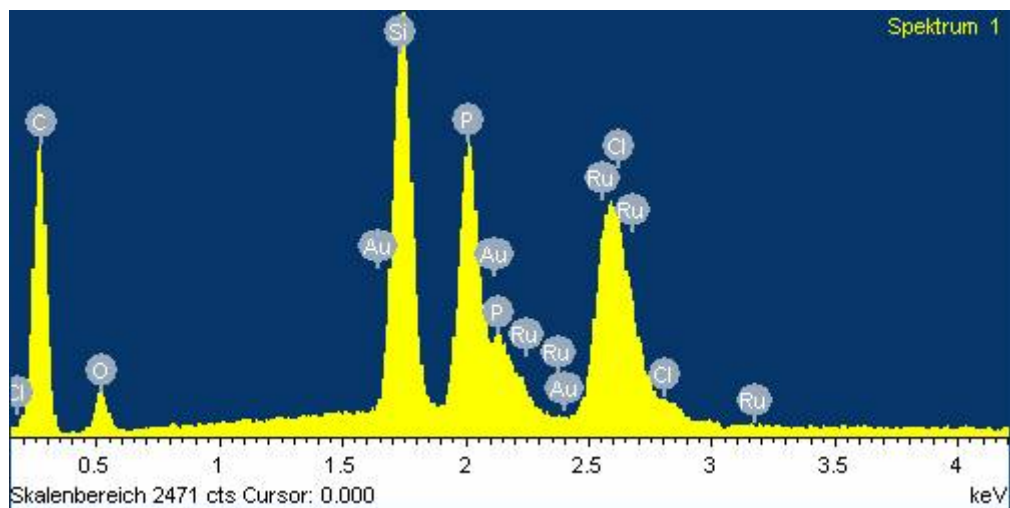


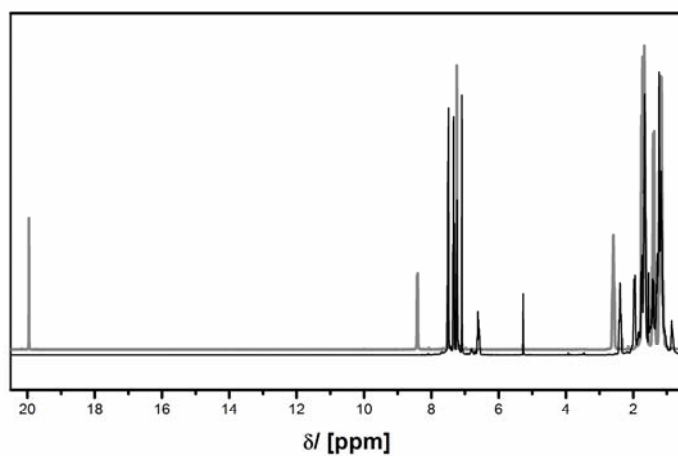
Supplementary Information

SI-1: Further analytical data for deactivation product 1, DP-1.

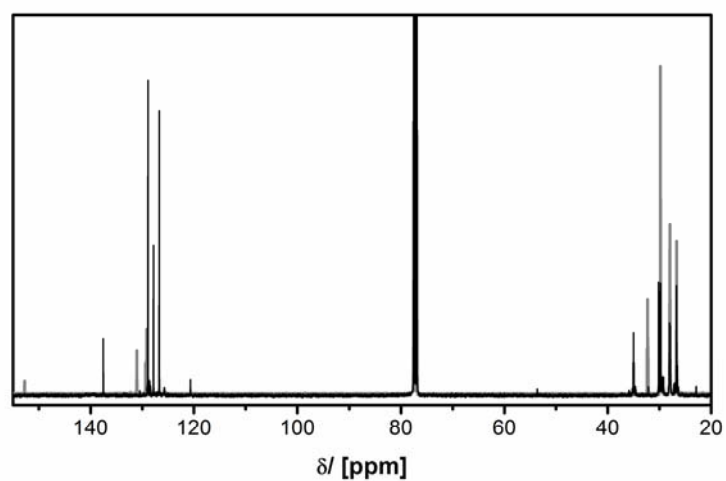
EDX:



$^1\text{H-NMR}$



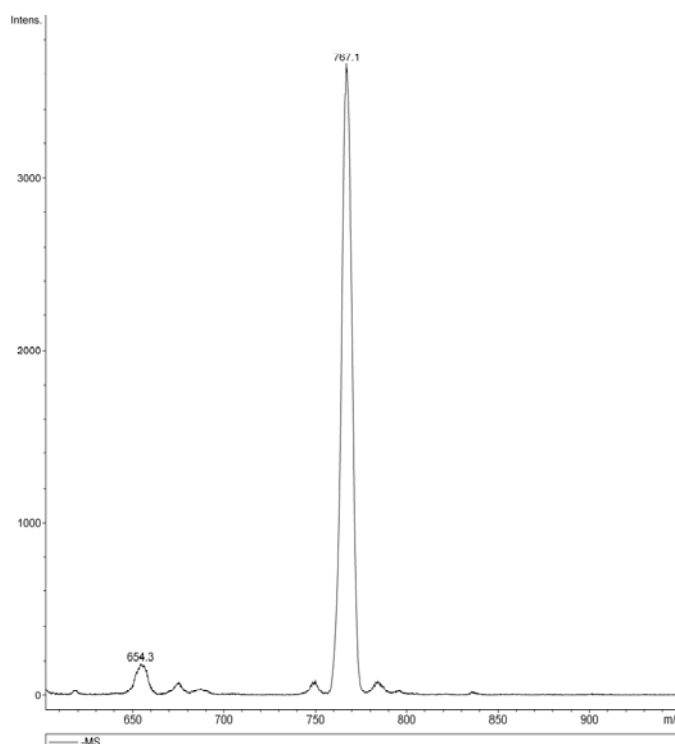
$^{13}\text{C-NMR}$



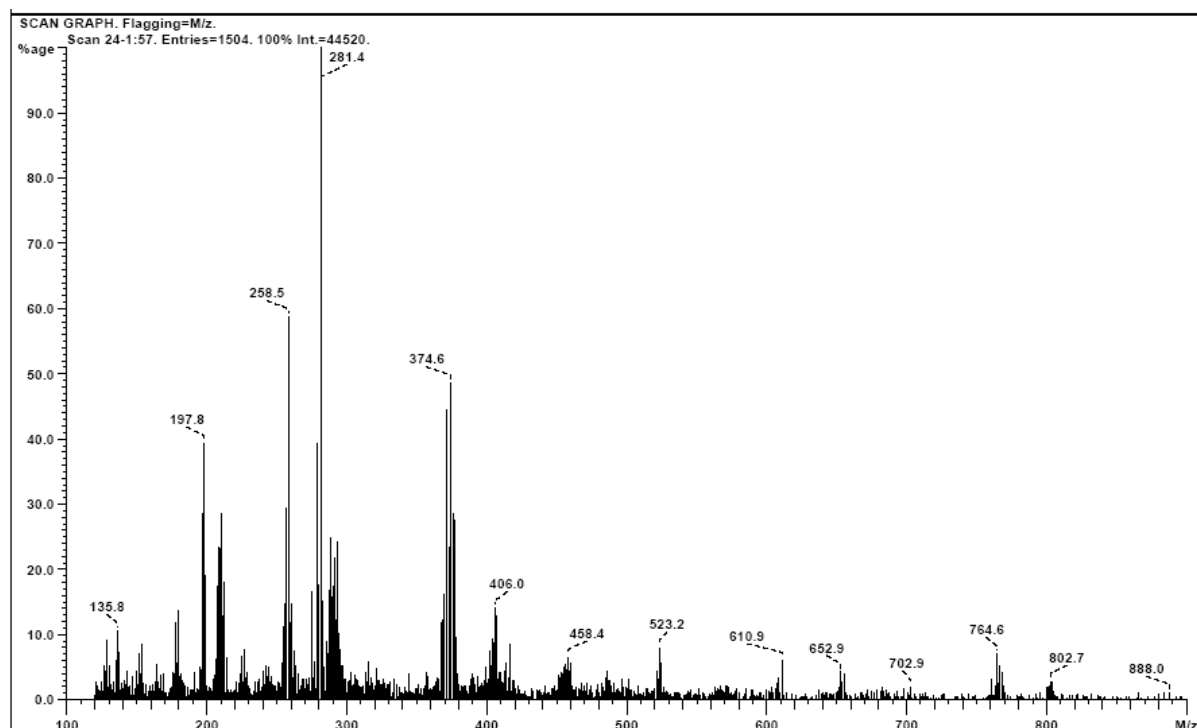
Grubbs catalyst as a reference: grey graph.

DP-1: black graph.

MALDI-TOF MS

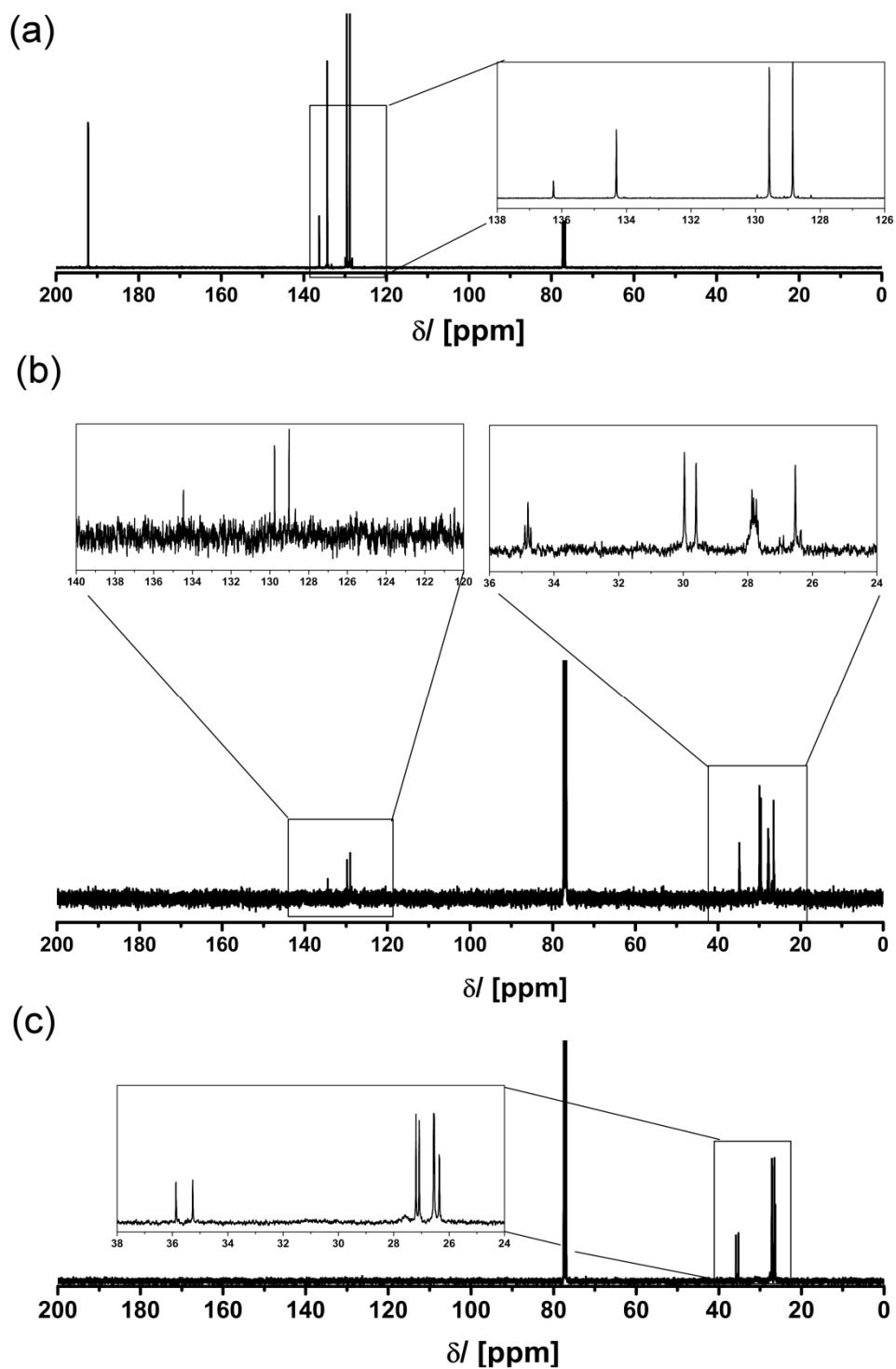


FAB-MS



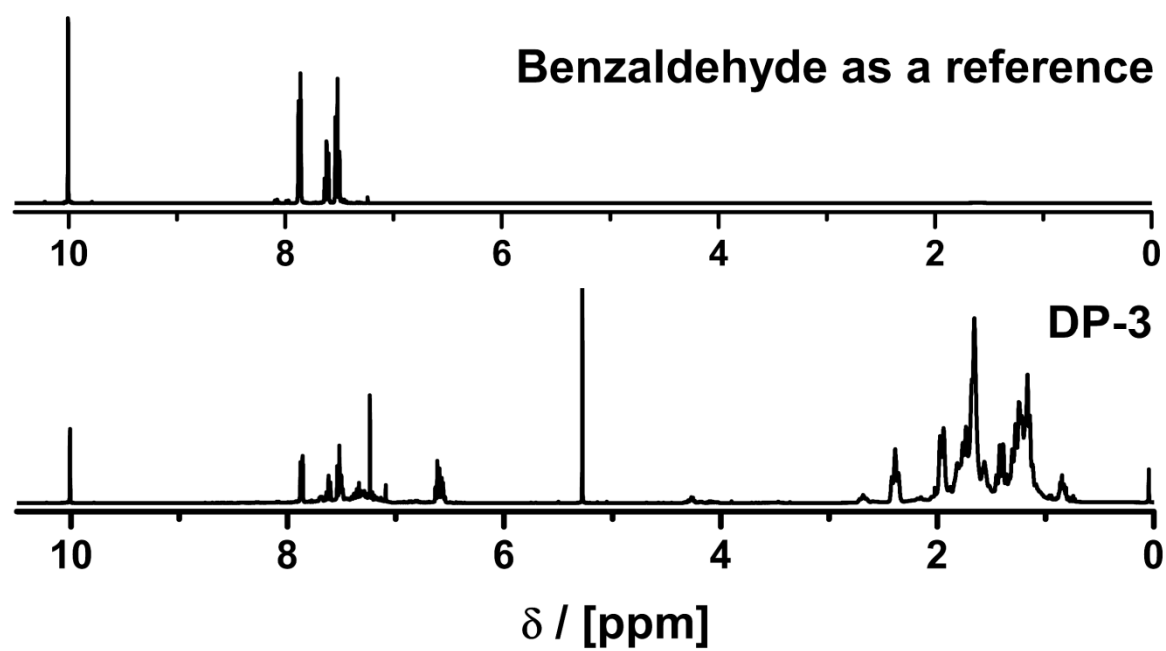
SI-2: Analytical data for decomposition product 2; DP-3.

^{13}C -NMR:

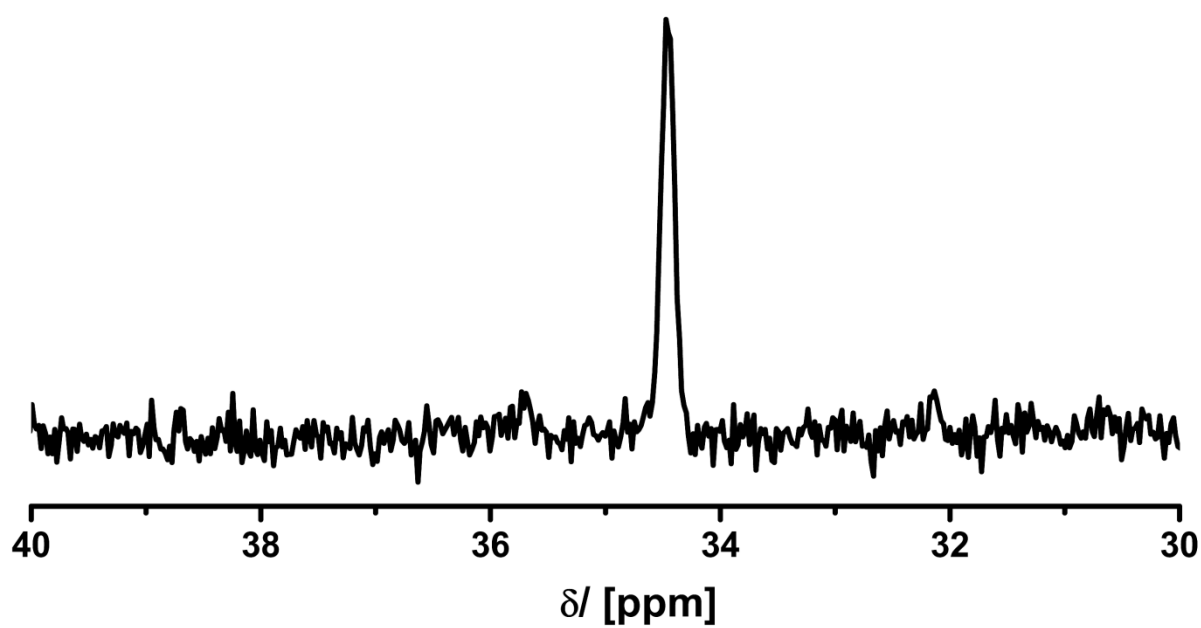


(a) benzaldehyde as a reference; (b) DP-3; (c) PCy_3 as a reference.

$^1\text{H-NMR}$:

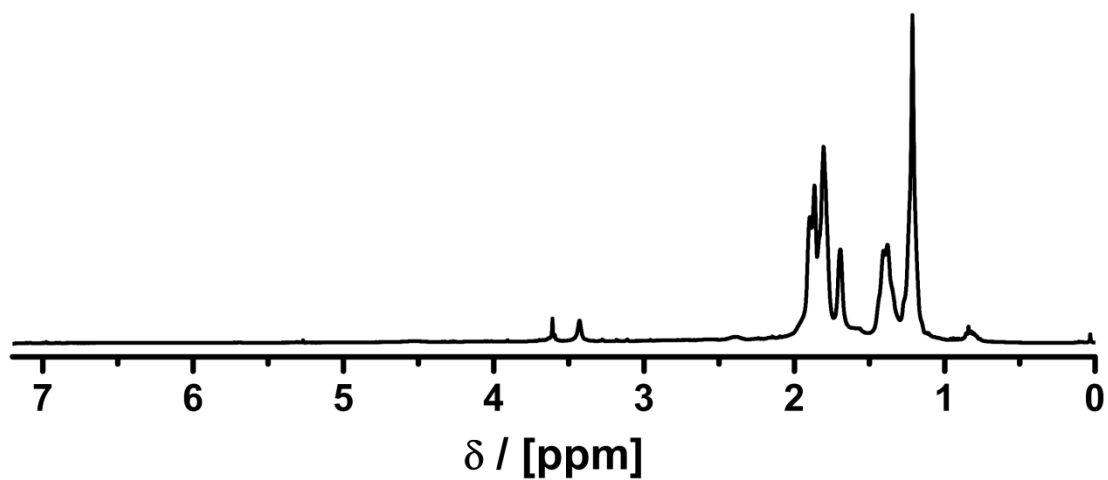


$^{31}\text{P-NMR}$:

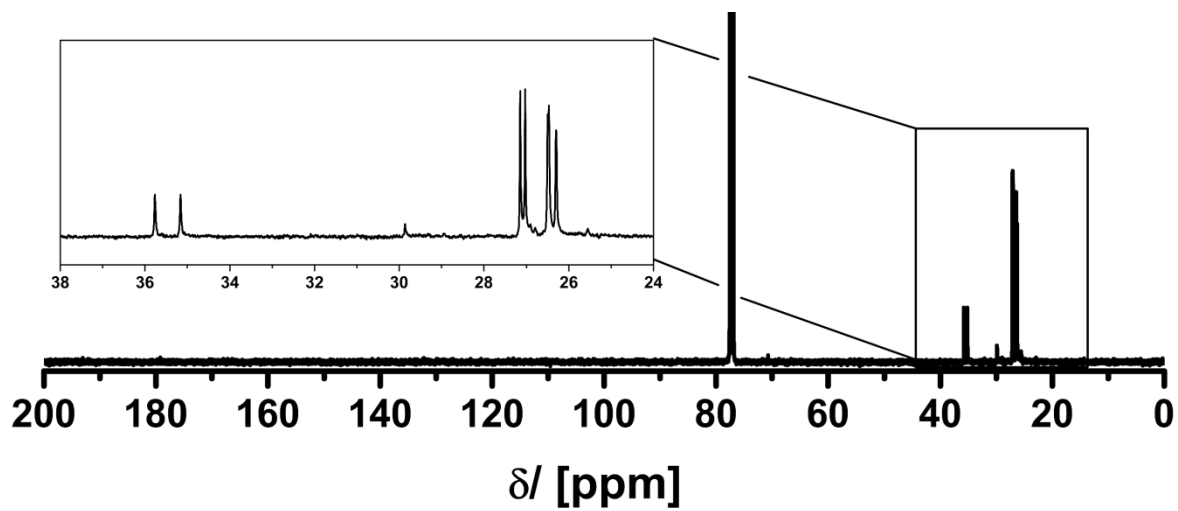


SI-3: Analytical data for decomposition product 4; DP-4.

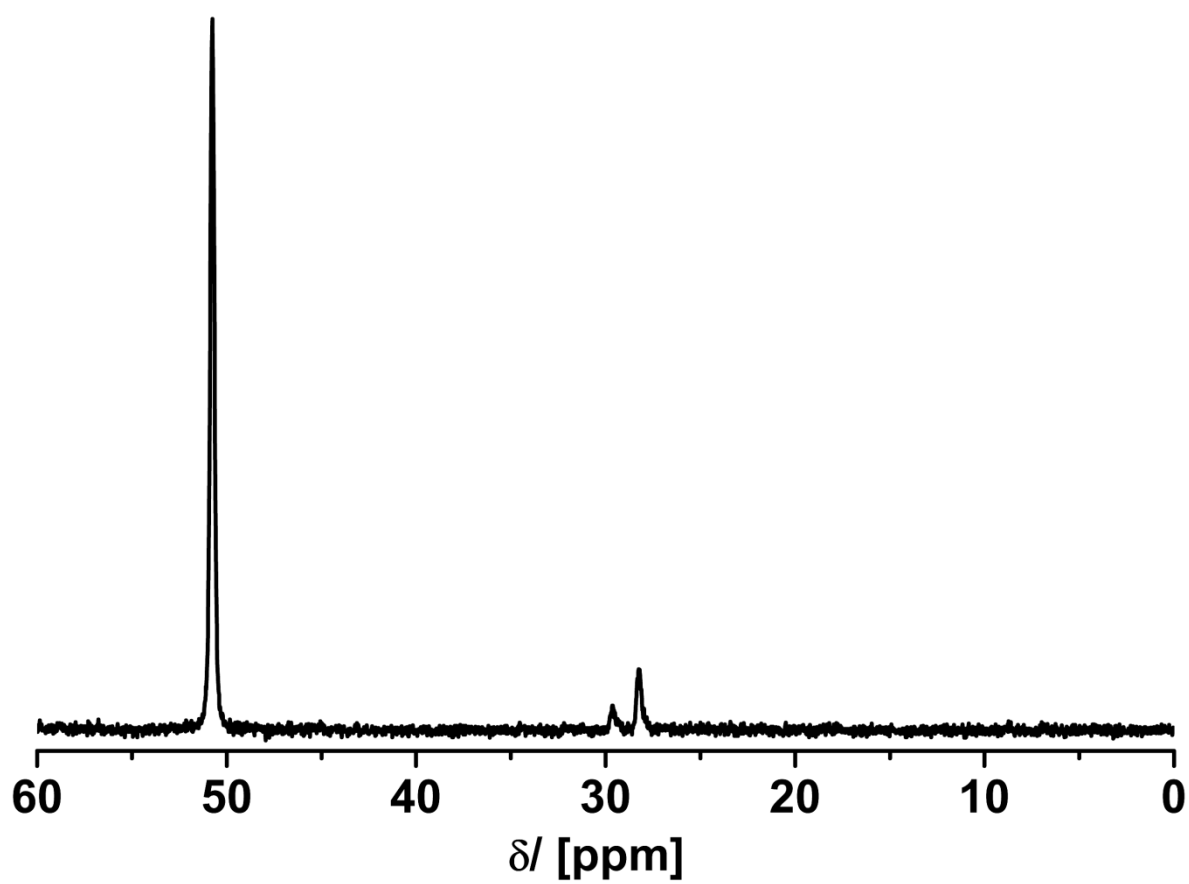
^1H -NMR



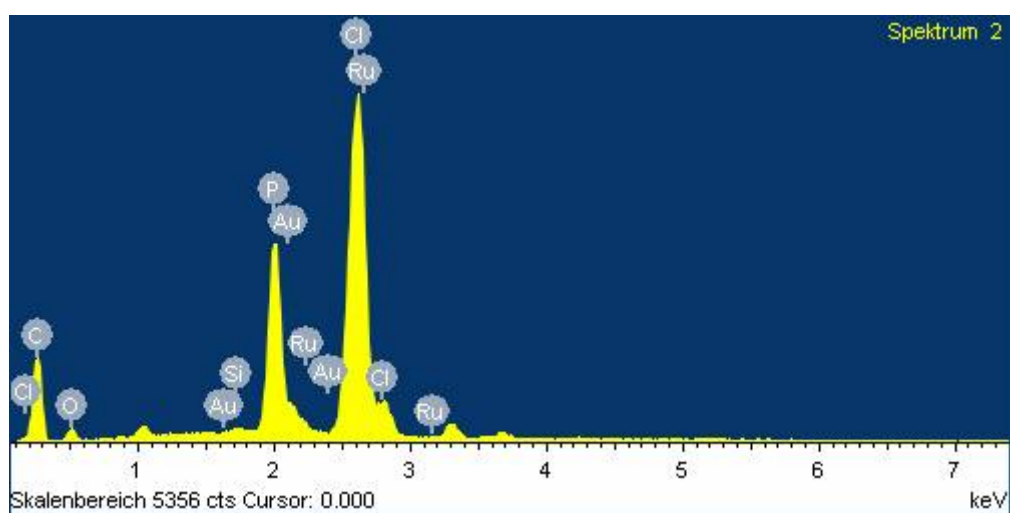
^{13}C -NMR:



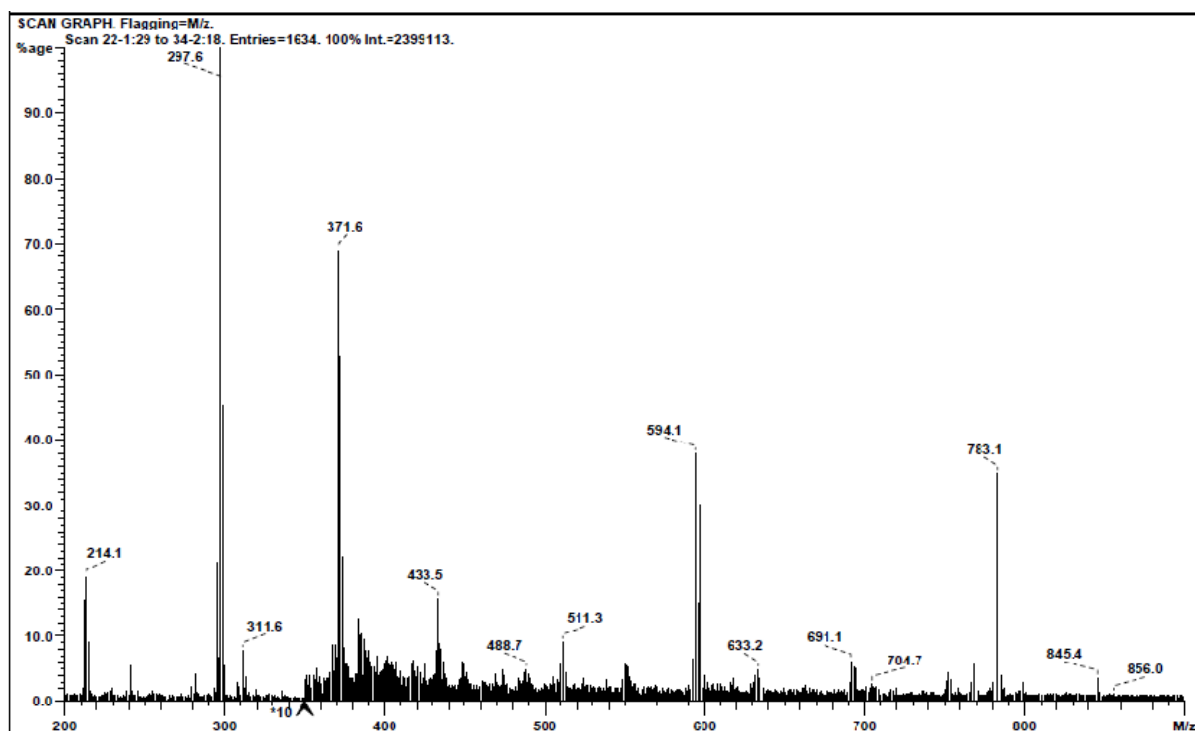
^{31}P -NMR:



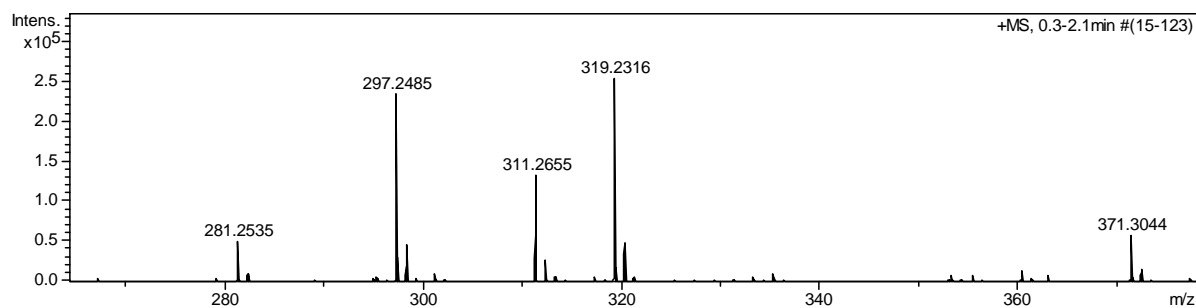
EDX-spectrum



FAB-MS:



ESI-MS:



SI-4: Stability of the Grubbs catalyst in silylated, mesoporous silica.

^{31}P -NMR:

