

## Making Chains from Balls—Polymers for Organic Photovoltaics; and Community Scale OPV installations

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The perfectly spherical molecule, fullerene (C<sub>60</sub>), is widely employed in organic photovoltaic devices (OPVs) as an electron acceptor. It is normally modified to improve its solubility for blending and coating; phenyl C<sub>61</sub> butyric acid methyl ester (PCBM) is the most common derivative used. However, PCBM excessively crystallises leading to short circuits.<sup>1</sup> When macromolecules based on C<sub>60</sub> are used,<sup>2</sup> crystallisation can be avoided. This lecture looks at some recently developed methods of making polymers from C<sub>60</sub> and PCBM,<sup>3,4,5</sup> and discusses their use for stabilising OPVs.

In a second part to this talk, the on-going development of community-scale OPV installations in the Vic-Montaner region is shown.



**Figure 1.** Planned OPV installation at Pujol, Communauté de Communes Vic-Montaner, France. Design: J. C. Cousins (www.lateliercousin.com).

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