 7. Commercial petroleum products: physical-chemical characteristics, standardized values.

## **REFERENCES**

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- 2. RĂDULESCU, G. A., *Proprietățile țițeiurilor românești*, Ed. Academiei R.P.R., București, 1961.
- 3. GERRY, G.J., ş.a. *Petroleum Reffining Technology and Economics*, Marcel Dekker Inc., N.Y. 1994.
- 4. SPEIGHT, C. J., *The chemistry and technology of petroleum*, vol. I, Marcel Dekker Inc., N.Y. 1980.
- 5. WAUQUIER, J. P., Petrol brut. Produits petroliers. Schemas de fabrication, Ed. Technip, Paris, 1994.
- 6. ȚUNESCU, R.C., Tehnologia distilării țițeiului, Ed. Didactică și Pedagogică, București, 1970.
- 7. ONUŢU, I., JUGĂNARU, T., *Merceologia produselor petroliere*, Editura UPG Ploieşti, 2018. LAKE W. L., *Petroleum Engineering Handbook*, Society of Petroleum Engineers, 2007

- 8. SPEIGHT, J. G., *Handbook of Petroleum Product Analysis*, JOHN WILEY & SONS, INC., PUBLICATION, 2002
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- 12. RIAZI, M.R., *Characterization and Properties of Petroleum Fractions*, American Society for Testing and Materials, 2005

## Discipline coordinator,

## Responsible for the doctoral field

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