

University of Cologne participates in Girls'Day 2017



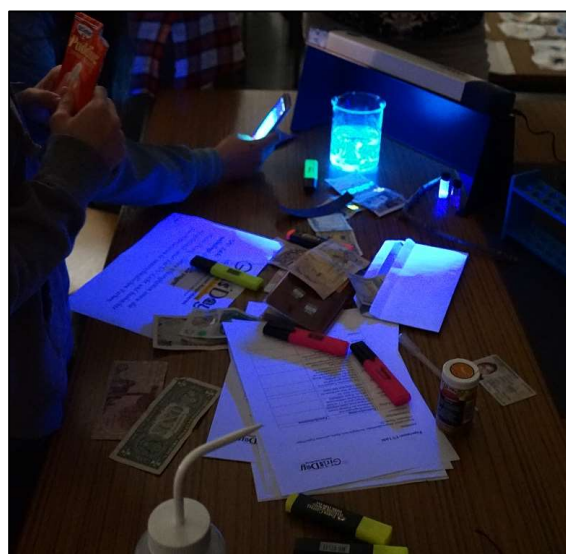
Cologne, April 27th, 2017

Thursday, April 27th, 2017 happened to be the 17th nationwide Girls'Day, a nationwide campaign to motivate girls and young women to choose a technical profession. The staff of the Department of Physical Chemistry and the COPT Center for Organic Electronics offered exciting experiments to the participants of this event around the topic of light. Like last years, 15 schoolgirls in schoolyears 6 to 8 had the opportunity to do experiments in the fields of chemistry and physics.



Schoolgirls test glove boxes to work in inert atmosphere (left photo) and investigate the additive mixing of colors using beamers (right photo) © J. Emara

The day started with a short lecture to prepare the girls for the topic and the experiments ahead. In a short lecture, Dr. Selina Olthof, working with Prof. Klaus Meerholz, explained the basic properties of light, how color impressions arise, and the use of light of different wave lengths. Examples from daily life and natural phenomena generated the interest for subsequent experiments with light and colors.



Rotating color discs were made using a solar powered small engine (left photo). Security features of bank notes light up using UV light (right photo). © J. Emara

Via chromatography the schoolgirls separated colors of felt-tip markers, created colored artwork, used prisms to split the light of a flashlight, or combined colored light of beamers to yield white light. The examination of several materials with UV light created quite an excitement, when washing powder or security features of bank notes lit up. This year's new feature was an infrared camera used to visualize the heat radiation of several objects.

Solar cells were examined for the generation of electrical power. During short breaks Dr. Olthof guided the school girls through the department building in small groups to gather a glimpse of the daily life within laboratories, watch scientists during their research work and slip into their roles for a short time.



for the visitors. © J. Emara

After this thrilling experience it became time for refreshments as well as a pizza snack jointly with the volunteers. Finally, a culinary highlight: homemade raspberry yoghurt ice-cream and Nutella ice-cream made with liquid nitrogen. Then it became time to chat about future plans.

COPT Center, the central entity for organic Electronics in NRW, provided this year's Girls' Day financial support of the state of North Rhine Westphalia within the funded project CONCEPT.

Volunteers of the Girls' Day 2017 prepare nitron ice-cream

The Girls' Day is a nationwide campaign starting in schoolyear 5, initiated by the Kompetenzzentrum Technik-Diversity-Chancengleichheit e.V. to motivate girls and young women to choose technical professions. With financial support from the Federal Ministry for Education and Research, it is a junior development program to enable a profound insight into professions and studies of mathematics, IT, natural sciences, and engineering.

Contact: Dr. Ann-Christin Schmädicke, a.schmaedicke@uni-koeln.de