



Figure 2

We plan to investigate how the oxidation of guanidine substrates is influenced by their bound orientation and proximity with respect to the porphyrin's metal centre. With this in mind we are currently expanding our first generation NOS models to include members with variant spacer-superstructure units **2-9**. So far we have completed the challenging synthesis of variants with spacer-superstructure units **5-8**; model **3** is also well advanced. The programme will progress by investigating model guest-binding properties with guanidine, guanidoxime and urea analogues of the substrate intermediate and product in the Arg-NO pathway.

The EPSRC National Mass Spectrometry Service facilitates accurate mass determination of key synthetic intermediates en route to our NOS models as well as the characterisation of the target models themselves.

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