## Research &

## Development

## Microwave Heating as a Tool for Sustainable Chemistry

Microwave Heating as a Tool for Sustainable Chemistry. Edited by Nicholas E. Leadbeater. CRC Press: Boca Raton, FL. 2010. 290 pages. \$149.95. ISBN 978-1-4398-1269-3

This is the second book to be published in the CRC series on Sustainability: Contributions through Science and Technology, the first being Sharma, S. K. and Mudhoo, A., Eds. *Green Chemistry for Environmental Sustainability;* Sustainability, CRC Press: Boca Raton, 2010.

This interesting volume on Microwave Chemistry will be prized by those working in process chemistry for an excellent chapter on "Microwave Heating as a Tool for Process Chemistry", by Jonathan Moseley of AstraZeneca. This 45-page chapter focuses on equipment issues related to scale up, but also discusses the use of microwaves in reaction optimisation and process development, and in continuous processing. Of the rest of the chapters, those on Organic Synthesis (chapter 2) and on Drug Discovery (chapter 4) will be of most value to process chemists.

The editor, Nicholas Leadbeater, is well-known in the field of microwave chemistry and has compiled a useful book using less well-known authors. He has contributed to several chapters as well as being the overall editor.

In conclusion, this latest book on microwave chemistry is valuable for process chemists and should be read by all those thinking about scaling up a microwave reaction or purchasing equipment. It is relatively up-to-date with some references to 2009 papers, but clearly, the Process Chemistry chapter with its emphasis on equipment might get outdated quite quickly as companies bring out newer modules.

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