

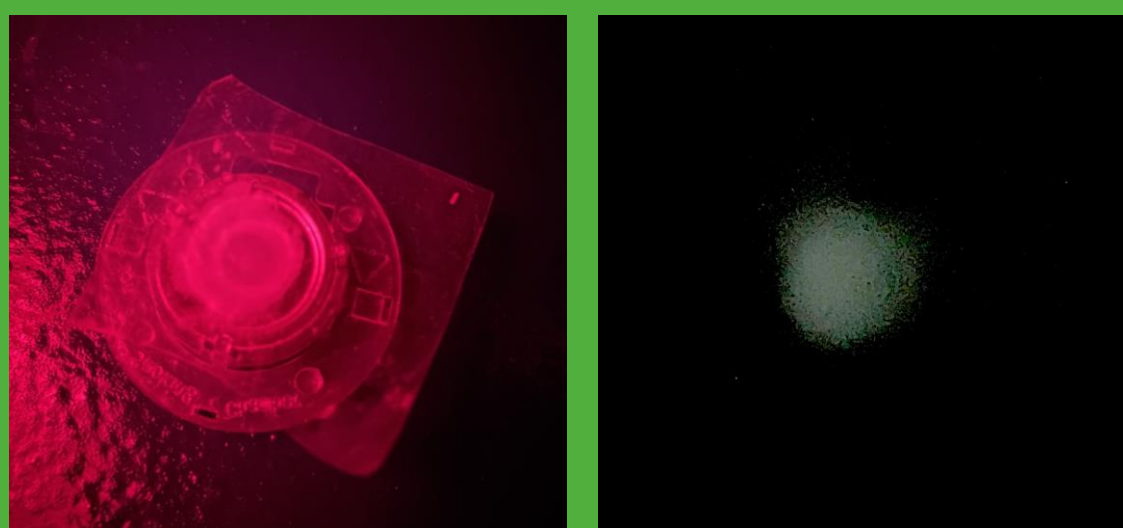
Adam Blahák | VIDA! Science center & Gymnázium J. G. Mendela | Brno | Czech Republic

## Radioactivity around us

### DIY detection of ionising radiation

Geiger-Müller counters and other detectors are often quite expensive. However, there are several ways to make DIY detectors cheaply and even easily with the students themselves without any danger. Let us show you our most favourite ones from our educational program.

#### Scintillation



Just a little bit of duct tape and ZnS:Cu is all you need to make your radiation shine.



#### DIY detectors



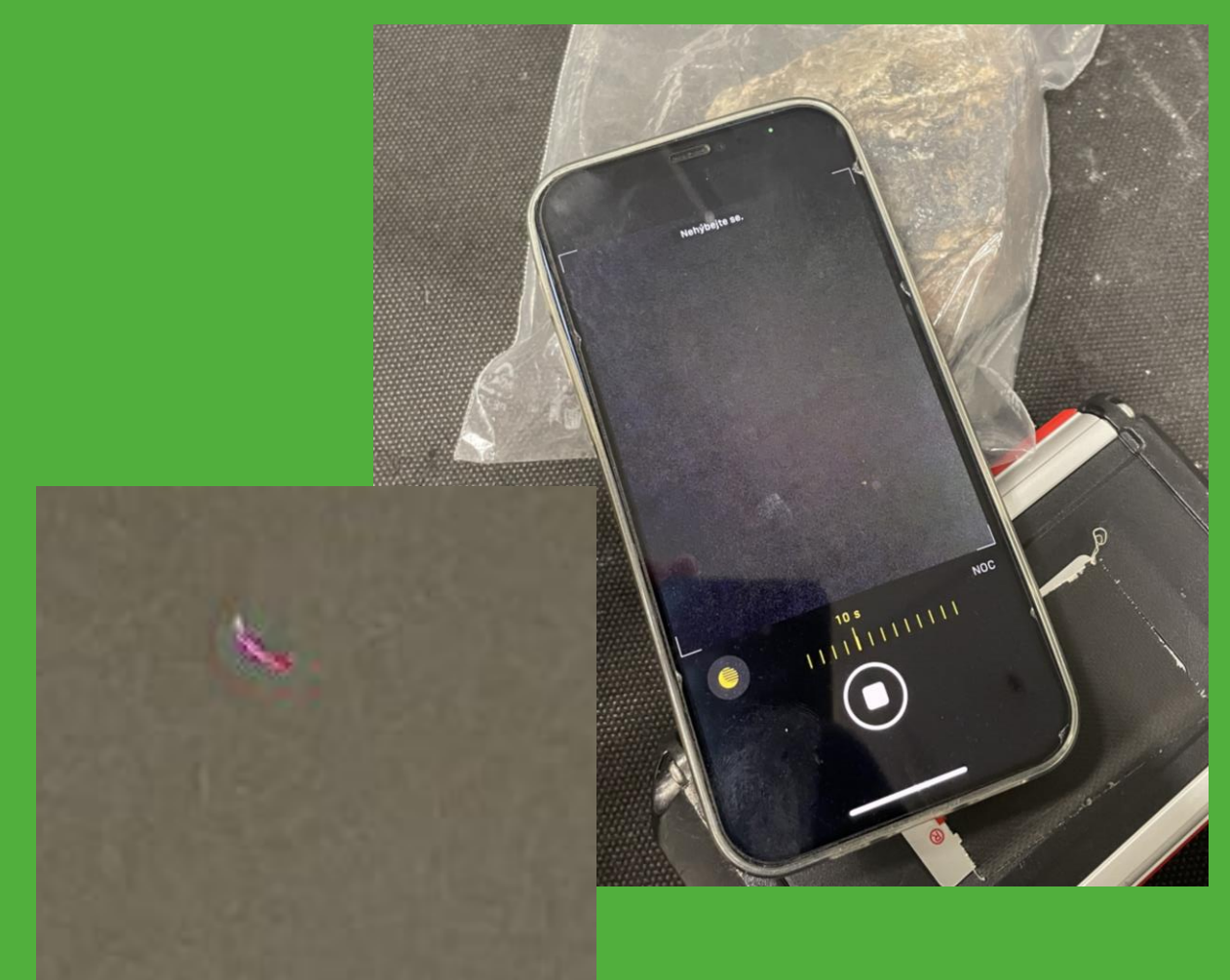
#### Cloud chamber



See radiation with your naked eye and a pretty simple equipment: dry ice, alcohol and plastic cup...

#### Semiconductors

You can also use an old webcam or camera in your smartphone to track ionising radiation. If you are lucky or patient.



Of course, we need some radioactive samples to go with the detectors. Safe ones aren't that difficult or expensive to obtain. We do a whole other series of activities with the students about radioactivity. For example, students can find out their yearly radiation dose, work with a model of a nucleus or find out practical uses of ionising radiation.

**Conclusion: With simple tools and creative methods, we can unlock the mysterious world of ionizing radiation.**