

Contribution of electronic olfactory microsystems as potential instruments for recognition in biometrics.

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The objective evaluation of emotions in humans and their quantification is a subject of a great interest not only for the people concerned in health as psychiatry, neurology and endocrinology, today it has become in a important challenge for the responsables on civic security that their interest is growing in order to detect, digitalize and integrate the human responses for biometric identification purposes.

Different kinds of stress induce reactions in the humans as: sweating, conductive skin sympathetic responses, hormonal secretion in plasma and urine, body odours, changes in feeling, heart and respiration rate.

Many of these reactions could be measured and quantified by non invasive methods if we dispose of suitable sensors to construct patterns of human emotions based on digitalization of senses by chemical sensors.

The present talk has been focused as a review of some functionalized chemical sensors and candidate configurations for associate human odours coming from sweat and corporal chemical signals with images of emotional states.