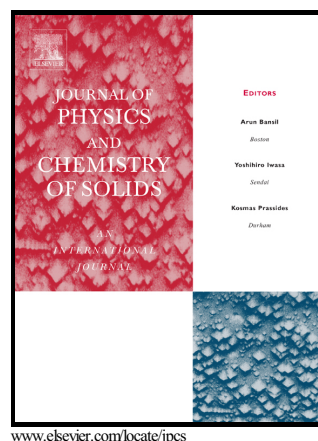


Author's Accepted Manuscript

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Rajendran Selvakumar, Steven J. Geib, Aathi Muthu Sankar, Thathan Premkumar, Subbaiah Govindarajan



PII: S0022-3697(15)00148-1
DOI: <http://dx.doi.org/10.1016/j.jpcs.2015.05.024>
Reference: PCS7556

To appear in: *Journal of Physical and Chemistry of Solids*

Received date: 14 February 2015

Revised date: 27 April 2015

Accepted date: 27 May 2015

Cite this article as: Rajendran Selvakumar, Steven J. Geib, Aathi Muthu Sankar, Thathan Premkumar and Subbaiah Govindarajan, The chemistry of aminoguanidine Derivatives – preparation, crystal structure, thermal properties, and molecular docking studies of aminoguanidinium Salts of several carboxylic Acids, *Journal of Physical and Chemistry of Solids*, <http://dx.doi.org/10.1016/j.jpcs.2015.05.024>

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The Chemistry of Aminoguanidine Derivatives – Preparation, Crystal Structure, Thermal Properties, and Molecular Docking Studies of Aminoguanidinium Salts of Several Carboxylic Acids

Rajendran Selvakumar,^a Steven J. Geib,^b Aathi Muthu Sankar,^c Thathan

Premkumar^{d*} and Subbaiah Govindarajan^{a*}

^aDepartment of Chemistry, Bharathiar University, Coimbatore – 641 046, India.

^bDepartment of Chemistry, University of Pittsburgh, Pittsburgh- PA 15260, USA.

^cDepartment of Bioinformatics, Bharathiar University, Coimbatore – 641 046, India.

^dThe University College, Department of Chemistry, Sungkyunkwan University, Suwon 440-746, South Korea.

E-mail: S.G: drsgovind@yahoo.co.in; T.P: thathanpremkumar@gmail.com; Tel.: +82 31-299-6242.

Abstract

The reaction of aminoguanidine bicarbonate (Amg) with oxamic, oxalic, malonic and sulfoacetic acids yielded (AmgH)H₂NOC-COO (1), OOC-CONHNHC(NH₂)NH₂ (2) (AmgH)HOOC-CH₂-COO (3) and O₃S-CH₂-CONHNHC(NH₂)NH₂ (4), respectively. For the first time, we studied the salt-forming ability of aminoguanidine with several carboxylic acids, such as oxamic, oxalic, malonic and sulphoacetic acids. We also compared the structural and thermal properties of these salts. Oxamic and malonic acids form only mono-

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