MICROWAVE ASSISTED SYNTHESIS OF SOME SCHIFF BASES

R.R. Somani, A.G. Agrawal, R.N. Dandekar, P.Y. Shirodkar

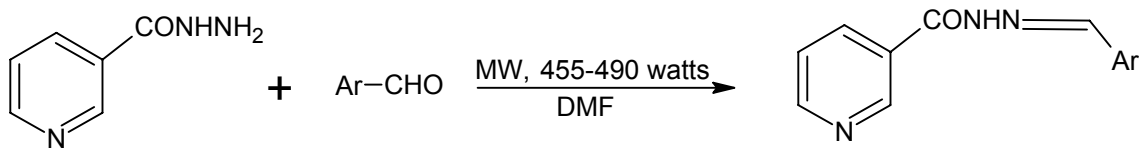
Bharati Vidyapeeths College of Pharmacy, Department of Medicinal Chemistry, Navi Mumbai , India

rakeshrsomani@yahoo.com

The challenge faced by scientific community is to define the objectives of sustainable development and to provide scientific, technological and social tools to achieve these objectives. Most important goals of sustainable development are reducing the adverse consequences of the substances that we use and generate. The role of chemistry is essential in ensuring that our next generation of chemicals, materials and energy is more sustainable than the current generation. Thus Green Chemistry is the most attractive concept in chemistry for sustainability that utilizes a set of principles which reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products.

Advances in technology have now made microwave energy a more efficient mean of heating a chemical reaction. Microwave energy offers numerous benefits for performing synthesis including increased reaction rates, yield enhancement and cleaner chemistries. Herein we have reported synthesis of various Schiff bases (**3a-3g**) by the condensation of nicotinic hydrazide **1** with different aromatic aldehydes (**2a-2g**) under microwave irradiations. Surprisingly the yields were improved, reactions were clean and the time was reduced.

Scheme of Synthesis:



1 (**2**a-**2**g) (**3**a-**3**g)