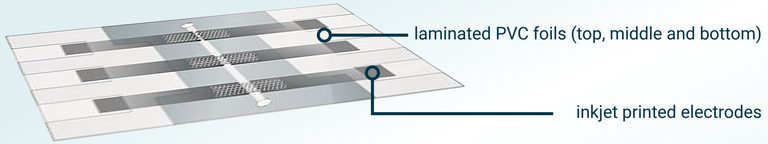
DEPOSITION OF GRAPHENE SHEET IN THE GAP BETWEEN THE ELECTRODES OF MICROFLUIDIC PLATFORM FOR ASCORBIC ACID DETECTION

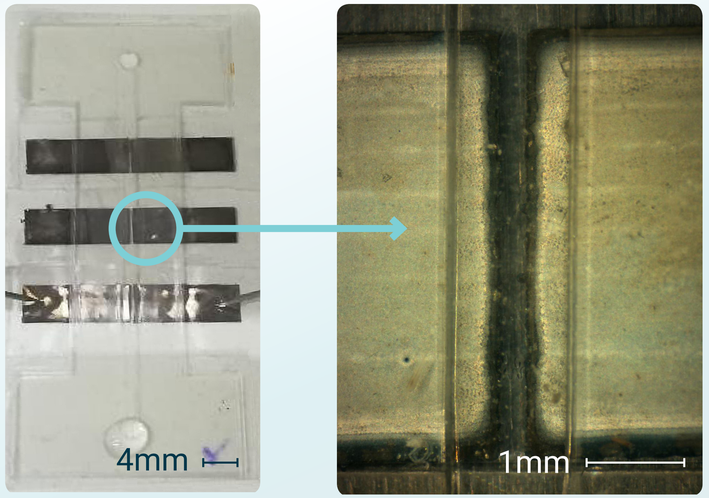
1. Differentiation of ascorbic acid (AA) from isomalt and Detection of isomalt presence in AA

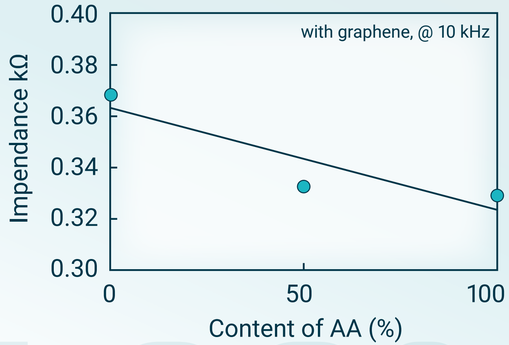
2. Measurement of electrical impedance, enables determination of the concentration of supplements

3. It is useful in the food and dietary supplement industry as well as for authenticity checking of-the-shelf products

Assembled structure







The addition of graphene improve the response linearity

BY 5.28%

and lower the LOD and LOQ

BY 12%

G. Stojanović, T. Kojić, M. Simić, A. Jovanović-Galović, B. Pavlović, A. Zurutuza, L. Anzi, R. Sordan, "Rapid Selective Detection of Ascorbic Acid Using Graphene-Based Microfluidic Platform", IEEE Sensors Journal, 2021, doi:10.1109/JSEN.2021.3078692.

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