



### Sweat Band Helps Workers

A SWEAT band designed for use by workers who wear goggles is said to thoroughly absorb forehead perspiration, preventing clouding of the goggles and keeping the workman's eyes clear. The band consists of a cellulose pad covered with high-grade absorbent gauze.



# The Smart Sweatband

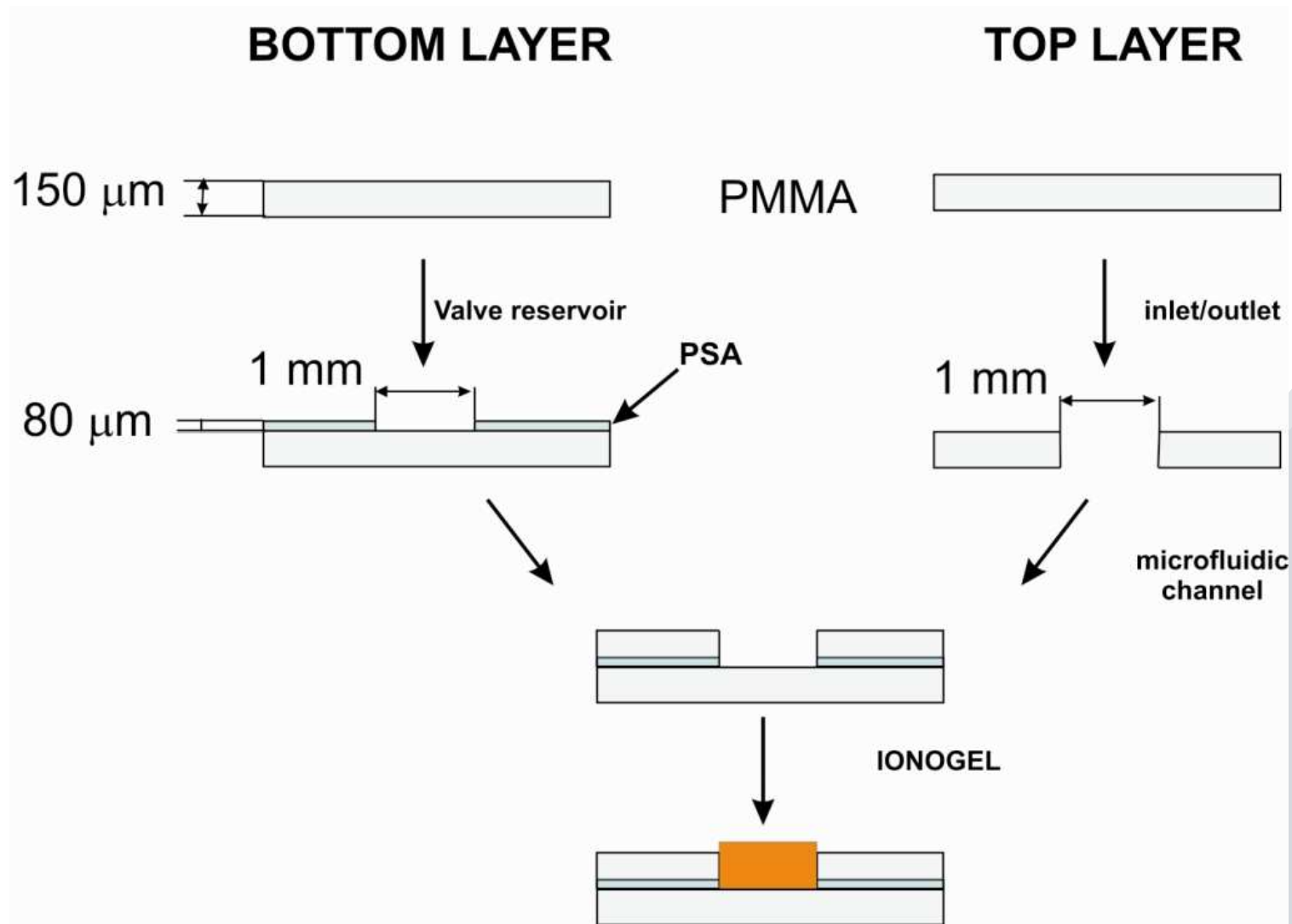
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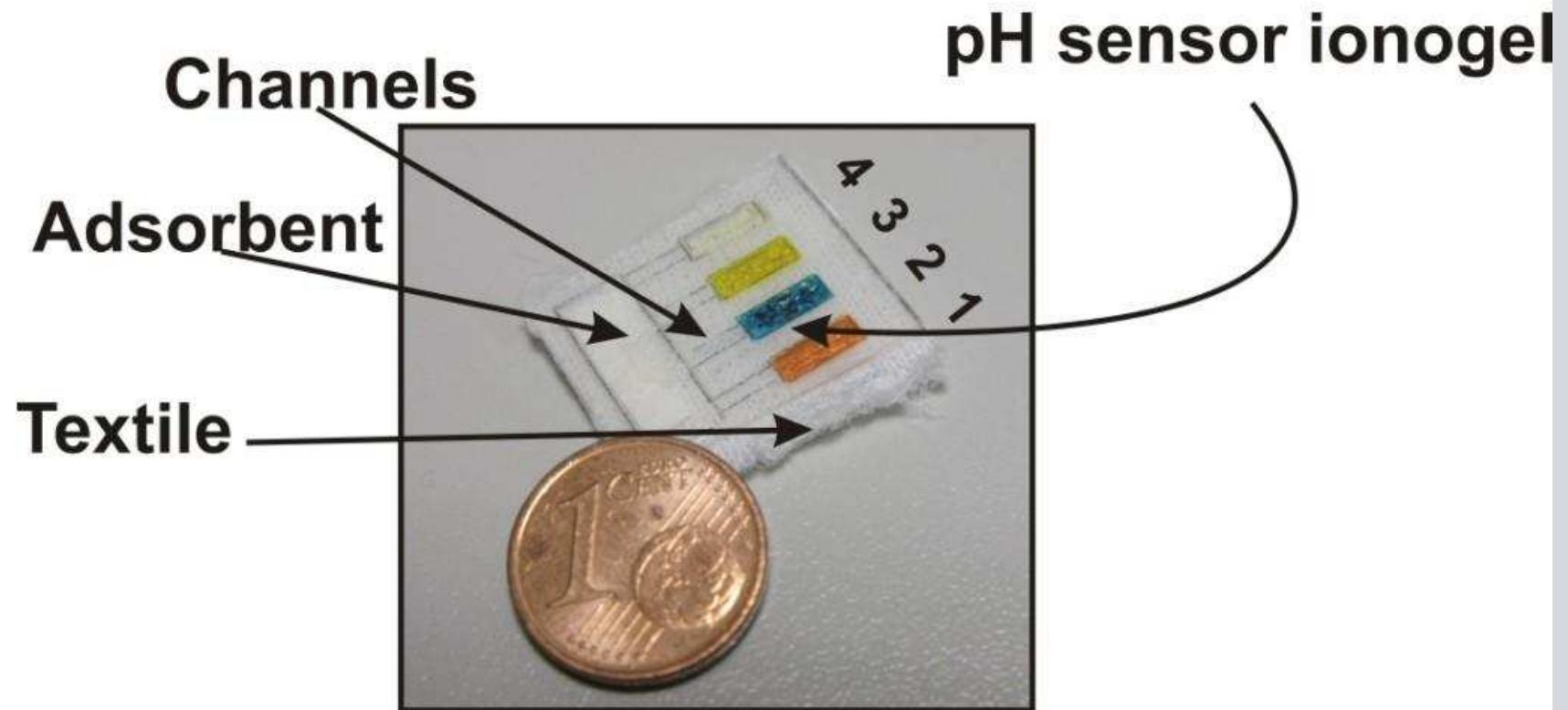
# pH sensitive dyes

STRIPE	Indicator	Low pH color	Transition pH range	High pH color
1	p-Xylenol blue	yellow	8.0-9.6	Blue-violet
2	Methyl orange	red	3.1-4.4	orange
3	Methyl red	red	4.5-5.2	green *
4	Bromocresol green	yellow	3.8-5.4	blue-green *
5	Bromocresol purple	yellow	5.2-6.8	purple *
6	Bromothymol blue	yellow	6.0-7.6	blue *
7	Neutral red	red	6.8-8.0	yellow
8	Phenol red	yellow	6.8-8.4	purple
9	Phenolphthalein	colourless	8.3-10.0	fuchsia
10	Thymolphthalein	colourless	9.3-10.5	blue
11	Alizarine Yellow R	yellow	10.2-12.0	red

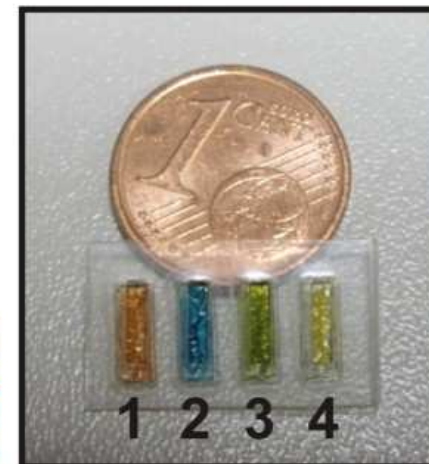
# Fabrication of barcode sensor



# Microchip Sweat Sensor



# Plaster Sweat Sensor



	pH	
1- METHYL RED	4.4	6.2
2- BROMOCRESOL GREEN	3.8	5.4
3- BROMOGRESOL PURPLE	5.2	6.8
4- BROMOTHYMOL BLUE	6.0	7.6

# Wearable pH sweat sensor

## PERFORMANCE



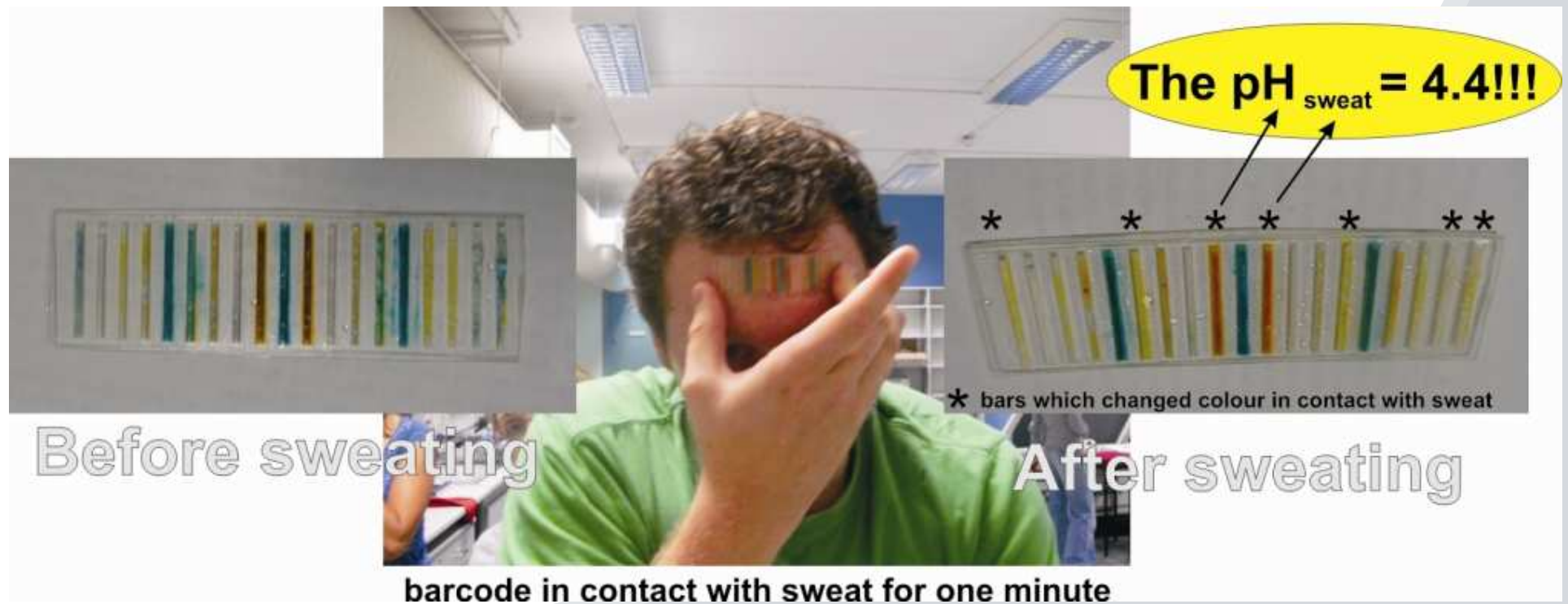
ACIDIC SOLUTION



BASIC SOLUTION

# pH wristband

## PERFORMANCE



# Acknowledgements



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