Scientific Communication

Exercises on Grammar Series 07

Notation

- Errors are blue.
- Correct versions are green.
- Comments are black.
- Highlights are red.

• It is verified that a electron performs circular motion under uniform magnetic field.

• It is verified that a electron performs circular motion under uniform magnetic field.

• It is verified that an electron performs circular motion under uniform magnetic field.

• It is verified that an electron performs circular motion under Δ uniform magnetic field.

singular noun; missing a/an

• It is verified that an electron performs circular motion under a uniform magnetic field.

• It is verified that an electron performs circular motion under a uniform magnetic field.

wrong preposition

in a field

• It is verified that an electron performs circular motion in a uniform magnetic field.

• It is verified that an electron performs circular motion in a uniform magnetic field.

• Variation in voltage and current would cause the radius of the electron beam changes.

• Variation in voltage and current would cause the radius of the electron beam changes.

cause ... to change

• Variation in voltage and current would cause the radius of the electron beam to change.

Variation in Δ voltage and Δ
 current would cause the radius of
 the electron beam to change.
 specific voltage and current;
 missing the

• Variation in the voltage and the current would cause the radius of the electron beam to change.

• Variation in the voltage and the current would cause the radius of the electron beam to change.

radius of the orbit!

physics misleading!

 Variation in the voltage and the current would cause the radius of the orbit traced out by the electron beam to change.

 Variation in the voltage and the current would cause the radius of the orbit traced out by the electron beam to change.

• Generating magnetic field for the experiment is produced by means of the Helmholtz coils.

• Generating magnetic field for the experiment is produced by means of the Helmholtz coils.

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generating ... is produced? magnetic field ... is produced?
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• Magnetic field for the experiment is produced by means of the Helmholtz coils.

 Δ Magnetic field for the experiment is produced by means of the Helmholtz coils.

specific field, missing the

• The magnetic field for the experiment is produced by means of the Helmholtz coils.

• The magnetic field for the experiment is produced by means of the Helmholtz coils.

• The field produced by the Helmholtz coils is sufficient to our experiment because we are dealing with low energy electron.

• The field produced by the Helmholtz coils is sufficient to our experiment because we are dealing with low energy electron.

wrong preposition sufficient for

• The field produced by the Helmholtz coils is sufficient for our experiment because we are dealing with low energy electron.

 The field produced by the Helmholtz coils is sufficient for our experiment because we are dealing with low energy electron.
many electrons

(should be clear to any physics student)

• The field produced by the Helmholtz coils is sufficient for our experiment because we are dealing with low energy electrons.

• The field produced by the Helmholtz coils is sufficient for our experiment because we are dealing with low energy electrons.

• If we pass 1 A current to the coils, the field at the center is about 7.6 gauss.

• If we pass 1 A current to the coils, the field at the center is about 7.6 gauss.

wrong preposition current through the coils

• If we pass 1 A current through the coils, the field at the center is about 7.6 gauss.

• If we pass 1 A current through the coils, the field at the center is about 7.6 gauss.

not idiomatic

1 A

a current of 1 A

• If we pass 1 A through the coils, the field at the center is about 7.6 gauss.

• If we pass 1 A through the coils, the field at the center is about 7.6 gauss.

• The electron beam can deflected by the parallel plates.

• The electron beam can deflected by the parallel plates.

beam is deflected by ...

• The electron beam can be deflected by the parallel plates.

• In collision with the electron, the gas atoms in the electron beam tube are ionized.

• In collision with the electron, the gas atoms in the electron beam tube are ionized.

many collisions many electrons

• In collisions with the electrons, the gas atoms in the electron beam tube are ionized.

• The experiment is necessary to carry out in darkened room.

• The experiment is necessary to carry out in darkened room.

It is necessary to ...

Food is necessary.

• It is necessary to carry out the experiment in darkened room.

It is necessary to carry out the experiment in ∆ darkened room.
singular non-specific noun; missing a

• It is necessary to carry out the experiment in a darkened room.

• It is necessary to carry out the experiment in a darkened room.

• The cathode filament is heated and emission of electrons begin.

 The cathode filament is heated and emission of electrons begin.

subject-verb disagreement

• The cathode filament is heated and emission of electrons begins.