

*Chemical Sensor Technology*, Vol. 3, by N.Y. Yamazoe (Ed.), Elsevier/Kodansha, Amsterdam/Tokyo 1991, ISBN 0-444-98701-0, xviii + 302 pp., \$194.50/Dfl. 340.00.

In the preface of this book, the editor notes that after two decades of use and development of chemical sensors, they have “become indispensable for protecting the life and health of human beings from disasters and diseases, enriching life styles, and promoting the activity of society and industry.” The book is the third in a series of annual reviews reporting the latest progress being made in research and technology, both basic and applied, in the area of chemical sensors.

Several selected papers are published on a wide variety of “sensor” topics by experts from Japan, United States, Germany, Singapore, France, United Kingdom and Switzerland.

To say the least, the papers cover a wide variety of subjects and applications:

- Gas sensing characteristics of oxide whiskers
- Odor sensing (including detection of bad breath!)
- Dielectric supported thin film chemiresistors – to detect organophosphorous pesticides
- Biochemical sensors
- Automotive chemical sensors
- SO<sub>x</sub> optic sensors
- Fiber optic sensors
- Ion selective electrodes
- Enzyme sensors
- Microvoltammetry and brain dialysis
- Biological molecule detection
- Immunochemical sensors

There have been tremendous accomplishments in the field as well illustrated by the closing comments in the paper on “Automotive Oxygen Sensors” by E.M. Logothetis of Ford Motor Co. (USA):

“The development of the automotive oxygen technology must indeed be considered a success story. Presently, the technology is able to produce millions of sensors every year where the required performance and remarkable durability in the hostile automotive environment.”

And as for the future, Tazio Uda of UBE Industries (Japan) concluded his paper “Recent Development of Immunochemical Sensors and Immunological Assays Using Monoclonal Antibodies Against Small Molecules” in this way: “The biological application of ELISA [enzyme-linked immunochemical sensors] is currently in the diagnostic field. It continues to make steady progress in many areas including pharmaceuticals, medicine, agriculture, food, chemical industries and others. Accurate and highly sensitive immunochemical sen-