Installation worksheet for all three programs: The Neighbour-Sensing simulation program, Apex angle-based model and Spatial organisation model of the gravitropic reaction

Installation

Download the **.msi** file named **all.msi**. Then navigate (in *File Explorer*) to the folder in which this file was saved and double-click on the file name to run the file [*OR* right-click on the **all.msi** file name and choose '**Install**' from the menu that appears].

The installation file will display this announcement in the centre of your screen:
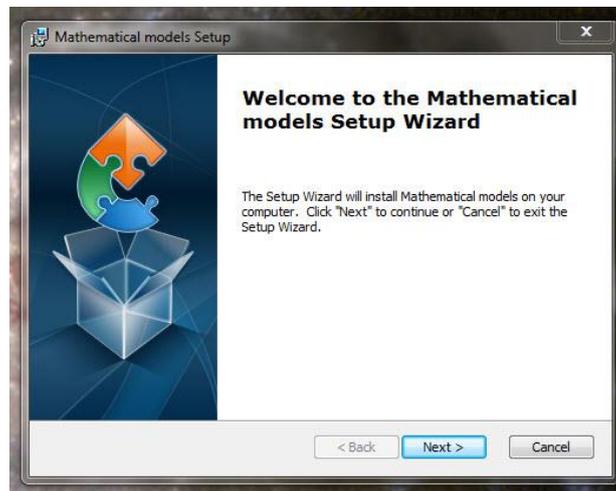
When you click '**Next**', this screen appears:
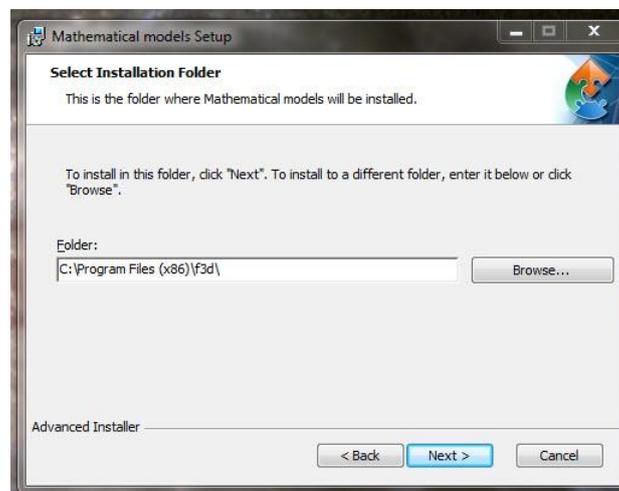
You can accept that offer to install the package into your existing '**C:\Program Files (x86)**' folder, or click on the '**Browse…**' button to find somewhere else. *BUT* as we've suggested

already, we recommend downloading and installing on a USB flash drive, so we expect you are running the **all.msi** file from a flash drive in a USB port on your machine. The little window that currently shows **C:\Program Files (x86)\f3d** is actually a text edit window, so you can position your cursor in it and start typing the address of the place you want to install the three modelling programs. I'll assume your USB drive will be drive E: (you may have to **Browse** to use File Explorer to confirm that) and suggest you type **E:\f3d** into that edit window. With that done, click on the '**Next >**' button and the Installer will do everything for you. It will keep you informed of progress and announce when it's finished.

When the installation is complete, use File Explorer to *Browse* to, and look inside, the folder you've just created (**\f3d**), and you'll find it contains:
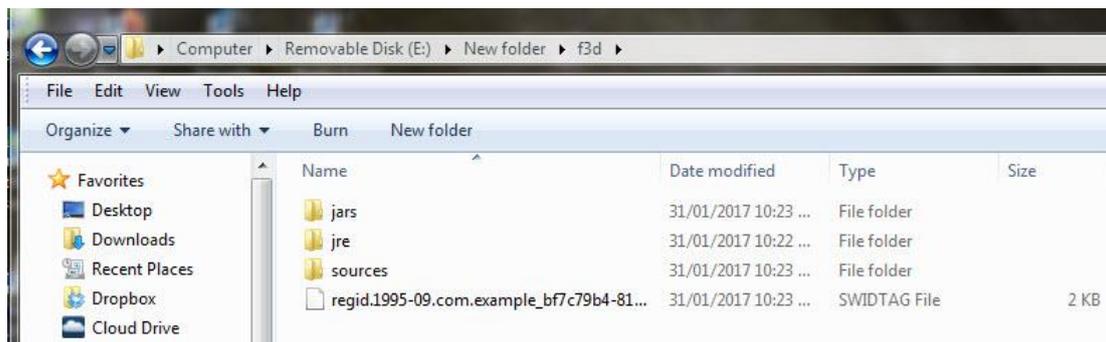
The SWIDTAG (software identification tag) is a management file that need not concern you. It is an XML-format file that identifies the software to Windows. The file folder called **sources** is an archive containing three ZIP files (**apex.zip**, **compensation.zip** and **neighbour-sensing_model.zip**), which hold all the .java files for the three programs, and a **.txt** copy of the **GNU General Public License** [https://www.gnu.org/licenses/gpl.html] under which these software packages are distributed. The file folder called **jre_nsm** contains all the working components of the three programs.

The folder you need to look at is the one called **jars**; have a look in that and you'll see that it looks like this:
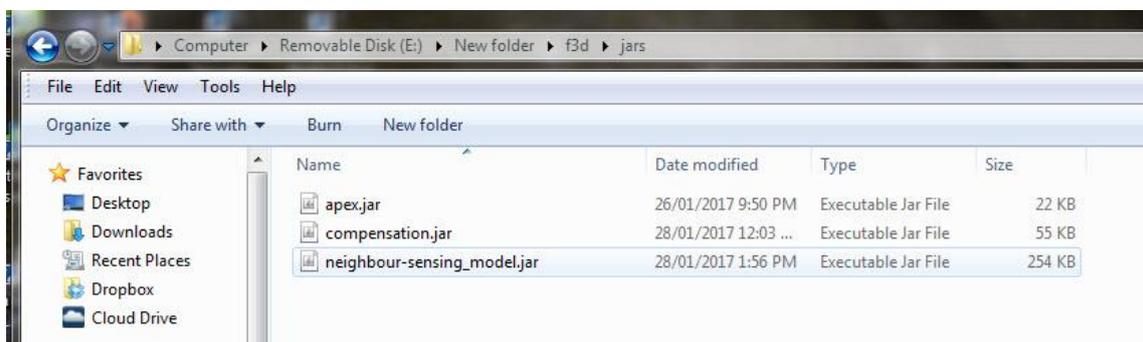
It contains the three 'executable jar' files that will launch the three programs you've just installed:

- **apex.jar** will launch the *apex angle-based model of the gravitropic reaction*;
- **compensation.jar** will launch the *spatial organisation model of the gravitropic reaction*;

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- **neighbour-sensing_model.jar** will launch the *Neighbour-Sensing hyphal growth simulation program*.

Before you launch any of these programs we strongly recommend that you create *shortcuts* to the **.jar** file(s) of the program(s) you are planning to use, to save yourself the hassle of navigating through all these folders to launch them. Do it like this: settle your cursor on the **.jar** file of interest to highlight it in the folder window, then **right-click** and choose '**Create shortcut**' from the menu that appears. The shortcut will appear in the same window beneath the **.jar** files, and you can then drag-and-drop the newly created shortcut(s) from that folder window to your *Desktop*, where it/they will acquire their glitzy 'cup of steaming java' icon.

IF YOUR SHORTCUTS DO NOT ACQUIRE THIS ICON, it's because you don't have Java^{TM} installed. This is quick and easy (and free) to do. Go to the download section of the **Java.com** website [at https://java.com/en/download/manual.jsp] and choose the flavour of *Java* appropriate to your browser and operating system; download and install. [The only limitation you might meet is that the Windows 10 '*Edge*' browser does not support plug-ins and will, therefore, not find and install *Java*. *Internet Explorer 11* and *Firefox* **will** run *Java* on *Windows 10*, and **will** therefore, select and install the most appropriate version of Java for Windows 10. Our programs do not require a browser to run, so *once Java is installed* these browser preferences are not relevant to us.]

NOW, refer to the individual program installation worksheet PDFs for further information.

And enjoy a whole new world of cyberfungi!