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BOOK REVIEW

Handbook of Affinity Chromatography

(Hage, D. S. (ed.) in *Chromatographic Science Series*, Vol. 92 (Cazes, J., ed.), CRC, Taylor & Francis Group, Boca Raton-London-New York-Singapore, 2006, 944 p., $195.95)

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This book of six sections including 30 chapters has been written by a large international group of authors.

The first section (chapters 1-4) deals with basic principles of affinity chromatography; it gives description of principles of this method, most common materials, methods used for immobilization and elution, and also applicability of this method for purification and isolation of various components from complex biological systems.

The second section (chapters 5-10) gives characteristics and information on use of variants of affinity including bioaffinity chromatography, immunoaffinity chromatography, DNA affinity chromatography, affinity chromatography using boric acid fixed on a matrix, ligand-dye affinity chromatography, biomimetic affinity chromatography, and affinity chromatography using immobilized metal ions.

The third section (chapters 11-16) considers the use of affinity chromatography for preparative isolation of enzymes, recombinant proteins, purification of antigens and antibodies, and chromatography of regulatory, receptor, and some other proteins involved in signal transduction.

The fourth section (chapters 17-21) gives examples of use of affinity chromatography for analytical and semipreparative purposes, including the use of affinity chromatography in clinical and pharmaceutical analyses and in biotechnology, molecular biology, and some other studies.

The fifth section (chapters 22-25) deals with results of quantitative affinity chromatography, use of affinity chromatography in biophysical studies, molecular recognition, bound plasma proteins and enzymes, and also the use of affinity chromatography in biosensor analysis.

The sixth section (chapters 26-30) considers the latest achievements in the use of affinity chromatography including characterization of ligands of affinity used in capillary electrophoresis, affinity mass-spectrometry, affinity chromatography based microanalytical methods, types of immunoanalysis, and artificial receptors for affinity chromatography.

The book is well illustrated; it contains ~500 figures and tables, summaries after each chapter, a bibliography including ~3000 references, and detailed alphabetical index.

This book is addressed to a wide audience; it may be used by specialists working in biochemistry, biotechnology, molecular biology, pharmacology, medicinal chemistry, and also for specialists in environmental studies. The book may also be recommended as a handbook for university students and their teachers as well as for other schools preparing specialists in the above-mentioned fields.

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