Electronic Supplementary Material (ESI) for Reaction Chemistry & Engineering.

SUPPORTING INFORMATION

Encapsulation of Hoveyda-Grubbs 2nd Generation Catalyst in Magnetically Separable Alginate/Mesoporous Carbon Beads for Olefin Metathesis Reactions in Water

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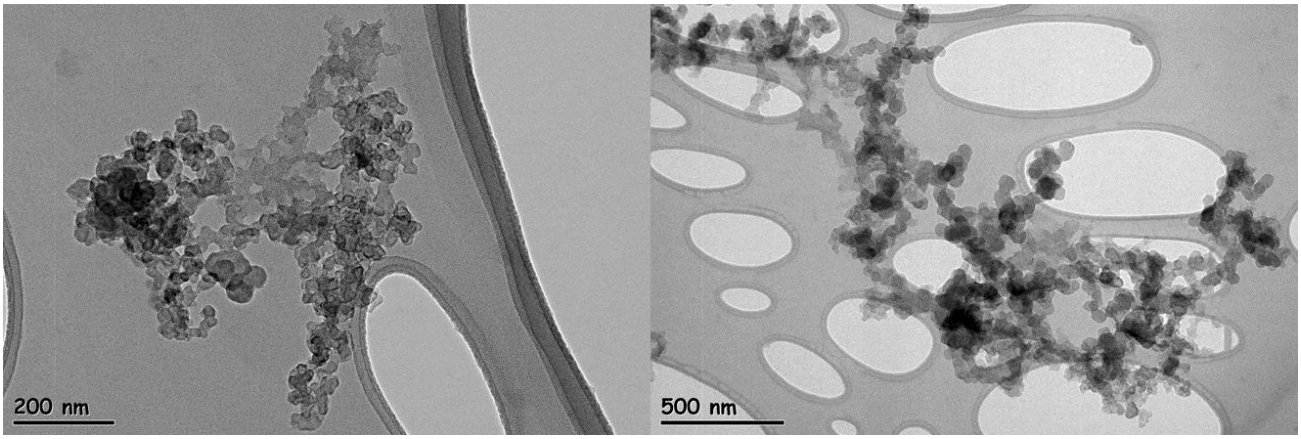


Figure S 1. HR-TEM images of as-received mesoporous carbon

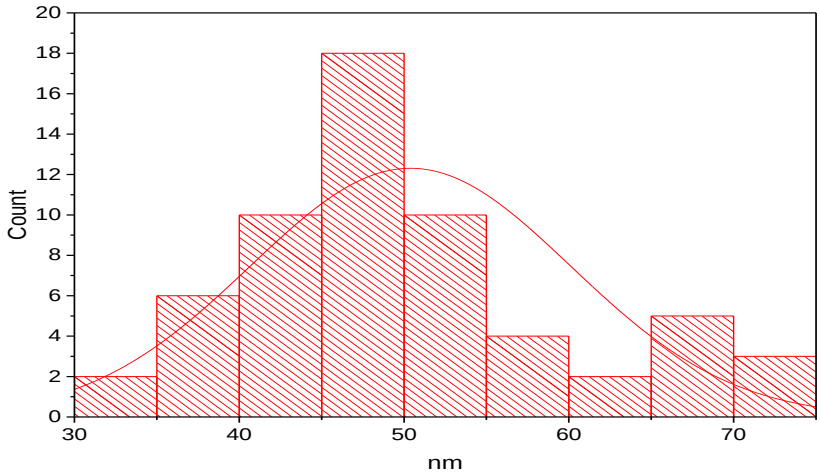
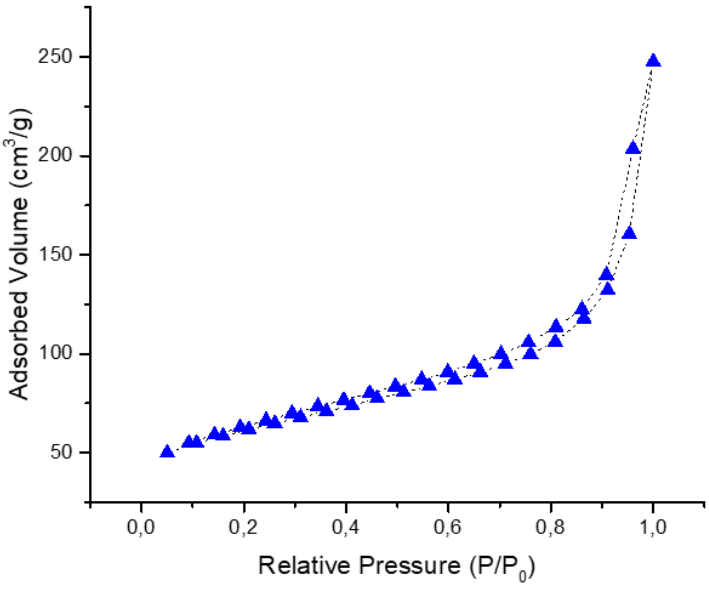


Figure S 2. Particle size distribution of mesoporous carbon



Surface Area (m^2/g)	Pore Volume (cm^3/g)	Pore Size (nm)
206	0.66	4.00

Figure S 3. N_2 adsorption/desorption isotherm of mesoporous carbon

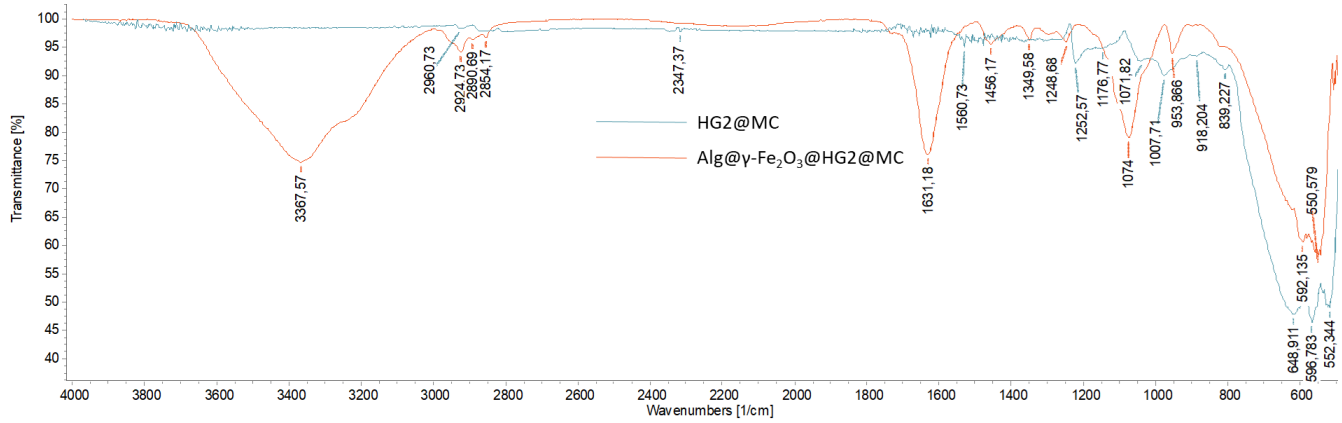


Figure S 4. FTIR spectrum of Alg@γ-Fe_2O_3@HG2@MC

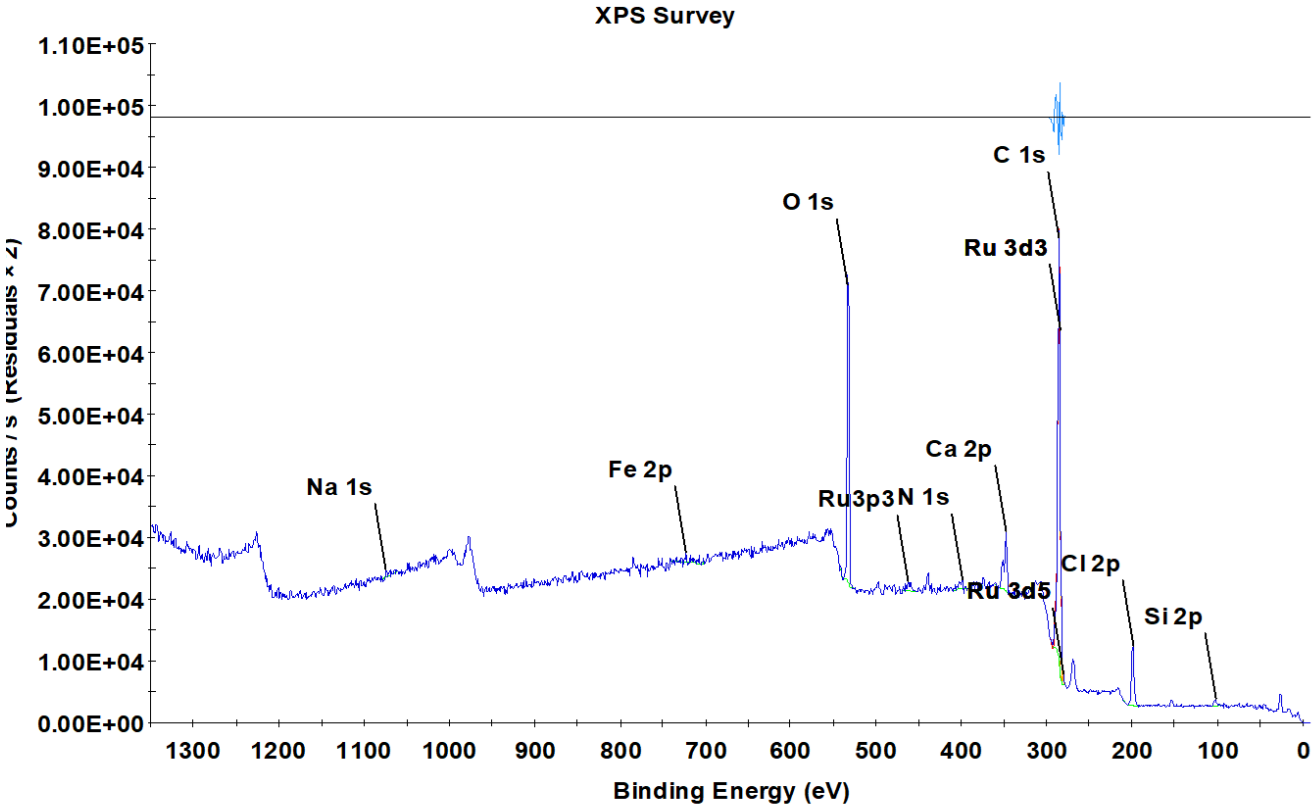


Figure S 5. XPS survey of Alg@γ-Fe_2O_3@HG2@MC

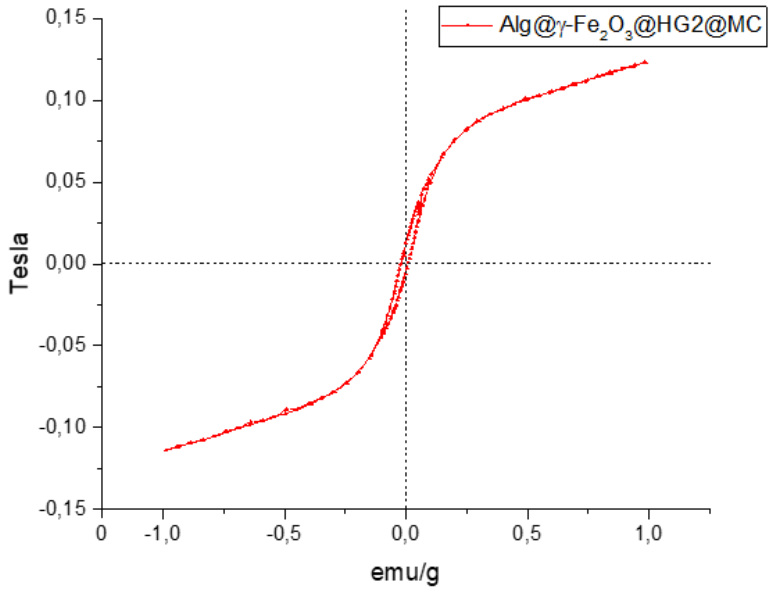


Figure S 6. Magnetization curve for Alg@γ-Fe_2O_3@HG2@MC

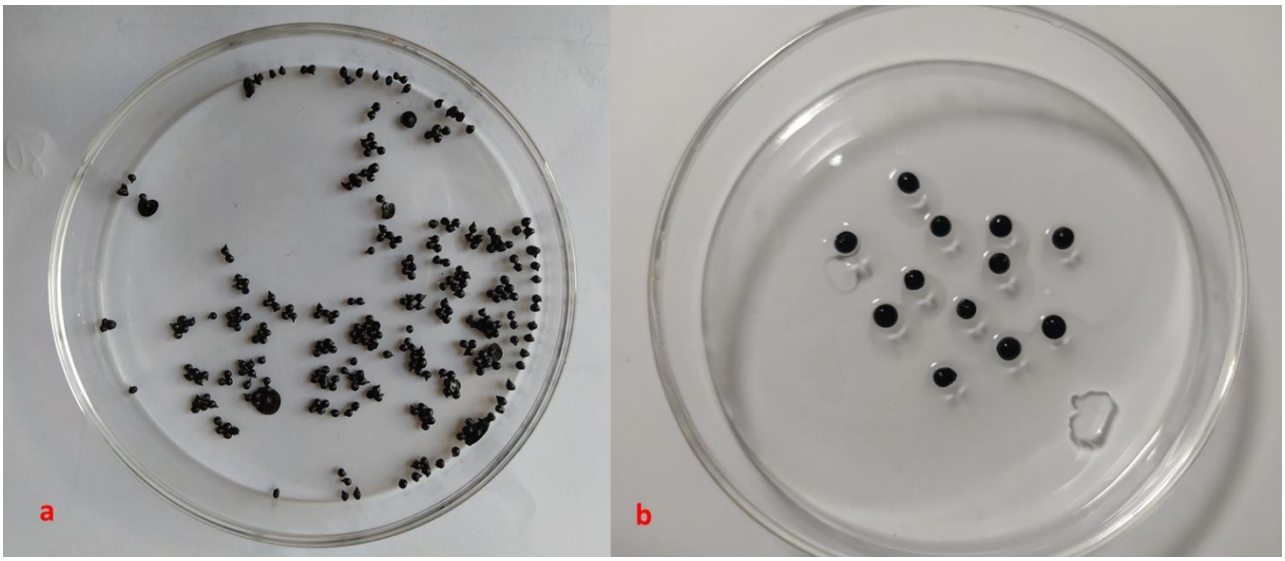


Figure S 7. Alginate beads; Alg@γ-Fe_2O_3@HG2@MC, a) Dried under vacuum oven b) Freshly prepared alginate beads

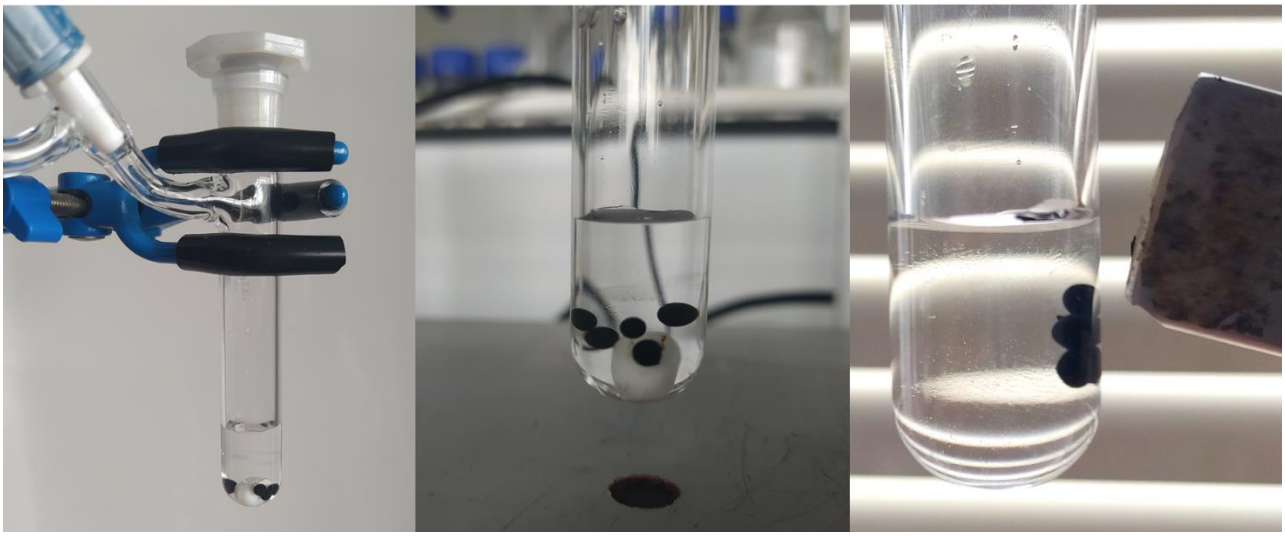


Figure S 8. Alginate beads in in aqueous reaction mixture

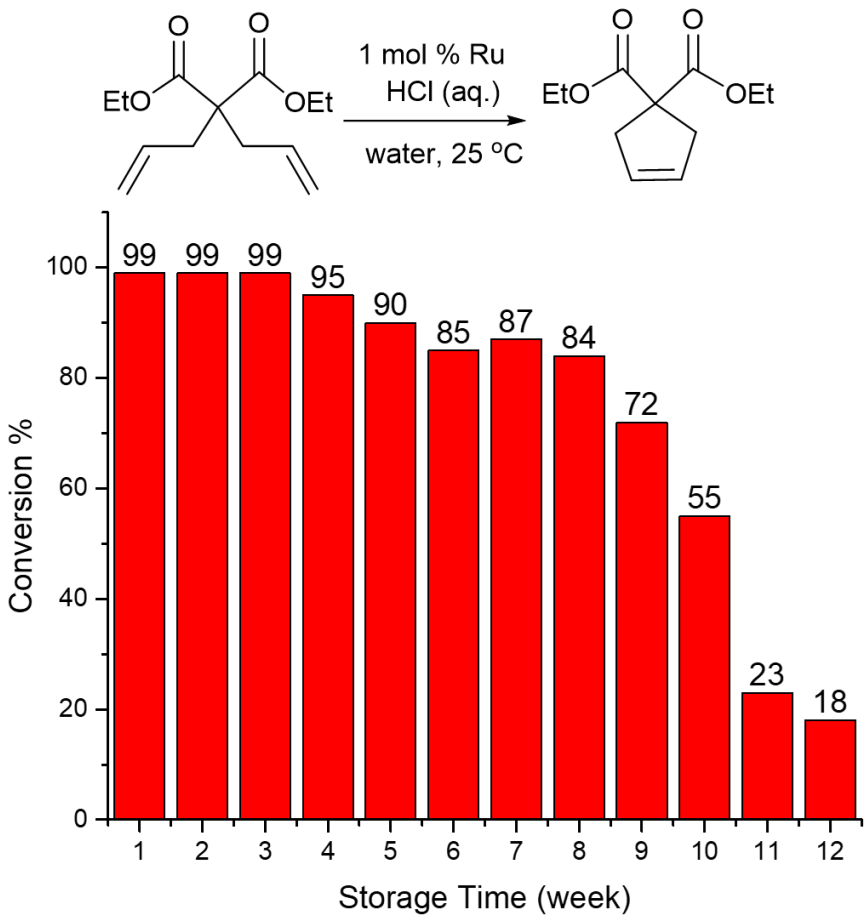


Figure S 9. The performance of the catalyst in RCM of diethyldiallyl malonate after storage on benchtop under air atmosphere

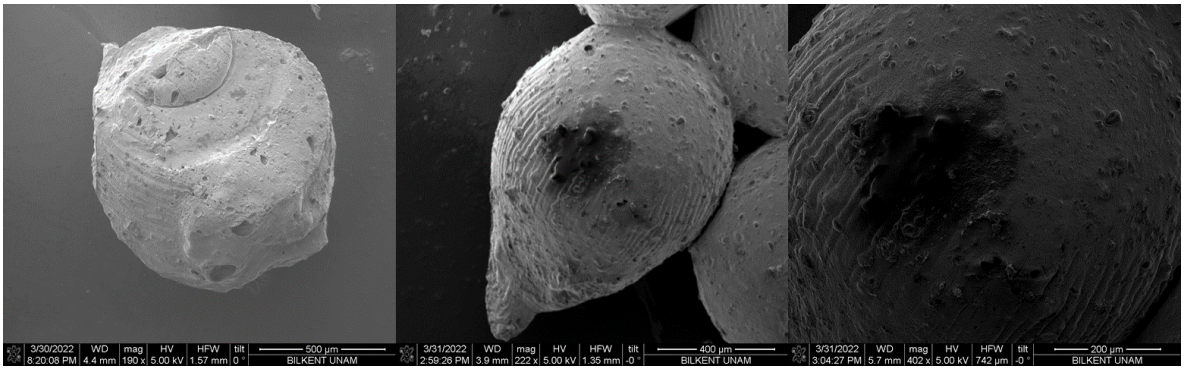


Figure S 10. SEM images of the catalyst bead after 1st run

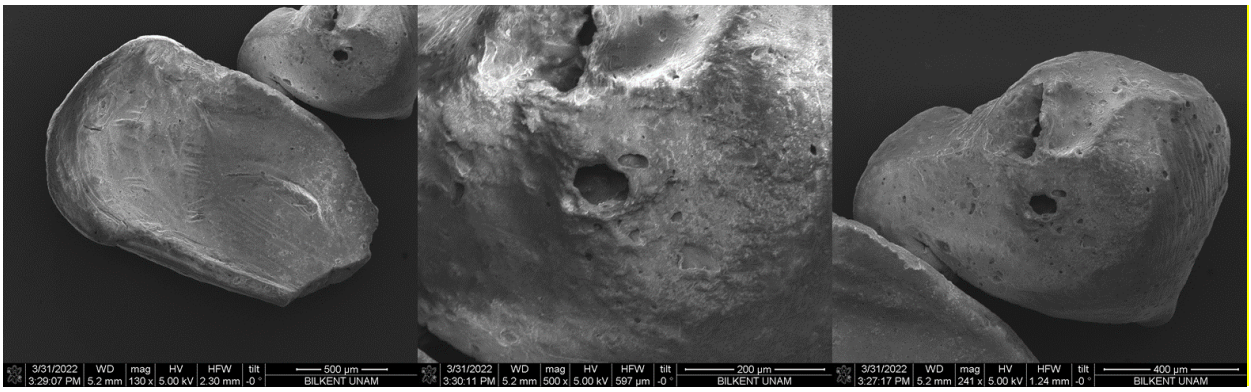
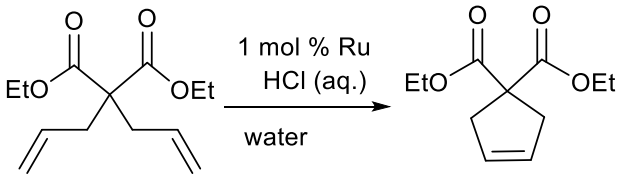


Figure 11. SEM images of the catalyst bead after 7th run

Table 1. RCM reactions at different reaction temperatures



Entry[a]	Temperature (°C)	Time (h)	Conversion %
1	25	1	99
2	60	24	40
3	4	24	60

a: aqueous HCl (1M) solution was used in RCM reactions with a HCl/Ru (mol/mol) ratio of 10/1.