PETROLEUM-GAS UNIVERSITY OF PLOIEȘTI
PhD Programme

Field of **CHEMICAL ENGINEERING**

Approved in the CSD meeting _____

Doctoral School Director
Prof. habil. PhD. Eng. Mihai Albulescu

SYLLABUS

PROCESSES AND PETROLEUM REFINING AND PETROCHEMISTRY PLANTS

Discipline category: **Advanced knowledge**

Number of hours for study: **210**

Number of credits allocated: 1**5**

Evaluation form: **Exam**

CONTENT

1. Thermal processes for petroleum refining: Coking, raw materials and products, process parameters, industrial realization.
2. Thermal processes for petroleum refining: Pyrolysis, raw materials and products, process parameters, industrial realization.
3. Catalytic Cracking process: raw materials and products, catalysts, process parameters, industrial realization.
4. Catalytic Reforming process: raw materials and products, catalysts, process parameters, industrial realization.
5. Hydrofining process: raw materials and products, catalysts, process parameters, industrial realization.
6. Processes for formulation of the gasoline: isomerization, alkylation, etherification, oligomerization.

REFERENCES

1. Rașeev S., Conversia hidrocarburilor, vol I, II, III, Editura Zecasin, București, 1996-1997
2. Suciu, G., Ionescu, C., Ingineria Prelucrării Hidrocarburilor, vol.4, Editura Tehnica, București, 1993
3. **** Fundamentals of Petroleum Refining-First edition, 2010, Elsevier, B V
4. Parkash Surinder –Refining Processes Handbook, Elsevier, 2003
5. Rașeev S-Thermal and Catalytic Processes in Petroleum Refining, Marcel Dekker Inc, New York , 2003

Discipline coordinator,

Prof. PhD. Eng. Roşca Paul

Responsible for the PhD field,

Prof. habil. PhD. Eng. Diana Cursaru