



# Open source capillary electrophoresis device for quality control of medicines

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## CE for Quality Control

About 30% of drugs in the developping world are fake

Fake medicine can be contaminated, contain a wrong or no active ingredient.

#### CE is green and cost effective

Capillary electrophoresis is a suitable method for the qualitative and quantitative analysis of drugs in emerging countries. electrolyte aqueous low solvent comsumption ~ 1 μL cheap material ~10€/m low sample volume ~ 10 nL effective cost ~2ct / analysis

background

## **Build your own CE**

#### Easy to buy standard components

Our device is built from standard components readily available around the world.

#### Build your own parts

Manufacturing techniques by laser cutting or 3D printing allow everyone to manufacture complex parts without specific knowledge.

#### Easy to assemble yourself

You only need a screwdriver.



ChemTech Institute of Chemical Technology

Institute of Smart and Secured Systems

iSIS



Raspberry Pi

### **Open Source Components**



Our device contains many open source components. This ensures the durability of the device and involves the assistance of a large community for future development.



## Pharmelp

#### Promotion and training to CE technique

Pharmelp is a non-profit association created to support quality control and detection of counterfeit medicines in emerging countries.



#### Our goals

- Search for funds in order to finance CE devices
- Theoretical and practical training of laboratory staff
- · Contribution of a scientific and technical support





http://phar