

Physical and chemical prerequisites of petrochemicals rational use

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Rational use of petrochemicals is one of the essential ways to reducing valuable natural asset consumption and diminishing the dependence of the country from the import of power resources. The key sectors making the biggest contribution into the waste of petrochemical products are, of course, power generating, municipal and industrial branches of economy. They are responsible for the biggest share of petrochemicals consumption both in productional and service processes. The modern framework of sustainable energy and industry development is based on the application of alternative power generating facilities, application of alternative fuels in conventional systems and modernization of equipment. However, the installation of the newest equipment and introduction of alternative ways to provision of energy demands is losing part of its efficiency due to low level of personnel awareness of fuel losses reasons and approaches to organization of fuels life-cycle at an enterprise. The hazards, related to occupational and accidental exposure to commercial oils, must be also made clear to the staff to stimulate their activity in the direction to reduction of situations causing losses of fuels and to move from working practices involving unrational practices of petrochemicals use. Poor management of unproductional power sector (utilities) at any enterprise or organization is also an important source of increasing fuels use. The consideration of fuel properties as the main grounds of their rational use is the key to reasonable consumption of petrochemicals in all sectors of economy. The most important among them are those which affect their volatility and performance.

Biography

Margaryta Radomska has completed MSc from National Technical University of Oil and Gas, and later Ph.D. at the age of 28 years from National Aviation University. She is teaching at Environmental Safety Institute of National Aviation University at the position of associate professor. She has published more than 25 papers in reputed journals.