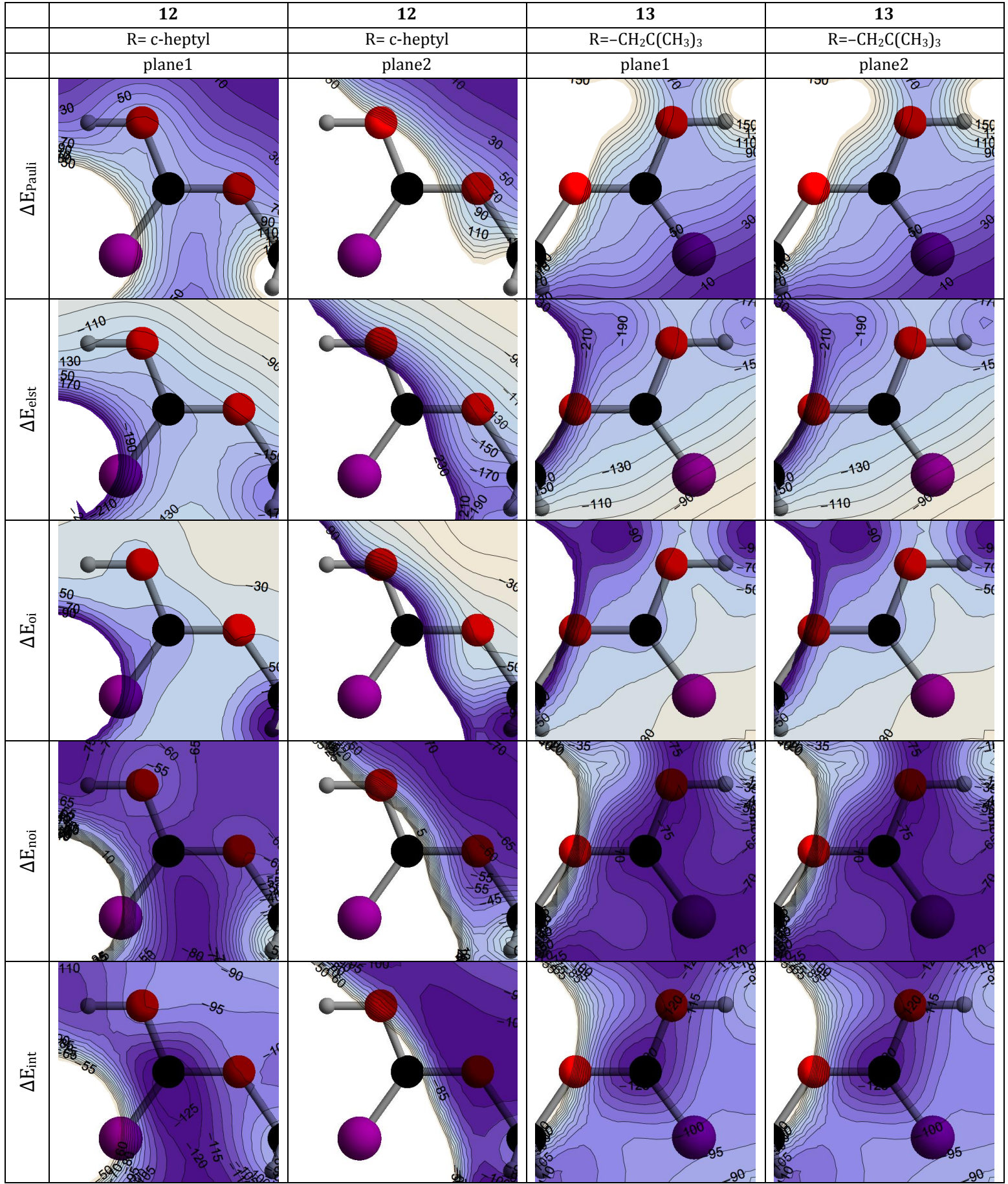
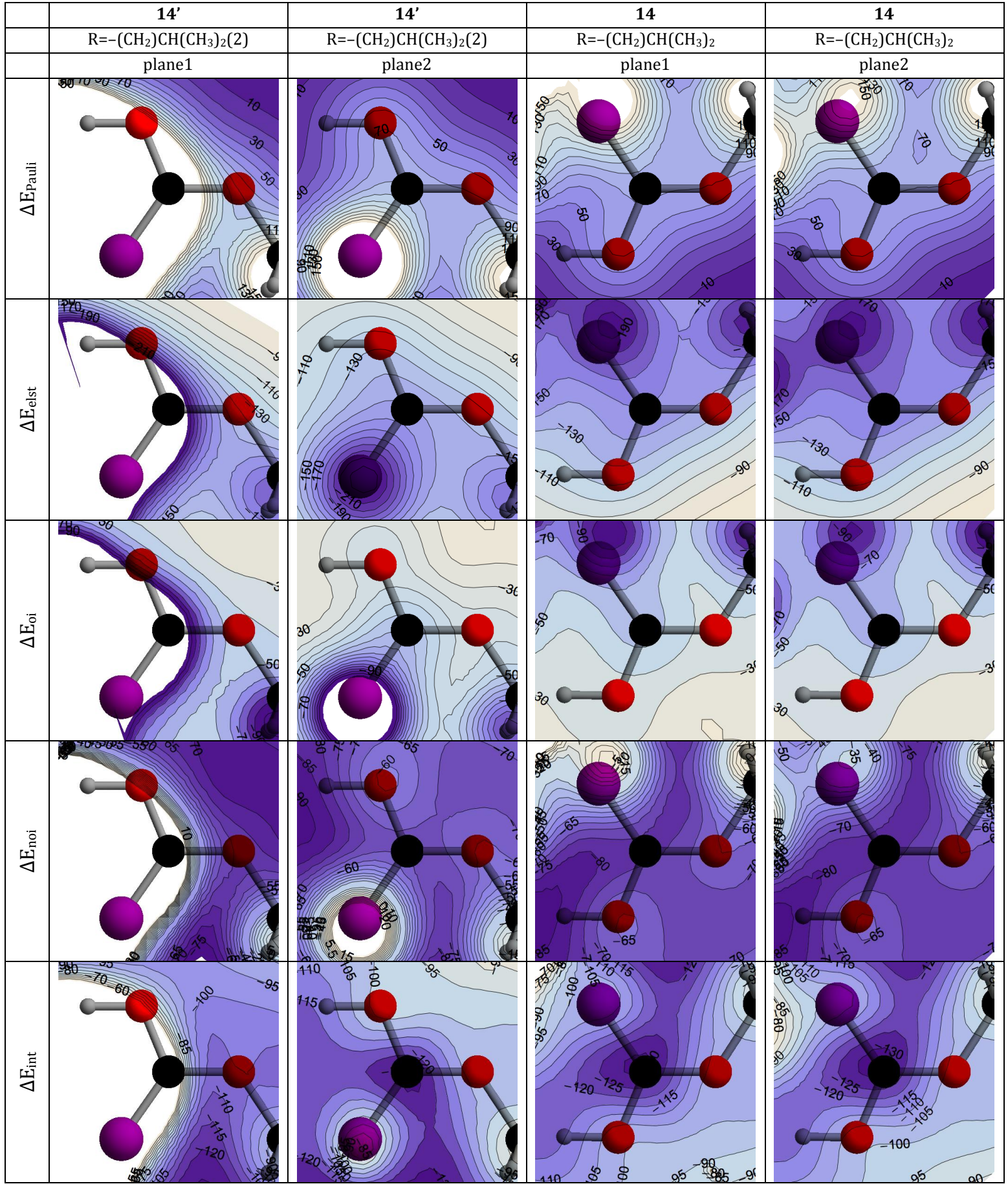
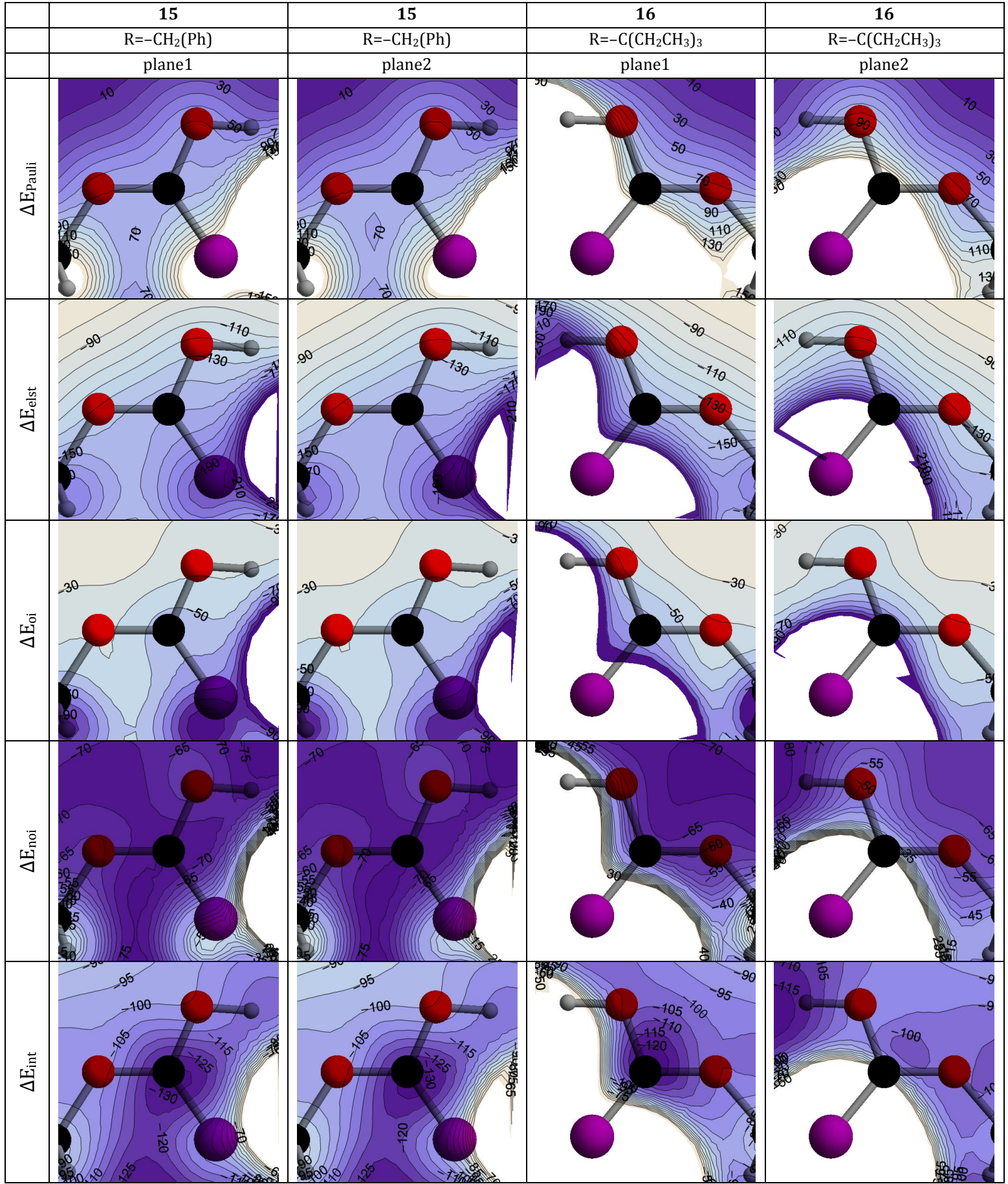
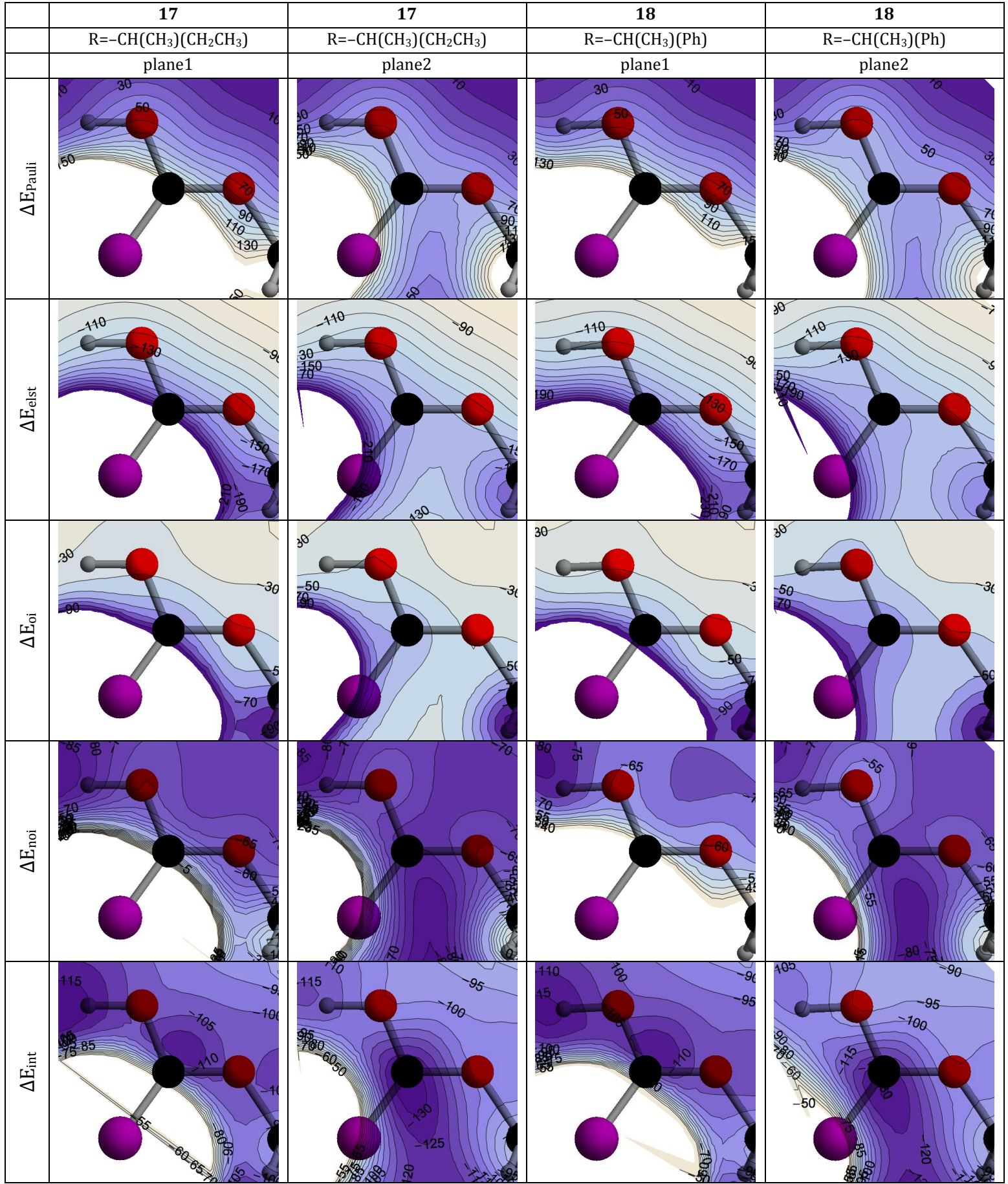
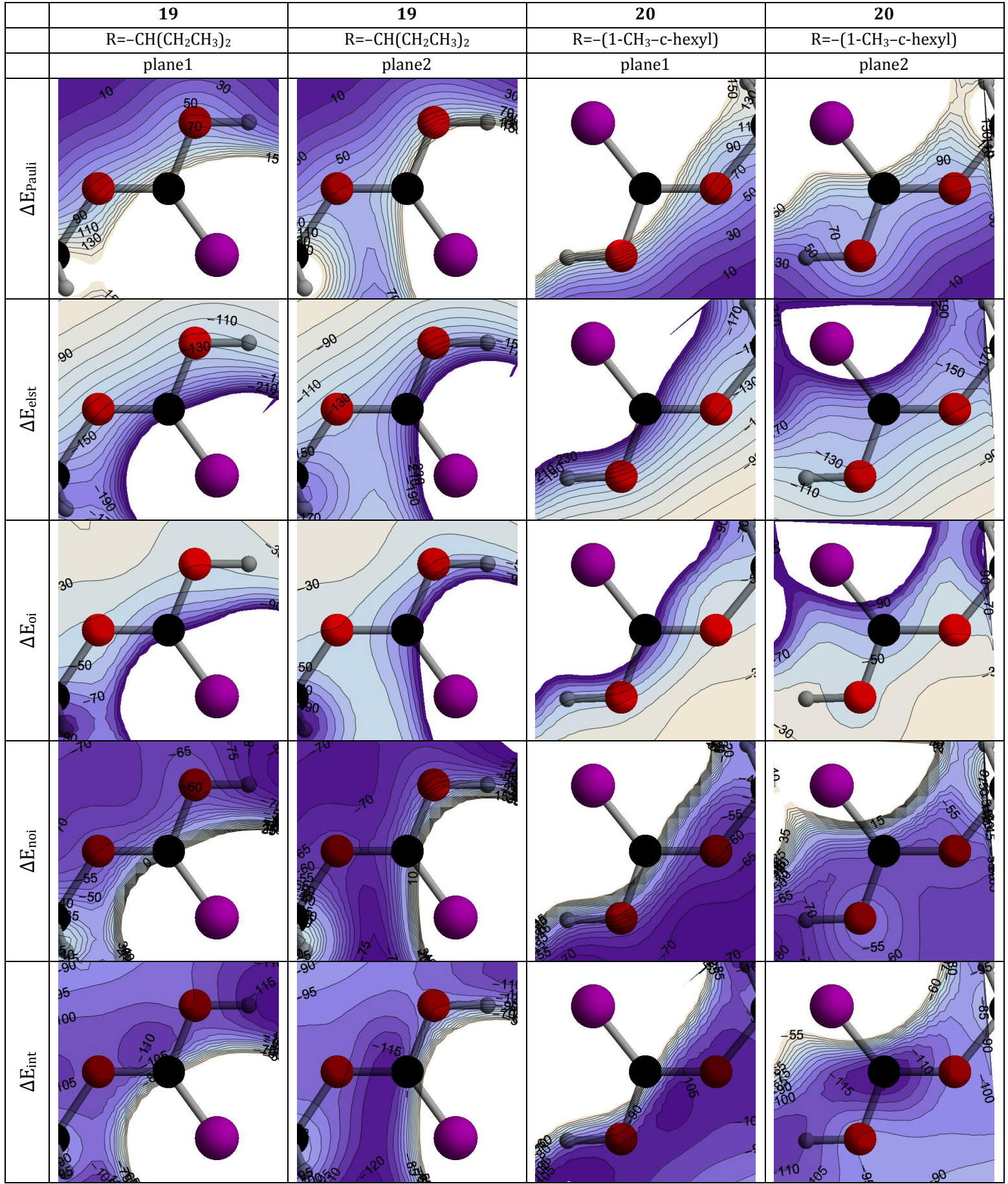


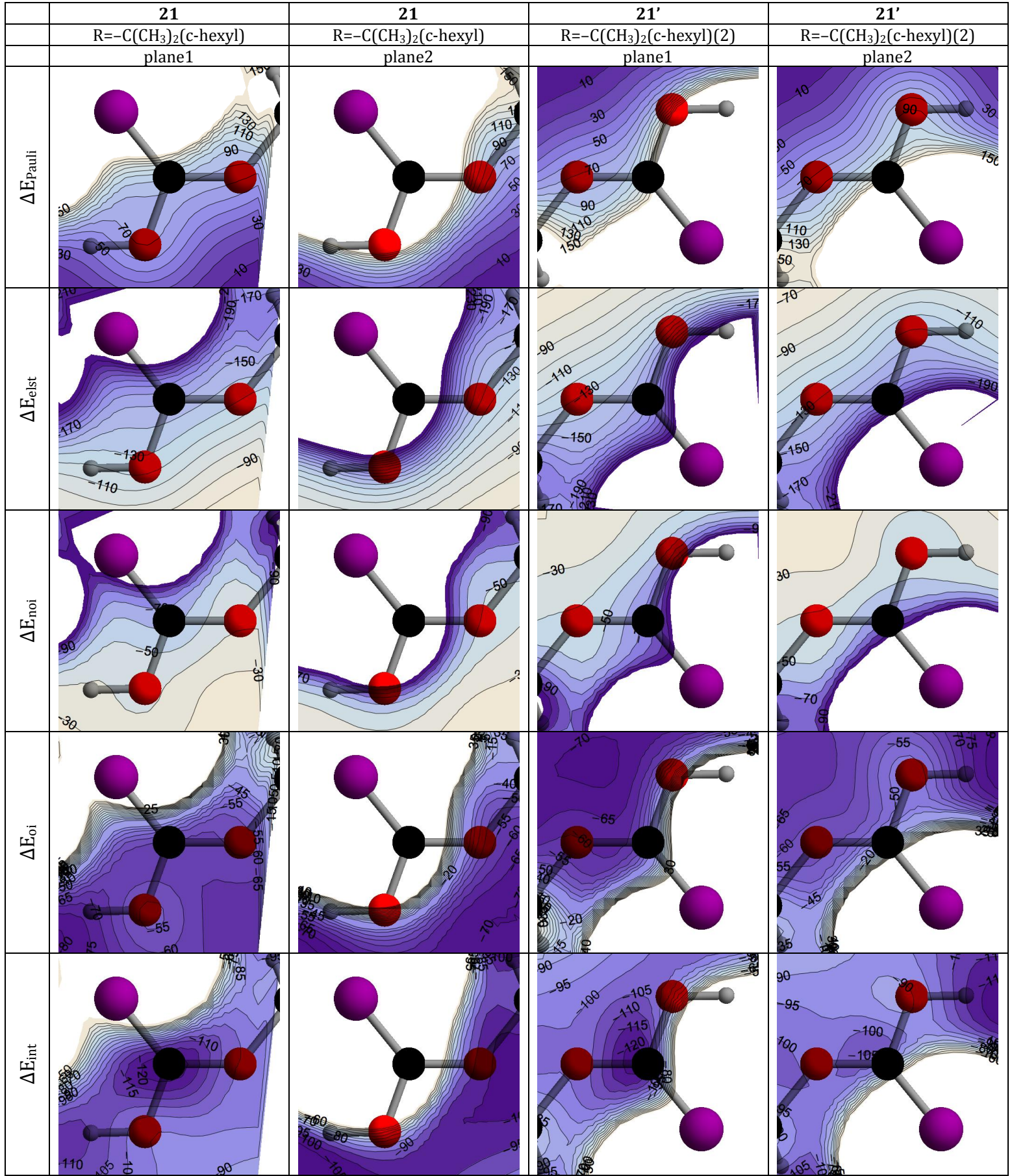


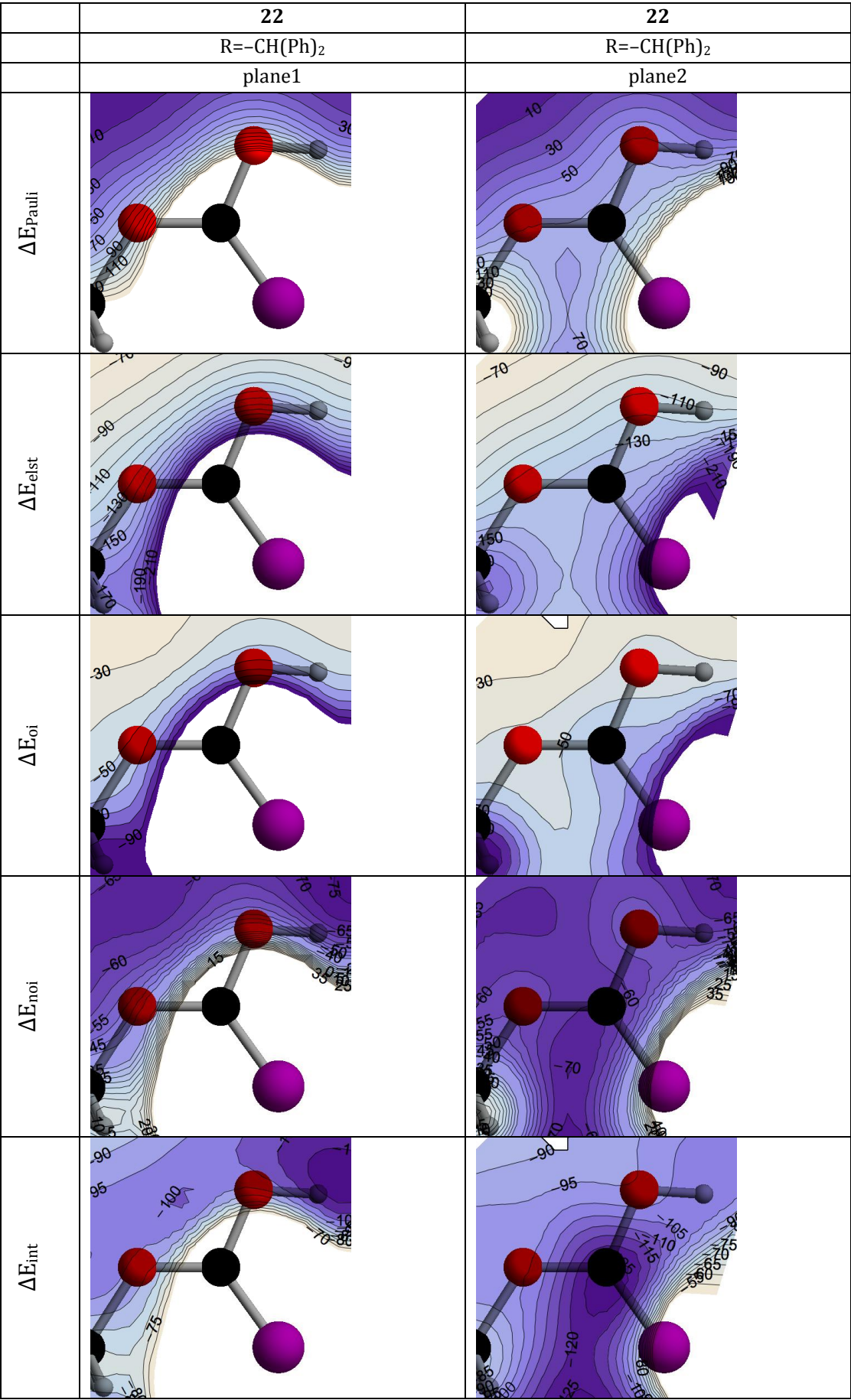












**Table S2.** Cartesian coordinates of the optimized structures **1-22**. (Values are in Å.)

|                                            |           |           |           |
|--------------------------------------------|-----------|-----------|-----------|
| <b>1</b> R=CH <sub>3</sub>                 |           |           |           |
| C                                          | -0.031944 | 0.047497  | -0.054807 |
| O                                          | 0.163001  | -0.418682 | 1.326424  |
| C                                          | 1.266797  | -0.318318 | 1.941509  |
| H                                          | 0.142464  | 1.118749  | -0.097212 |
| H                                          | 0.633333  | -0.502889 | -0.713807 |
| O                                          | 1.211911  | -0.790650 | 3.140145  |
| H                                          | 2.048716  | -0.721974 | 3.625887  |
| H                                          | -1.067714 | -0.185415 | -0.266828 |
| C                                          | 2.495974  | 0.273707  | 1.363281  |
| H                                          | 2.298626  | 1.305610  | 1.064874  |
| H                                          | 3.322931  | 0.256030  | 2.067777  |
| H                                          | 2.777609  | -0.276729 | 0.462990  |
| <b>2</b> R=CH <sub>2</sub> CH <sub>3</sub> |           |           |           |
| C                                          | -0.009296 | 0.006690  | -0.073907 |
| O                                          | 0.172339  | -0.475178 | 1.300907  |
| C                                          | 1.244867  | -0.303097 | 1.958805  |
| H                                          | 0.081641  | 1.088968  | -0.089698 |
| H                                          | 0.719127  | -0.472965 | -0.721350 |
| O                                          | 1.188452  | -0.805389 | 3.143340  |
| H                                          | 2.011003  | -0.671611 | 3.643616  |
| H                                          | -1.015444 | -0.300504 | -0.329700 |
| C                                          | 2.451916  | 0.399749  | 1.440343  |
| H                                          | 2.741538  | -0.110946 | 0.516054  |
| H                                          | 2.125549  | 1.396459  | 1.125532  |
| C                                          | 3.623025  | 0.483280  | 2.416449  |
| H                                          | 3.997855  | -0.504293 | 2.690532  |
| H                                          | 4.447374  | 1.012263  | 1.943620  |
| H                                          | 3.365358  | 1.042632  | 3.317457  |
| <b>3</b> R=n-propyl                        |           |           |           |
| C                                          | 0.000000  | 0.000000  | 0.000000  |
| O                                          | 0.000000  | 0.000000  | 1.467757  |
| C                                          | 1.063722  | 0.000000  | 2.163048  |
| H                                          | 0.410992  | 0.940804  | -0.354942 |
| H                                          | 0.563681  | -0.854090 | -0.363412 |
| O                                          | 0.825571  | -0.023451 | 3.428704  |
| H                                          | 1.641342  | -0.013551 | 3.956765  |
| H                                          | -1.046792 | -0.086384 | -0.262813 |
| C                                          | 2.443897  | -0.012353 | 1.601467  |
| H                                          | 2.564455  | -1.007491 | 1.153779  |
| H                                          | 2.470420  | 0.687808  | 0.763150  |
| C                                          | 3.575442  | 0.281243  | 2.595175  |
| H                                          | 3.515200  | -0.400847 | 3.451626  |
| H                                          | 4.506587  | 0.007624  | 2.099942  |
| C                                          | 3.646354  | 1.741668  | 3.046836  |
| H                                          | 2.739170  | 2.078605  | 3.553352  |
| H                                          | 4.474695  | 1.882784  | 3.738453  |
| H                                          | 3.810859  | 2.402406  | 2.195485  |
| <b>4</b> R=n-butyl                         |           |           |           |
| C                                          | -0.059059 | -0.436429 | 0.233662  |
| O                                          | -0.023558 | 0.209627  | 1.550418  |
| C                                          | 1.057251  | 0.530813  | 2.137581  |
| H                                          | 0.453934  | 0.188759  | -0.491258 |
| H                                          | 0.388100  | -1.423502 | 0.308729  |
| O                                          | 0.850387  | 1.106475  | 3.270981  |
| H                                          | 1.681022  | 1.334983  | 3.720968  |
| H                                          | -1.114739 | -0.508389 | 0.004209  |
| C                                          | 2.421353  | 0.312603  | 1.580474  |
| H                                          | 2.487866  | 0.977180  | 0.709480  |
| C                                          | 3.588696  | 0.555110  | 2.544894  |
| H                                          | 4.494598  | 0.603722  | 1.939973  |

|   |          |           |          |
|---|----------|-----------|----------|
| H | 3.511630 | 1.553341  | 2.994723 |
| H | 2.455811 | -0.701033 | 1.172652 |
| C | 3.757941 | -0.525274 | 3.620992 |
| H | 2.847543 | -0.622861 | 4.222701 |
| H | 3.890760 | -1.490794 | 3.126464 |
| C | 4.945834 | -0.249530 | 4.540610 |
| H | 4.829148 | 0.695662  | 5.073258 |
| H | 5.049507 | -1.037829 | 5.284130 |
| H | 5.876850 | -0.200878 | 3.975022 |

#### 5 R=n-pentyl

|   |           |           |           |
|---|-----------|-----------|-----------|
| C | 0.000000  | 0.000000  | 0.000000  |
| O | 0.000000  | 0.000000  | 1.466516  |
| C | 1.066289  | 0.000000  | 2.159569  |
| H | 0.532506  | 0.874554  | -0.362337 |
| H | 0.445248  | -0.923951 | -0.357873 |
| O | 0.832496  | 0.022874  | 3.425419  |
| H | 1.652661  | 0.001839  | 3.947623  |
| H | -1.048961 | 0.049508  | -0.263625 |
| C | 2.444194  | 0.010477  | 1.593351  |
| H | 2.538611  | 0.972814  | 1.074522  |
| C | 3.580537  | -0.184077 | 2.603795  |
| H | 4.505157  | 0.106376  | 2.103915  |
| H | 3.478596  | 0.535395  | 3.424057  |
| H | 2.483358  | -0.746380 | 0.805063  |
| C | 3.720262  | -1.622097 | 3.123241  |
| H | 2.774312  | -1.978688 | 3.549316  |
| H | 3.925176  | -2.273664 | 2.270114  |
| C | 4.826602  | -1.792131 | 4.171437  |
| H | 4.967277  | -2.860511 | 4.340612  |
| H | 5.770213  | -1.424868 | 3.759864  |
| C | 4.539055  | -1.107747 | 5.507751  |
| H | 5.332290  | -1.314222 | 6.224850  |
| H | 4.474753  | -0.021623 | 5.417739  |
| H | 3.606874  | -1.472018 | 5.946902  |

#### 6 R=i-propyl

|   |           |           |           |
|---|-----------|-----------|-----------|
| C | -0.170252 | 0.335440  | 0.039798  |
| O | 0.106213  | -0.389532 | 1.286054  |
| C | 1.241400  | -0.416265 | 1.856884  |
| H | -0.043954 | 1.399930  | 0.214028  |
| H | 0.478842  | -0.029444 | -0.749188 |
| O | 1.215538  | -1.089915 | 2.957601  |
| H | 2.072871  | -1.083870 | 3.414202  |
| H | -1.205857 | 0.101378  | -0.173064 |
| C | 2.499384  | 0.197556  | 1.331089  |
| H | 2.209482  | 1.071614  | 0.747818  |
| C | 3.448887  | 0.633887  | 2.454324  |
| H | 3.856932  | -0.217979 | 3.005761  |
| H | 4.302989  | 1.143781  | 2.012914  |
| H | 2.975894  | 1.322219  | 3.153837  |
| C | 3.169216  | -0.828999 | 0.376670  |
| H | 2.515140  | -1.137078 | -0.436824 |
| H | 4.051151  | -0.361585 | -0.056514 |
| H | 3.485086  | -1.718575 | 0.920423  |

#### 7 R=i-butyl

|   |           |           |           |
|---|-----------|-----------|-----------|
| C | -0.028714 | -0.094731 | 0.053749  |
| O | 0.003646  | -0.018437 | 1.518634  |
| C | 1.081708  | 0.054422  | 2.188622  |
| H | 0.486348  | 0.763962  | -0.366599 |
| H | 0.417006  | -1.032938 | -0.263919 |
| O | 0.867525  | 0.137966  | 3.456332  |
| H | 1.696716  | 0.180643  | 3.962273  |
| H | -1.083991 | -0.069097 | -0.187294 |
| C | 2.448744  | 0.087170  | 1.600317  |

|   |          |           |          |
|---|----------|-----------|----------|
| H | 2.540298 | 1.082692  | 1.144978 |
| C | 3.618972 | -0.173076 | 2.568910 |
| H | 2.478455 | -0.617714 | 0.766210 |
| C | 3.647736 | -1.629994 | 3.046414 |
| H | 3.823444 | -2.303512 | 2.206026 |
| H | 4.456749 | -1.776983 | 3.759880 |
| H | 2.723046 | -1.946237 | 3.534268 |
| C | 4.934423 | 0.215562  | 1.885941 |
| H | 5.771359 | 0.053799  | 2.562815 |
| H | 5.104562 | -0.394389 | 0.997130 |
| H | 4.942336 | 1.264295  | 1.588181 |
| H | 3.510124 | 0.494047  | 3.436108 |

**8** R=t-butyl

|   |           |           |           |
|---|-----------|-----------|-----------|
| C | 0.000000  | 0.000000  | 0.000000  |
| O | 0.000000  | 0.000000  | 1.464600  |
| C | 0.979739  | 0.000000  | 2.274654  |
| H | 0.144725  | 1.021590  | -0.335128 |
| H | 0.758102  | -0.667643 | -0.388296 |
| O | 0.554826  | 0.027678  | 3.495735  |
| H | 1.285838  | 0.039001  | 4.134976  |
| H | -0.992972 | -0.349906 | -0.255789 |
| C | 2.465620  | -0.058881 | 1.964131  |
| C | 3.272111  | 0.177420  | 3.256412  |
| H | 3.101483  | -0.597381 | 4.009473  |
| H | 4.332561  | 0.130258  | 3.018541  |
| H | 3.087185  | 1.162940  | 3.687813  |
| C | 2.777745  | -1.484984 | 1.435127  |
| H | 2.272218  | -1.715376 | 0.500890  |
| H | 3.849657  | -1.544328 | 1.252258  |
| H | 2.517288  | -2.249850 | 2.166078  |
| C | 2.855304  | 1.023287  | 0.931612  |
| H | 2.456163  | 0.832784  | -0.059420 |
| H | 2.546771  | 2.018357  | 1.252088  |
| H | 3.940485  | 1.026077  | 0.845334  |

**9** R=c-butyl

|   |           |           |           |
|---|-----------|-----------|-----------|
| C | 0.254692  | -0.507302 | 0.026665  |
| O | 0.035437  | -0.026564 | 1.394351  |
| C | 0.979257  | 0.389130  | 2.141276  |
| H | 0.638042  | 0.307454  | -0.581176 |
| H | 0.931970  | -1.354877 | 0.045469  |
| O | 0.554299  | 0.778032  | 3.296607  |
| H | 1.277172  | 1.110495  | 3.854184  |
| H | -0.730316 | -0.805852 | -0.309472 |
| C | 2.409762  | 0.397893  | 1.775667  |
| C | 3.474557  | 0.976594  | 2.741537  |
| C | 3.171905  | -0.988898 | 1.837655  |
| H | 2.506877  | 0.820400  | 0.775297  |
| C | 4.398401  | -0.210654 | 2.369225  |
| H | 3.184143  | 0.916413  | 3.794110  |
| H | 3.818698  | 1.985562  | 2.532795  |
| H | 2.742271  | -1.650559 | 2.587852  |
| H | 3.270393  | -1.522264 | 0.897004  |
| H | 4.955003  | -0.672679 | 3.178412  |
| H | 5.086375  | 0.052185  | 1.568897  |

**10** R=c-pentyl

|   |           |           |           |
|---|-----------|-----------|-----------|
| C | 0.239440  | -0.405451 | -0.074773 |
| O | 0.034580  | -0.095170 | 1.342692  |
| C | 0.976226  | 0.241147  | 2.132130  |
| H | 0.557788  | 0.494098  | -0.593900 |
| H | 0.960391  | -1.210498 | -0.172565 |
| O | 0.543380  | 0.462805  | 3.328852  |
| H | 1.254954  | 0.757797  | 3.920911  |
| H | -0.738160 | -0.719423 | -0.418880 |

|                                    |           |           |           |
|------------------------------------|-----------|-----------|-----------|
| C                                  | 2.410296  | 0.324489  | 1.769624  |
| C                                  | 3.283670  | 1.259339  | 2.631808  |
| C                                  | 3.092459  | -1.107140 | 1.878900  |
| H                                  | 2.465475  | 0.649578  | 0.731803  |
| C                                  | 4.685725  | 0.665269  | 2.461995  |
| H                                  | 3.018911  | 1.204057  | 3.695268  |
| H                                  | 3.197289  | 2.301062  | 2.328601  |
| C                                  | 4.447227  | -0.843355 | 2.577734  |
| H                                  | 3.222399  | -1.515126 | 0.879283  |
| H                                  | 2.479016  | -1.812061 | 2.438841  |
| H                                  | 5.078291  | 0.922414  | 1.476343  |
| H                                  | 5.387279  | 1.045081  | 3.201409  |
| H                                  | 5.243326  | -1.433655 | 2.129161  |
| H                                  | 4.384608  | -1.131321 | 3.627449  |
| <b>11</b> R=c-hexyl <sub>eq</sub>  |           |           |           |
| C                                  | 0.000000  | 0.000000  | 0.000000  |
| O                                  | 0.000000  | 0.000000  | 1.465764  |
| C                                  | 1.058779  | 0.000000  | 2.173338  |
| H                                  | 0.422100  | 0.935797  | -0.354599 |
| H                                  | 0.548821  | -0.859983 | -0.369335 |
| O                                  | 0.792573  | 0.034315  | 3.437197  |
| H                                  | 1.599901  | 0.072284  | 3.976483  |
| H                                  | -1.048464 | -0.070553 | -0.261645 |
| C                                  | 2.450538  | -0.084925 | 1.660339  |
| C                                  | 3.470667  | 0.661933  | 2.544240  |
| C                                  | 2.835506  | -1.596484 | 1.527599  |
| H                                  | 2.461550  | 0.352644  | 0.661089  |
| C                                  | 4.883673  | 0.514163  | 1.967674  |
| H                                  | 3.474338  | 0.237754  | 3.557066  |
| H                                  | 3.199838  | 1.715229  | 2.630426  |
| C                                  | 4.254664  | -1.723521 | 0.964112  |
| H                                  | 2.781083  | -2.060184 | 2.515716  |
| H                                  | 2.122230  | -2.120202 | 0.890484  |
| C                                  | 5.278399  | -0.954272 | 1.800951  |
| H                                  | 5.587554  | 1.028228  | 2.621527  |
| H                                  | 4.928258  | 1.025448  | 1.001944  |
| H                                  | 4.513777  | -2.781705 | 0.920676  |
| H                                  | 4.266379  | -1.357310 | -0.066272 |
| H                                  | 6.261198  | -1.022638 | 1.335414  |
| H                                  | 5.370366  | -1.421932 | 2.785706  |
| <b>11'</b> R=c-hexyl <sub>ax</sub> |           |           |           |
| C                                  | -0.000118 | -0.187875 | 0.011553  |
| O                                  | 0.037518  | -0.074744 | 1.471707  |
| C                                  | 1.109347  | 0.066464  | 2.147745  |
| H                                  | 0.338870  | 0.746376  | -0.426783 |
| H                                  | 0.603756  | -1.029955 | -0.310339 |
| O                                  | 0.868943  | 0.184475  | 3.409512  |
| H                                  | 1.689807  | 0.296464  | 3.924330  |
| H                                  | -1.046323 | -0.357080 | -0.211282 |
| C                                  | 3.004777  | -1.413833 | 1.489190  |
| C                                  | 3.483546  | 0.956063  | 2.368721  |
| C                                  | 3.471267  | -1.977140 | 2.832373  |
| H                                  | 3.843574  | -1.383315 | 0.791766  |
| H                                  | 2.248549  | -2.057969 | 1.039211  |
| C                                  | 4.013516  | 0.348136  | 3.676266  |
| H                                  | 4.331868  | 1.108915  | 1.700007  |
| H                                  | 3.053780  | 1.945063  | 2.537602  |
| C                                  | 4.524292  | -1.081119 | 3.487387  |
| H                                  | 3.877468  | -2.974675 | 2.664171  |
| H                                  | 2.620398  | -2.116136 | 3.507870  |
| H                                  | 4.804928  | 0.994174  | 4.056448  |
| H                                  | 3.263535  | 0.361071  | 4.484825  |
| H                                  | 4.830281  | -1.497793 | 4.446433  |

|                                                                               |           |           |           |
|-------------------------------------------------------------------------------|-----------|-----------|-----------|
| H                                                                             | 5.419458  | -1.057786 | 2.859801  |
| C                                                                             | 2.488366  | 0.064961  | 1.585422  |
| H                                                                             | 2.402669  | 0.450288  | 0.569763  |
| <b>12</b> R=c-heptyl                                                          |           |           |           |
| C                                                                             | 0.102902  | 0.105268  | -0.348403 |
| O                                                                             | -0.090132 | 0.145954  | 1.102525  |
| C                                                                             | 0.861828  | 0.156377  | 1.951168  |
| H                                                                             | 0.624519  | 1.003691  | -0.665591 |
| H                                                                             | 0.640633  | -0.795759 | -0.623565 |
| O                                                                             | 0.424687  | 0.252165  | 3.159341  |
| H                                                                             | 1.154558  | 0.268124  | 3.807652  |
| H                                                                             | -0.904181 | 0.088134  | -0.746320 |
| C                                                                             | 2.313015  | 0.049154  | 1.627787  |
| C                                                                             | 3.240879  | 0.834158  | 2.587138  |
| C                                                                             | 2.727411  | -1.450520 | 1.451276  |
| H                                                                             | 2.431777  | 0.509024  | 0.645377  |
| C                                                                             | 3.435803  | 0.352012  | 4.033802  |
| H                                                                             | 4.216362  | 0.817149  | 2.098891  |
| H                                                                             | 2.934547  | 1.882744  | 2.597208  |
| C                                                                             | 2.339783  | -2.456793 | 2.541023  |
| H                                                                             | 3.810838  | -1.419428 | 1.333753  |
| H                                                                             | 2.337937  | -1.815422 | 0.500348  |
| C                                                                             | 3.829807  | -1.115612 | 4.242362  |
| H                                                                             | 2.560621  | 0.572990  | 4.668330  |
| H                                                                             | 4.207118  | 0.995697  | 4.460304  |
| C                                                                             | 2.693059  | -2.117816 | 4.008062  |
| H                                                                             | 2.837045  | -3.387225 | 2.263453  |
| H                                                                             | 1.271407  | -2.678091 | 2.475548  |
| H                                                                             | 4.699053  | -1.359031 | 3.625708  |
| H                                                                             | 4.163869  | -1.219717 | 5.275151  |
| H                                                                             | 2.940196  | -3.051716 | 4.512104  |
| H                                                                             | 1.802449  | -1.754668 | 4.531724  |
| <b>13</b> R=CH <sub>2</sub> C(CH <sub>3</sub> ) <sub>3</sub>                  |           |           |           |
| C                                                                             | 0.000000  | 0.000000  | 0.000000  |
| O                                                                             | 0.000000  | 0.000000  | 1.464587  |
| C                                                                             | 1.064469  | 0.000000  | 2.165171  |
| H                                                                             | 0.491837  | 0.898403  | -0.361836 |
| H                                                                             | 0.487399  | -0.900794 | -0.361890 |
| O                                                                             | 0.812369  | 0.001820  | 3.426642  |
| H                                                                             | 1.625771  | 0.004001  | 3.959567  |
| H                                                                             | -1.050021 | 0.002531  | -0.264172 |
| C                                                                             | 2.434886  | -0.000758 | 1.581992  |
| C                                                                             | 3.682115  | -0.012035 | 2.507509  |
| C                                                                             | 4.895650  | -0.007218 | 1.558992  |
| H                                                                             | 5.819803  | -0.016247 | 2.134982  |
| H                                                                             | 4.900365  | -0.885079 | 0.911299  |
| H                                                                             | 4.906914  | 0.882758  | 0.928107  |
| H                                                                             | 2.474972  | 0.871813  | 0.919533  |
| H                                                                             | 2.469968  | -0.863387 | 0.906691  |
| C                                                                             | 3.747560  | 1.249944  | 3.387098  |
| H                                                                             | 3.688480  | 2.159461  | 2.787964  |
| H                                                                             | 2.966486  | 1.314084  | 4.150822  |
| H                                                                             | 4.694005  | 1.270600  | 3.925308  |
| C                                                                             | 3.738460  | -1.289914 | 3.364103  |
| H                                                                             | 3.682464  | -2.187590 | 2.747124  |
| H                                                                             | 4.680624  | -1.323054 | 3.909214  |
| H                                                                             | 2.949953  | -1.365882 | 4.118700  |
| <b>14</b> R=(CH <sub>2</sub> ) <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub> |           |           |           |
| C                                                                             | -0.034397 | -0.431853 | 0.067112  |
| O                                                                             | -0.014043 | -0.121351 | 1.500130  |
| C                                                                             | 1.052388  | 0.173895  | 2.126912  |
| H                                                                             | 0.321237  | 0.428205  | -0.492991 |
| H                                                                             | 0.570503  | -1.314893 | -0.117913 |

|                                                                                      |           |           |           |
|--------------------------------------------------------------------------------------|-----------|-----------|-----------|
| O                                                                                    | 0.842610  | 0.414487  | 3.374792  |
| H                                                                                    | 1.665136  | 0.633821  | 3.845632  |
| H                                                                                    | -1.077772 | -0.627092 | -0.146093 |
| C                                                                                    | 2.405453  | 0.245166  | 1.513774  |
| H                                                                                    | 2.345488  | 0.990454  | 0.713363  |
| H                                                                                    | 2.577106  | -0.708758 | 1.003369  |
| C                                                                                    | 3.544771  | 0.560065  | 2.487881  |
| H                                                                                    | 3.561126  | -0.196439 | 3.279236  |
| C                                                                                    | 4.935338  | 0.585852  | 1.821039  |
| H                                                                                    | 5.071218  | -0.376131 | 1.315297  |
| C                                                                                    | 5.060212  | 1.702743  | 0.781407  |
| H                                                                                    | 4.906501  | 2.682991  | 1.238089  |
| H                                                                                    | 6.057302  | 1.699282  | 0.342998  |
| H                                                                                    | 4.354643  | 1.598026  | -0.044903 |
| C                                                                                    | 6.017666  | 0.709986  | 2.896403  |
| H                                                                                    | 5.962886  | -0.104140 | 3.620298  |
| H                                                                                    | 7.008723  | 0.685512  | 2.445535  |
| H                                                                                    | 5.926232  | 1.653165  | 3.439264  |
| H                                                                                    | 3.373095  | 1.535685  | 2.957460  |
| <b>14'</b> R= (CH <sub>2</sub> ) <sub>2</sub> CH (CH <sub>3</sub> ) <sub>2</sub> (2) |           |           |           |
| C                                                                                    | -0.822676 | -1.274209 | 1.177498  |
| O                                                                                    | -0.396278 | 0.045835  | 1.653949  |
| C                                                                                    | 0.800868  | 0.467817  | 1.568995  |
| H                                                                                    | -0.724609 | -1.311439 | 0.096481  |
| H                                                                                    | -0.237132 | -2.046063 | 1.667555  |
| O                                                                                    | 0.945535  | 1.638526  | 2.086668  |
| H                                                                                    | 1.852107  | 1.972616  | 1.978831  |
| H                                                                                    | -1.863412 | -1.335068 | 1.470242  |
| C                                                                                    | 1.944357  | -0.309770 | 1.017147  |
| H                                                                                    | 1.574608  | -0.985441 | 0.246578  |
| H                                                                                    | 2.254832  | -0.951707 | 1.853437  |
| C                                                                                    | 3.150624  | 0.493771  | 0.499950  |
| H                                                                                    | 4.011090  | -0.173597 | 0.544936  |
| C                                                                                    | 3.010522  | 1.030210  | -0.935553 |
| H                                                                                    | 2.854941  | 0.159493  | -1.581992 |
| C                                                                                    | 1.819545  | 1.972869  | -1.122362 |
| H                                                                                    | 1.912775  | 2.870449  | -0.505121 |
| H                                                                                    | 1.759364  | 2.305393  | -2.157707 |
| H                                                                                    | 0.857767  | 1.502392  | -0.897909 |
| C                                                                                    | 4.318360  | 1.701706  | -1.363661 |
| H                                                                                    | 5.166931  | 1.024431  | -1.264630 |
| H                                                                                    | 4.265329  | 2.017725  | -2.404565 |
| H                                                                                    | 4.523162  | 2.588297  | -0.759680 |
| H                                                                                    | 3.409770  | 1.311018  | 1.187574  |
| <b>15</b> R=CH <sub>2</sub> (Ph)                                                     |           |           |           |
| C                                                                                    | -0.003748 | -0.492475 | 0.089128  |
| O                                                                                    | -0.017334 | -0.159111 | 1.517264  |
| C                                                                                    | 1.027581  | 0.198010  | 2.148320  |
| H                                                                                    | 0.288494  | 0.384167  | -0.481857 |
| H                                                                                    | 0.667097  | -1.329624 | -0.080945 |
| O                                                                                    | 0.820504  | 0.449235  | 3.388328  |
| H                                                                                    | 1.661628  | 0.715871  | 3.819549  |
| H                                                                                    | -1.027809 | -0.769124 | -0.127699 |
| C                                                                                    | 2.394150  | 0.324564  | 1.546179  |
| H                                                                                    | 2.654115  | -0.658166 | 1.138780  |
| H                                                                                    | 2.307427  | 0.987517  | 0.680531  |
| C                                                                                    | 3.431408  | 0.818031  | 2.528137  |
| C                                                                                    | 4.092788  | -0.084321 | 3.367059  |
| C                                                                                    | 3.726254  | 2.181273  | 2.614002  |
| C                                                                                    | 5.035098  | 0.374318  | 4.280251  |
| H                                                                                    | 3.889981  | -1.146030 | 3.295727  |
| C                                                                                    | 4.670508  | 2.634193  | 3.526832  |
| H                                                                                    | 3.231636  | 2.888395  | 1.959854  |

|                                                                      |           |           |           |
|----------------------------------------------------------------------|-----------|-----------|-----------|
| C                                                                    | 5.323518  | 1.732009  | 4.359773  |
| H                                                                    | 5.549130  | -0.329313 | 4.919515  |
| H                                                                    | 4.900000  | 3.688837  | 3.582142  |
| H                                                                    | 6.061346  | 2.086242  | 5.065743  |
| <b>16</b> R=C (CH <sub>2</sub> CH <sub>3</sub> ) <sub>3</sub>        |           |           |           |
| C                                                                    | -0.142530 | -1.773008 | 1.515267  |
| O                                                                    | -0.065128 | -0.365687 | 1.906501  |
| C                                                                    | 0.908411  | 0.455160  | 1.866094  |
| H                                                                    | -0.250367 | -1.829689 | 0.437921  |
| H                                                                    | 0.726066  | -2.314798 | 1.868466  |
| O                                                                    | 0.551910  | 1.578566  | 2.402527  |
| H                                                                    | 1.263459  | 2.237375  | 2.359632  |
| H                                                                    | -1.041183 | -2.122811 | 2.009493  |
| C                                                                    | 2.331076  | 0.241362  | 1.375278  |
| C                                                                    | 2.979588  | -0.566371 | 2.576752  |
| C                                                                    | 4.504917  | -0.522579 | 2.699671  |
| H                                                                    | 4.796544  | -1.151297 | 3.540493  |
| H                                                                    | 5.011128  | -0.901539 | 1.816166  |
| H                                                                    | 4.875504  | 0.479580  | 2.905372  |
| H                                                                    | 2.564247  | -0.192621 | 3.516834  |
| H                                                                    | 2.660467  | -1.605344 | 2.494345  |
| C                                                                    | 3.027304  | 1.617537  | 1.205692  |
| H                                                                    | 3.072534  | 2.134897  | 2.173367  |
| H                                                                    | 4.070963  | 1.409886  | 0.986482  |
| C                                                                    | 2.478502  | 2.548703  | 0.116761  |
| H                                                                    | 3.041837  | 3.480502  | 0.117677  |
| H                                                                    | 2.581268  | 2.109433  | -0.873321 |
| H                                                                    | 1.426132  | 2.809617  | 0.243470  |
| C                                                                    | 2.318952  | -0.551681 | 0.030752  |
| H                                                                    | 1.979640  | -1.566059 | 0.221116  |
| H                                                                    | 1.580376  | -0.097188 | -0.633541 |
| C                                                                    | 3.648227  | -0.651560 | -0.723553 |
| H                                                                    | 4.060474  | 0.318290  | -0.993125 |
| H                                                                    | 4.401804  | -1.199360 | -0.163330 |
| H                                                                    | 3.478351  | -1.196707 | -1.651312 |
| <b>17</b> R=CH (CH <sub>3</sub> ) (CH <sub>2</sub> CH <sub>3</sub> ) |           |           |           |
| C                                                                    | 0.021637  | -0.977858 | 0.206289  |
| O                                                                    | -0.021438 | -0.190357 | 1.443603  |
| C                                                                    | 0.995310  | 0.371893  | 1.960959  |
| H                                                                    | 0.409457  | -0.368907 | -0.603642 |
| H                                                                    | 0.623107  | -1.866531 | 0.373031  |
| O                                                                    | 0.703006  | 0.982752  | 3.060326  |
| H                                                                    | 1.484402  | 1.383241  | 3.476034  |
| H                                                                    | -1.013376 | -1.242471 | 0.029203  |
| C                                                                    | 2.371953  | 0.396474  | 1.382956  |
| H                                                                    | 2.483355  | -0.501986 | 0.775026  |
| C                                                                    | 3.455846  | 0.388292  | 2.484407  |
| H                                                                    | 3.232636  | -0.403455 | 3.203081  |
| H                                                                    | 3.437095  | 1.339348  | 3.030396  |
| C                                                                    | 2.460464  | 1.635206  | 0.449294  |
| H                                                                    | 1.673122  | 1.646662  | -0.302712 |
| H                                                                    | 2.400468  | 2.559998  | 1.022336  |
| H                                                                    | 3.415216  | 1.612552  | -0.069304 |
| C                                                                    | 4.865392  | 0.173201  | 1.932783  |
| H                                                                    | 5.577112  | 0.116959  | 2.754323  |
| H                                                                    | 4.930792  | -0.761330 | 1.374543  |
| H                                                                    | 5.181890  | 0.985980  | 1.281741  |
| <b>18</b> R=CH (CH <sub>3</sub> ) (Ph)                               |           |           |           |
| C                                                                    | -0.084791 | -0.394449 | 0.177605  |
| O                                                                    | 0.047635  | 0.041679  | 1.569552  |
| C                                                                    | 1.159970  | 0.262880  | 2.149607  |
| H                                                                    | 0.211420  | 0.412550  | -0.484203 |
| H                                                                    | 0.507549  | -1.290152 | 0.016298  |

|                                                               |           |           |           |
|---------------------------------------------------------------|-----------|-----------|-----------|
| O                                                             | 1.021495  | 0.585971  | 3.384944  |
| H                                                             | 1.902484  | 0.677897  | 3.812744  |
| H                                                             | -1.140667 | -0.609724 | 0.070133  |
| C                                                             | 2.520150  | 0.206877  | 1.505358  |
| H                                                             | 2.497271  | -0.614740 | 0.788503  |
| C                                                             | 3.586853  | -0.090402 | 2.549013  |
| C                                                             | 4.090212  | 0.910050  | 3.388990  |
| C                                                             | 4.042059  | -1.400625 | 2.705678  |
| C                                                             | 5.027066  | 0.596513  | 4.370812  |
| H                                                             | 3.795230  | 1.944239  | 3.262731  |
| C                                                             | 4.984505  | -1.706743 | 3.678566  |
| H                                                             | 3.668911  | -2.185154 | 2.059456  |
| C                                                             | 5.473923  | -0.710120 | 4.516235  |
| H                                                             | 5.415070  | 1.378531  | 5.008133  |
| H                                                             | 5.336429  | -2.723489 | 3.782027  |
| H                                                             | 6.206462  | -0.950689 | 5.273573  |
| C                                                             | 2.747575  | 1.523368  | 0.712559  |
| H                                                             | 2.016352  | 1.653462  | -0.082118 |
| H                                                             | 2.703696  | 2.397408  | 1.358146  |
| H                                                             | 3.736090  | 1.476324  | 0.261682  |
| <b>19</b> R=CH(CH <sub>2</sub> CH <sub>3</sub> ) <sub>2</sub> |           |           |           |
| C                                                             | -2.178108 | -1.129459 | -1.088795 |
| O                                                             | -2.026708 | -0.266817 | 0.087157  |
| C                                                             | -0.914888 | 0.221278  | 0.468815  |
| H                                                             | -1.911865 | -0.569866 | -1.980317 |
| H                                                             | -1.569270 | -2.020031 | -0.969646 |
| O                                                             | -1.048738 | 0.952780  | 1.525403  |
| H                                                             | -0.207459 | 1.352822  | 1.800344  |
| H                                                             | -3.231368 | -1.381122 | -1.093923 |
| C                                                             | 0.417859  | -0.049563 | -0.142161 |
| C                                                             | 1.011413  | -1.287690 | 0.616442  |
| H                                                             | 0.250868  | -0.338394 | -1.180073 |
| C                                                             | 2.196824  | -1.912948 | -0.115901 |
| H                                                             | 2.546804  | -2.782209 | 0.439016  |
| H                                                             | 1.916947  | -2.247190 | -1.115403 |
| H                                                             | 3.035215  | -1.225185 | -0.207373 |
| H                                                             | 1.306488  | -0.969690 | 1.618553  |
| H                                                             | 0.234554  | -2.043450 | 0.750691  |
| C                                                             | 1.337680  | 1.185596  | -0.112349 |
| H                                                             | 1.527789  | 1.490978  | 0.924382  |
| H                                                             | 2.310230  | 0.865777  | -0.482503 |
| C                                                             | 0.836759  | 2.365389  | -0.945004 |
| H                                                             | 1.543206  | 3.191888  | -0.893581 |
| H                                                             | 0.734618  | 2.087905  | -1.994576 |
| H                                                             | -0.128427 | 2.744448  | -0.602345 |
| <b>20</b> R=(1-CH <sub>3</sub> -c-hexyl)                      |           |           |           |
| C                                                             | -0.208686 | -0.458053 | 0.145517  |
| O                                                             | 0.033466  | -0.068211 | 1.538610  |
| C                                                             | 1.145438  | 0.167145  | 2.129779  |
| H                                                             | -0.204622 | 0.450172  | -0.462522 |
| H                                                             | 0.530441  | -1.184341 | -0.192948 |
| O                                                             | 0.921064  | 0.547431  | 3.349575  |
| H                                                             | 1.754946  | 0.668831  | 3.842514  |
| H                                                             | -1.207004 | -0.898397 | 0.174728  |
| C                                                             | 2.892972  | -1.458549 | 1.341207  |
| C                                                             | 3.597460  | 0.640703  | 2.577915  |
| C                                                             | 3.070110  | -2.259005 | 2.638426  |
| H                                                             | 3.834566  | -1.460937 | 0.773102  |
| H                                                             | 2.146256  | -1.934403 | 0.694637  |
| C                                                             | 3.871056  | -0.184524 | 3.853297  |
| H                                                             | 4.539499  | 0.693405  | 2.017223  |
| H                                                             | 3.345835  | 1.686529  | 2.814848  |
| C                                                             | 4.164225  | -1.654247 | 3.526244  |

|                                                              |           |           |           |
|--------------------------------------------------------------|-----------|-----------|-----------|
| H                                                            | 3.322798  | -3.294933 | 2.378421  |
| H                                                            | 2.117929  | -2.309923 | 3.193200  |
| H                                                            | 4.720667  | 0.274015  | 4.375402  |
| H                                                            | 3.045446  | -0.147232 | 4.590462  |
| H                                                            | 4.267733  | -2.231912 | 4.453358  |
| H                                                            | 5.131156  | -1.719191 | 3.003632  |
| C                                                            | 2.556734  | 0.051518  | 1.576287  |
| C                                                            | 2.647028  | 0.855962  | 0.252540  |
| H                                                            | 2.111465  | 0.384501  | -0.575131 |
| H                                                            | 2.283951  | 1.884956  | 0.373158  |
| H                                                            | 3.702205  | 0.908719  | -0.038029 |
| <b>21</b> R=C (CH <sub>3</sub> ) <sub>2</sub> (c-hexyl)      |           |           |           |
| C                                                            | -0.217196 | -0.246583 | 0.386472  |
| O                                                            | 0.030873  | -0.213669 | 1.832330  |
| C                                                            | 1.143825  | -0.059176 | 2.446415  |
| H                                                            | -0.172806 | 0.776208  | 0.005738  |
| H                                                            | 0.496956  | -0.904653 | -0.109643 |
| O                                                            | 0.938930  | -0.048660 | 3.729711  |
| H                                                            | 1.773341  | 0.067154  | 4.218187  |
| H                                                            | -1.230740 | -0.644229 | 0.313628  |
| C                                                            | 2.543673  | 0.071296  | 1.871072  |
| C                                                            | 3.492188  | 0.566230  | 2.988465  |
| H                                                            | 3.594262  | -0.142016 | 3.824435  |
| H                                                            | 4.497919  | 0.693752  | 2.578681  |
| H                                                            | 3.182149  | 1.547450  | 3.373797  |
| C                                                            | 2.546296  | 1.128980  | 0.733409  |
| H                                                            | 2.159914  | 0.738367  | -0.211987 |
| H                                                            | 1.977216  | 2.026084  | 1.010365  |
| H                                                            | 3.577631  | 1.447967  | 0.555184  |
| C                                                            | 2.954955  | -1.366042 | 1.335462  |
| C                                                            | 4.375425  | -1.374136 | 0.734034  |
| C                                                            | 2.809041  | -2.493754 | 2.377309  |
| H                                                            | 2.266686  | -1.596614 | 0.508471  |
| C                                                            | 4.695130  | -2.744251 | 0.111555  |
| H                                                            | 5.113970  | -1.165001 | 1.521643  |
| H                                                            | 4.483233  | -0.592308 | -0.028533 |
| C                                                            | 3.141172  | -3.864648 | 1.762954  |
| H                                                            | 3.490038  | -2.310264 | 3.222592  |
| H                                                            | 1.788666  | -2.528131 | 2.790204  |
| C                                                            | 4.537570  | -3.878833 | 1.130119  |
| H                                                            | 5.717895  | -2.724639 | -0.287646 |
| H                                                            | 4.027313  | -2.920045 | -0.747006 |
| H                                                            | 3.060477  | -4.637141 | 2.539068  |
| H                                                            | 2.386504  | -4.109103 | 0.998003  |
| H                                                            | 4.721861  | -4.848300 | 0.648676  |
| H                                                            | 5.298781  | -3.770642 | 1.919508  |
| <b>21'</b> R=C (CH <sub>3</sub> ) <sub>2</sub> (c-hexyl) (2) |           |           |           |
| C                                                            | 0.040693  | 0.611797  | 0.056347  |
| O                                                            | 0.043550  | 0.383083  | 1.505782  |
| C                                                            | 1.015430  | 0.031193  | 2.262283  |
| H                                                            | 0.555781  | 1.549457  | -0.159849 |
| H                                                            | 0.493323  | -0.238970 | -0.457128 |
| O                                                            | 0.578922  | -0.175839 | 3.467040  |
| H                                                            | 1.317851  | -0.401655 | 4.063719  |
| H                                                            | -1.021693 | 0.687391  | -0.181222 |
| C                                                            | 2.474366  | -0.229562 | 1.903267  |
| C                                                            | 2.986626  | 0.720126  | 0.796003  |
| H                                                            | 2.728156  | 1.767837  | 0.984638  |
| H                                                            | 4.077925  | 0.651407  | 0.762296  |
| H                                                            | 2.626256  | 0.435738  | -0.195711 |
| C                                                            | 2.467800  | -1.703139 | 1.386867  |
| H                                                            | 2.269600  | -2.416144 | 2.196661  |
| H                                                            | 1.722254  | -1.860748 | 0.597986  |

|                                  |           |           |           |
|----------------------------------|-----------|-----------|-----------|
| H                                | 3.449736  | -1.925539 | 0.957111  |
| C                                | 3.354145  | -0.096277 | 3.203295  |
| C                                | 4.794334  | -0.632290 | 3.044099  |
| C                                | 3.393804  | 1.341659  | 3.765699  |
| H                                | 2.919299  | -0.767456 | 3.974855  |
| C                                | 5.552906  | -0.571022 | 4.381829  |
| H                                | 5.333555  | -0.028854 | 2.299581  |
| H                                | 4.788947  | -1.666863 | 2.680821  |
| C                                | 4.140456  | 1.400435  | 5.107347  |
| H                                | 3.912010  | 1.988269  | 3.043135  |
| H                                | 2.382123  | 1.760836  | 3.884960  |
| C                                | 5.562837  | 0.842528  | 4.975618  |
| H                                | 6.578808  | -0.929506 | 4.225877  |
| H                                | 5.084800  | -1.268940 | 5.094962  |
| H                                | 4.164649  | 2.438204  | 5.465013  |
| H                                | 3.583987  | 0.822224  | 5.863665  |
| H                                | 6.057988  | 0.836082  | 5.955548  |
| H                                | 6.155783  | 1.508457  | 4.328354  |
| <hr/>                            |           |           |           |
| <b>22</b> R=CH (Ph) <sub>2</sub> |           |           |           |
| <hr/>                            |           |           |           |
| C                                | -0.140197 | -0.479949 | 0.244567  |
| O                                | -0.051654 | -0.060435 | 1.650433  |
| C                                | 1.060909  | 0.223207  | 2.213197  |
| H                                | 0.294668  | 0.295276  | -0.391928 |
| H                                | 0.369665  | -1.441611 | 0.129584  |
| O                                | 0.927741  | 0.563472  | 3.451027  |
| H                                | 1.819400  | 0.719138  | 3.842722  |
| H                                | -1.211552 | -0.587494 | 0.071077  |
| C                                | 2.419529  | 0.193274  | 1.550540  |
| H                                | 2.442449  | -0.738960 | 0.967859  |
| C                                | 3.523142  | 0.116926  | 2.608103  |
| C                                | 4.028045  | -1.138232 | 2.984853  |
| C                                | 4.011757  | 1.273747  | 3.240431  |
| C                                | 5.006568  | -1.236669 | 3.976288  |
| H                                | 3.665875  | -2.044134 | 2.496050  |
| C                                | 4.984361  | 1.169151  | 4.242332  |
| H                                | 3.669916  | 2.260254  | 2.927629  |
| C                                | 5.481844  | -0.083511 | 4.610481  |
| H                                | 5.399550  | -2.214619 | 4.252793  |
| H                                | 5.362983  | 2.071271  | 4.721847  |
| H                                | 6.245366  | -0.161818 | 5.383902  |
| C                                | 2.535197  | 1.356890  | 0.554433  |
| C                                | 3.282619  | 1.160368  | -0.616409 |
| C                                | 1.951955  | 2.608878  | 0.799908  |
| C                                | 3.454199  | 2.207930  | -1.523291 |
| H                                | 3.743580  | 0.192326  | -0.816456 |
| C                                | 2.120118  | 3.654297  | -0.114480 |
| H                                | 1.364229  | 2.792745  | 1.701074  |
| C                                | 2.872616  | 3.456273  | -1.274721 |
| H                                | 4.042530  | 2.048426  | -2.426465 |
| H                                | 1.662926  | 4.623150  | 0.083778  |
| H                                | 3.004534  | 4.271537  | -1.985396 |