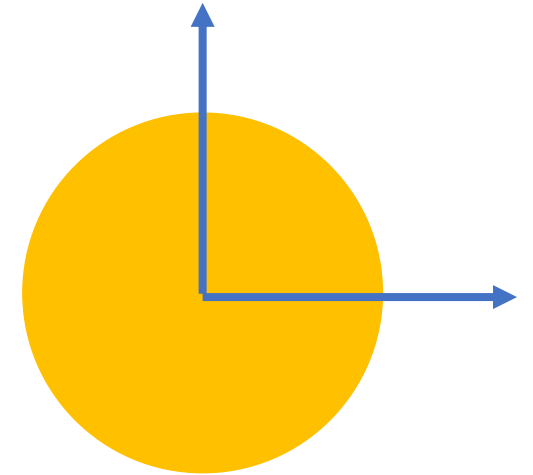
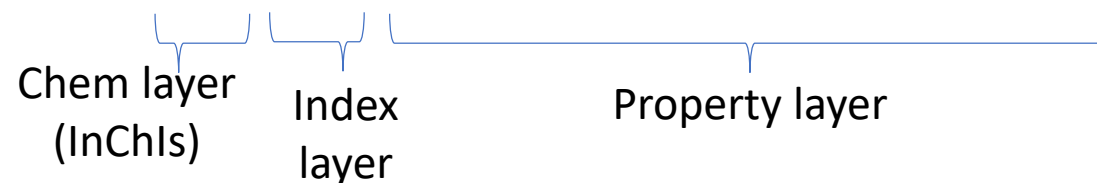


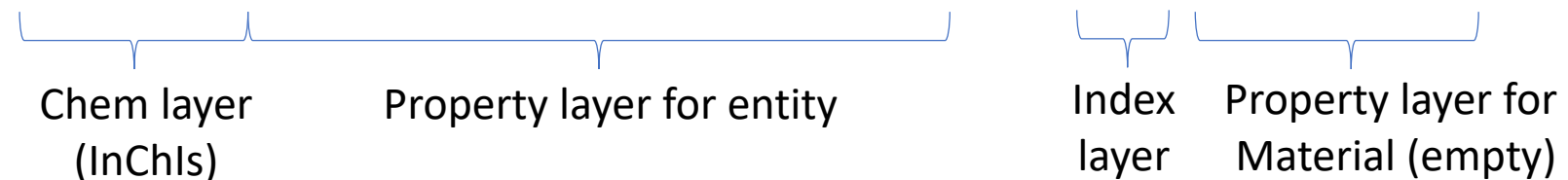
30nm gold nanoparticles (with citric acid stabilisation from synthesis)

NInChI=0.00.1A/Au/Nmsp/Ns0:15rxyz-9/Nk225/Ny1

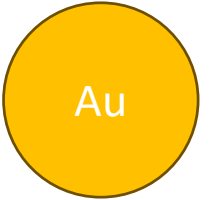
NInChI=0.00.2A/Au/**Nn1**/Nmsp/Ns0:15rxyz-9/Nk225



NInChI=0.00.3A/**InChI=1S**/Au/Nmsp/Ns0:15rxyz-9/Nk225/**Nn1**



30nm gold nanoparticles (with citric acid stabilisation from synthesis)



NInChI=0.00.1A/Au/Nmsp/Ns0:15rxyz-9/Nk225!

C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)
/Nmmol/No100
/Ny1>2

NInChI=0.00.2A/Au&

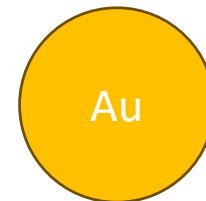
C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)
/Nn1>2/Nmsp&mol/Ns0:15rxyz-9& /Nk225& /No &100

NInChI=0.00.3A/InChI=1S/Au/Nmsp/Ns0:15rxyz-9/Nk225&

InChI=1S/C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)
/Nmmol
/Ny1>2/No &100

Morphology, size and crystallinity are properties of an entity (e.g. core)
Occupation is properties of multiple entities (e.g. ligands on surface of core)

30nm gold nanoparticles with citric acid and glycine stabilisation



NInChI=0.00.1A/Au/Nmsp/Ns0:15rxyz-9/Nk225!

C2H5NO2/c3-1-2(4)5/h1,3H2,(H,4,5)/Nmmol/No50!

C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)
/Nmmol/No50

/Ny1>{2&3}

NInChI=0.00.2A/Au&

C2H5NO2/c3-1-2(4)5/h1,3H2,(H,4,5)&

C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)
/Nn1>{2&3}/Nmsp&mol&mol/Ns0:15rxyz-9& &

/Nk225& & /No &50&50

NInChI=0.00.3A/InChI=1S/Au/Nmsp/Ns0:15rxyz-9/Nk225&

InChI=1S/C2H5NO2/c3-1-2(4)5/h1,3H2,(H,4,5)/Nmmol&

InChI=1S/C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)
/Nmmol

/Ny1>{2&3}/No &50&50

30nm gold nanoparticles with citric acid and glycine stabilisation



Or even as Mixture InChI in a NInChI:

NInChI=0.00.3A/

InChI=1S/Au/Nmsp/Ns0:15rxyz-9/Nk225&

MInChI=0.00.*S/

InChI=1S/C2H5NO2/c3-1-2(4)5/h1,3H2,(H,4,5)/Nmmol&

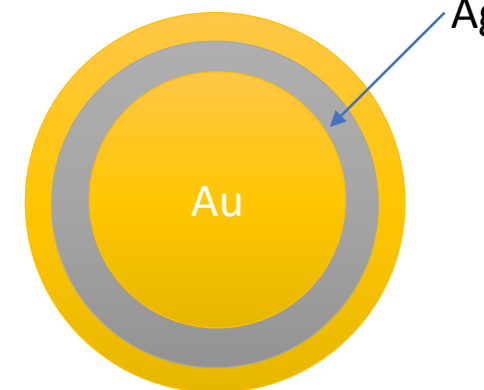
InChI=1S/C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)/Nmmol

/Mn1&2/Mg50pp0&

/Nn1>2/No &100

This is not nice since we have NInChI layers in an entity, which can exist outside of a nanomaterial. But since we have the prefix InChI now, we could just remove it, since InChIs are only for molecular entities anyway. For the previous versions, this would mean that *Mm* is empty for entity 2 and 3.

Gold / silver core shell



NInChI=0.00.1A/Ag/Nm{sp}/Ns{15:20rxyz-9}/No{100}/Nk{225}!

Au/Nm{sp}/Ns{0:15rxyz-9}/Nk{225}!

Au/Nm{sp}/Ns{20:25rxyz-9}/No{100}/Nk{225}!

C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)/Nm{mol}/No{100}
/Ny{{2>>1}>>3}>4

NInChI=0.00.2A/Ag&

Au&

C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)

/Nn{{2>>1}>>2}>3

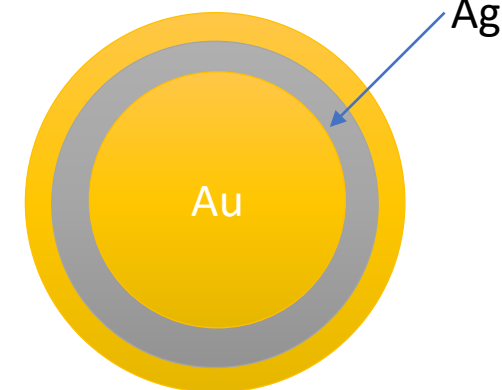
/Nm_{sp&sp&mol}

/Ns0:15rxyz-9&15:20rxyz-9&20:25rxyz-9&

/No &100&100&100

/Nk225&225&225&

Gold / silver core shell



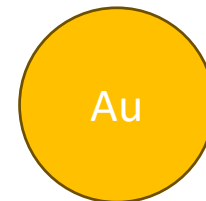
`NInChI=0.00.3A/InChI=1S/Ag/Nmsp/Ns15:20rxyz-9/Nk225&`

`InChI=1S/Au/Nmsp/Ns0:15rxyz-9/Nk225&`

`InChI=1S/Au/Nmsp/Ns20:25rxyz-9/Nk225&`

`InChI=1S/C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-2H2,(H,7,8)(H,9,10)(H,11,12)/Nmmol
/Ny{{2>>1}>>3}>4/No &100&100&100`

Gold nanoparticle in dispersion (NInChI in a MInChI)



MInChI=0.00.*S/

InChI=1S/H2O/h1H2

NInChI=0.00.3A/

InChI=1S/Au/Nmsp/Ns0:15xyz-9/Nk225&

InChI=1S/C6H8O7/c7-3(8)1-6(13,5(11)12)2-4(9)10/h13H,1-
2H2,(H,7,8)(H,9,10)(H,11,12)

/Nmmol

/Ny1>2/No &100

/Mn1&2/Mg &1mr0