

Scientific Book Review

A review by Cristina Leonelli

Title: Microwave and Radio-Frequency Technologies in Agriculture-An Introduction for Agriculturalists and Engineers

Authors: Brodie, Graham / Jacob, Mohan V. / Farrell, Peter

Book Format: eBook (PDF)

<https://www.degruyter.com/view/product/466435>

Publication Date: November 2015

ISBN code: 978-3-11-045540-3

How could microwave and radio-frequency technologies be applied successfully to agriculture? Three Australian professors, namely Graham Brodie, Mohan V. Jacob and Peter Farrell, have provided a comprehensive treatise of what is possible to be done by microwave and radio-frequency systems to further enhance the agricultural industry. These suggestive answers to our question are collected in the 369 pages book titled: "Microwave and radio-frequency technologies in Agriculture - An Introduction for agriculturalists and engineers" published by De Gruyter in 2015 as an open access e-book. The book is divided into 4 sections, each of which is further divided into a number of chapters; the four sections are: General introduction, Non-destructive characterization using electromagnetic waves, Dielectric heating, and finally Automatic data acquisition and wireless sensor networks.

Electromagnetic waves, as the authors point out, do offer a good means of solving problems such as crop drying, quarantine and biosecurity, moisture monitoring, radar imaging, GPS geographic information, weed management, treatment of animal fodder, wood modification, MW extraction, thermal processing of biomasses, animal tracking systems and much more.

The authors have collected their personal experiences and report the findings of their colleagues in well-matched chapters where the beginner and the expert equally can find interesting novelties and original approaches.

This book is of considerable interest to investors in emerging technologies as well as MW and RF development specialists and industrialists.

