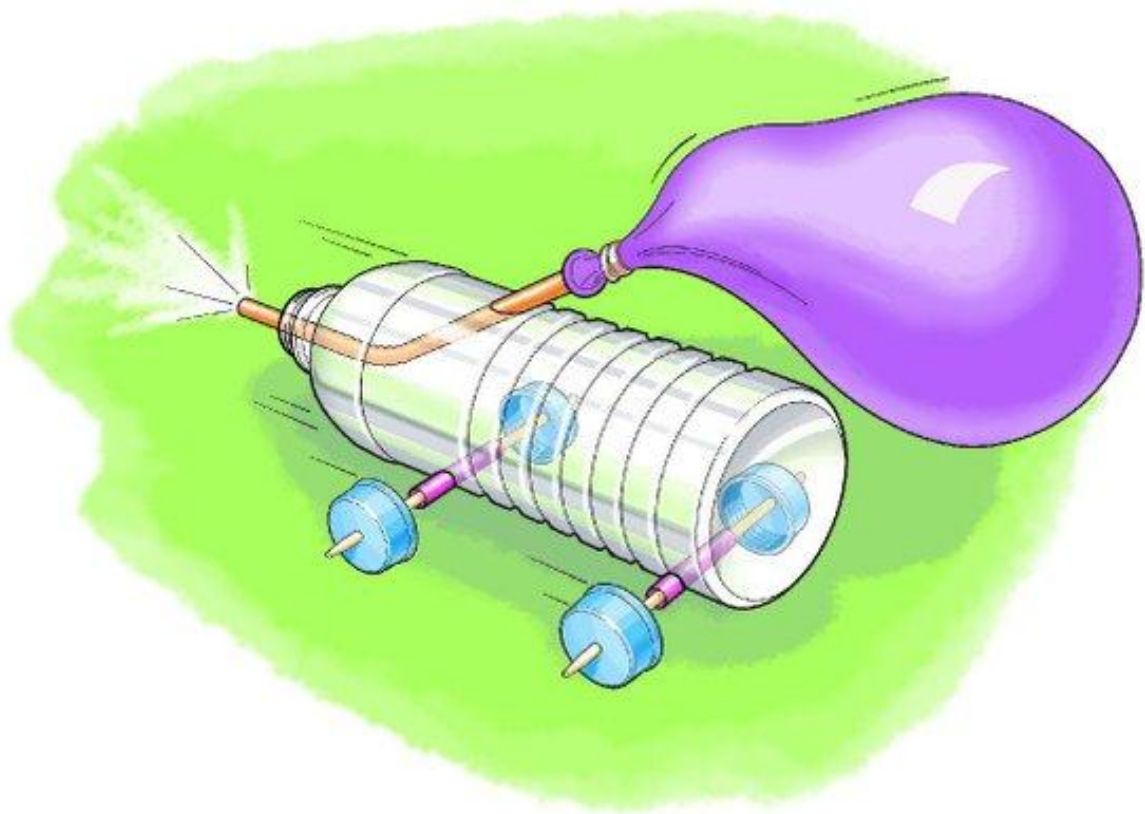


B27 - B28
Hands-on Workshops

Workshop title:	Chem-Balloon Car's Competition
Workshop owner: (Name of School/ Institution/University/Organization)	Petrochemical Engineering/ Faculty of Engineering and Green Technology/ UTAR
Description of workshop: (objective, content, etc)	Objective: <ol style="list-style-type: none">1. To use chemical mixture for the motion-actuation of self-made car.2. To instill the interests of students in chemistry and science technology. Content: <ol style="list-style-type: none">1. Registration on the schedule for competition.2. Chemical mixture (sodium bicarbonate and vinegar) for gases production, then store in the balloon using any methods that based on students' innovation.3. Then, the students will stick or install the balloon to their self-made car.4. One track will be prepared to record the distance travelled by the car.5. They will then release the gases from the balloon to push the car forward.6. The car that travelled longest distance wins the competition.7.
Age group:	Primary/secondary school students.
Group size:	20 participants/session, 5 person in 1 group
Number of session per day:	2 sessions in the morning (6 prizes) 2 sessions in the evening (6 prizes)
Duration per session (eg. 30 minutes):	60 min
Time (eg. 9.00am – 9.30am):	10.00am-11.00am; 11.00am-12.00pm 2.00pm-3pm, 3.00pm- 4.00pm



Hands-on Workshops

Activity/Experiment title:	Could you help John to treat the water?
Activity owner: (Name of School/ Institution/University/Organization)	Petrochemical Engineering, FEGT, UTAR
Description of activity/experiment: (objective, content, etc)	<p>Objective</p> <ul style="list-style-type: none"> • To introduce the concept of filtration to students. • To construct a simple filtration system using various filtration materials. • To identify the effect of various filtration materials on treating pollutant water. <p>Content</p> <ul style="list-style-type: none"> • Students will be introduced to various filtration materials. • Students will be asked to construct a simple filtration system using the introduced filtration materials. • Polluted water will be given to the students and it will be filtered using the constructed filter. • This activity will make the students understand the filtration system better. • This activity also intended to educate the students about the danger of polluting the water bodies.
Age group:	Primary – secondary school
Group size:	20 participants/session
Number of session per day: Duration per session (eg. 30 minutes): Time (eg. 9.00am – 9.30am):	<p>3 sessions in the morning 3 sessions in the evening 30 minutes / session</p> <p>9.15 - 10.15 am 10.30 - 11.30 am 11.45 - 12.45 pm 1.45 - 2.45 pm 3.00 - 4.00 pm 4.15 - 5.15 pm</p>

