

Exercise 02565-04	Illumination and Texture - Hierarchical Structure
Readings	UG-M 271-90, UG-W 57-83, UG-R 3-23, UG-D 4-41, 55-83.
Purpose	The purpose of the exercise is to animate the characters in a text and to work with material properties and illumination. In particular the Phong equation is used. Furthermore, the exercise demonstrates how objects can be grouped into hierarchical structures and to use the Schematic View in manipulating complex scenes and sharing material properties.
Part 1	Carry out exercise 4 “Methane Molecule” from the manual Softimage 3D - Quick Start (QS). Add the bindings between the four hydrogen atom the the carbon atom. Use cylinders with axes connecting the centres of the spheres.
Part 2	Make a tree including the stem, the branches, and leaves. Of course they need to be hierarchical organized.
Part 3	Carry out exercise 5 “News Logo” from the manual Softimage 3D - Quick Start. Because of a software error you must use NEVS as logo text (The W does not work correctly in extrusion). Use the font Times-New-Roman.
Part 4	Make a test scene including 5 spheres and 5x5 spheres. Use various light sources and investigate the effect of the parameters of the Phong equation. Let the parameters varies systematically using the values 0, 0.25, 0.5, 0.75, 1 for the five spheres in order to get a
Part 5	Make an animation in which both the light source and the camera are moving. Use function curves in editing the material properties.
Part 6 (optional)	Make your own flying logo.