book is its beautiful organization. Consisting of 16 chapters of approximately 14 pages (± 3) each, it really touches on almost all experimental and theoretical points of fundamental interest in liquids. By leaving out entirely some derivations found in standard textbooks on quantum mechanics and statistical mechanics (giving instead references to specific equations in these books) Egelstaff manages in general to give a good account of almost all the topics. He also has managed, and for this he deserves really high praise, to make the best tables and graphs that I have ever seen. Table 1.1, which compares the physical properties in the liquid and solid state of argon and sodium, alone is worth half the price of the book. This inclusion of liquid metals in a book on liquids is, as far as I know, a novel feature, and to me a most welcome one.

Having praised the book so highly I very much regret that it also has some shortcomings which will reduce its usefulness to graduate students and "outsiders" wanting to learn about liquids. In many places brevity is carried to the point of confusing the reader, and the confusion is made worse by the absence of references in these places. Also there is sometimes confusion about factors and scales. To cite a few examples: the definition of the grand canonical pressure in Eq. 2.25 is different from the "usual" one. The difference disappears when the size of the system becomes infinite, a limit which is not mentioned at this point but which is brought in unnecessarily and confusingly following Eq. 2.32. In Eq. 3.4 $\phi_R\{r_j\}$ is (from the context) the wave function of all electrons (in two atoms) but the text says "where $\phi(r_j)$ is the electronic wave function of the j*th* electron," which makes no sense. In Eq. 6.12 the factor N^{-1} appears unnecessarily. This is compounded when Eq. 6.13 again has the same factor in a way which is inconsistent with 6.12. I could not follow Sec. 6.6 and could find no reference. The horizontal scale of Fig. 7.3 should be multiplied by $6/\pi$. The faults are of the kind that can be remedied relatively easily. I very much hope that they will be for the next printing so that the book can play an important part in aiding the study of liquids.

The book by Pryde, which does not contain the word "introduction" in its title, is of a much more introductory nature. It deals exclusively with classical fluids and devotes only a small portion to nonequilibrium properties. The style of the book is very relaxed, almost chatty, the opposite of Egelstaff's book. The experiments done by Scott and Bernal on steel balls in various containers are described interestingly. So are Monte Carlo and molecular dynamic methods. In general, qualitative explanations are given whenever possible. All in all, the book is pleasant and well worth reading. It could be used to form part of an undergraduate or graduate course on the properties of matter.

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Lipids

An Introduction to the Chemistry and Biochemistry of Fatty Acids and Their Glycerides. F. D. GUNSTONE. Chapman and Hall, London, 1967 (distributed in the U.S. by Barnes and Noble, New York). x + 209 pp., illus. $10. Second edition of *Introduction to the Chemistry of Fats and Fatty Acids.*

This book is meant to be a critical introduction to lipid chemistry and biochemistry for the advanced undergraduate and the graduate student. Gunstone has successfully reviewed with an appropriate amount of detail the chemistry of fatty acids and their glycerides. Phospholipids, although omitted from the title, are briefly discussed. The description of the biochemistry of these compounds is less successful.

Especial emphasis seems to have been given to recent methodological developments in the isolation and characterization of fatty acids and glycerides. This is as it should be. The range of fatty acids that occur naturally is bewilderingly complex and varied. The fatty acids can be isolated and separated only by the skillful application of the recently developed techniques of gas-liquid and thin-layer chromatography. Indeed, the immense variety of these acids and their derivatives has been fully appreciated only with the application of these techniques. Classical methods of structure determination are described, but the importance of infrared and nuclear magnetic resonance spectroscopy, of x-ray diffraction, and of mass spectrometry is fully recognized.

Most of the book is devoted to a description of the chemistry of fatty acids; their structure; their chemical synthesis, reduction, and oxidation; and their physical-chemical properties. The references at the end of each chapter, though few, are carefully selected, often to reviews, and usually very recent. Many statements in the text, however, are not documented by specific reference or covered in the reviews that are cited. This is, perhaps, appropriate for an introductory survey, but it will make it more difficult for the reader to explore many questions in greater depth.

The only disappointment in this otherwise admirable text is the brief treatment given to lipid biochemistry. In the one frankly biochemical chapter the allotted 20 pages are sufficient for only a superficial description of the major pathways of synthesis of saturated and unsaturated fatty acids, glycerides and phospholipids, and of the mechanism of β-oxidation. Elsewhere in the book mention is made of the distribution of the fatty acids among plants, animals, and microbial species, and phylogenetic aspects are briefly alluded to. Nowhere are the major problems of fatty acid transport, effects of hormones on lipid metabolism, or the role of lipids in the structure and function of biological membranes mentioned.

This book, then, is an extremely well-written and concise description of the chemistry of fatty acids but gives no indication of why these compounds are of interest to so many biologists.

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Effects of Radiation

Radiation Research. Proceedings of the Third International Congress, Cortina d'Ampezzo, Italy, June–July 1966. G. SILINI, Ed. North-Holland, Amsterdam; Interscience (Wiley), New York, 1967. xvi + 927 pp., illus. $39.

This book contains the proceedings of 12 symposia that were held at the Third International Congress of Radiation Research. Most of the 58 papers which make up the symposia present, in depth and at an advanced level, current ideas about the effects of radiation. There is considerable merit in having ultraviolet and ionizing radiation and photodynamic effects discussed in one book where they can be compared.

Both the fundamental physical interaction of radiation with matter and the