WinPSSP: a free-distribution software for the crystal structure determination of organics from powders

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Toward increasing the use of the methods and software for crystal structure determination from powders and the number of new structures published, (1) the improvement of the average training in crystallography, and (2) increasing the user-friendliness of the software have been proposed [1]. Towards the latter, we have made available *WinPSSP* [2], a Windows OS version of the direct-space methods program *PSSP* (Powder Structure Solution Program) [3], which has been used to solve several small-molecule crystal structures submitted to the ICDD PDF-4 Organics database during recent years.
WinPSSP is freely downloadable at **http://users.uoi.gr/nkourkou/winpssp**. We have made a few instructional videos useful for undergraduate and inexperienced users, and we have recently prepared a website with a worked example as instructional material used in the first LACA small-molecule crystallography school.
WinPSSP application in combination with other free-distribution software will be discussed, and a few crystal structure determination examples highlighting useful *WinPSSP* features will be shown.

[1]- A. Le Bail *et al., Powder Diffraction* (2009) **24:3**, 254-262.
[2]- S. Pagola, A. Polymeros and N. Kourkoumelis, *J. Appl. Cryst.* (2017) **50**, 293-303.
[3]- S. Pagola and P. W. Stephens, *J. Appl. Cryst.* (2010) **43**, 370-376.