

Exactly one answer is correct in each case. Questions are allowed on site with the scientists!  
The draw will be held for those who have answered at least five questions correctly.

**1. What is the role of bacterial growth in blood compatibility research?**

- Bacteria easily colonize implants from the skin or through the bloodstream.
- Bacteria hardly adhere to plastics and therefore do not cause problems.
- Because hospital germs are often antibiotic-resistant, antimicrobial coatings are useless.

**Station 1**  
*Building B*

**2. Which principle is used to separate substances in porous membranes?**

- Sieve effect
- Charge repulsion
- Solution-Diffusion principle

**Station 5**  
*Building L*

**3. In what form does the naturally occurring polyhydroxyalkanoate (PHA) crystallize at 80 °C?**

- rod-shaped
- star-shaped
- round

**Station 7**  
*Building T*

**4. The layer thickness of the shell adhesive compared to a 3 mm thick plastic sheet behaves like a sheet of paper to the height...**

- of a desk.
- of the technical center building in the IPF.
- of the TV tower in Dresden.

**Station 8**  
*Building T*

**5. Which property describes the maximum force with which a plastic can be loaded in a tensile test?**

- Stiffness
- Strength
- Hardness

**Station 13**  
*Building H*

**6. When droplets hit a surface at high velocity, they...**

- the droplets shatter very quickly on microscopic roughness of the surface.
- Initially forms a liquid pancake, which then disintegrates from the edge into small drops.
- the droplet remains intact as long as the surface is smooth enough.

**Station 16**  
*Building H*

**7. What are the minimum layer heights that can be achieved with a DLP printer?**

- 1-100 µm
- 1-100 mm
- 1-100 cm

**Station 17**  
*Building H*

The quiz prizes were donated by Leibniz Institute of Polymer Research Dresden e.V.  
and are displayed at the reception Hohe Straße 6.

Name, first name: \_\_\_\_\_

Age: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

E-Mail: \_\_\_\_\_ (optional information)

In order to enter the draw and possibly receive a prize, it is necessary to provide your age and address. The drawing of the winners will take place in the 28th calendar week 2022; the prizes will be sent. The address data will only be used to send the prizes and will be deleted afterwards, unless you give us permission below to use it again.

I agree that my address will be stored by the IPF and used for sending information about future Long Nights of Science at the IPF.

.....  
Date Signature

### If you have a moment

We would also be interested to know how you found out about the IPF's Dresden Science Night event.

(Details have no influence on the draw and will be evaluated anonymously!)

- via relatives/acquaintances at the IPF
- by teacher/school
- from the online program for the Dresden Science Night
- through special IPF flyers for the Dresden Science Night
- Banner at IPF
- been to the IPF for the Dresden Science Night in previous years
- Publications in the newspaper (DNN, SZ o. a.)
- Social Media
- Other: \_\_\_\_\_

# *Thank you for visiting us!*

Employees of the IPF are excluded from the raffle!