Modelling tempering behaviour of dark chocolates from varying particle size distribution and fat content using response surface methodology

Emmanuel Ohene Afoakwa
Alistair Paterson, University of Strathclyde
Mark Fowler
Joselio Vieira

Available at: https://works.bepress.com/emmanueloheneafoakwa/92/
The requested information on Chocolate Science has been put together with additional information on relevant areas in the field of Chocolate Science into a book entitled Chocolate Science and Technology. Kindly obtain a copy of the book for your reference. You can also print this information sheet for yourself, Research Supervisor, Research team members, Faculty, School, Department and/or Institution’s Librarian to obtain some reference copies. Details on the book are as stated below:

DA 22 Nov 2010
DT Book
Author Afoakwa, E. O. (Professor Emmanuel Ohene Afoakwa, PhD)
Publication Year 2010
Author’s Address Department of Nutrition and Food Science, University of Ghana, P. O. Box LG 134, Legon-Accra, Ghana

Publishers:
The Atrium, Southern Gate, Chichester, PO19 8SQ, UK; Wiley-Blackwell.
Tel. +44 (0)1243 779777.
Fax +44 (0)1243 775878.
E-mail cs-books@wiley.co.uk
Website: www.wiley.com

Price:
GBP 120.00,
EUR 144.00
US$ 200.00
(Discount Available at Publishers and Online Bookshops)

PG xv + 275pp.
RF many ref.
LA English
BOOK CONTENT:
This book provides an overview of the science and technology of chocolate manufacture from cocoa production, through the manufacturing processes, to the sensory, nutritional and health aspects of chocolate consumption. Includes detailed explanations of the various stages of chocolate manufacturing. Focuses on factors that influence chocolate flavour and quality. The book is designed to be a reference for those involved in chocolate manufacture, as well as students and food scientists.

It contains 12 chapters under the following headings:

**Chapter 1:** Chocolate consumption and consumption patterns (pp. 1–11);

**Chapter 2:** Cocoa cultivation, bean composition and chocolate flavour precursor formation and character (pp. 12–34);

**Chapter 3:** Industrial chocolate manufacture – processes and factors influencing quality (pp. 35–57);

**Chapter 4:** The chemistry of flavour development during cocoa processing and manufacture (pp. 58–72);

**Chapter 5:** Sensory character and flavour perception of chocolates (pp. 73–90);

**Chapter 6:** Nutritional and health benefits of cocoa and chocolate consumption (pp. 91–100);

**Chapter 7:** Structure – properties (rheology, texture and melting) relationships in chocolate manufacture (pp. 101–154);

**Chapter 8:** Tempering behaviour during chocolate manufacture – effects of varying product matrices (pp. 155–173);

**Chapter 9:** Tempering and fat crystallisation effects on chocolate quality (174–197);

**Chapter 10:** Fat bloom formation and development in chocolates (pp. 198–214);

**Chapter 11:** Matrix effects on flavour volatiles character and release in chocolates (pp. 215–229); and

**Chapter 12:** Conclusions and industrial applications (pp. 230–235).

**References, Appendices and Index:** A list of references, 3 appendices and a 16pp. index are also included.