

## The cycloaddition of N,N-dimethylaminomethylidene-P-phenylphosphine to vinylallenylphosphonates

Lonkin A., Khusainova N., Smirnova L., Nekhoroshkov V., Efremov Y., Cherkasov R., Pudovik A.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

### Abstract

The cycloaddition of N,N-dimethylaminomethylidene-P-phenylphosphine (I) to  $\alpha$ -vinylallenylphosphonates (II) proceeds regioselectively with the formation of 2-dimethylamino-5-dialkoxyphosphoryl-6-isopropylidene-1-phenyl-1,2,3-tetrahydro- $\lambda^3$ -phosphorine (III). © 1990 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF00960353>

---