are K-valued, K a local field. Their work establishes that there is a lot of interesting mathematics in this area.

This current contribution is a text book and is extra-ordinarily complete, in the areas with which it deals: An introduction to requisite valuation theory and topology; Banach spaces (spherical completeness, orthogonal bases); Banach algebras; Integration; Invariant ("Haar-like") measures; and a brief look at the Fourier theory. It is filled with exercises, outlines of unsolved and partially solved problems and excellent notes. The author makes no attempt to be encyclopedic; avoiding topics such as: special functions, categories of Banach spaces, analytic functions and rings of power series. He does, however, give some references to the literature for those topics.

The list of references is long and overly complete in some ways and is lacking in others. On the plus side we have that the notes and comments are well and specifically referenced. However, the introduction refers to some work that is not referenced and an occasional reference seems to be included because it has the right words in the title and not because it is used or refers to any subject discussed.

The fashionable view is that if functional analysis is not Archimedean then it is either a trivial extension of the Archimedean case which holds because of certain abstract nonsense, or it is trivial because it clearly fails or holds for the most elementary of reasons. Consider some counter-examples: If G is a nice enough non-Archimedean group and $\hat{G}$ is its dual (by the way, there are *three* natural notions of dual available) then the space of finite measures (non-Archimedean valued measures!) on G is isomorphic with space of bounded uniformly continuous functions on $\hat{G}$. For Banach algebras, the rather spectacular failure of the Gelfand-Mazur theorem leads to *four* non-equivalent notions of the spectral radius, and it would seem that the future holds, not a general theory of Banach algebras, but a variety of such theories.

If you have the patience to read a text book, and it takes patience to read a text, you will find that the view that non-Archimedean functional analysis is trivial is not entirely correct.

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BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 1, Number 5, September 1979

0002-9904/79/0000-0417/$01.75

Quasi-ideals in rings and semigroups, by Ottó Steinfeld, Akadémiai Kiadó (Publishing House of the Hungarian Academy of Sciences), Budapest, 1978, xii + 154 pp.

The notion of a quasi-ideal was first introduced by the author, for rings in 1953 and for semigroups in 1956. An additive subgroup Q of a ring A is called a *quasi-ideal of* A if $QA \cap AQ \subseteq Q$. The same definition applies if A is a semigroup, changing "additive subgroup" to "non-empty subset". More than fifty papers have appeared since that time, dealing with quasi-ideals, and the present book gives a systematic survey of the main concepts and results in this area. The author himself is the outstanding contributor, with more than a dozen papers on the subject.

A subset of a semigroup S is a quasi-ideal of S if and only if it is the