

رتبه اول ایرانی مقیم خارج

First Winner - Iranian Researcher In Abroad

Project Title:

Cubanes: From Explosives to Pharmaceuticals

Researcher:

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Country:

Iran



عنوان طرح:

کوبان‌ها: تبدیل مواد منفجره به مواد دارویی

محقق:

دکتر عبدا... بشیر هاشمی

کشور:

ایران

Abstract:

Cubane (C_8H_8) is a Kinetically stable compound, but a thermodynamic powerhouse (heat of formation 150 Kcal/mol). It is one of the most dense hydrocarbons known (1.29g/ml). Highly nitrated cubanes are expected to be very powerful explosive. Until now seven nitrogroups have been introduced on cubane. Very recently we have introduced chlorocarbonyl groups which can be transferred to versatile amino and carboxy groups. We have made several molecules from cubane as pharmaceutical intermediates and core molecules for polymers and liquid crystals. we are exploring medical and civilian application of this exotic molecule.