

Supporting Information

Terpene Polymerization via a Binary Neodymium-Based Catalytic System with di-n-butylmagnesium as Co-Catalyst

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SEC and NMR Analysis of Myrcene under Different [Nd]:[Mg] Ratios and Temperatures

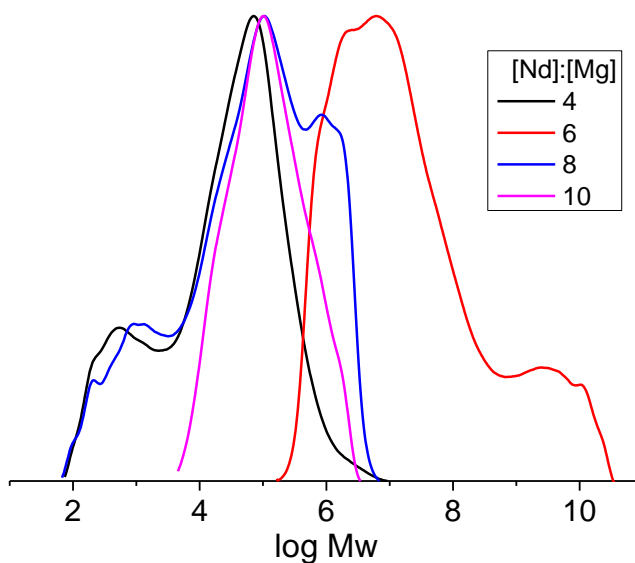


Figure S1. SEC curves at different [Nd]:[Mg] ratios at 50°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 1.

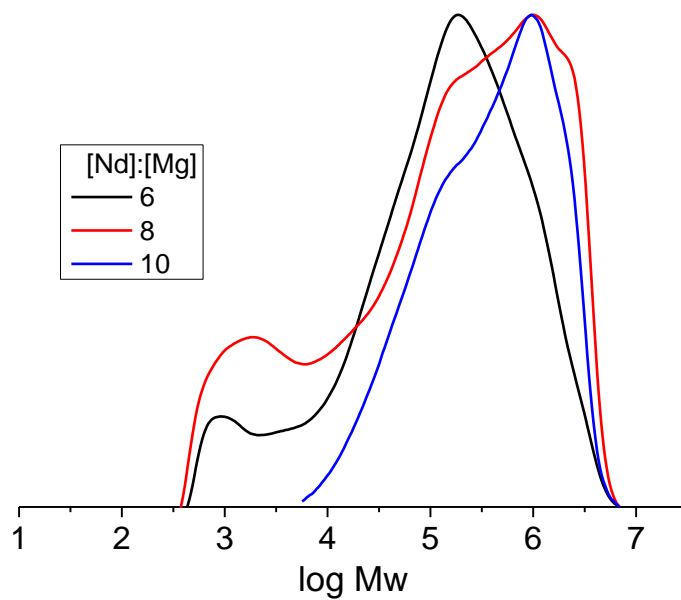


Figure S2. SEC curves at different [Nd]:[Mg] ratios at 60°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 1.

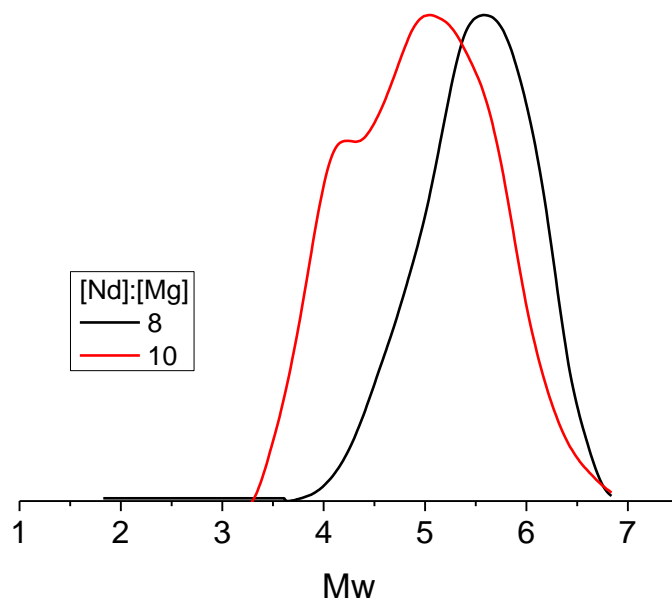


Figure S3. SEC curves at different [Nd]:[Mg] ratios at 70°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 1.

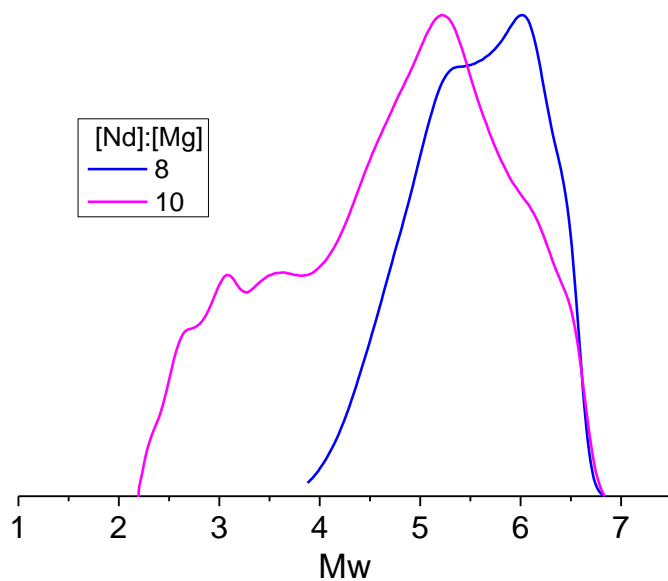


Figure S4. SEC curves at different [Nd]:[Mg] ratios at 70°C with an [Mon]:[Nd] ratio of 500. Experimental details in Table 1.

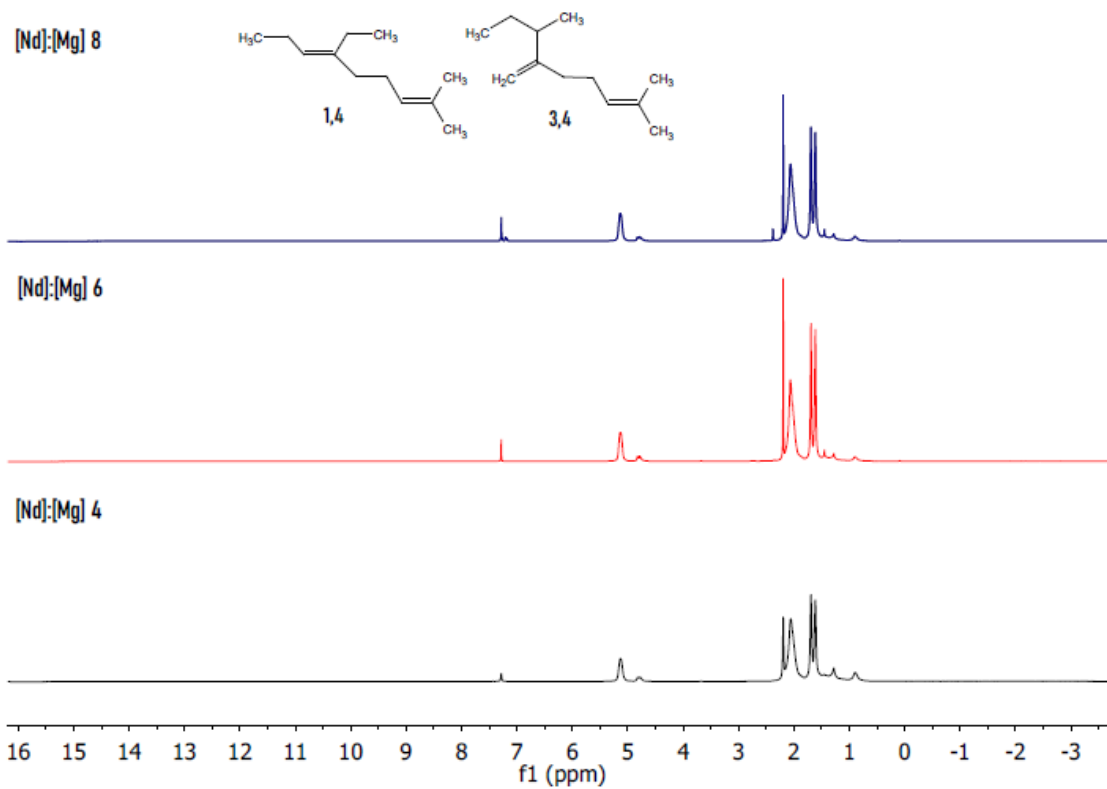


Figure S5. ^1H NMR at different [Nd]:[Mg] ratios at 50°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 3.

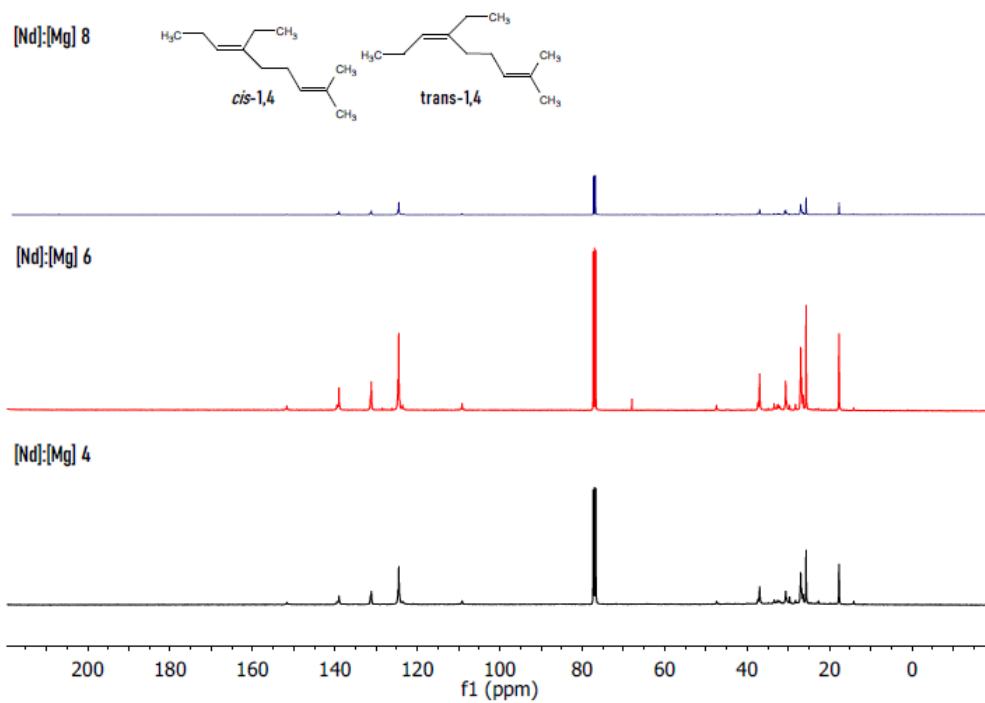


Figure S6. ^{13}C NMR at different [Nd]:[Mg] ratios at 50°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 3.

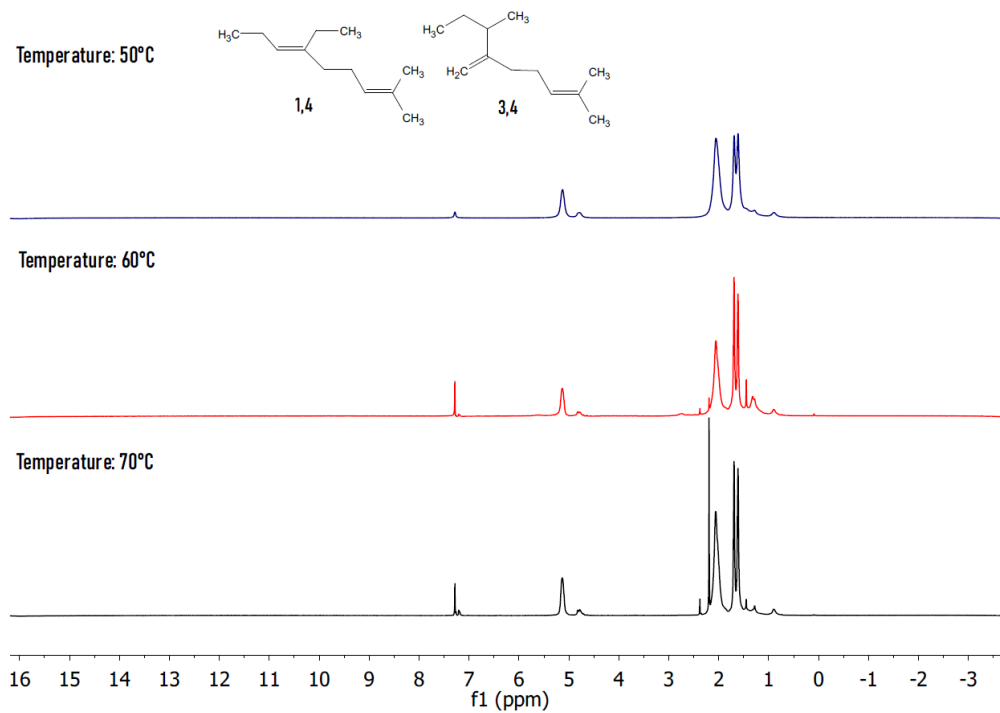


Figure S7. ^1H NMR at [Nd]:[Mg] ratio of 8 at different temperature 50°C, 60°C and 70°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 3.

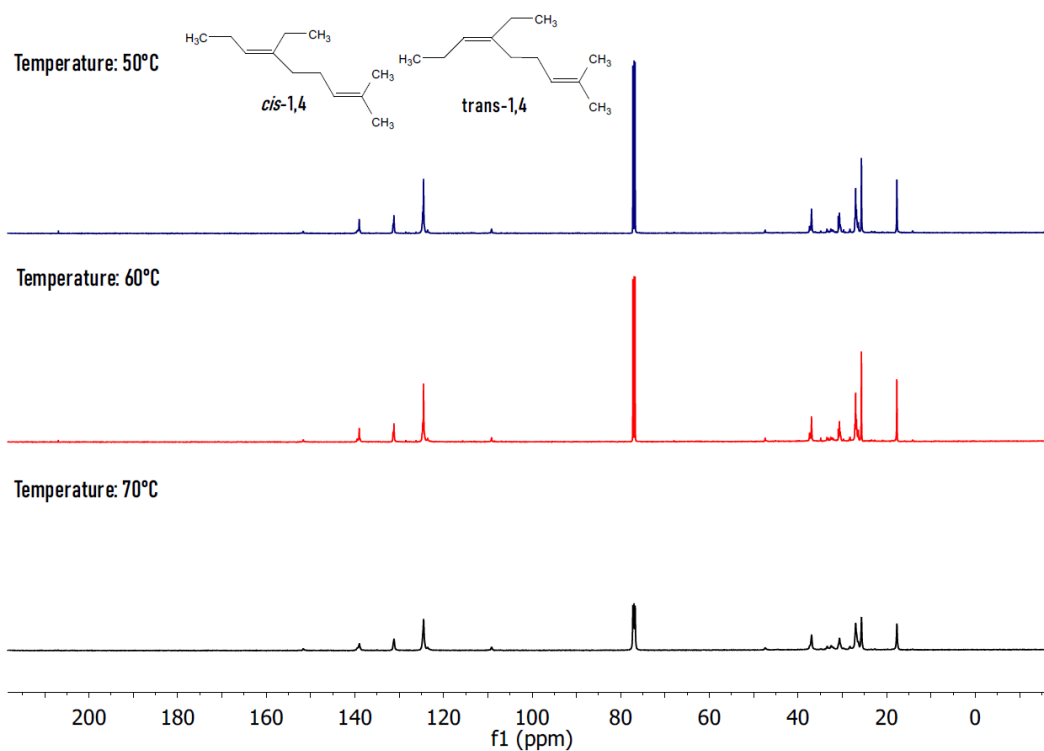


Figure S8. ^{13}C NMR at [Nd]:[Mg] ratio of 8 at different temperature 50°C, 60°C and 70°C with an [Mon]:[Nd] ratio of 250. Experimental details in Table 3.

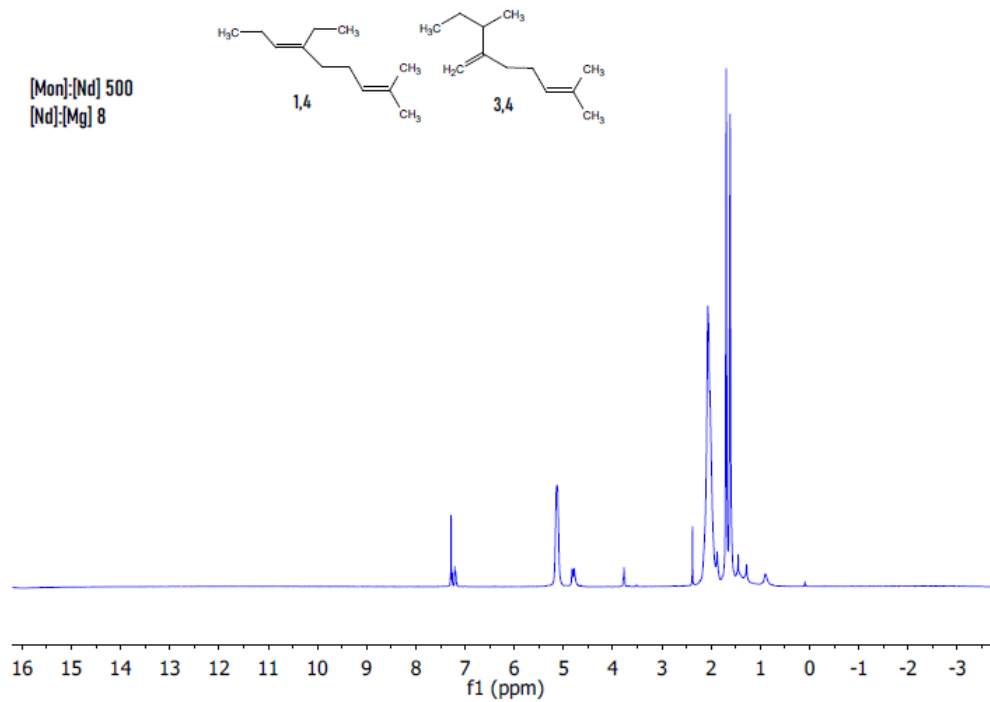


Figure S9. ^1H NMR at [Mon]:[Nd] ratio of 500 at 70°C. Experimental details in Table 3.

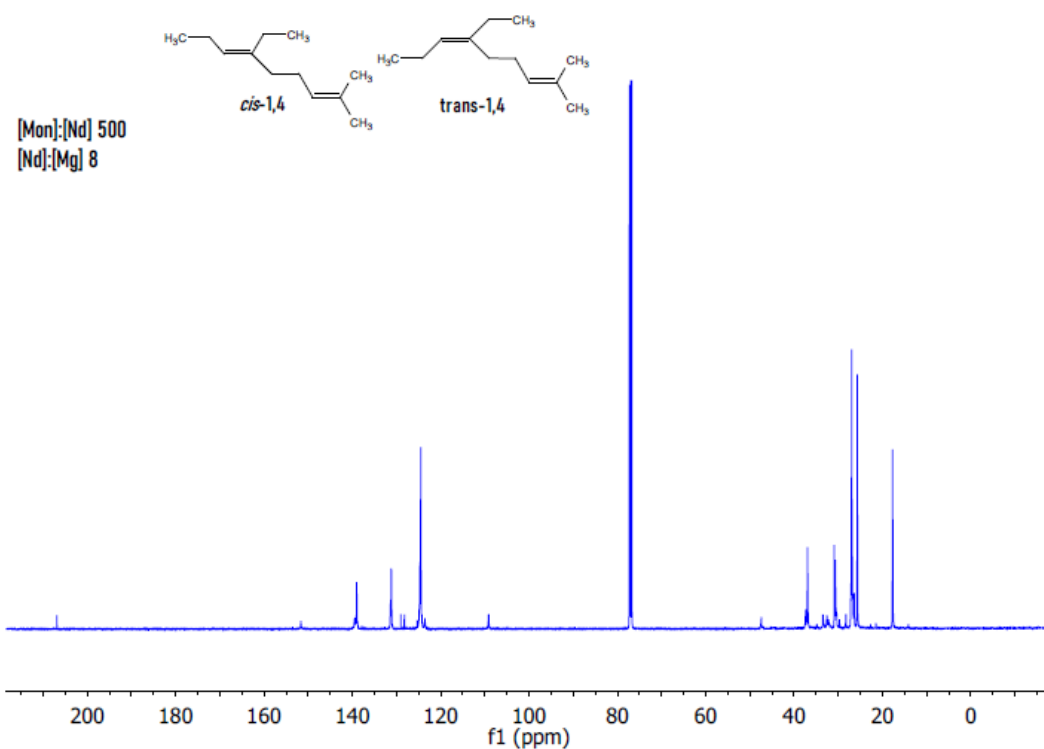


Figure S10. ^{13}C NMR at $[Mon]:[Nd]$ ratio of 500 at $70^{\circ}C$. Experimental details in Table 3.

SEC and NMR Analysis of Farnesene under Different Mg/Nd Ratios and Temperatures

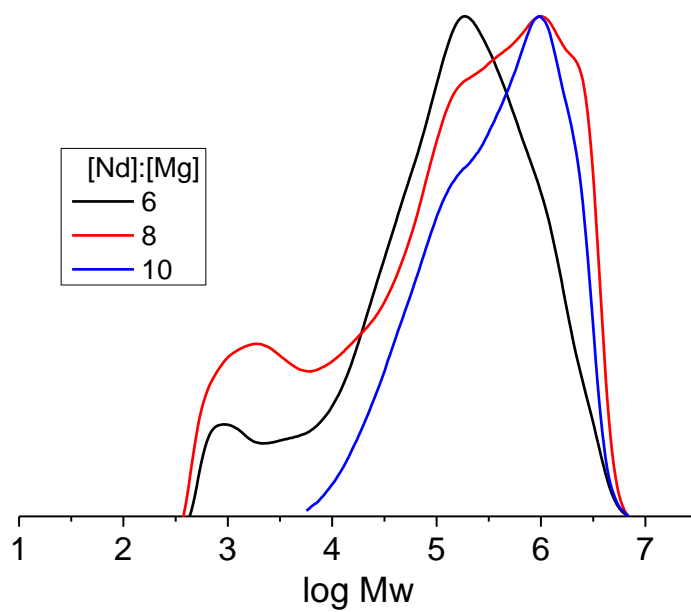


Figure S11. SEC curves at different $[Nd]:[Mg]$ ratios at $60^{\circ}C$ with an $[Mon]:[Nd]$ ratio of 150. Experimental details in Table 2.

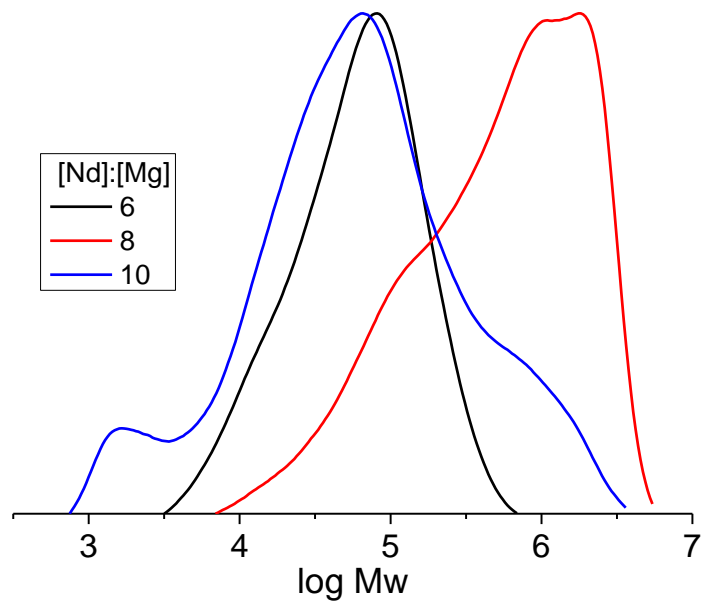


Figure S12. SEC curves at different [Nd]:[Mg] ratios at 70°C with an [Mon]:[Nd] ratio of 150. Experimental details in Table 2.

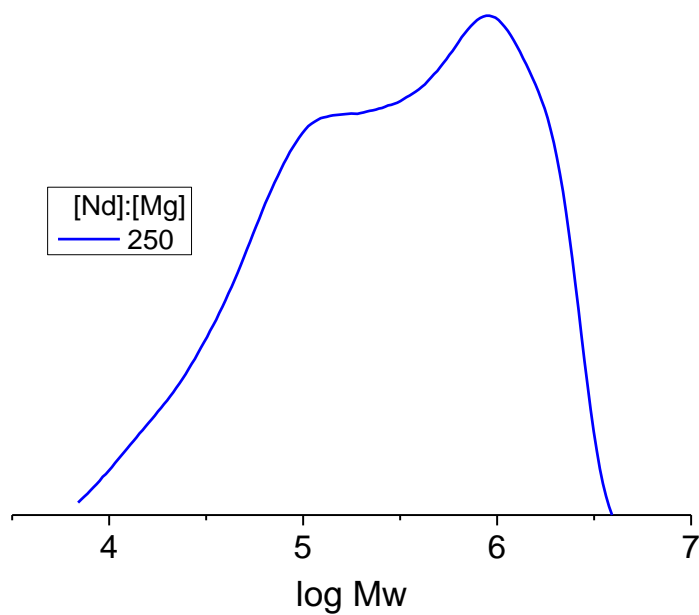


Figure S13. SEC curves at 70°C with an [Nd]:[Mg] ratio of 10. Experimental details in Table 2.

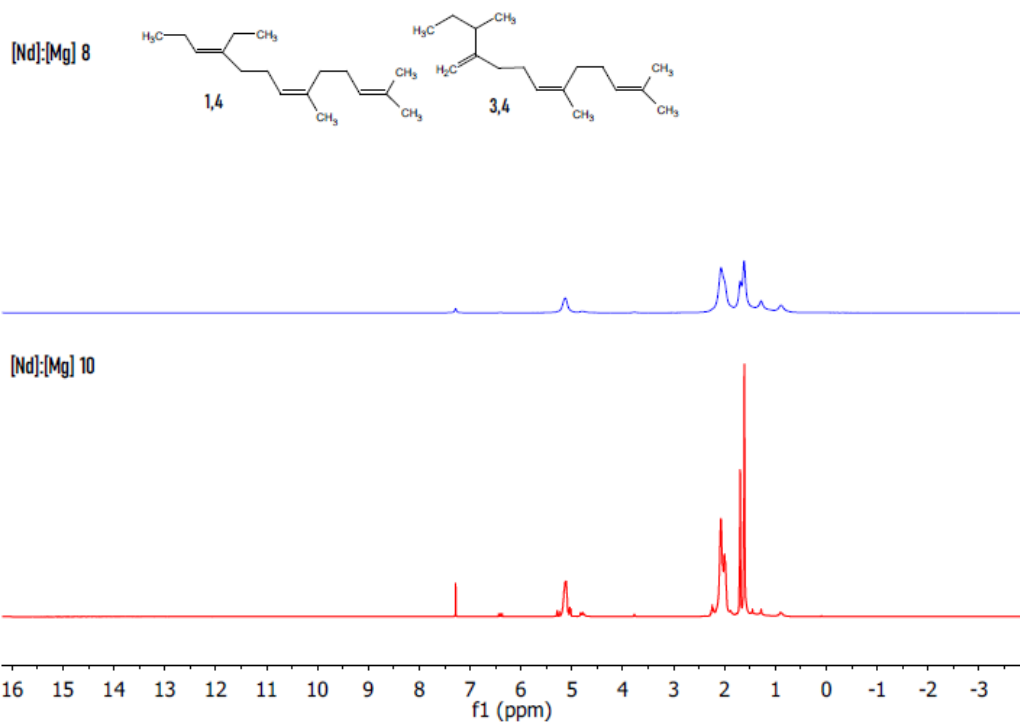


Figure S14. ^1H NMR at different $[\text{Nd}]:[\text{Mg}]$ ratios at 60°C with an $[\text{Mon}]:[\text{Nd}]$ ratio of 150. Experimental details in Table 3.

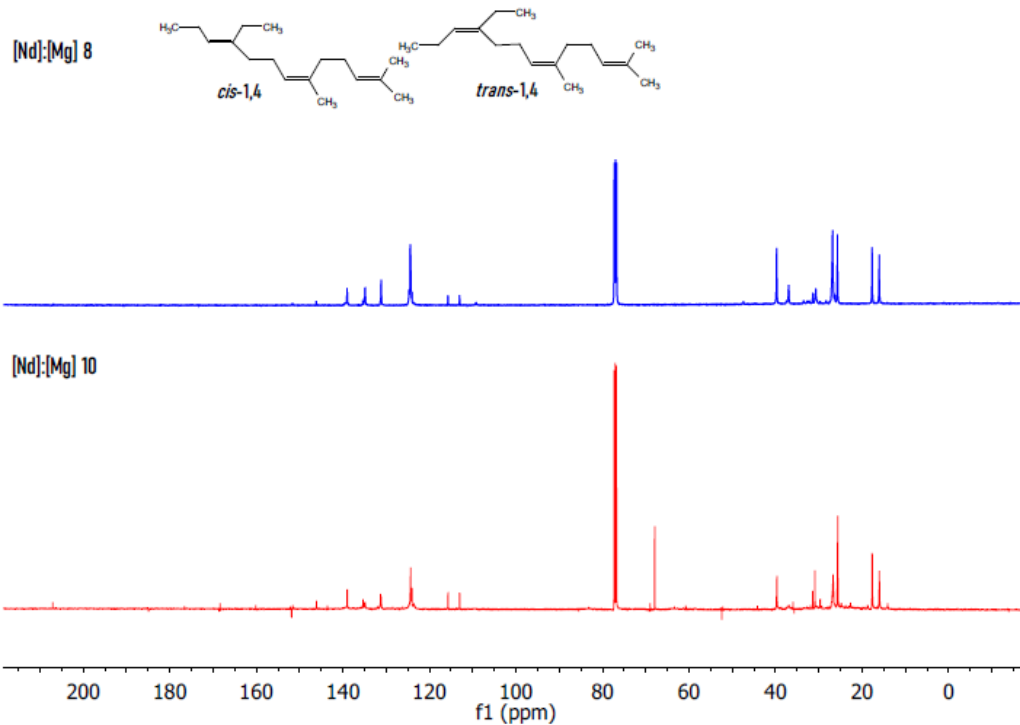


Figure S15. ^{13}C NMR at different $[\text{Nd}]:[\text{Mg}]$ ratios at 60°C with an $[\text{Mon}]:[\text{Nd}]$ ratio of 150. Experimental details in Table 3.

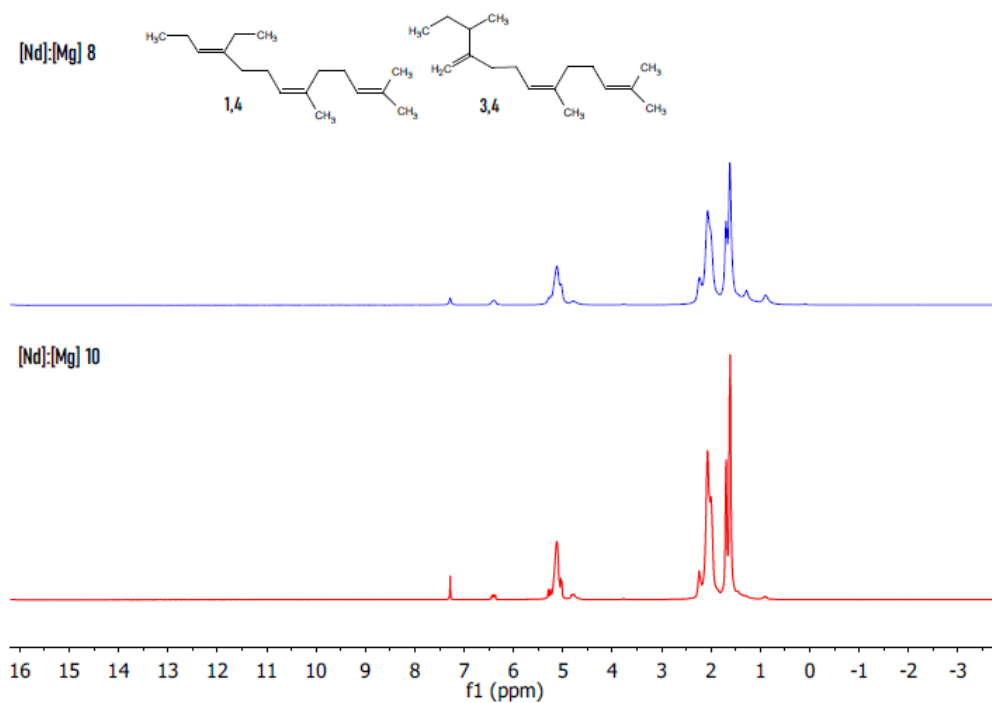


Figure S16. ^1H NMR at different $[\text{Nd}]:[\text{Mg}]$ ratios at 70°C with an $[\text{Mon}]:[\text{Nd}]$ ratio of 150. Experimental details in Table 3.

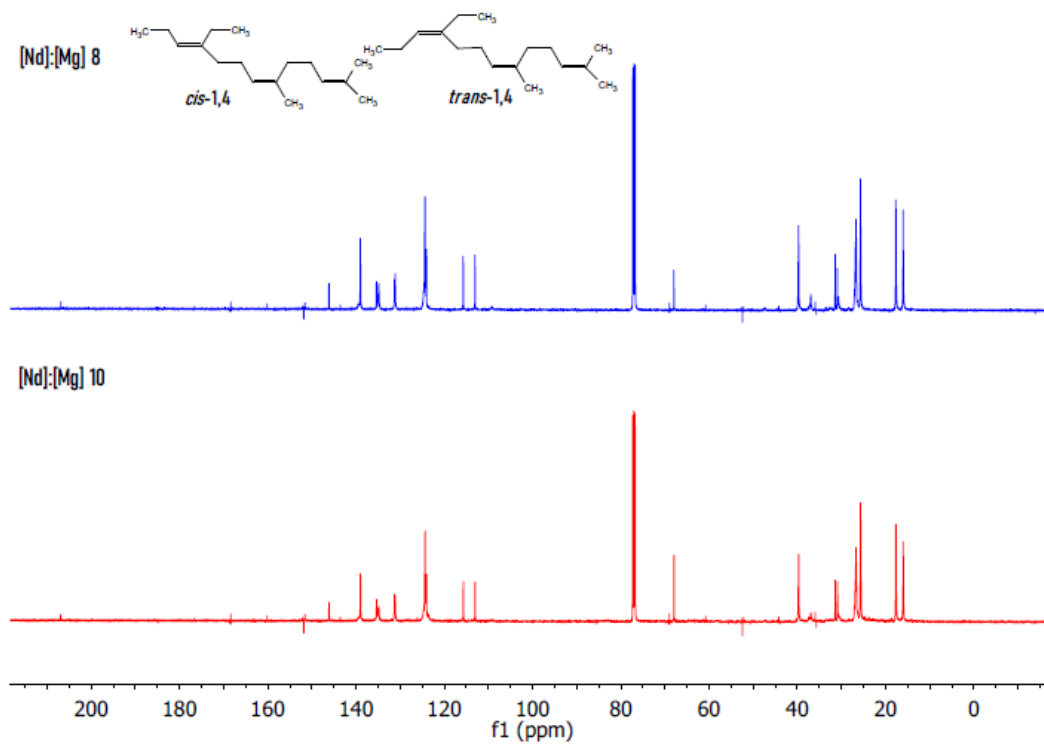


Figure S17. ^{13}C NMR at different $[\text{Nd}]:[\text{Mg}]$ ratios at 70°C with an $[\text{Mon}]:[\text{Nd}]$ ratio of 150. Experimental details in Table 3.