

# Institute of Chemical Engineering

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## Summary of homogeneous combustion kinetic studiem of lean methane-air mixtures In monolith bed

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**Abstract:** The paper presents results of kinetic studies of noncatalytic combustion of lean methane - air mixtures in monolith bed in a wide range of temperatures being carried out within PhD Thesis. The study reveals an influence of size, type of monolith's surface and temperature in combustion zone on the reaction mechanism and its kinetics. A hypothesis that the share of combustion type: heterogeneous with surface effect (on the monolith's wall) and homogeneous (in the free space) depends on the temperature in the combustion zone was formulated. The appropriate kinetic equations were estimated.

## Attachments:

[Zeszyt-17-2013](#) pdf, 6.23 MB

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