

Supporting Information

Structural refinement:

For the structures after irradiation, all non-hydrogen atoms of the product were located in Fourier difference maps, calculated with coefficients $F_o(\text{exposed}) - F_o(\text{pre-exposure})$, and then refined with restraints and constraints of the geometrical and thermal parameters of the reactant and product atoms bond lengths and thermal parameters (SADI and EADP instructions of *SHELXL-97*). For example, in the SHELX input file, (only) the following restraints and constraints commands have been used:

....

EADP O₉ O₉B

EADP O₁₀ O₁₀B

EADP C₄₁ C₄₁B

EADP C₄₂ C₄₂B

EADP C₄₃ C₄₃B

EADP C₄₄ C₄₄B

EADP C₄₅ C₄₅B

SADI C₄₁ O₉ C₄₁B O₉B

SADI C₄₁ O₁₀ C₄₁B O₁₀B

SADI C₄₁ C₄₂ C₄₁B C₄₂B

SADI C₄₂ C₄₃ C₄₂B C₄₃B

SADI C₄₃ C₄₄ C₄₃B C₄₄B

SADI C₄₂ C₄₅ C₄₂B C₄₅B

....

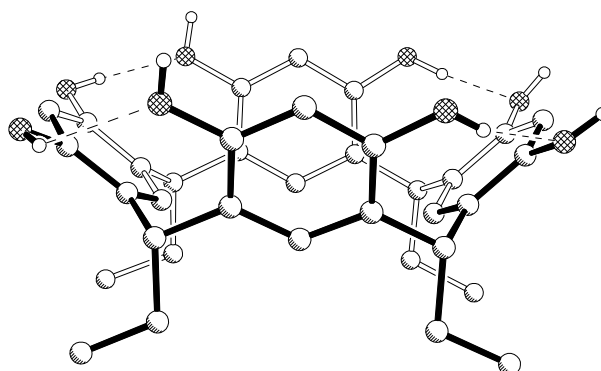
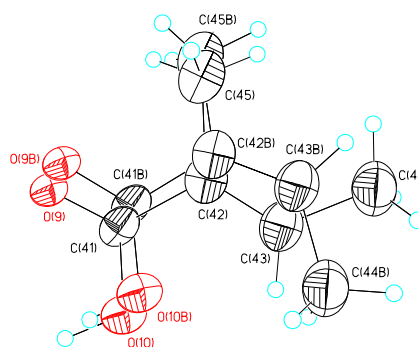


Figure S1: CE CR with intramolecular hydrogen bond connectivity of C_2 symmetry.

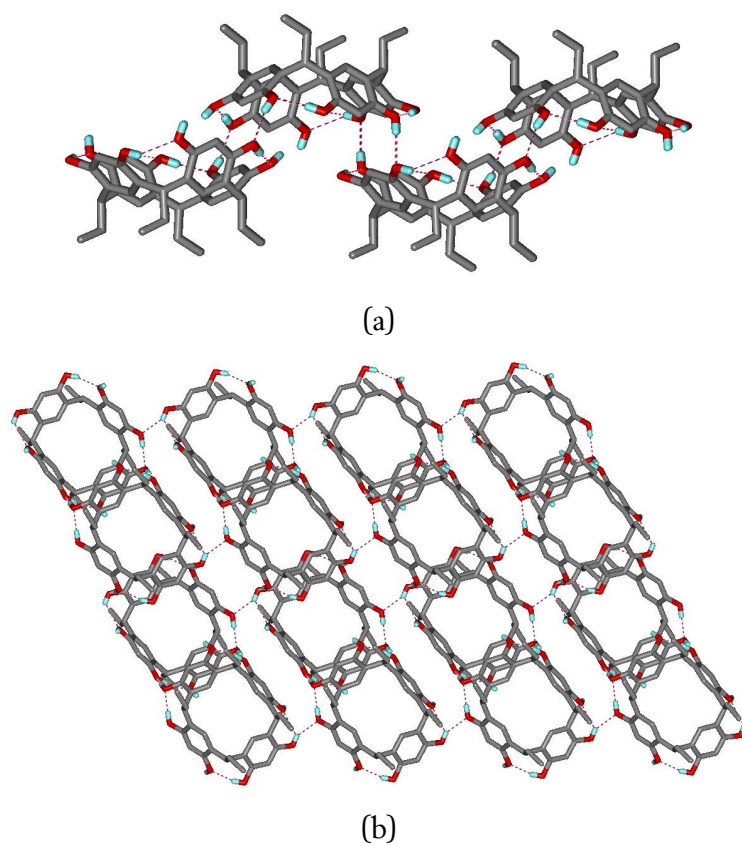


Figure S2. The hydrogen-bonded layer in **1** viewed (a) from the side and (b) from above.



Figure S3. The crystal before (left), during (center) and after (right) laser exposure.

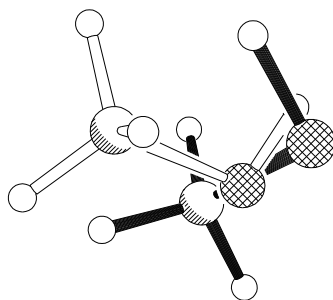


Figure S4. Shift in position and orientation of the methanol molecule on 3 hour exposure (solid bonds: molecule before exposure; open bonds: molecule after exposure).