

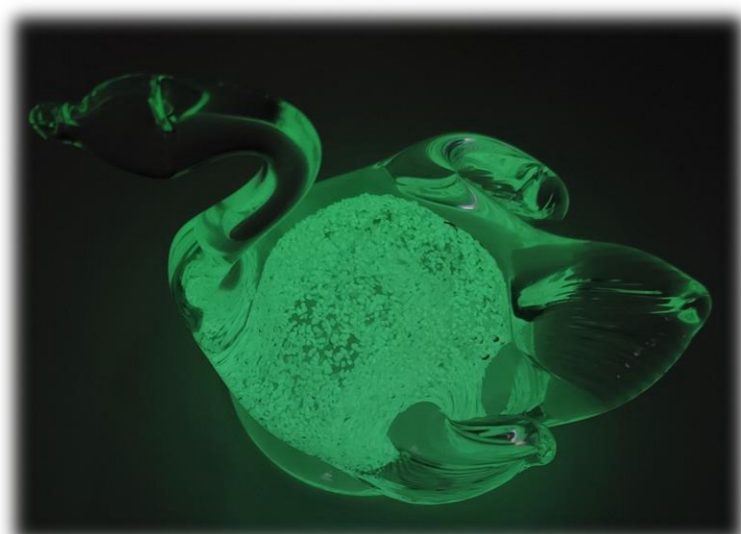
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Chemistry Journey Around the World

This project aims to popularize science among children and young people, specifically focusing on the chemistry component of a joint physical-chemical project involving two Czech high schools. This project serves as a scientific popularization initiative across multiple school subjects, including geography, chemistry, and physics. The project explores typical snacks, plants, and products from various countries, utilizing them as the basis for a diverse range of physical and chemical experiments.

Czech glass

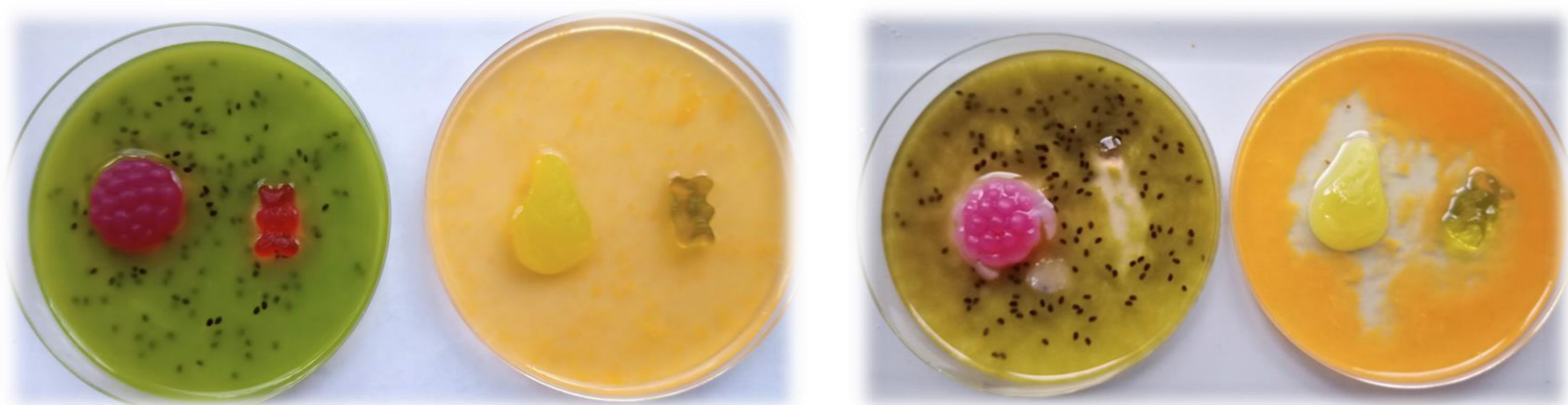
The history of glassmaking in Europe begins in 1414 in Bohemia in the Lusatian Mountains, where there was an abundance of forests providing wood as fuel for the glass furnaces. There are also deposits of quartz used for glass processing. Czech glass is characterized by high transparency, imitating crystal.



In this case, the experiment is aimed at determining whether the green glass is uranium glass and then at determining the difference between fluorescence and phosphorescence.

Gummy bears

The Haribo company in Bonn, Germany, started producing teddy bears in 1922. The founder of the company, Hans Riegel, was inspired by the dancing bears at pilgrimages. The gelatine candies contain amino acids necessary for the synthesis of collagen. Gummy bears consist of sugar, food colouring, gelatin, flavourings, aromas and other ingredients.



In this case, the aim of the experiment is to determine whether the gummy candy contains gelatin or agar. This is done either by means of catalases present in certain fruits or by means of the Biuret reaction.

The output of the project is a chemical passport with 20 countries. This passport always contains a map with the flag of the country, interesting facts about the country and the specific object chosen, a motivational picture, instructions for the experiment and a real photo of the experiment. A parallel passport with physics experiments, always with the same subject, was created in the Czech Republic at the gymnasium in Stříbro.