

**Social Structure and Testosterone: Explorations of the Socio-Bio-Social Chain.** By T. D. KEMPER. Published 1990 by Rutgers University Press, New Brunswick and London. No. of pages: 271. ISBN: 0-8135-1551-3. Price at May 1991: US\$ 13.95.

This book treats several questions in the field of sociopsychoneuroendocrinology, concerned with problems that bridge sociology, psychology and endocrinology, requiring a broad transdisciplinary perspective. Among the topics dealt with, sexuality is not simply hormonal, psychological, or social, but at the least a complex amalgam of the three. Likewise, intellectual functioning is not simply psychological but entails physiological structures and processes, as well as social constraints and incentives. Finally, mass audiences for media spectacles are not simply social phenomena, but are made possible only by strong psychic ties of identification and sufficient physiological arousal.

The following chapters are included in this book:

- Social structure, testosterone, and male sexuality.
- Infidelity and sexual intimacy: reflections on the dominance/eminence-testosterone relationship.
- Social structure, testosterone, and women's spatial ability: revisiting the Broverman hypothesis.
- Vicarious dominance/eminence: sports, testosterone, and society.

This book would be of interest to endocrinologists, physiologists, biologists, sociologists, psychologists, as well as advanced students.

**Advances in Steroid Analysis '90.** Edited by S. GOROG and guest editor E. HEFTMANN. Published 1990 by Akademiai Kiado, Budapest. No. of pages: 508. ISBN: 963-05-6034-8.

This volume contains the *Proceedings of the 4th Symposium on the Analysis of Steroids*, held in Pecs, Hungary, 24–26 April 1990. The papers included represent contributions from 16 countries by some of the leading experts in the contemporary steroid analysis field. The majority are concerned with various steroid hormones and their synthetic analogues, but other classes, including non-hormonal drugs, sterols and digitalis glycosides are also adequately represented. In the main the papers are focused on these steroid determinations in the bioanalytical field through: analysis in biological matrices, biosynthetic problems, metabolism and clinical diagnostics involving the use of steroids. However, analytical investigations of bulk drugs and their respective preparations together with industrial problems such as microbiological transformation products of sterols, also comprise a considerable proportion of the material. The main sections are as follows:

Receptor binding studies.

Immunoassays:

- Radioimmunoassay;
- Enzyme immunoassay;
- Other immunoassays.

Chromatography:

- Gas chromatography;
- High-performance liquid chromatography (HPLC);
- GC/MS and HPLC/MS;
- Thin-layer chromatography.

Spectroscopy:

- Mass spectroscopy;
- Other spectroscopic methods (NMR, optical rotation, colorimetry);
- Complex application of spectroscopic techniques.

Clinical studies:

- Biosynthesis and metabolism;
- Diagnosis;
- Other studies.

This book would be interesting to biochemists, biophysicists, analytical biochemists, and immunologists.

**Protein Purification. From Molecular Mechanisms to Large-Scale Processes.** Edited by M. R. LADISCH, R. C. WILLSON, C.-D. C. PAINTON and S. E. BUILDER. ACS Symposium Series, Vol. 427. Published 1990 by The American Chemical Society, Washington. No. of pages: 280. ISBN: 0-8412-1790-4. Price at Jan. 1991: US\$ 64.95.

This book offers a practical guide to the transition from research to industry. The authors, acknowledged leaders in the field, discuss a combination of proven successful methods and a wide variety of emerging techniques. Their approach is heavily industrial, with an emphasis on scale-up of promising methods. The modern concepts and research strategies offered here can revolutionize the field of pharmaceutical protein purification. Many of the 16 chapters focus on applications of liquid chromatography for protein separation. Other techniques described are adsorption, extraction, centrifugation, and electrophoresis. All of these approaches are evaluated for their practicality in connection with recombinant proteins on an industrial scale. Some of the specific topics discussed are adsorptive separations, mechanisms of protein retention in hydrophobic interaction chromatography, radial-flow affinity chromatography for trypsin purification, metal-affinity protein separations, site-specific proteolysis of fusion proteins, and use of applied electric fields for downstream processing.

Anyone involved in designing protein production systems or separation techniques, in making pharmaceutical proteins or in purifying proteins on a large scale will find this volume invaluable. It belongs in the professional libraries of biochemical and bioengineering firms, as well as academic institutions offering courses related to recombinant proteins and similar biochemical topics.