**1. Introduction**

The main program is called from the Matlab prompt by the line

**MMB\_3D\_GNTO (**DL,DW,DH,nelx,nely,nelz,xn,yn,zn,volfrac,rk**)**

where DL is length of the design domain

DW is weight of the design domain

DH is height of the design domain

nelx is number of elements in x direction

nely is number of elements in y direction

nelz is number of elements in z direction

xn is interval number of bars in x direction

yn is interval number of bars in y direction

zn is interval number of bars in z direction

volfrac is volume fraction

rk is radius

**2. Example**

This example is the slender beam. You can run the main.m file directly, or paste the following line code into the MATLAB command window to call the MMB\_3D\_GNTO function:

MMB\_3D\_GNTO(80,4,20,80,4,20,8,0,2,0.2,1.5);

Finally, all the results for the slender beam are saved in the “GNTO results” Folder. Please send your suggestions and comments to zuowenjie@jlu.edu.cn