

P R E F A C E

This dissertation consists of four articles. The first article is introductory which surveys the historical background and incorporates a few relevant basic concepts from the earlier work. Second and third articles cover the study of self-reciprocal generalized Hankel transformation. Last article contains n -dimensional generalized Hankel transform of arbitrary order. Every article is divided into sections and each sections are further divided into sub-sections. The triple system has been used in numbering these sections and sub-sections. Hence, section 3.3 means third sub-section of the third section. The equations are numbered within the article in triple system and are put within brackets.

References to the literature that have been used in this work are given at the end of this dissertation in alphabetical order. In this work, these are referred to by putting within square brackets in the serial number of the reference.

- B.P. REDDY