New highly active chromium procatalysts based on triazacyclohexane and donor-substituted
cyclopentadienyl ligands were identified. Their catalytic behavior can be controlled upon
changing the substitution pattern of the corresponding ligands, to give a broad range of
products from liq. olefins to ultra high-mol.-wt. polyethylene. Complex synthesis, mechanistic
aspects and polymn. results of these catalytic systems will be presented.