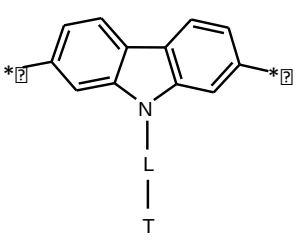
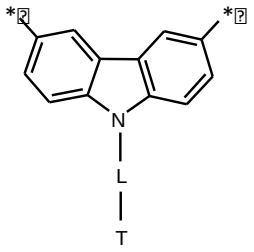
Claims

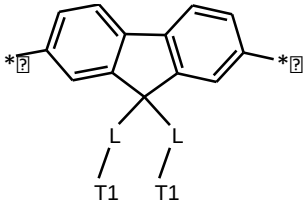
1. Conjugated polymer comprising monomer units A chosen from the monomer units of formulas A3a, A3b, A1a' or A1a":



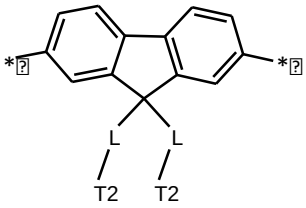
A3a



A3b

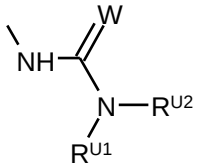


A1a'



A1a''

where L denotes a divalent group, T comprises at least one oxime function, T2 includes an iminodiacetic acid group or one of the salts thereof connected via the nitrogen atom thereof, and T1 is a group of formula:

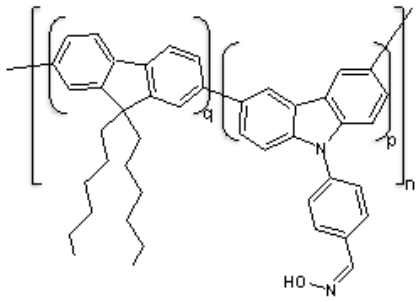


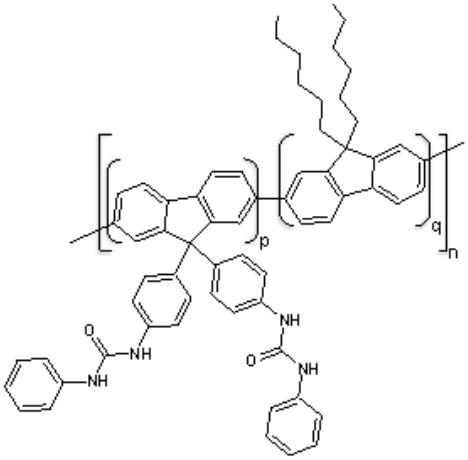
T1

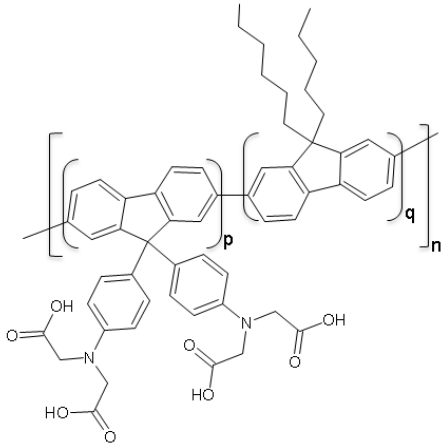
where W denotes a sulphur or oxygen atom, R^{U1} and R^{U2} denote independently a hydrogen atom, an optionally substituted alkyl group or an aryl group,

—— * denotes the attachment point of the monomer unit to the polymer chain, the carbon atoms of the monomer units A being optionally substituted.

2. Conjugated polymer, characterised in that it complies with one of the following formulas:

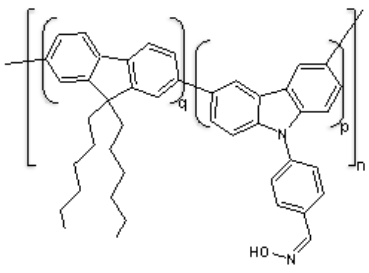


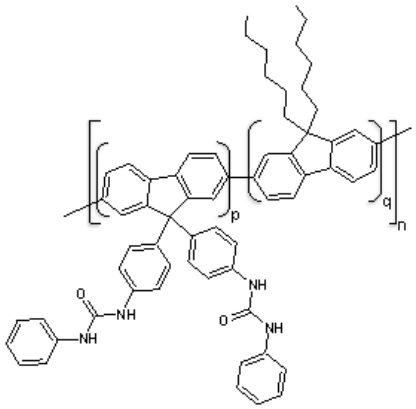


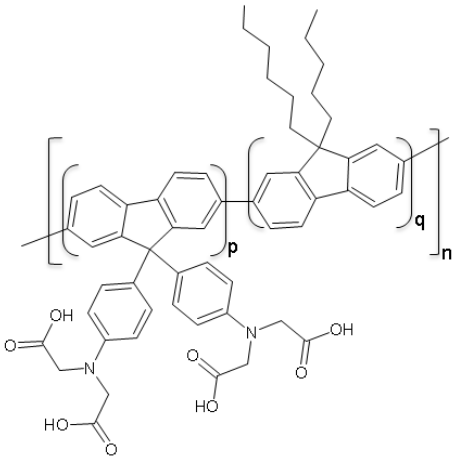


wherein p and q are identical or different integers ranging from 1 to 5 for p and from 0 to 20 for q and n denotes the degree of polymerisation.

3. Carbon nanotubes functionalised by at least one conjugated polymer, characterised in that the conjugated polymer complies with one of the following formulas, the functionalisation being preferably of non-covalent nature:






p
q
n
OH
O
N
HO
O
N
OH
O
O
HO