Kurzfassungen von PdN-ChiS 1 /54

A lab like a doll´s house – Short history of chemical experimental kits
E. Vaupel
The tradition of chemical experimental kits goes back to the 17th century. Whereas in England these Liliput-labs have had a continuous tradition eversince, in Germany from the second half of the 18th century onwards hardly anything has been heard about them. Eventually in 1922 there was a revival thanks to the activities of Fröhlich, a teacher, and the Franckh publishing house. Since then the success story of Kosmos Experimental Kit as a means of teaching at school and of learning at home is unbroken.
PdN-ChiS 1/54, p. 2

Sciences in early childhood – a ray of hope
G. Lück
After a historic excursus the article deals with the tendencies of the development of getting children involved with science during the past decade. Extensive studies have been carried out on this. Some practical aspects referring to elemental school are described.
PdN-ChiS 1/54, p.7

Chemistry in the kindergarten – have the courage to experiment
E. Irmer
This report on lessons learned from the XLAB-project “chemistry in the kindergarten” serves to encourage in a threefold way: one should have the courage to let preschool kids experiment by themselves in a discovering way, chemists and especially chemistry teachers should get involved in a dialogue with kindergarten and preschool teachers, and finally kindergarten and preschool teachers, as well as parents, should be inspired to dare take part in the adventure of “chemistry in the kindergarten”. The experimental kit “chemistry in the kindergarten” which has been developed by the XLAB in cooperation with a school for social pedagogy serves as a help for this endeavour.
PdN-ChiS 1/54, p.11

Tracing Ötzi with an experimental kit
K. Wloka
Within the project “chemistry in context” an experimental kit, which is also suitable for home use, has been developed including low-cost parts. The article describes the use of the kit in a teaching unit “a world full of metals … and how it came to that”. The focus is on experiments on the generation of copper from malachite.
PdN-ChiS 1/54, p.15

My first chemistry lab – chemical experiments for children
S. Leupold
An experimental kit for children has been developed at the student chemistry lab of the University of Bremen. It includes an appealing scriptum as well as the most important experimenting utensils. The kit has been successfully used in kindergarten, primary schools and at public events.
PdN-ChiS 1/54, p.18

A self-made chemistry kit – making discoveries by means of basic reactions
G. Schwedt
The article motivates to investigate essential chemical basic reactions with easily accessible reagents. Further investigations with drugstore and supermarket products leading up to a higher education level can be carried out.
PdN-ChiS 1/54, p. 19

Learning chemistry is fun! – student-centered teaching methods in a teaching unit on air and combustion
G. von Borstel, A. Böhm
Open teaching methods can help to arrange contents and methods of teaching chemistry according to a context orientation and networked learning, as well as a stronger orientation towards hands-on learning. This is shown exemplified by a teacing unit on air and combustion. At the core there is a multimedia-based learning at stations, where the students scrutinise the components of air, and an egg-race.
PdN-ChiS 1/54, p.21

Chemistry – in social and religious children and youth programms
V. Wiskamp, M. Holfeld, H.-L. Krauß, W. Proske
Since chemistry is exciting and enthralling it can become an attractive sparetime activity for children and adolescents. In holiday camps, at a childrens´ universitiy or during a confirmands´ night chemistry experiments needn´t end with a chemical formula but may also simply be fun. They are in many ways a propedeutic way to a sensibly structured and practicably usable scientific knowledge. Adequate instructions (“kits”) are sketched as template for individually carried out events.
PdN-ChiS 1/54, p.25

A game of chemistry as kit for the promotion of creativity
H. Arnold-Fußhöller, A. König
Within a seminar in the chemistry teacher training the authors have developed a chemistry game which has been initiated in stand-in classes and by an attempt to be creative. The method of learning playfully should not be limited to the main subjects or primary school and *Sekundarstufe II*, but be introduced throughout *Sekundarstufe I* in all school types. Therefore a game has been developed that can be played in all grades and all school types. The detailed description of the game is supposed to make the reader want to try the game out.
PdN-ChiS 1/54, p.30

Series: Short experiments with elements – part 10: nitrogen – main element of the fifth group
G. Schwedt
Simple qualitative and quantitative experiments with ammonia, ammonium salts, nitric acid and nitrates in everday products are described in a way that enables teachers to integrate them in a number of ways in the chemistry classroom. They are also suitable for a number of methodical approaches.
PdN-ChiS 1/54, p.37

Forum: Figure of thought – the nanoworld
M. Wohlmuth
The bridge between the gap of the macroscopic everyday world and the models of particulate matter (nanoworld) is described in this article as a patter of thinking that has to be mediated.
PdN-ChiS 1/54, p. 40

CVD- Chemical Vapour Deposition – Microscale- model experiments with monosilane
V. Obendrauf
This article contains partially new experiments, which can be carried out safely, as well as detailed background information an this innovative topic for the chemistry classroom.
PdN-ChiS 1/54, p.43