

by or with?

In scientific articles authors often confuse **by** with **with**. I provide a few guidelines to clarify the problem.

1. In the passive **by** can introduce the “doer” at the end of the sentence.

*The test was performed **by** Lemuel.*

2. **by** can introduce a method.

*The product was manufactured **by** extrusion.*

3. **Beware!** If you use the words **technology**, **method** etc., **with** is correct!

***With** this technology, we can produce toilet seats much faster.*

If you use **by** here with the passive, it will indicate the “doer”!

*Many toilet seats were produced **by** this technology.* – The technology produced the toilet seats (not the people with the technology).

4. In other cases, **with** can mean a “tool” or “instrument”.

*We produced the product **with** a single-screw extruder.* – The extruder was the tool.

There is a big difference between 2 and 4: **extrusion** is a method, while **extruder** is a tool.

Example:

What is the difference?

a) *The streets were covered **by** snow.*

b) *The streets were covered **with** snow.*

In a), **by** is followed by the “doer”, so snow covered the streets.

In b), somebody covers the streets **with** snow.

Who? For example God, or perhaps the film company people before shooting a scene.