
Contents

Preface	vii
Part I: Basic Concepts	1
1. Inkjet Printing Technologies <i>Alan Hudd</i>	3
2. Ink Requirements and Formulations Guidelines <i>Shlomo Magdassi</i>	19
3. Equilibrium Wetting Fundamentals <i>Abraham Marmur</i>	43
4. The Behaviour of a Droplet on the Substrate <i>Patrick J. Smith</i>	55
5. Tailoring Substrates for Inkjet Printing <i>Moshe Frenkel</i>	73
Part II: Formulation and Materials for Inkjet Inks	99
6. Pigments for Inkjet Applications <i>Alex Shakhnovich and James Belmont</i>	101
7. Formulation and Properties of Waterborne Inkjet Inks <i>Christian Schmid</i>	123
8. Solvent-Based Inkjet Inks <i>Josh Samuel and Paul Edwards</i>	141
9. Formulating UV Curable Inkjet Inks <i>Sara E. Edison</i>	161

10. Raw Materials for UV Curable Inks <i>Ian Hutchinson</i>	177
11. Unique Inkjet Ink Systems <i>Matti Ben-Moshe and Shlomo Magdassi</i>	203
Part III: Specialty Inkjet Materials	223
12. Electrically Conductive Inks for Inkjet Printing <i>Moira M. Nir, Dov Zamir, Ilana Haymov, Limor Ben-Asher, Orit Cohen, Bill Faulkner and Fernando de la Vega</i>	225
13. Inkjet 3D Printing <i>Eduardo Napadensky</i>	255
14. Printing Bioinks with Technologically Relevant Applications <i>Leila F. Deravi, David W. Wright and Jan L. Sumerel</i>	269
15. Printed Electronics <i>Vivek Subramanian</i>	283
16. Ceramic Inks <i>Stefan Güttler and Andreas Gier</i>	319
Index	341