

# Микроскоп



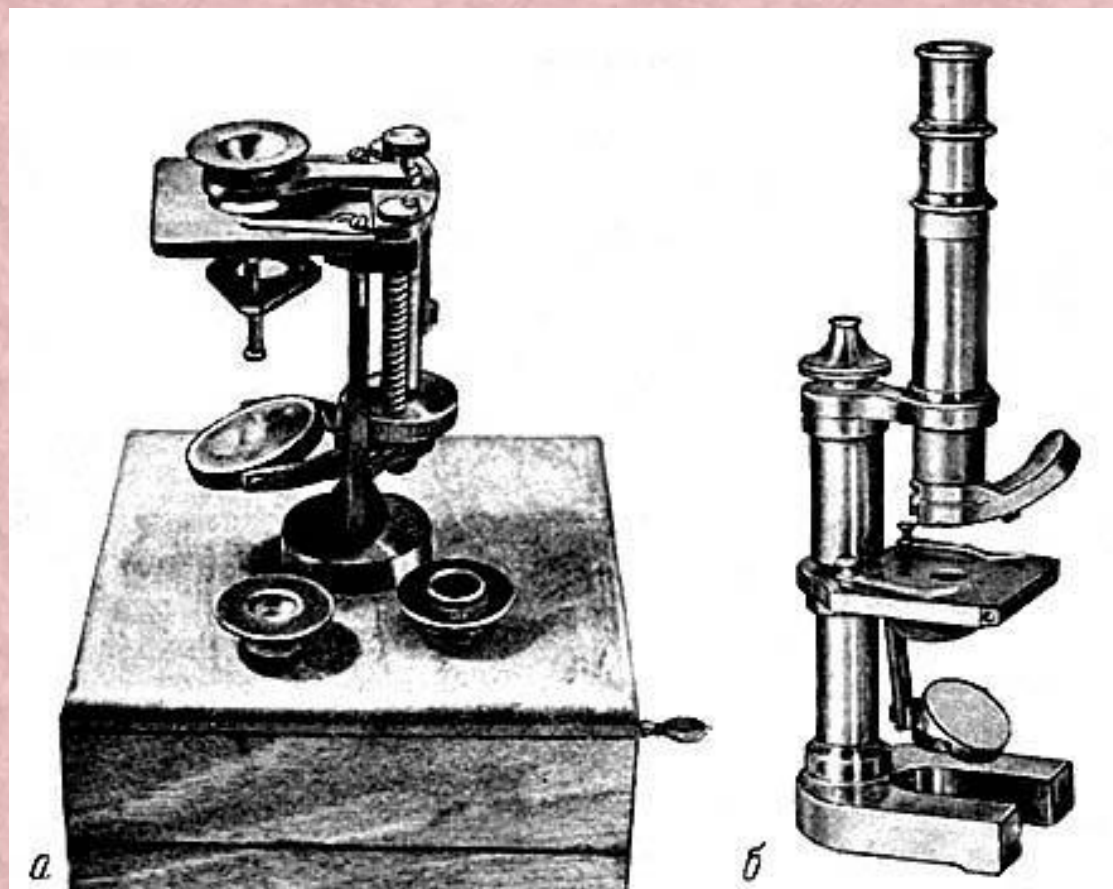
## Цель:

рассказать об устройстве и видах микроскопов

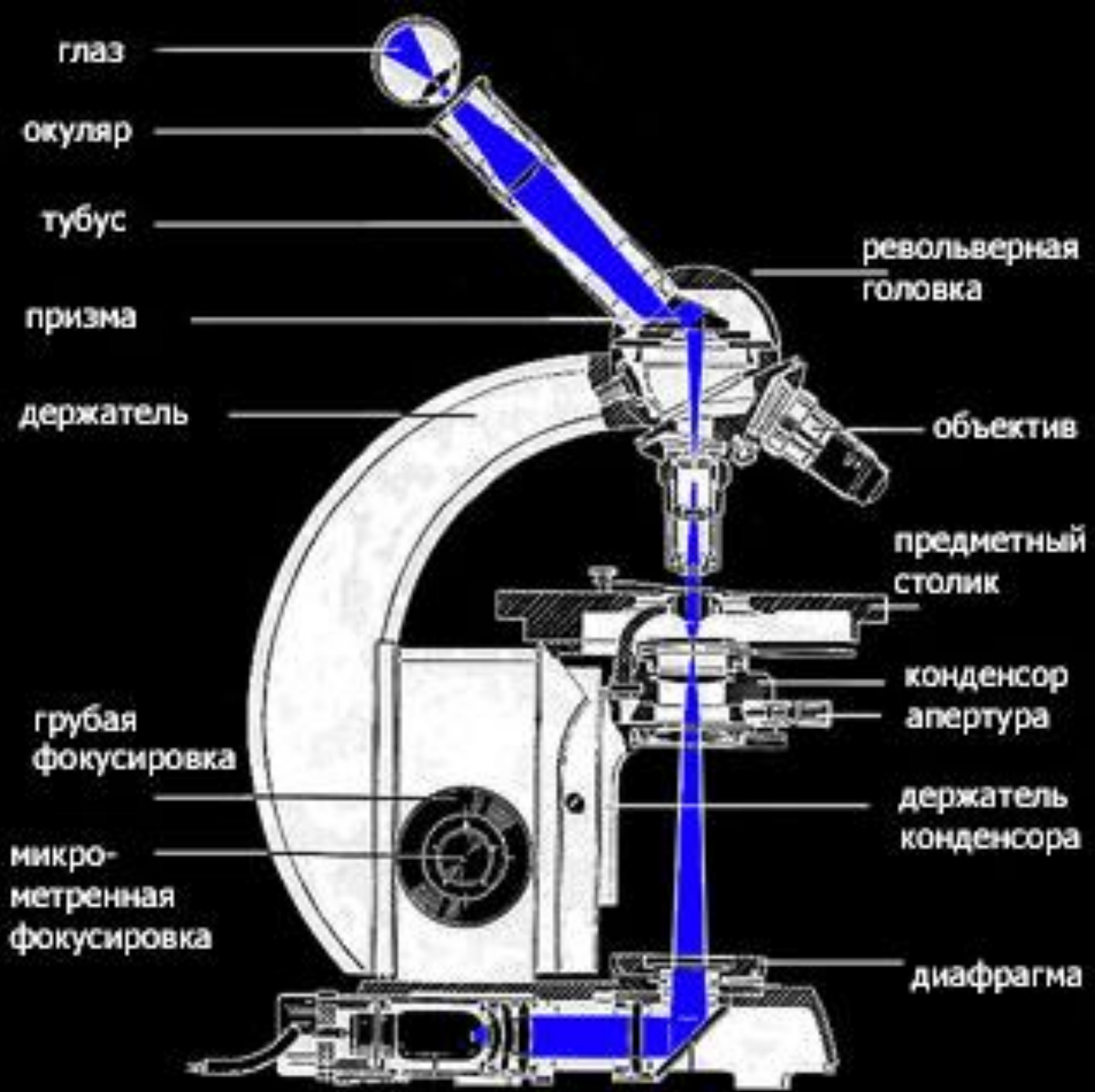
## Авторы:

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Абрамова Татьяна - информация  
Бибилова Альбина - лаборант*

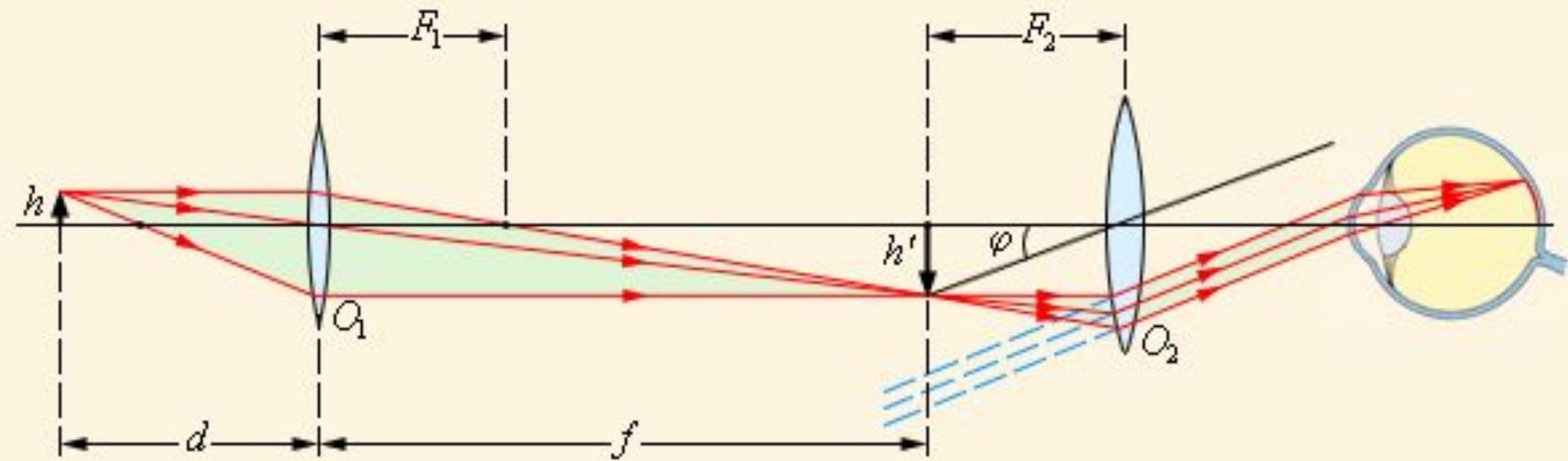
# Первые микроскопы



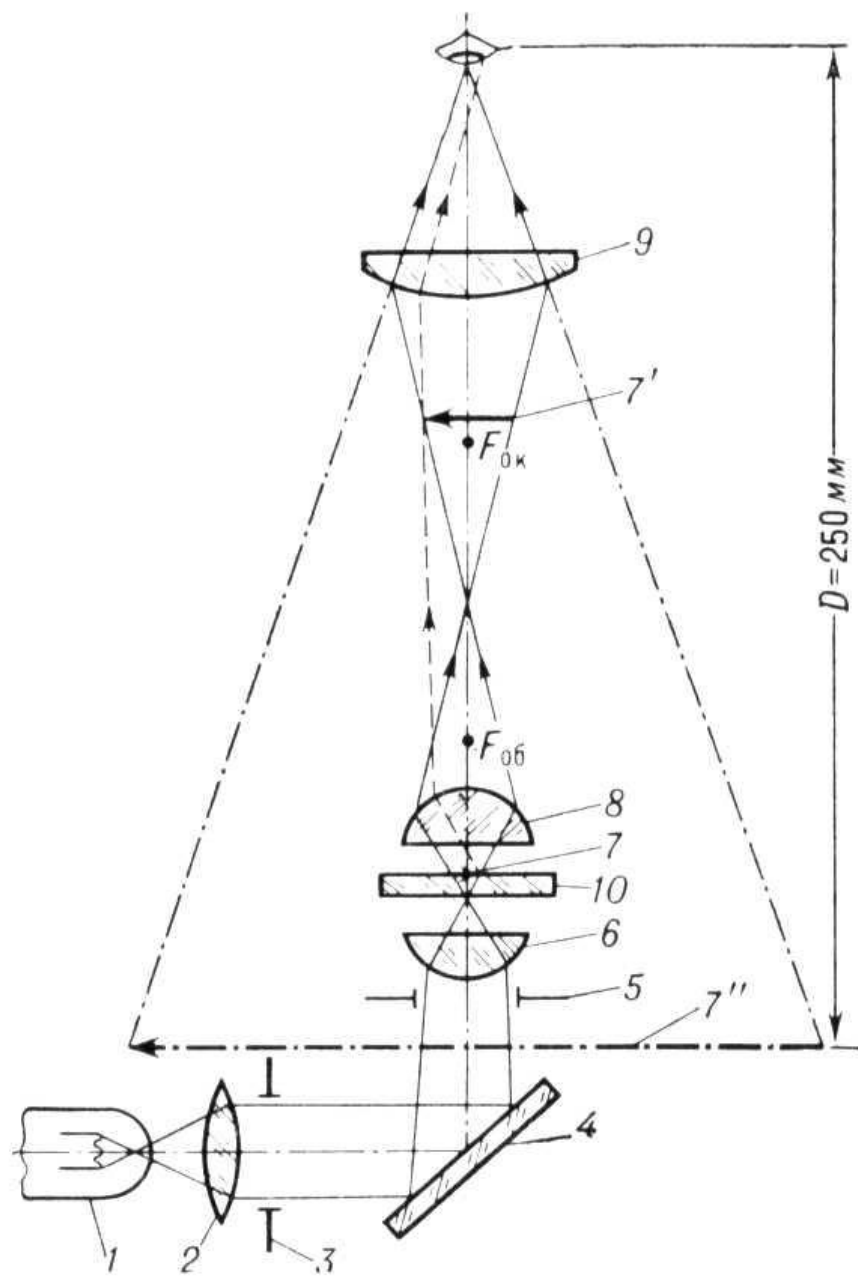
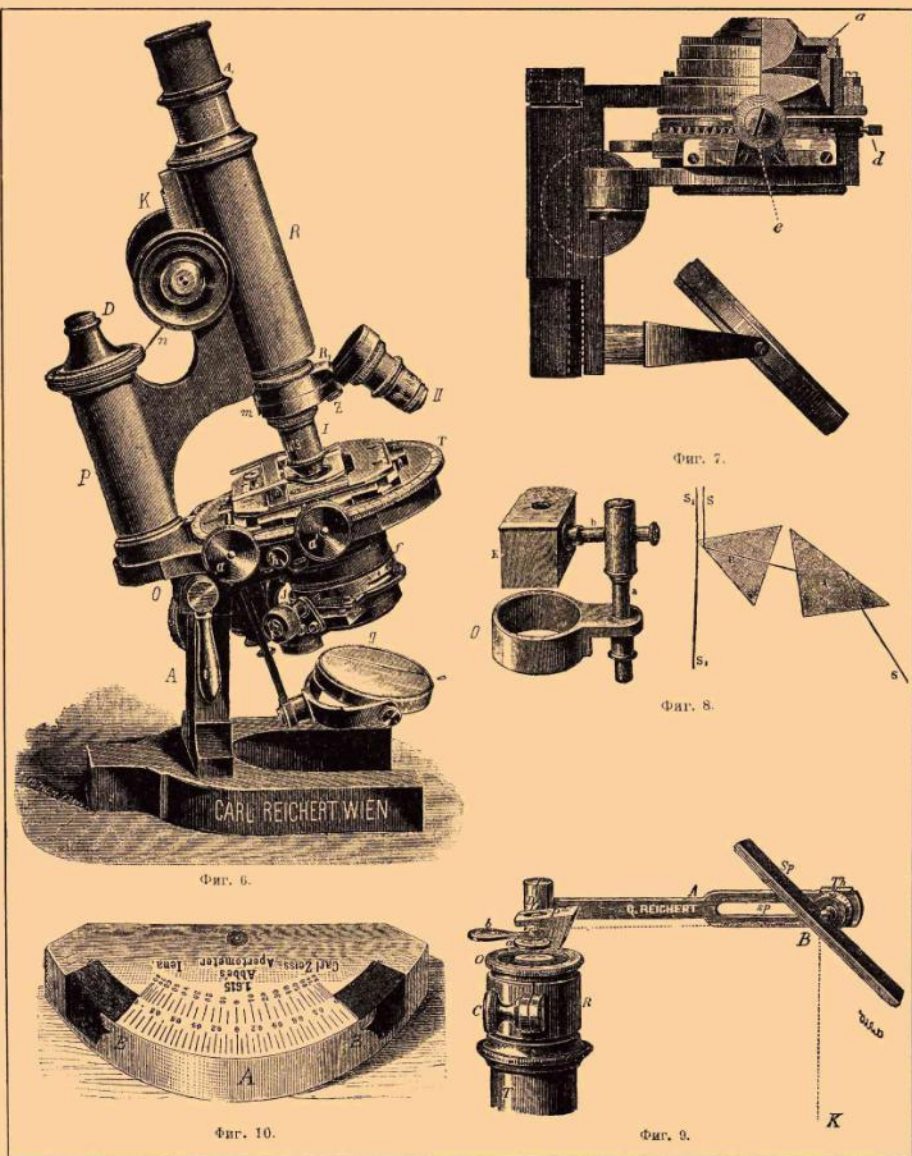
# Строение микроскопа



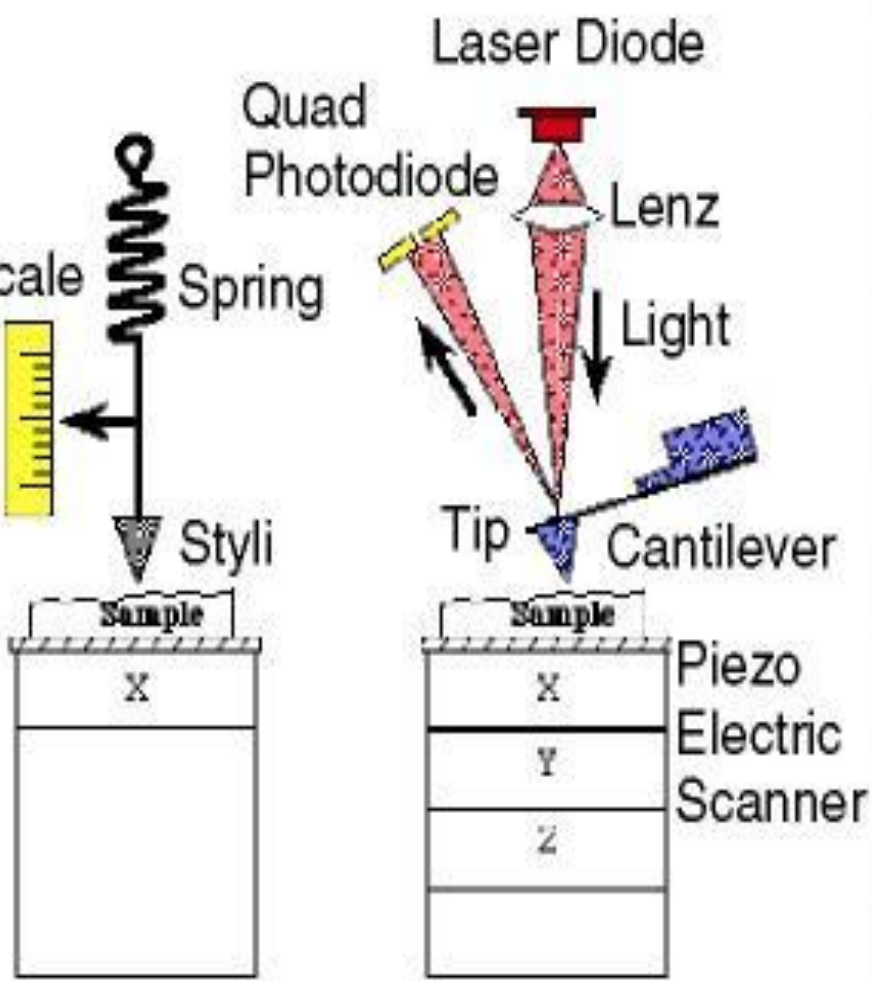
# Микроскоп



# МИКРОСКОПЪ.



Фиг. 6. Микроскопъ съ объективными револьверомъ и конденсаторомъ Аббе. Фиг. 7. Конденсаторъ Аббе. Фиг. 8 и 9 Инструменты для рисования и опредѣленія увеличенія. Фиг. 10. Апертурный Аббе.



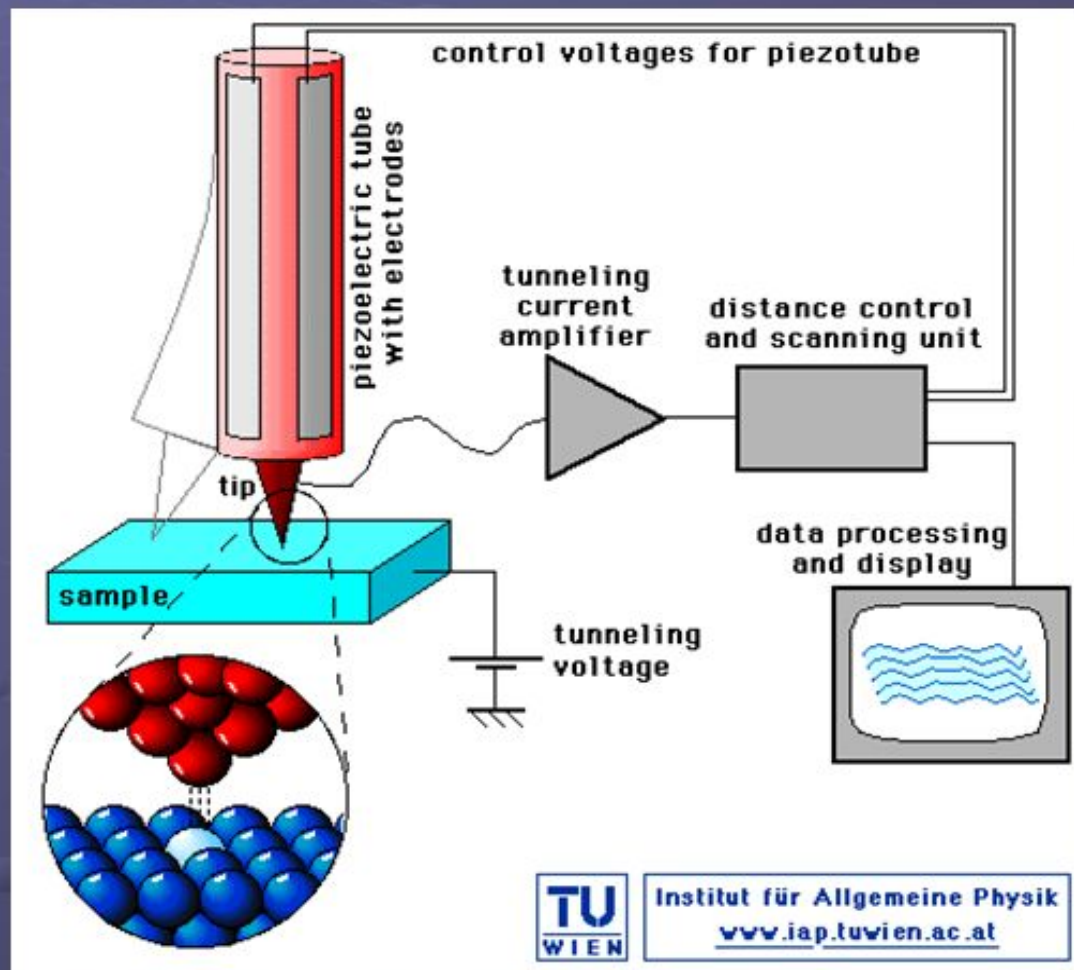
**Profilemeter  
Concept**

**Atomic Force  
Microscope**

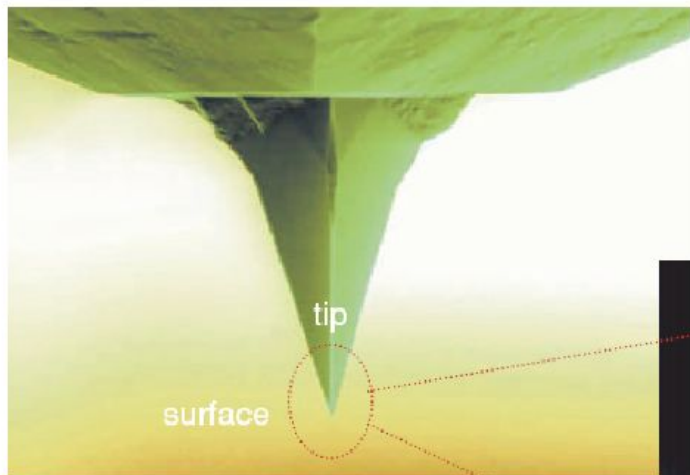


# Scanning tunneling microscope STM

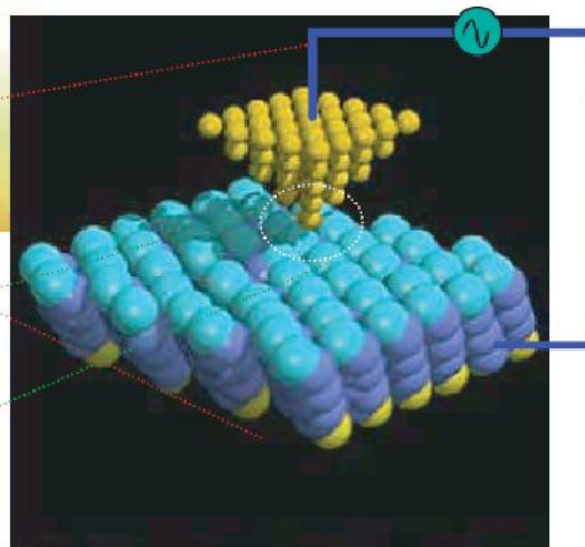
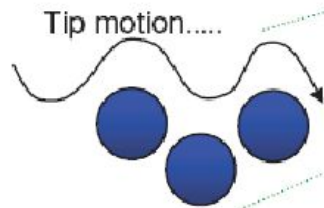
[http://www.iap.tuwien.ac.at/www/surface/STM\\_Gallery/stm\\_schematic.htm](http://www.iap.tuwien.ac.at/www/surface/STM_Gallery/stm_schematic.htm)



Exploiting tunneling: scanning tunneling microscope



STM



Tip scanned across a surface

Figure 12.2. The atomic force microscope (AFM) and the scanning tunneling microscope (STM) have powerful capabilities for treating and analyzing surfaces. The figure shows a schematic view of a STM, with the inset showing a STM in action. Below is the resulting atomic arrangement.



The image features a blue background with several 3D molecular models. In the upper left, there are three clusters of atoms, each with a central purple core and a surrounding shell of grey and white spheres. In the lower left, a flat layer of red spheres is shown on a dark grey substrate. On the right side, a large, light blue, cone-shaped structure is composed of a grid of hexagonal cells, tapering towards the bottom right.

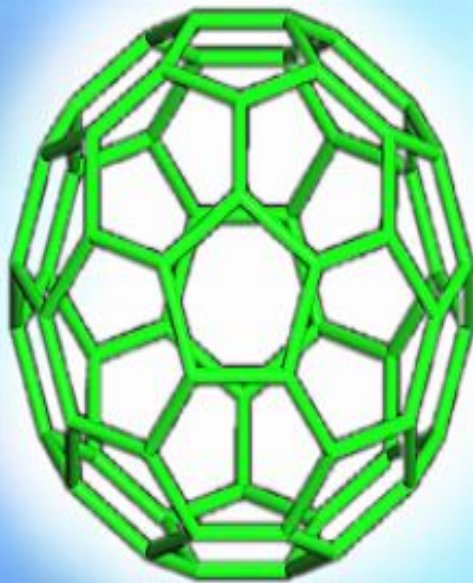
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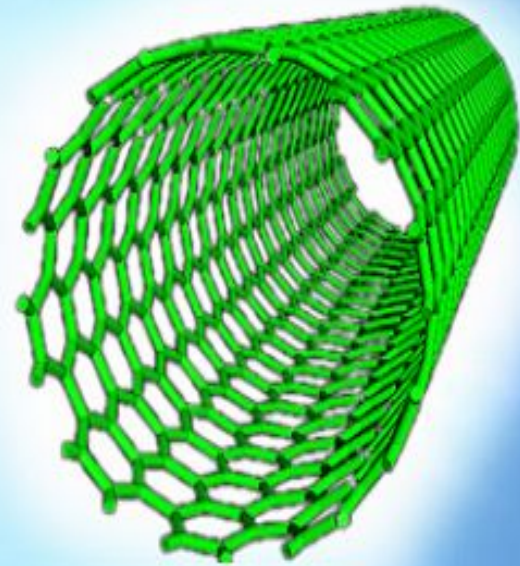
- The NanoKids Project is working to bring understanding to our communities.

*Continuous change of properties at the nanoscale*



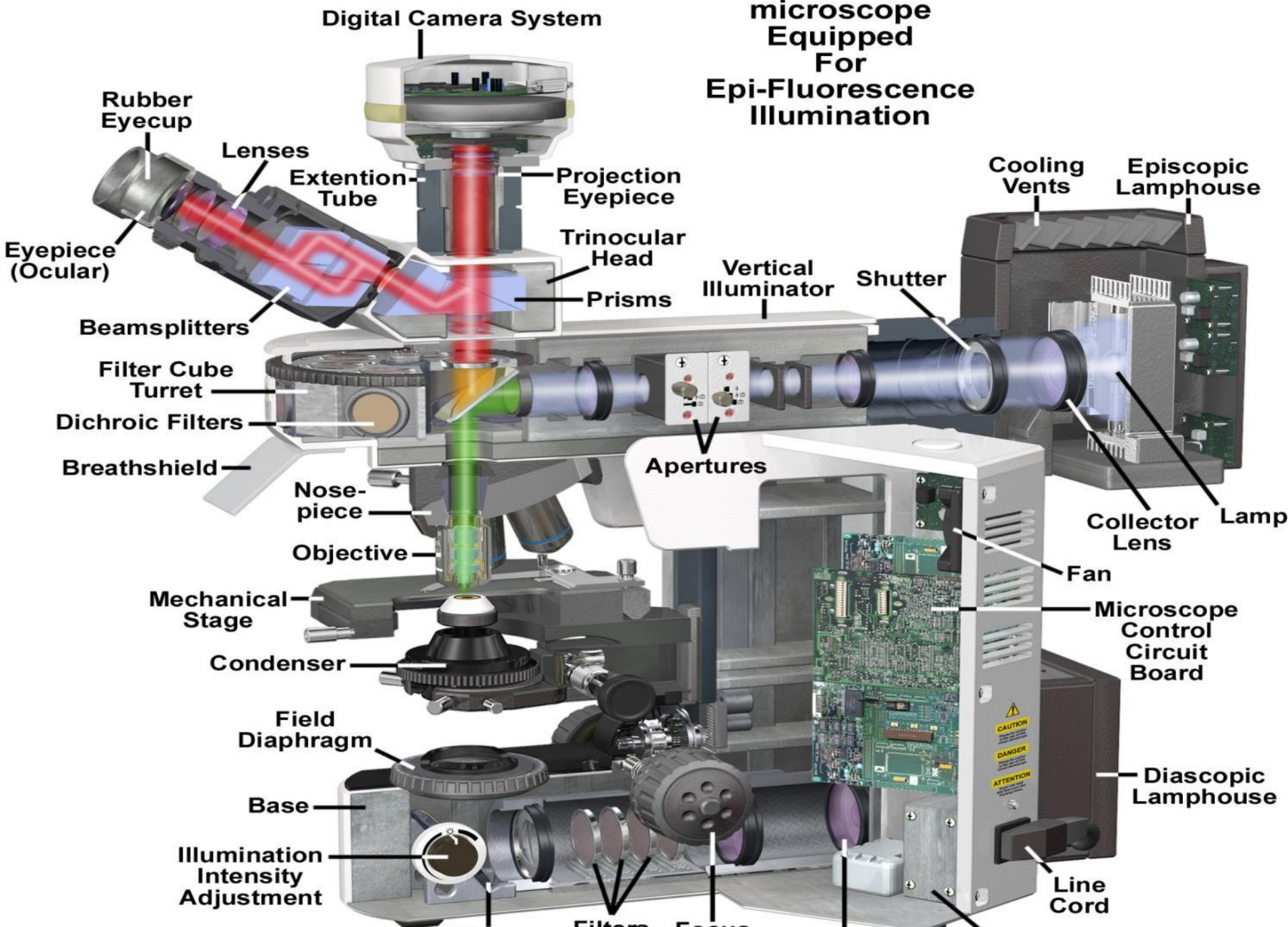
$C_{60}$  Buckyball

*1 atomic layer—  
100 % surface*



Carbon Nanotube

and  
Reflected Light  
microscope  
Equipped  
For  
Epi-Fluorescence  
Illumination



# **Используемая литература:**

- **«Физика 11 класс», В.А. Касьянов;**
- **«Физика 11 класс», А.А. Пинский;**
- **Большая Советская Энциклопедия;**
- **«Открытая физика», С.М. Козел;**
- **Ресурсы Интернет;**
- **«Энциклопедия «Физика»,  
издательство Аванта+.**