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Effects of tempering and fat crystalization behaviours on microstructure, mechanical properties and appearance in dark chocolate systems.

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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:

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**DT Book**
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**PG xv + 275pp.**
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**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.