PR-3

CALCIUM BROMIDE CATALYSED SYNTHESIS AND ANTICOAGULANT ACTIVITY OF BIS(A-AMINOPHOSPHONATES)

S. Santhisudha,[1] G. Mohan,[1,2] C. Sridevi,[3] N. Bakthavatchala Reddy,[4]
Grigory V Zyryanov,[4,5] C. Suresh Reddy[1]*

[1]*Department of Chemistry, Sri Venkateswara University,*
Tirupati-517 502, Andhra Pradesh, India.
[2]*DST PURSE Centre, Sri Venkateswara University, Tirupati-517 502, Andhra Pradesh, India.*
[3]*Department of Chemistry, SPW Degree and PG College,*
Tirupati-517 502, Andhra Pradesh, India.
[4]*Ural Federal University, Chemical Engineering Institute Yekaterinburg,*
620002, Russian Fedaration.
[5]*I. Ya. Postovskiy Institute of Organic Synthesis,*
Ural Division of the Russian Academy of Sciences, 22 S. Kovalevskoy St.,
620219 Yekaterinburg, Russian Federation.
*Corresponding author e-mail: csrsvu@gmail.com

Abstract. A simple and efficient microwave irradiated synthesis of bis(α-aminophosphonates) has been developed by the reaction of 1,2-diphenylethane-1,2-diamine, aromatic aldehydes, and dimethyl phosphite in the presence of calcium bromide as catalyst under neat conditions at room temperature. All the title compounds were screened for their anticoagulant activity using blockasol as standard. The compounds containing thio group exhibited promising anticoagulant activity when compared to blockasol.