

Understanding van de graff generator

[Engineering](#)



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- We hear a typical crackling sound while combing our dry hair and the hairs instead of settling down get attracted towards the comb.
- After narrating such incidents, students would be encouraged to come out with their own experiences.

The Balloon Experiment: In the balloon experiment, two balloons are charged up, by rubbing them with our woolen jacket. One of the balloons is hung up with a string. Care must be taken to see that the room where this experiment is being conducted must be free from airflows. Fans, blowers, etc must also be switched off during the experiment so that the balloon hung up with thread remains stationary in the absence of any outside force. Then gradually we bring another balloon near to this balloon. It is found that the balloon hung with a thread tried to go away from the other balloon. This is happening because of the static charge.

Perspex Rod Experiment: Students are asked to charge a Perspex rod by rubbing it with a silk cloth. The rod is placed on a watch glass table. Then another rod is charged by rubbing with the silk cloth. When we try to take the second rod near to the first one, it is found that the rod on the watch glass starts nudging away. This indicates how the rods get charged, while the ordinary silk cloth is acting as a charger.