

cuits and instruments.

Here, then, are three books that describe how and why things are done in the lab. I believe Coyne's book is best suited for students and their supervisors in secondary school and undergraduate science laboratories, and there are undoubtedly others who will find useful tidbits in the book. Do you know why Teflon tape, as opposed to a sealant paste containing Teflon, should not be used on pipe threads in a vacuum system? Or why

oxygen-free high-conductivity (OFHC) copper should be used as gasket material? See Gary Coyne's book for the answers.

For those working at national, industrial and university research laboratories, I recommend that at least one but preferably all three of the above-mentioned books be made available at a convenient location in the lab.

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The Many-Body Problem: An Encyclopedia of Exactly Solved Models in One Dimension. D. C. Mattis, ed. World Scientific, River Edge, N.J., 1993. 958 pp. \$86.00 *hc* ISBN 981-02-0975-X.

The Non-Linear Field Theories of Mechanics. Second edition. C. Truesdell, W. Noll. Springer-Verlag, New York, 1993. 591 pp. \$89.00 *hc* ISBN 0-387-55098-4.

Partial Differential Equations IV: Microlocal Analysis and Hyperbolic Equations. *Encyclopedia of Mathematical Sciences* 33. Yu. V. Egorov, M. A. Shubin, eds. Springer-Verlag, New York, 1993. 241 pp. \$79.00 *hc* ISBN 0-387-53363-X.

Phantoms and Computational Models in Therapy, Diagnosis and Protection. *ICRU Report 48* International Commission on Radiation Units and Measurements, Bethesda, MD., 1992. 194 pp. \$55.00 *pb* ISBN 0-913394-45-9.

A Primer of Nonlinear Analysis. *Cambridge Studies in Advanced Mathematics* 34. A. Ambrosetti, G. Prodi, Cambridge U. P., New York, 1993. 171 pp. \$44.95 *hc* ISBN 0-521-37390-5.

Quantization of Gauge Systems. M. Henneaux, C. Teitelboim. Princeton U.P., New Jersey, 1992. 520 pp. \$59.50 *hc* ISBN 0-0691-08775-X.

Quantum Mechanics: Foundations and Applications. *Texts and Monographs in Physics*. A. Bohm. Springer-Verlag, New York, 1993. 688 pp. \$59.00 *hc* ISBN 0-387-97944-1.

Random Media and Boundaries: Unified Theory, Two-Scale Method, and Applications. *Springer Series on Wave Phenomena*. K. Furutsu. Springer-Verlag, New York, 1993. 270 pp. \$99.00 *hc* ISBN 0-387-55688-5.

Schrödinger Equations and Diffusion Theory. *Monographs in Mathematics* 86. M. Nagasawa. Birkhäuser, Boston (US dist., Springer-Verlag, New York), 1993. 319 pp. \$99.00 *hc* ISBN 0-8176-2875-4.

A Theory of Latticed Plates and Shells. *Series on Advances in Mathematics for Applied Sciences* 5. G. I. Pshenichnov. World Scientific, River Edge, N.J., 1993. 309 pp. \$58.00 *hc* ISBN 981-02-1049-3.

Topology of Gauge Fields and Condensed Matter. M. Monastyrsky (Translated from the Russian by O. Efimov). Plenum, New York, 1993. 372 pp. \$95.00 *hc* ISBN 0-306-44336-8.