

connections with classical transforms are discussed. The final Chapter 12 is a study of convolution integral equations involving the H -function of two variables.

The Appendix lists useful formulas for special functions of one and several variables, along with a brief account of an H -function of several variables. The bibliography contains more than one thousand references.

The wealth of material is, in the reviewer's opinion, sensibly selected and arranged. Proofs are not necessarily given; and in some cases the authors deal summarily with large families of formulas by merely deriving the *numbers* of such formulas. Moreover, it should be noted that H -symbols are satisfactorily printed, in spite of their typographical complexity.

The book, providing a comprehensive account of a subject widely scattered in the literature, will be of value to all researchers and students in the field of special functions.

REFERENCES

1. A. M. Mathai and R. K. Saxena, *Generalized hypergeometric functions with applications in statistics and physical sciences*, Lecture Notes in Math., vol. 348, Springer-Verlag, Berlin, Heidelberg and New York, 1973.
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The theory of topological semigroups, by J. H. Carruth, J. A. Hildebrandt, and R. J. Koch, Pure and Applied Mathematics, Marcel Dekker, Inc., 1983, vi + 244 pp., \$34.75. ISBN 0-8-8247-1795-3

BACKGROUND. Very few subject areas in mathematics can assign their creation to a single individual. Topological semigroups is one of the exceptions. Alexander Doniphan Wallace is universally acknowledged to have fostered the idea of studying continuous, associative multiplications on Hausdorff spaces, and no practitioner could wish for a more colorful father of the subject.

An excellent teacher of graduate students and an able wordsmith, Wallace was the natural choice of his descendants to chronicle the growth of the subject. Regrettably, the continuing press of administrative duties prevented this project from every being seriously begun. An early hint of what might have been is contained in the Bulletin article [4] that summarized his 1955 address to the Society—one of the most cited sources ever in American mathematics publishing.

By the early 1960s, the only book in print on the subject (besides Wallace's jealously guarded course notes) was a Centrum tract by Paalman-De Miranda [3], an effort clearly not intended to serve as a text. The appearance of the first volume of Clifford and Preston's work in algebraic semigroups [1] made the