sample.f

```
¥       integer i,icases,idin,ie,ifti,ifto,ii,iiz,imed,ireg,isam,
     * izn,nlist,j,k,n,ner,ntype,idum,ne
       character*24 medarr(MXMED)

!      (1) Open files
       open(6, FILE='egs5job.out',STATUS='unknown')  ! General output
       open(4, FILE='egs5job.inp',STATUS='old')      ! CG input
       open(39,FILE='egs5job.pic',STATUS='unknown')  ! CG output
       open(90,FILE='spcg.dat',   STATUS='unknown')  ! spc-gamma output

!      (2) Initialization
       call counters_out(0)
       call block_set

!ooo   (3) User setting parameters-1   (link PEGS5-material to EGS5 med)
       nmed=4
       medarr(1)='NAI                             '
       medarr(2)='AL                              '
       medarr(3)='QUARTZ                          '
       medarr(4)='AIR-AT-NTP                      '

!ooo   (4) User setting parameters-2
       ncases    = 100000          ! number of calculations
       maxpict   = 200             ! number of incident radiations in CG
       chard(1) = 7.62d0           ! set character dimensions
```

number of Mediums

Medium-1 is NAI
Medium-2 is Al
:

sample.data

```
RCC     1   0 0    0      0 0 7.62    3.81
RCC     2   0 0  -0.5    0 0 8.12    4.31
RCC     3   0 0  -0.6    0 0 8.72    4.41
RCC     4   0 0   7.62   0 0 0.5     4.31
RCC     5   0 0 -10.0    0 0 30     20
END
 Z1        +1
 Z2        +2       -1
 Z3        +3       -2       -4
 Z4        +4
 Z5        +5       -3
 Z6                 -5
END
 1     0     2     3     4     0
```

Med. of Reg.1 Med. of Reg.2 ···

Surface-1 is RCC
Surface-2 is RCC
:

Reg.-1 is inside of Surface-1
Reg.-2 is inside of Surface-2
and outside of Surface-1
:

Region 1 is filled by Medium 1
Region 2 is vacuum
Region 3 is filled by Medium 2
Region 4 is filled by Medium 3
:

sample.inp

(the order of Mediums are free)

```
COMP
 &INP NE=2,RHO=3.67, PZ=1,1 IRAYL=1 /END
NAI                                NAI
NA I
ENER
 &INP AE=0.521,AP=0.0100,UE=2.511,UP=2.0 /END
PWLF
 &INP  /END
DECK
 &INP  /END
ELEM
 &INP IRAYL=1 /END
AL                                 AL
AL
ENER
 &INP AE=0.521,AP=0.010,UE=2.511,UP=2.0 /END
PWLF
 &INP  /END
DECK
 &INP  /END
COMP
 &INP NE=2,RHO=2.20, PZ=1,2, IRAYL=1 /END
QUARTZ                             SIO2
SI O
ENER
 &INP AE=0.521,AP=0.0100,UE=2.511,UP=2.0 /END
PWLF
 &INP  /END
DECK
 &INP  /END
MIXT
 &INP NE=3,RHO= 1.2929E-03,RHOZ= 0.755,0.232,0.013,
      GASP=0.93174,IRAYL=1 /END
AIR-AT-NTP                         AIR-GAS
N  O  AR
ENER
 &INP AE=0.521,AP=0.010,UE=2.511,UP=2.0 /END
PWLF
 &INP  /END
DECK
 &INP  /END
```