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## Convergent synthesis of Biologically significant compounds through Eco-Friendly methods

## Ramandeep Kaur<sup>1</sup>, Nisha Aggarwal<sup>2</sup>, Monika Bansal<sup>2</sup>, Payal Jain<sup>2</sup>, Balbir Kaur<sup>\*2</sup>, Mohammad Yusuf<sup>2</sup>

Department of Chemistry, S.U.S. Govt. College, Sunam-148028, INDIA
Department of Chemistry, Punjabi University, Patiala-147002, INDIA

Email: drbalbir@gmail.com<sup>2\*</sup>, kaur2007\_chem@yahoo.co.in<sup>1</sup>

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## ABSTRACT

Pyrazoline and thiazole derivatives are associated with broad spectrum of biological activities. In literature, several conventional and non conventional methods have been reported for the synthesis of thiazolo-pyrazolines, which are associated with many drawbacks like multistep synthetic route, longer reaction time with drastic conditions, difficult workup, low yield and use of expensive & hazardous chemicals. However, convergent one-pot multicomponent synthesis through microwave enhanced chemical reactions, in general & especially on solid support has attracted attention recently. In view of this, different thiazolo-pyrazoline derivatives were synthesized through principles of green chemistry. Some of the compounds were screened for antibacterial and antifungal activities. Compounds show good antimicrobial activity.

**Keywords:** Thiazolo-pyrazolines, Convergent synthesis, Multicomponent reactions, Microwave enhanced chemical reaction, Green chemistry, Antimicrobial activity.