
The Mathematics of Physics and Chemistry. *Henry Margenau and George Moseley Murphy.*
D. Van Nostrand Company, Inc., Princeton, New Jersey. Second Edition, 1956.
xii+604 pp. \$6.85.

This excellent book can serve many useful purposes. It could serve as a text in various courses in applied mathematics at either the senior or first year graduate level. It could also be used as a text in introductory courses in fields such as quantum mechanics or statistical mechanics. As a reference book it should prove handy to the physicist or chemist who needs an occasional reminder of certain mathematical concepts and to the teacher of mathematics who may need a source of applications.

Although the part dealing with numerical analysis has been expanded it seems unfortunate that the authors could not have found room for a brief discussion of high speed machine computation.

The chapter heading and lengths are: Mathematics of Thermodynamics (31), Ordinary Differential Equations (57), Special Functions (48), Vector Analysis (35), Coordinate Systems, Vectors and Curvilinear Coordinates (26), Calculus of Variations (18), Partial Differential Equations of Classical Physics (30), Eigenvalues and Eigenfunctions (36), Mechanics of Molecules (20), Matrices and Matrix Algebra (31), Quantum Mechanics (98), Statistical Mechanics (36), Numerical Calculations (53), Linear Integral Equations (35), Group Theory (39).

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