

```
1 #
2 # global directories for PDB files and the correspondig .pkl models
3 # this is relative to the proteusPy package folder hierarchy!
4 #
5
6 PDB_DIR = '../pdb/'
7 MODEL_DIR = f'{PDB_DIR}models/'
8 DATA_DIR = '../data/'
9
10 # global for initialization of dihedrals and energies
11
12 ORIENT_BACKBONE = 2
13 ORIENT_SIDECHAIN = 1
14
15 # Cα Cβ Sγ X1 - X5 X
16
17 /* atoms_covalent.inc - covalent radii used by atoms.inc */
18 /* from Pauling and CAChe S/W */
19 /* 5/4/94 -egs- */
20
21 N_RAD_COV = 0.74
22 C_RAD_COV = 0.77
23 O_RAD_COV = 0.73
24 P_RAD_COV = 1.10
25 S_RAD_COV = 1.04
26 CA_RAD_COV = 1.74
27 H_RAD_COV = .35
28 FE_RAD_COV = 1.17
29
30 ATOM_RADII_COVALENT = {"N": N_RAD_COV, "C": C_RAD_COV, "CA": CA_RAD_COV,
... "O": O_RAD_COV, "S": S_RAD_COV, "SG": S_RAD_COV, "H": H_RAD_COV, "CB":
... C_RAD_COV}
31
32 /* atoms_cpk.inc - CPK radii for atoms, used by atoms.inc */
33
34 N_RAD_CPK = 1.54
35 C_RAD_CPK = 1.7
36 O_RAD_CPK = 1.4
37 P_RAD_CPK = 1.9
38 S_RAD_CPK = 1.8
39 CA_RAD_CPK = 1.274
40 H_RAD_CPK = 1.2
41
42 ATOM_RADII_CPK = {"N": N_RAD_CPK, "C": C_RAD_CPK, "CA": CA_RAD_CPK, "O":
... O_RAD_CPK, "SG": S_RAD_CPK, "S": S_RAD_CPK, "H": H_RAD_CPK, "CB": C_RAD_CPK
43 ATOM_COLORS = {'O': [1.0, 0.0, 0.0], 'C': [.5, .5, .5], 'N': [0.0, 0.0,
... 1.0], 'S': 'y', 'H': 'white', 'SG': 'yellow', 'CB': 'grey'}
44
```

```
45 BOND_RADIUS = .25
46
47
48
```