

Electronic nose and their application in food industries

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The feeling of smell and taste coming from specific and non specific atomic structures can be utilized to analyze the nature of food, drinks, and mixture of food items. Biological nose works actively to detect the quality of foods. We, as human being can use our nose to judge the quality of food by the odor coming out of food whether it is healthy or unhealthy. But still there is probability of making a mistake to judge the quality and to categorize the food. So the researchers feel a need to design an electronic system which can judge quality of food accurately and precisely. Electronic noses are making out of strong sensors arrays to sense the smell of food products. Comparing with the other artificial olfactory and gustatory techniques, traditional electronic nose are superior in some aspects, e.g., low cost, rapid detection, and convenient operation. In this paper literature is reviewed about the sensation of smell and taste and how electronic nose is useful for food industry. Biological nose and electronic nose are compared in this paper. Various sensor system used in electronic noses are also explained. Further conclusion and further scope also discussed.

Key Words : Electronic nose, Receptors, Bio-nose, Sensors

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