

Table S1 The names of porphyrin materials used to prepare colorimetric sensor arrays.

Number	Name
1	5,10,15,20-Tetraphenyl-21H,23H-porphine
2	5,10,15,20-Tetrakis(4-methoxyphenyl)-21H,23H-porphine iron (III) chloride
3	5,10,15,20-Tetraphenyl-21H,23H-porphine iron (III) chloride
4	5,10,15,20-Tetraphenyl-21H,23H-porphine copper (II)
5	5,10,15,20-Tetrakis(4-methoxyphenyl)-21H,23H-porphine cobalt (II)
6	5,10,15,20-Tetraphenyl-21H,23H-porphine zinc
7	meso- Tetraphenyl porphyrin (chlorin free)
8	2,3,7,8,12,13,17,18-Octaethyl-21H,23H-porphine copper (II)
9	2,3,7,8,12,13,17,18-Octaethyl-21H,23H-porphine
10	5,10,15,20-Tetraphenyl-21H,23H-porphine vanadium (IV) oxide
11	5,10,15,20- Tetraphenyl -21H,23H-porphine ruthenium (II) carbonyl
12	2,3,7,8,12,13,17,18-Octaethyl-21H,23H-porphine ruthenium (II) carbonyl

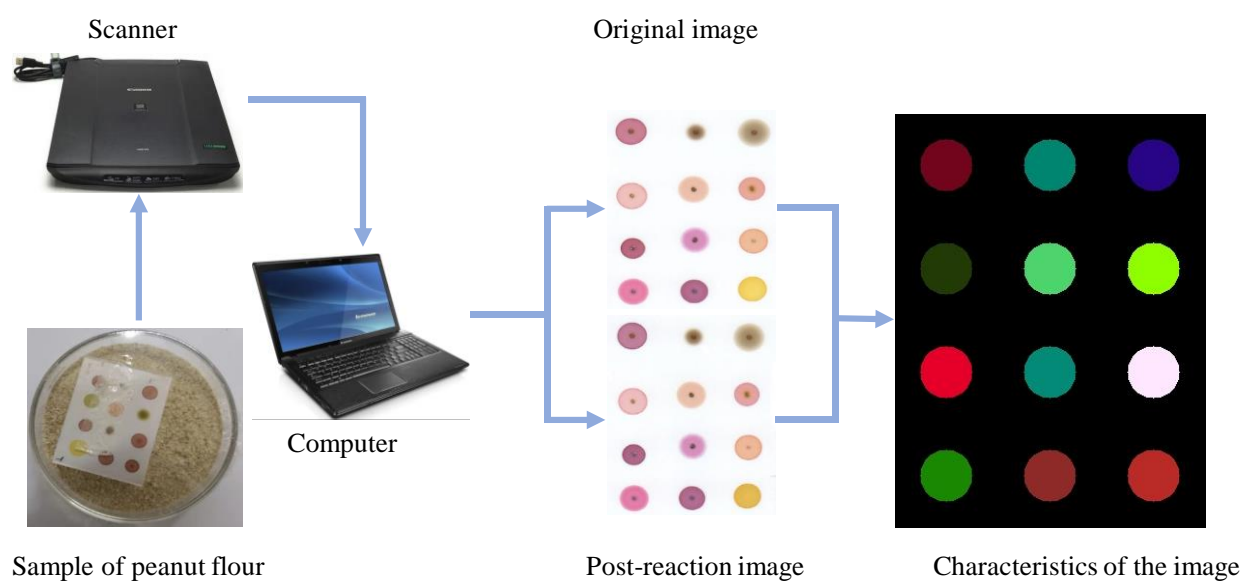


Figure S1 Data acquisition and pretreatment process of the olfactory visualization system.