

laboratories) and has done a superb job on the book, are, of course, nice bonus features.

When working at temperatures well below 1 K, the experimenter is confronted not merely with one frontier, but three: refrigeration, heat transfer and thermometry—all requiring state-of-the-art competence. Lounasmaa treats all three in detail. His discussions of the dilution refrigerator, compressional cooling and nuclear demagnetization are the only ones that really exist in a monograph. The coverage is balanced, and the discussions are quite clear. The discussions on thermometry and thermal contact update previous treatments in monographs and probably make the book worthwhile even for those interested merely in working at temperatures in and above the helium-three range ($T > 0.3$ K) as well as those pushing the millikelvin frontier. The presentation of the theory of the SQUID (Superconducting Quantum Interference Device) and its application for measuring minute voltages and magnetic fields is the most lucid and useful I have seen.

In summary Lounasmaa's book fills a unique void and fills it majestically. Any experimenter working below 1 K who does not have the book on his shelf would seem to place himself at a distinct disadvantage.

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Handbook on Nuclear Activation Cross-Sections. (Neutron, photon and charged-particle nuclear reaction cross-section data). 558 pp. International Atomic Energy Agency, Vienna, 1974. (Available from UNIPUB, New York) \$26.00

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roula. 328 pp. Halsted, New York, 1975. \$16.95

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