

**IEEE P2520 Seminars on Fundamentals of Odor Monitoring & Analysis
February 10, 2020**

Title: **Signal processing for chemical sensors: past, present, and future**
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Signal processing is a critical component of electronic-nose systems. Many of the e-nose signal processing techniques developed over the past three decades have leveraged developments in other disciplines, such as chemometrics and pattern recognition. In this talk, I present a brief history of these methods by identifying and reviewing a few papers that have been deeply influential to the e-nose community and my own research.

Biography



Ricardo Gutierrez-Osuna is a Professor in the Department of Computer Science and Engineering at Texas A&M University. He received a BS degree from the Polytechnic University of Madrid in 1992, and MS and PhD degrees from North Carolina State University in 1995 and 1998, respectively. His expertise is in the area of signal processing and pattern recognition for intelligent sensors, including chemical and physiological sensors and speech signals. He is a recipient of the NSF CAREER award for his research in biologically-inspired signal processing for machine olfaction. He served as Program Chair for International Symposium on Olfaction and Electronic Nose (ISOEN) in 2011 and 2015, and as its General Chair in 2017.

Organized by the IEEE P2520 Standard for Testing Machine Olfaction Devices and Systems
in cooperation with the
International Society for Olfaction and Chemical Sensing ([ISOCS](#))

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