

Newly designed microfluidic paper-based device for iodide determination in both food and biological samples



CATOLICA
ESCOLA SUPERIOR
DE BIOTECNOLOGIA

PORTO

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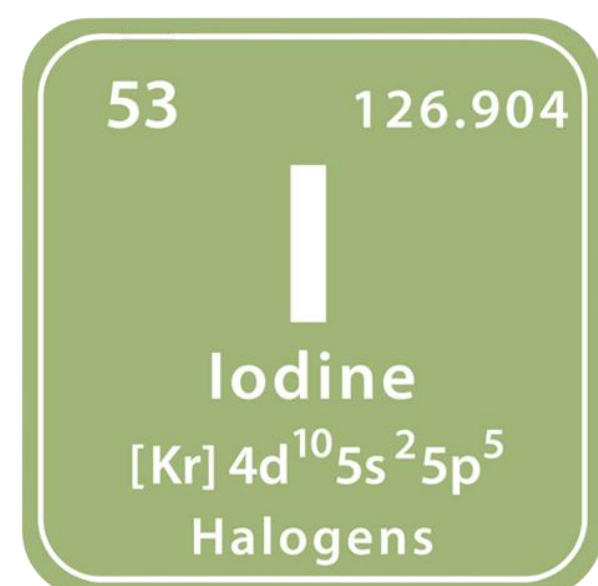
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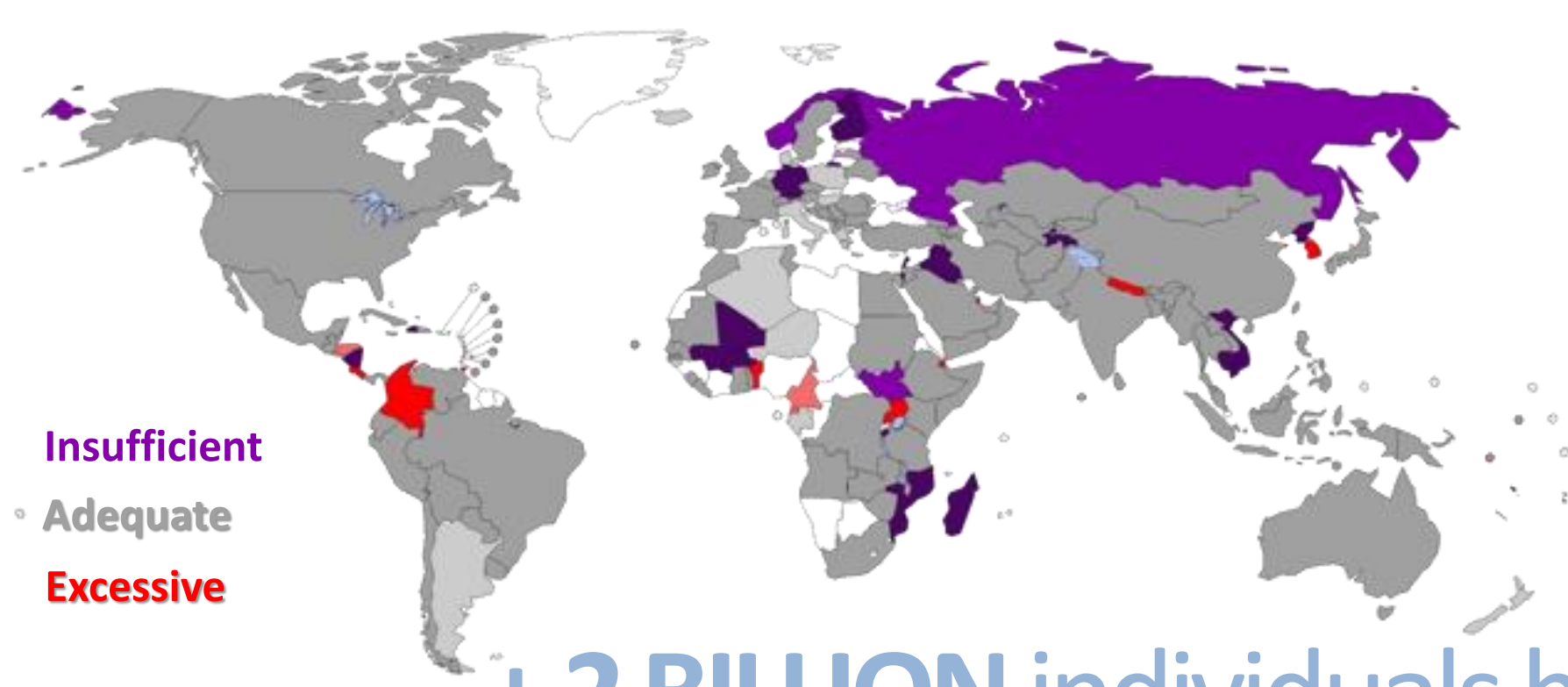
Introduction



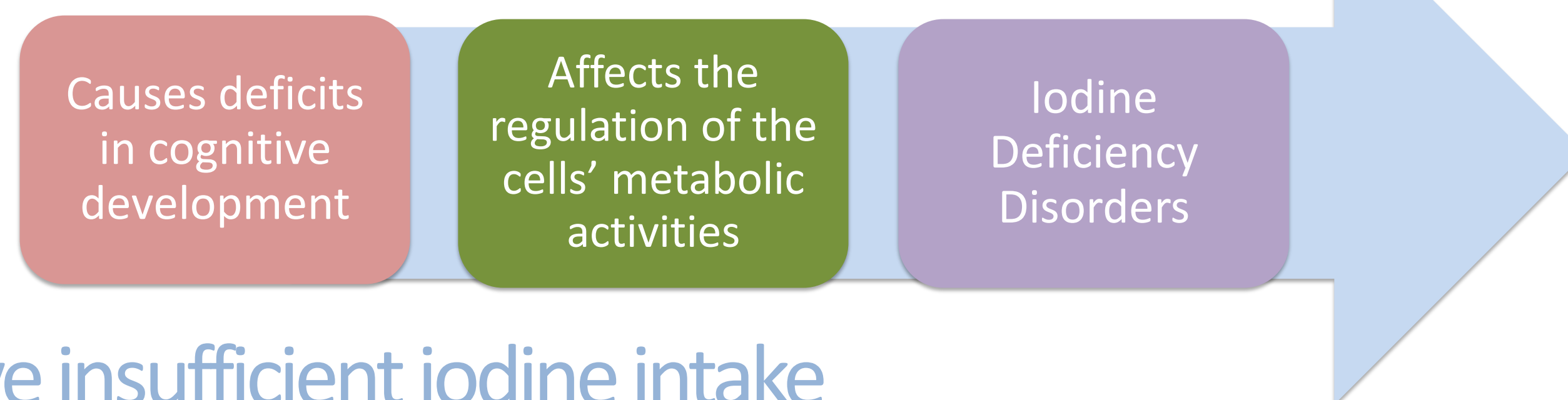
Group 17
Period 5

Humans need a daily intake of about 0.1 milligrams of iodide.

Fundamental element to produce the thyroid hormones, which makes it a key parameter to assess the health condition.

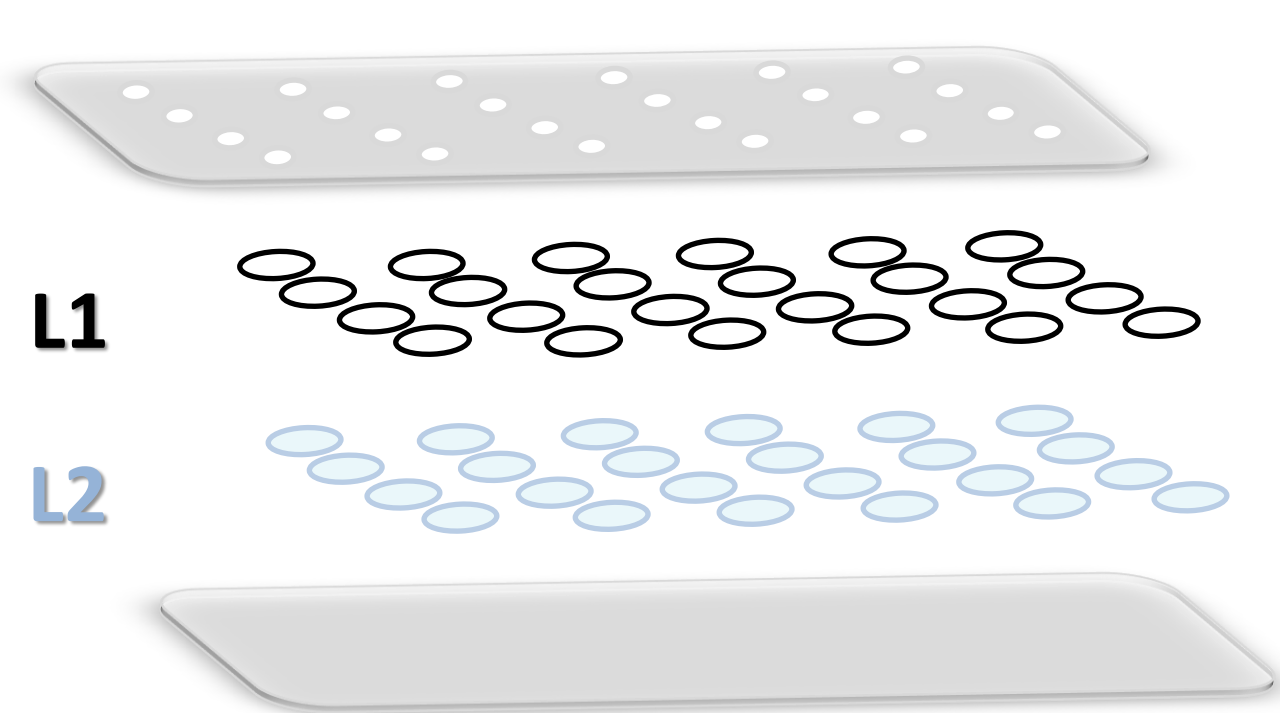
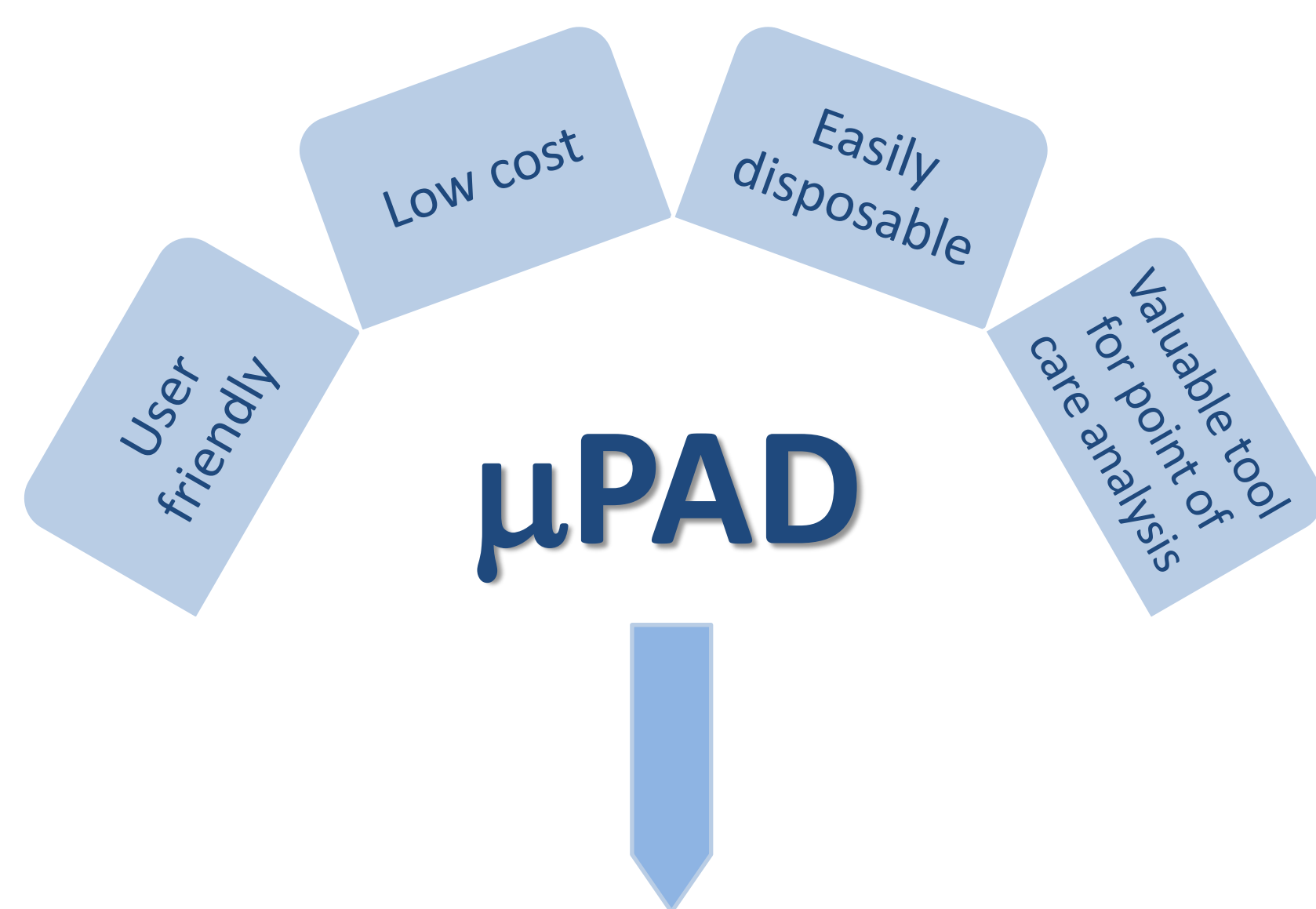


+ 2 BILLION individuals have insufficient iodine intake



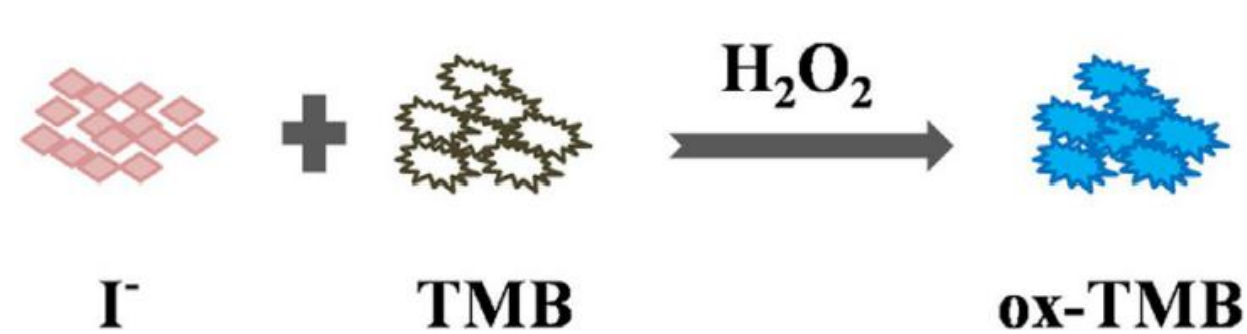
WHO, UNICEF and the International Council for the Control of Iodine Deficiency Disorders Global Network (ICCIDD) propose and promote **SALT IODIZATION** in order to avoid deficiency

Methods

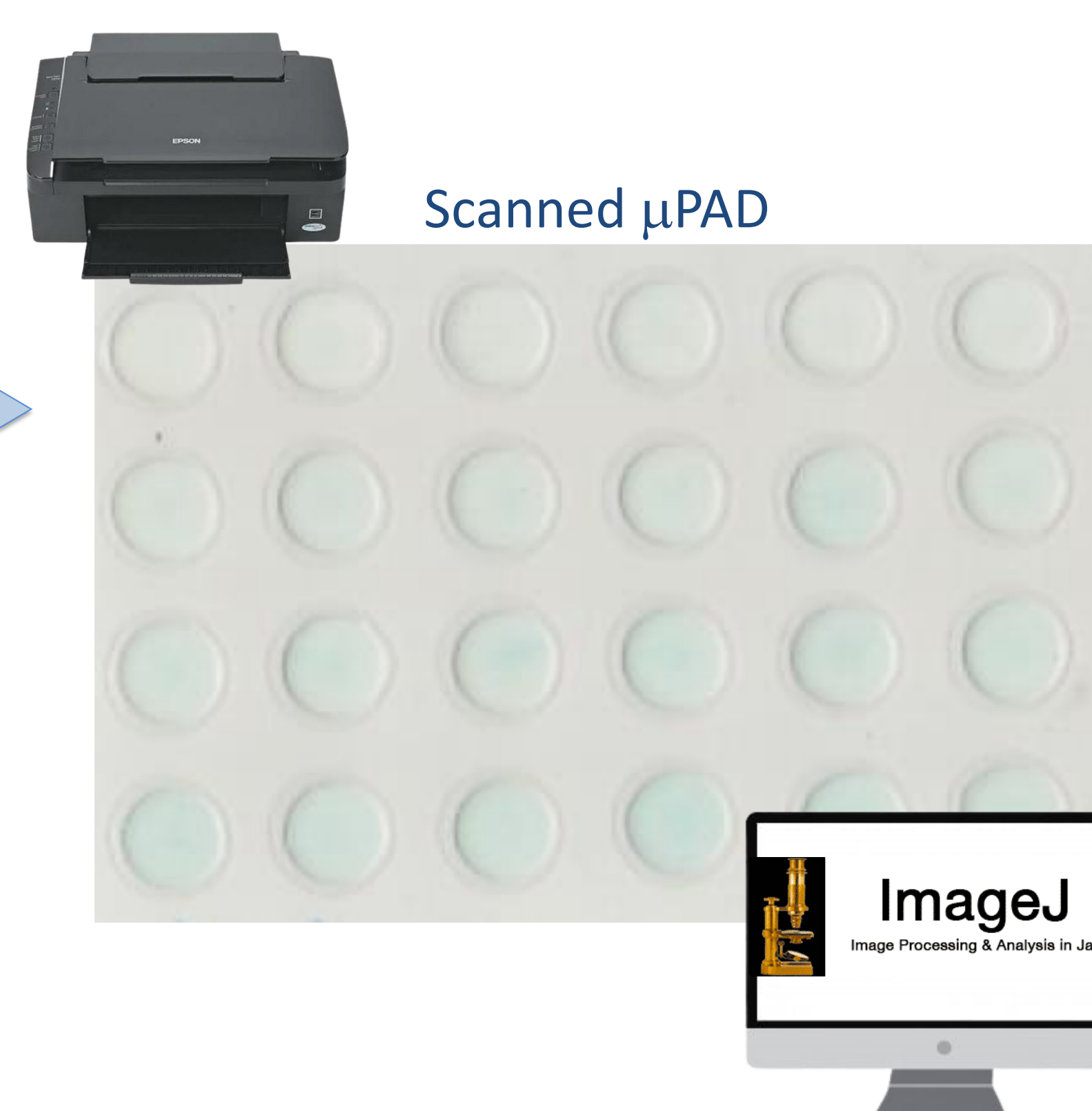
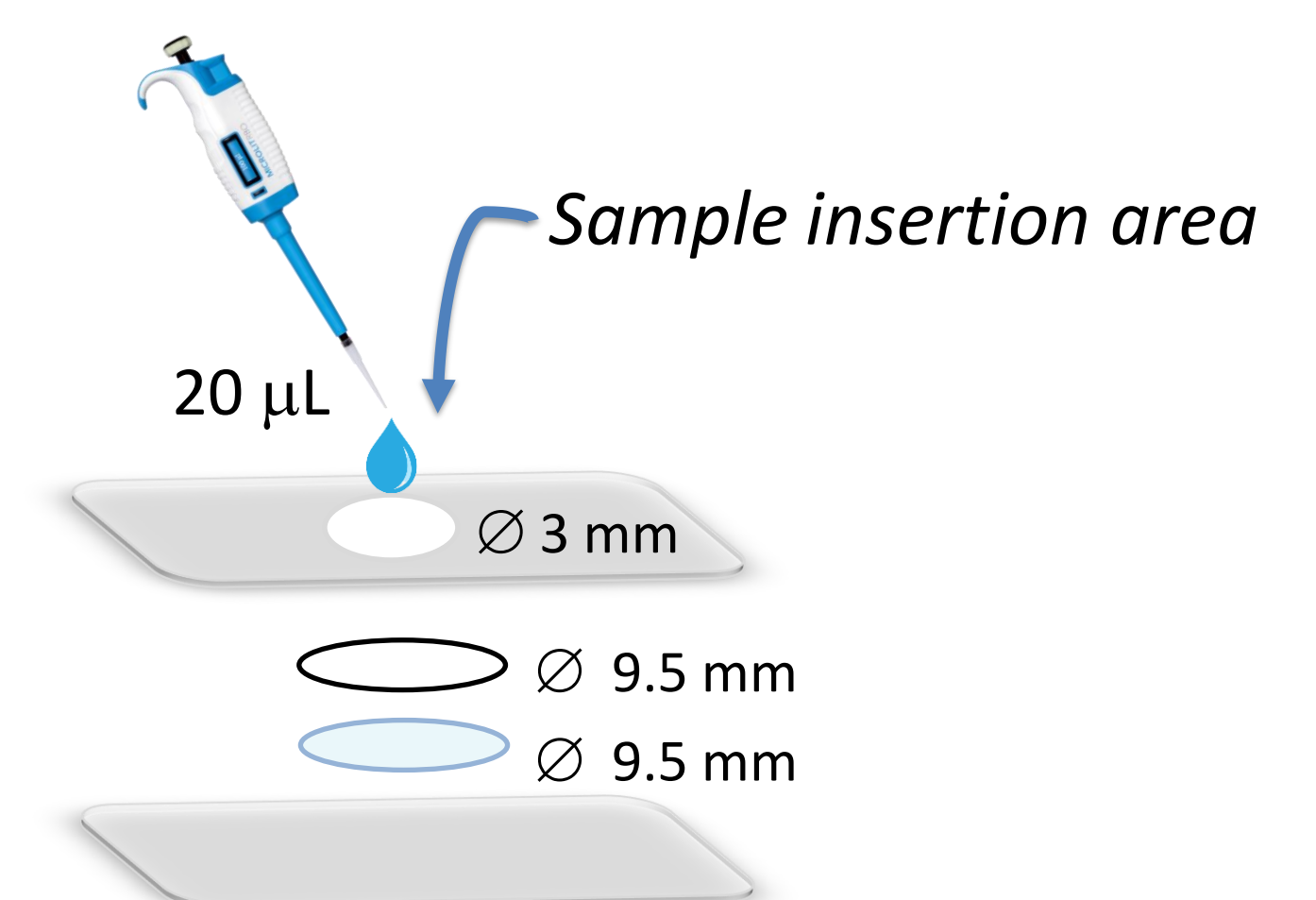


L1 - H₂O₂ + CH₃COOH

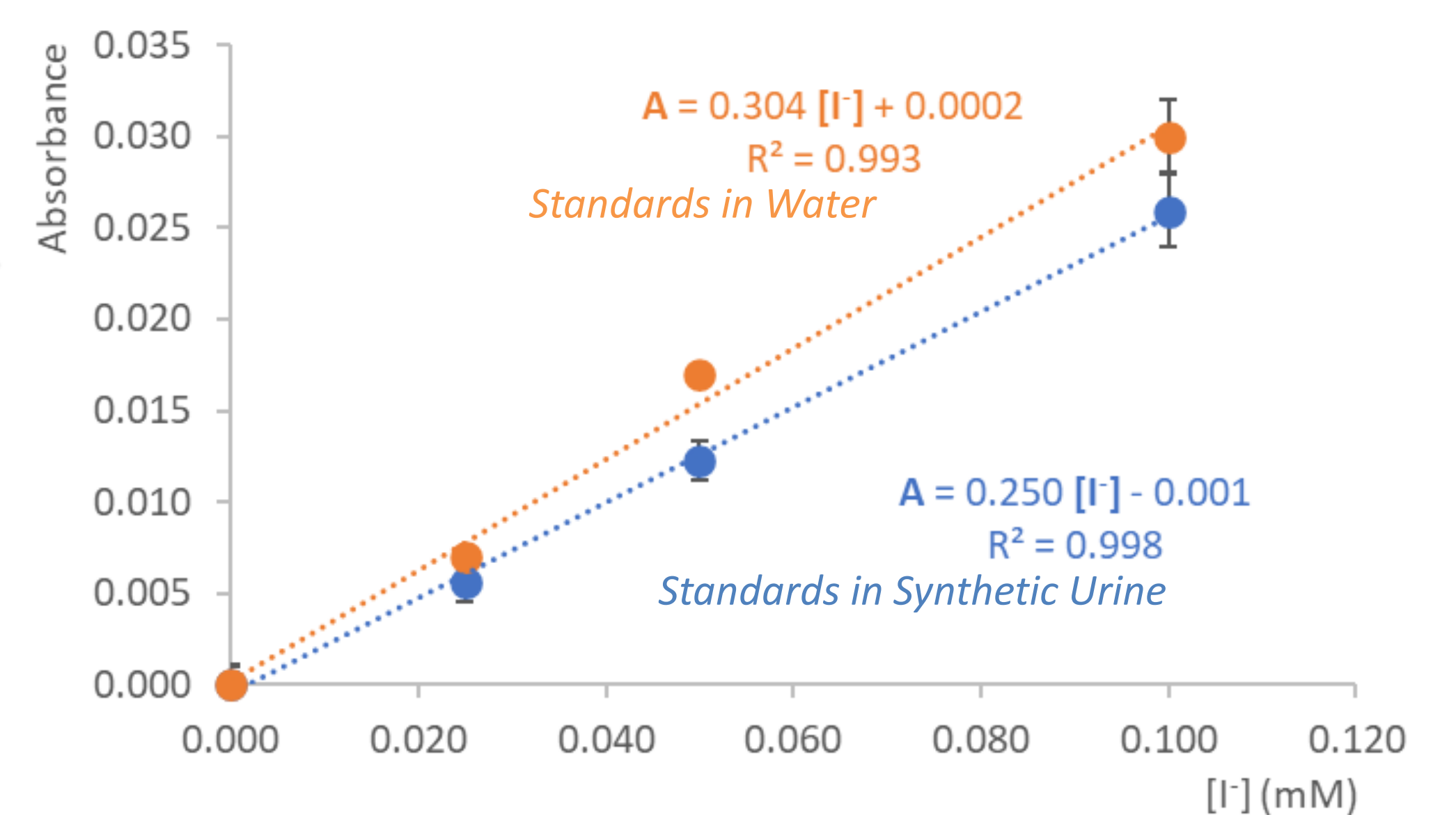
L2 - 3,3',5,5'-tetramethylbenzidine



Samples



Calibration curve for the determination of iodide



On going...

Conclusions



Acknowledgements

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