

For each question, exactly one of the proposed answers is correct.
To find the right answer it is allowed to ask the scientists in the labs.
Prize winners will be drawn by lots among all those who give at least five right answers.

1. Which amount of drug is typically released retardedly into a (biological) aqueous medium from a polymer film of a mass of 1 milligram? *Station 1 – Building W*

- 100 milligram
- 100 microgram
- 100 nanogram

2. In case of renal dysfunction, the blood has to be cleaned by hemodialysis several times a week. For this purpose, the blood passes through capillaries in a dialysis module. What is the total size of the surfaces of all capillaries in contact with the blood in such a module. The total surface size almost equals... *Station 4 – Building B*

- a 1 DIN A4 sheet of paper
- a soccer table
- a soccer playing field

3. Which solvent do environmentally friendly powder coatings contain? *Station 11 – Building P*

- none
- toluol
- water

4. Which material is the outer shell of the official FIFA World Cup Match Ball (adidas Telstar) made of? *Station 7 – Building T*

- 46 % rubber, 54 % polyurethane
- 92 % synthetic rubber, 8 % polyamide
- 83% thermoplastic polyurethane, 17% polyester

5. Electromagnetic waves are used to investigate structures, elongations and energy dissipation during deformation of polymers. Which wave length range is relevant to study energy dissipation? *Station 13 – Building H*

- 0.1 to 10 nm
- 400 to 800 nm
- 2000 to 6000 nm

5. Which substance can be used to prepare easy-to-clean surfaces? *Station 16 – Building H*

- Poly phosphorylcholine
- Polyurethane
- Polystyrol