Preface

I-optimal Design of Experiments Using R

1. Preface
2. A Short Introduction to R
    1. R, R Studio, and user-written libraries
    2. Data types
    3. Reading and writing data
    4. Operations with vectors and matrices
    5. Logical operators
    6. Base R graphics
    7. Selected R libraries (plot3D, mix.DOE, and the optimization one)
3. Response Surface Models
    1. Amount models (Cartesian space)
    2. Mixture models (Simplex space)
    3. Mixture-amount models (Combined space)
    4. Mixture-process models (Combined space)
    5. Mixture-amount-process models (Combined space)
4. Constructing I-optimal Designs
    1. Point optimization
        1. Weighting matrix construction
        2. Space matrix construction
        3. Point selection and optimization
    2. Pick-and-exchange algorithms