

GEHS 7500

Air Sampling & Analysis

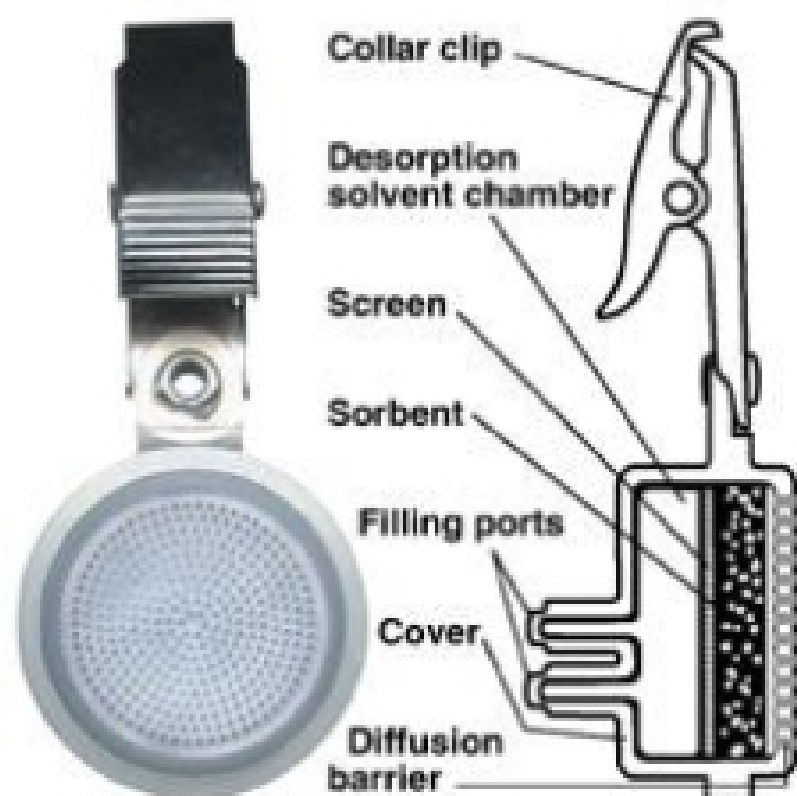
- Passive Sampling for Gases and Vapors

Roy J. Rando, ScD, CIH
Professor
GEHS



Passive samplers: small, badge-like devices containing a sorbent material separated from ambient air by a regulating membrane or chamber which allows pollutant to be collected at a predictable rate.

Typical Passive Samplers



Organic Vapor Samplers



Inorganic Mercury Sampler



NO₂ Sampler

2 general types of passive samplers, both first described in 1973:

diffusive - Palmes: **Personal monitoring devices for gaseous contaminants**, Amer. Ind. Hyg. Assoc. J. 32:78, 1973.

permeation - Reiszner and West: **Collection and determination of sulfur dioxide incorporating permeation and West-Gaeke procedure**, Environ. Sci. Technol. 7:526 - 532, 1973.