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Microwaves in organic synthesis. Thermal and non-thermal effects

[Antonio de la Hoz](#),^{*a} [Ángel Díaz-Ortiz](#)^a and [Andrés Moreno](#)^a

[Author affiliations](#)

* Corresponding authors

^a Departamento de Química Orgánica, Facultad de Química, Universidad de Castilla-La Mancha

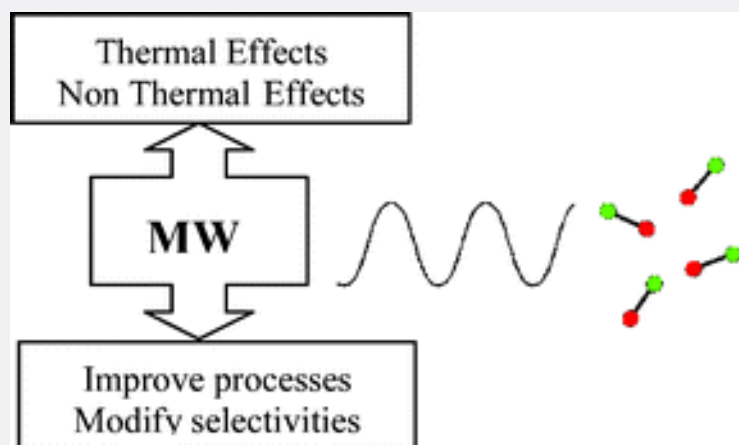
E-mail: Antonio.Hoz@uclm.es

Fax: +34 926295300

Tel: +34 926295411

Abstract

Microwave irradiation has been successfully applied in organic chemistry. Spectacular reaction conditions and higher product purities have all been reported. Indeed, a number of reactions that do not occur by conventional heating and even modifications of selectivities have been reported. The effect of microwave irradiation in organic synthesis is a combination of thermal effects and "hot spots" and the selective absorption of radiation by polar substances. Such effects are still a controversial topic. An overview of the thermal effects and the current state of this *critical review* along with a view on how these phenomena can be effectively used in synthesis.



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Publication details

The article was received on 27 Jul 2004 and first published on 12 Jan 2005

Article type: Critical Review

DOI: 10.1039/B411438H

Citation: *Chem. Soc. Rev.*, 2005, **34**, 164-178

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A. de la Hoz, Á. Díaz-Ortiz and A. Moreno, *Chem. Soc. Rev.*, 2005, **34**, 164

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the 1990s, the number of people in the UK who are employed in the public sector has increased from 10.5 million to 12.5 million, and the number of people in the public sector who are employed in health care has increased from 2.5 million to 3.5 million (Department of Health 2000).

There are a number of reasons why the public sector has grown in size. One reason is that the population of the UK has increased, and the number of people who are aged 65 and over has increased. This has led to an increase in the number of people who are employed in the public sector, particularly in health care.

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