

Electronic Supplementary Information

[3+2] Cycloaddition reaction of azomethine ylides generated by thermal ring opening of aziridines onto carbon nanohorns

Demetrios D. Chronopoulos,^a Zheng Liu,^{b,c} Kazu Suenaga,^c Masako Yudasaka^b and Nikos Tagmatarchis^{a*}

^a Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, Athens 11635, Greece

^b Inorganic Functional Materials Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Anagahora 2266-98, Shimoshidami, Moriyamaku, Nagoya 463-8560, Japan

^c Nanomaterials Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Central 5, 1-1-1 Higashi, Tsukuba 305-8565, Japan

Table of Contents

Fig. S1 ^1H NMR spectrum for aziridine 3a	2
Fig. S2 ^{13}C NMR spectrum for aziridine 3a	3
Fig. S3 ^1H NMR spectra for aziridine 3b	4
Fig. S4 ^{13}C NMR spectrum for aziridine 3b	5
Fig. S5 ATR-IR spectrum for functionalized CNH-based material 4b	6
Fig. S6 HR-TEM image for 4b	7
Fig. S7 DLS graph for functionalized CNH-based material 4b	8
Fig. S8 UV-Vis spectra for reference gold nanoparticles and pyrrolidino-modified CNH/Au _{nano} hybrid material 5	9

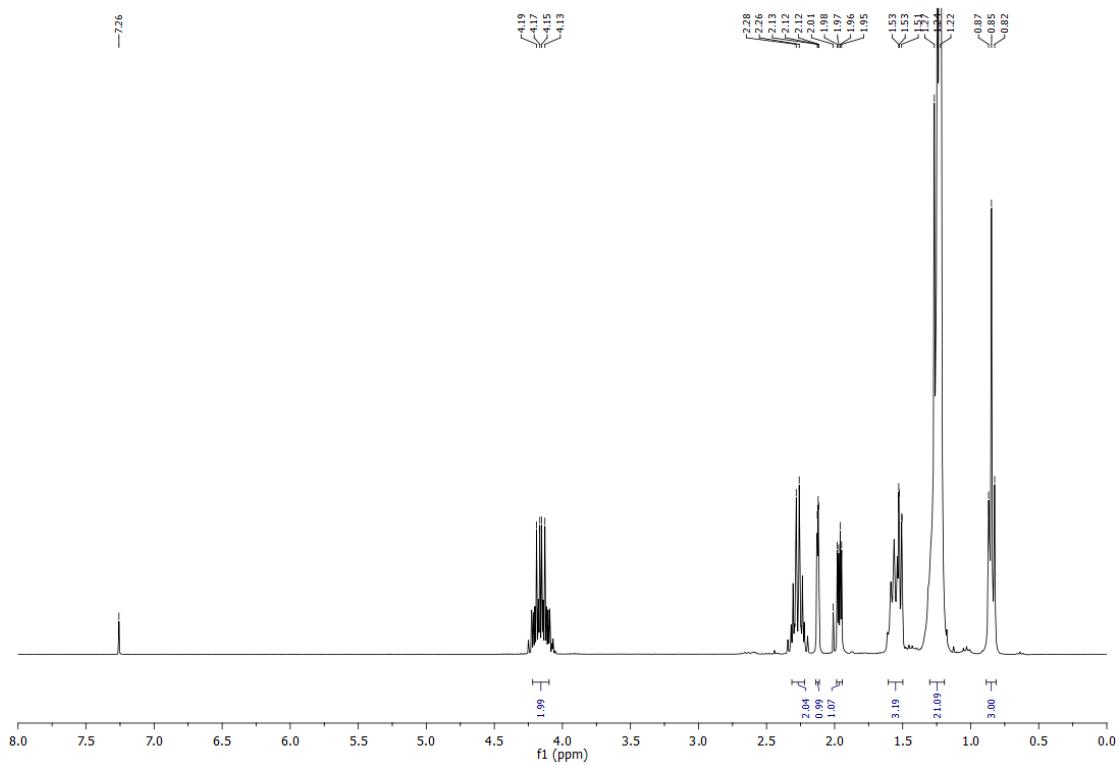


Fig. S1 ^1H NMR spectrum for aziridine **3a**.

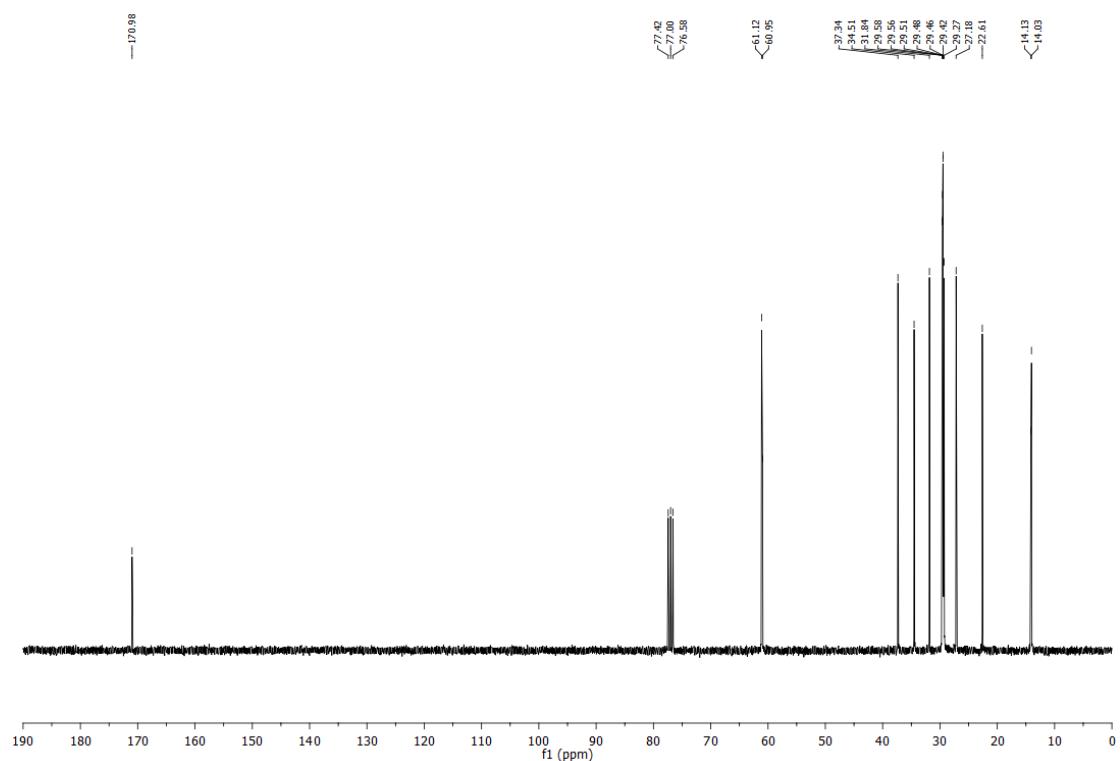


Fig. S2 ^{13}C NMR spectrum for aziridine **3a**.

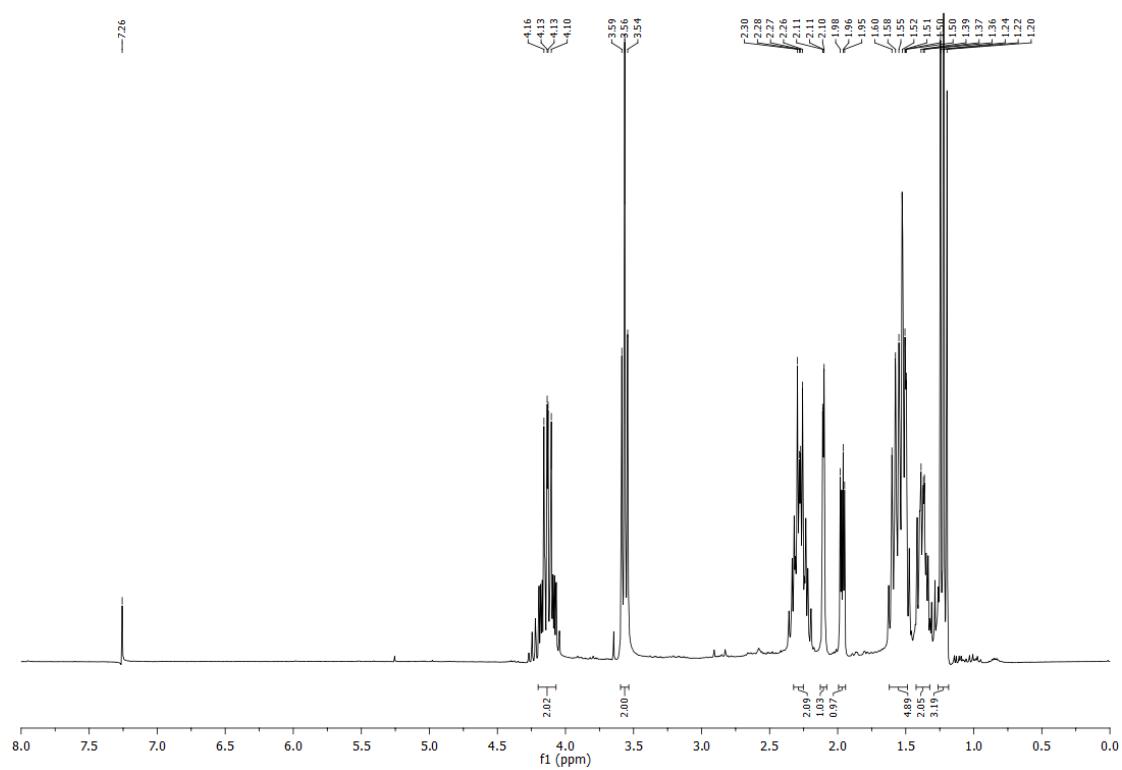


Fig. S3 ^1H NMR spectra for aziridine **3b**.

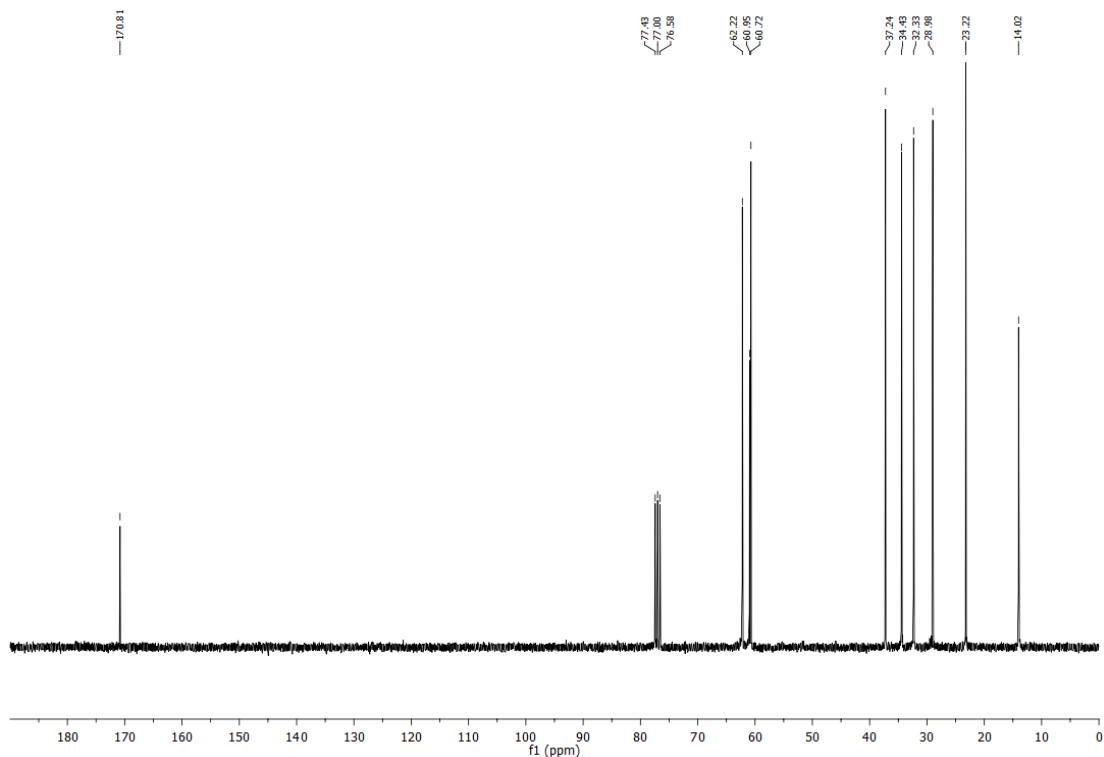


Fig. S4 ¹³C NMR spectrum for aziridine **3b**.

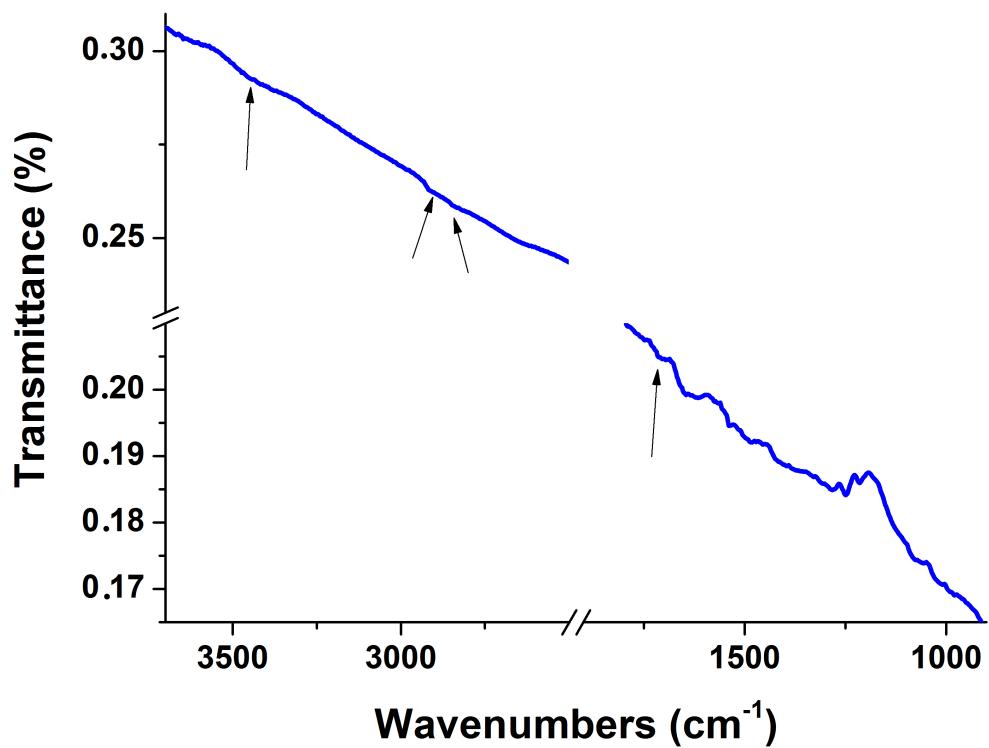


Fig. S5 ATR-IR spectrum for functionalized CNH-based material **4b**.

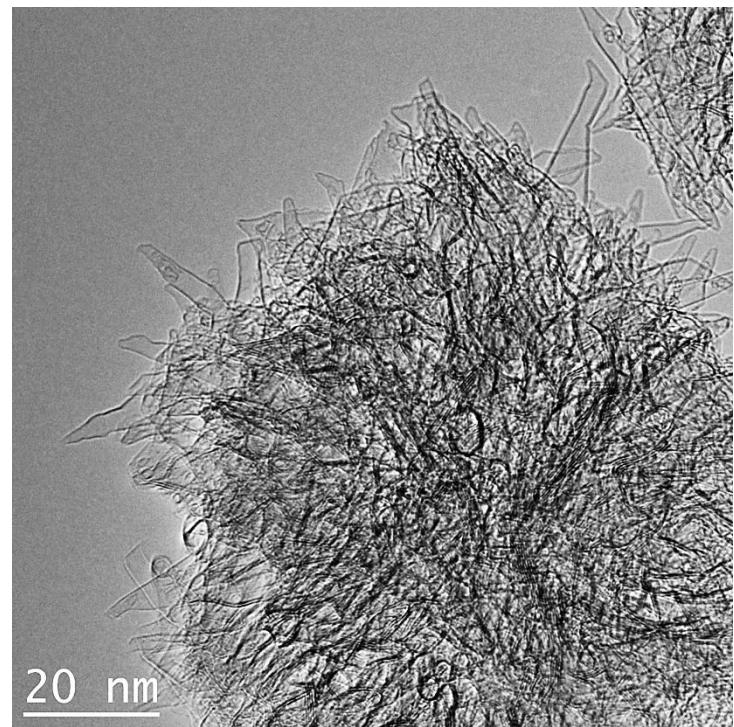


Fig. S6 HR-TEM image for functionalized CNH-based material **4b**.

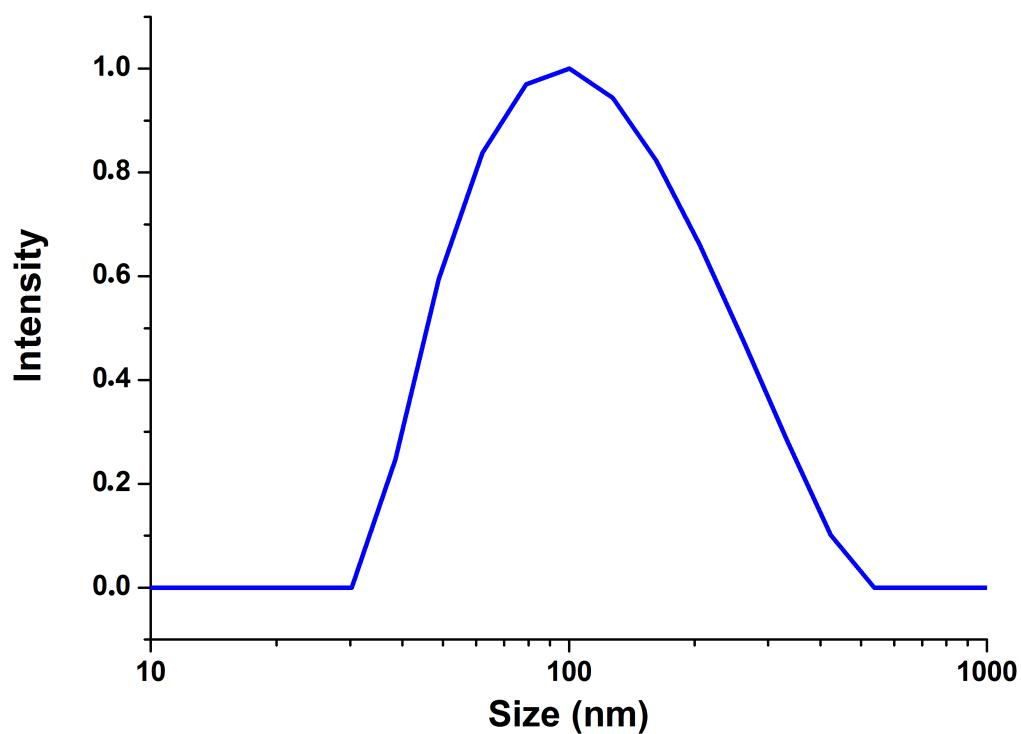


Fig. S7 DLS graph for functionalized CNH-based material **4b** obtained in DMF.

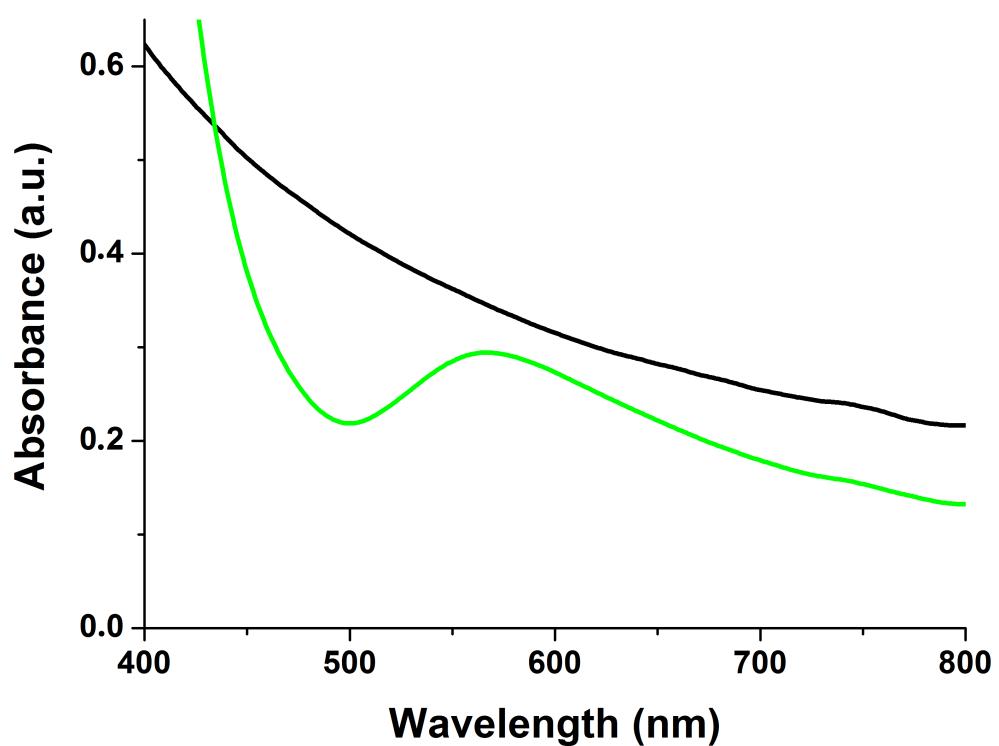


Fig. S8 UV-Vis spectra for reference gold nanoparticles (green) and pyrrolidino-modified CNH/Au_{nano} hybrid material **5** (black), obtained in MeOH.