Supporting Information

A Lewis Acid-promoted Cyclization of Enyne Triesters and Diesters

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I. Figure 4S, 5S, 6S, 7S and 8S.

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II. ^1H and ^{13}C NMR spectra for compounds **5a-Br**, **5d-Cl**, **6E-Cl**, **6E-Br** and **7b-Br**.

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Figure 4S. B3LYP/6-31G* SCRF-optimized geometry of the linear conformer **M2I** of precursor **M2**. Energy in square brackets is relative to **M2**.

M5 [-12.6 kcal•mol⁻¹]

Figure 6S. B3LYP/6-31G* SCRF-optimized geometry of cyclized intermediate **M5**. Energy in square brackets is relative to **M2**.

Figure 7S. B3LYP/6-31G* SCRF-optimized geometries of precursor **M8**, cyclized intermediate **M9** and product with the C₉-Cl bond, **M10** in reference 16. Energies in square brackets are relative to **M8**.

M1(bent) [0 kcal•mol⁻¹]

M1(linear) [-7.0 kcal•mol⁻¹]

Figure 8S. B3LYP/6-31G* SCRF-optimized geometries of Lewis acid-free **M1** bent and linear conformers. Energies in square brackets are relative to **M1** (bent).

1400001

exp1 at41h

```

data   Mar 6 41 422q 399.816
solvent CDCl3 d1
File   exp d1p2 30
ACQUISITION
freq 399.937 dm
nu 31 dm
at 3.744 dm
up 44928 dm
ac 3999.2 dm
Ph 3080 hnm
ba 14
type 41 vtille
pw 5.3 p100
di 1.256 fm
tot 500.0 mth
at 16
ot 16 wacz
clock a wacz
gain not used vbe
FLAG
ll n
ln n
qy y
ba n
display
sp -80.0
wp 4376.2
va 314
ac 0
wc 300
bwm 18.74
ls 1043.43
rl 342.7
rfy 0
th 2
lss 307.600
nm 440 ph
  
```

SECRET

6E-Cl

^{13}C NMR (CDCl_3 , 100.6 MHz)

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7b-Br
¹H NMR (CDCl₃, 400 MHz)

13C NMR

NAME 414133

data Apr 17 41 dfrq 300.206
 solvent CDCl3 d2 42
 file 414133
 ACQUISITION
 dfrq 150.574 dm 377
 tm 1.139 dm 27054
 up 54968 dm 27054
 pf 21000.2 dfrq 1.2
 fs 14022 hnm
 bs 16
 acq 51 1b 1.03
 pr 3.7 wfile
 dl 0.481 proc ft
 tot 1000.8 fm not used
 ac 10000 math f
 ct 10000
 alcox a wct
 gain not used wad
 phase 160
 li a val
 ls a
 op y
 bs m
 21000.2
 ap -1559.7
 up 25000.8
 vs 214
 ac 8
 ac 386
 bnm 1.88
 ls 500.88
 zc 9730.7
 zc 11794.0
 ls 21
 ls 500.880
 os no ph