



Division of High-Energetic Materials

Current research works:

- Development of technology of modern, low sensitive, high-energetic materials in large laboratory scale
- Development of new methods of removal of ethyl ether and ethanol, and modification of burning layer of smokeless powder for anti-aircraft ammunition
- Application of organic synthesis for preparing of intermediate products of modern explosives
- Study on new nitrating systems based on heterogeneous catalysis.

Head:

Andrzej Książczak

Staff:

Paweł Maksimowski

Tomasz Gołofit

Wojciech Pawłowski

Waldemar Tomaszewski

PhD students:

Joanna Adamiak

Anna Zalewska

Dariusz Ostaszewski

Katarzyna Cieślak

Joanna Konieczna

Selected publications:

- P. Maksimowski, M. Duda, W. Tomaszewski, *2-Acetyl-4,6,8,10,12-Pentanitro-Hexaazaisowurtzitane (PNAIW) Preparation and Properties*, Propellants, Explosives, Pyrotechnics, 36 (2011) 320–326.
- P. Maksimowski, A. Fabijańska, J. Adamiak, *Tetraacetyl-dibenzyl-hexaazaisowurtzitane Nitrosation – Studies on Scale-up Synthesis of*

Research profile:

- physicochemical principles of technologies based on nitrocellulose
- technologies of propellants
- synthesis of modern high-

<p><i>HNIW</i>, Propellants, Explosives, Pyrotechnics, 35 (2010) 353–358</p> <ul style="list-style-type: none"> • A. Książczak, T. Gołofit and W. Tomaszewski, <i>Binary System Nitrocellulose From Linters + Sym-Diethyldiphenylurea. Thermal Analysis of Phase Transition and Pore Structure</i>, J. Therm. Anal. Calorim., 91 (2008) 375–380. • A. Książczak, M. Ostrowski and W. Tomaszewski, <i>Thermochemistry of the Binary System Nitrocellulose+N-Nitrodiethanolamine Dinitrate</i>, J. Therm. Anal. Calorim., 94 (2008) 275–279. 	<p>energetic materials</p>
--	----------------------------