



รายการอ้างอิง

ภาษาไทย

- กรุง อังคนาพร. 2535. ผลของการตอบสนองต่อแผ่นดินไหวของอาคารในภาคเหนือและภาคตะวันตกของประเทศไทย. วิทยานิพนธ์ปริญญาโทบัณฑิต. ภาควิชาวิศวกรรมโยธา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย.
- ปณิธาน ลักคุณะประสิทธิ์. 2533. ข้อพิจารณาในการออกแบบอาคารต้านแรงแผ่นดินไหว. เอกสารการประชุมใหญ่วิชาการทางวิศวกรรม ประจำปี 2533. วิศวกรรมสถานแห่งประเทศไทย.
- ปณิธาน ลักคุณะประสิทธิ์, สุรียา ทศนียานนท์ และ อุทัย ฤกษ์ศิริรัตน์. 2532. สเปกตรัมการตอบสนองสำหรับการออกแบบอาคารต้านแผ่นดินไหวในกรุงเทพมหานคร. เอกสารการประชุมใหญ่วิชาการทางวิศวกรรม ประจำปี 2532. วิศวกรรมสถานแห่งประเทศไทย.
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จุฬาลงกรณ์มหาวิทยาลัย



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ข้อมูลที่ใช้ป้อนเข้าโปรแกรม SIMOKE

1 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.7566354 29.14913

2 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.9481476 35.103653

3 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6538273 51.136671

4 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.1457069 26.908838

5 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.5904794 24.710906

6 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.8412557 48.041997

7 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.2460442 42.414643

8 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6559314 51.099903

9 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.1810138 43.234879

10 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.7879468 48.886454

11 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.3099859 41.63567

12 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 20.064078 6.5309555

13 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 9.4653916 15.94721

14 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.3076586 57.926347

15 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 12.482261 11.452376

16 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 14.02441 9.9706146

17 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.4616654 21.250909

18 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.0518948 44.953087

19 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.8676147 28.475796

20 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.6044054 20.768508

21 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.1658606 26.801476

22 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 14.464278 9.6117881

23 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.7039199 37.365287

24 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.1836051 43.201637

25 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.1763635 26.745839



26 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 15.102275 9.1323062

27 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.7940095 36.500467

28 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.2388761 42.503645

29 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.9111657 19.797715

30 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***
 0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.2372583 22.052723

31 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.9208382 35.343881

32 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.1114498 33.727889

33 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.7131594 29.420996

34 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05

0.6 5.0601315 34.149356

35 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05

0.6 5.541402 30.542445

36 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.6183894 30.030164

37 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.1092882 44.174084

38 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.2374634 22.051964

39 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.0692007 27.323746

40 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6471783 51.253182

41 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.1895442 33.10466

42 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.7233583 37.175506

43 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.2804837 58.529648

44 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 18.234682 7.3089101

45 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.1500619 43.63562

46 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.0950115 33.861843

47 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.6183136 24.584409

48 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.6264443 38.139787

49 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.3360122 57.308948

50 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6052457 51.999365

51 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.8762133 19.904046

52 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.2385829 42.507293

53 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.4881145 54.193429

54 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.5962766 24.684461

55 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.2948353 58.209602

56 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6729664 50.804001

57 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.4231706 40.319683

58 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.4714935 31.021805

59 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 10.526868 14.037604

60 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 8.5834277 17.940406

61 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.1987278 60.416231

62 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6587463 51.05079

63 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 15.065869 9.1584594

64 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.3836095 25.690186

65 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 8.2727522 18.756671



ศูนย์วิจัยทรัพยากรธรณี
 จุฬาลงกรณ์มหาวิทยาลัย

66 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.8209808 48.359982

67 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6523177 51.163082

68 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.2226192 32.847081

69 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.6036755 20.770923

70 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.4944399 54.070613

71 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.1097263 33.741888

72 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.5461025 53.086373

73 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 9.4734321 15.930941

74 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.2845581 41.942264

75 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.1690055 61.130016

76 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 8.377871 18.472883

77 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.0437199 45.066106

78 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.992603 34.718987

79 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.3386958 31.971724

80 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 9.9614328 14.998267

81 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.1952593 60.498736

82 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 11.266722 12.941831

83 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.6970794 50.390503

84 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 9.7333092 15.421258

85 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.5998892 24.668007

86 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.3309383 57.41854

87 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.1677884 26.791248

88 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 8.896164 17.182969

89 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.4976631 21.127304

90 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.6463494 24.458202

91 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.567096 30.369688

92 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 8.6854402 17.686618

93 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 7.6015731 20.777882

94 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 9.7790679 15.334643

95 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 3.3306004 57.425854

96 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.2421369 32.696814

97 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.0705935 27.316087

98 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 5.7641302 29.102733

99 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 6.7412326 24.039847

100 EARTHQUAKE SIMULATION *** date Oct.9th,1995 ***

0.03 4.0 0.03 4.0 0.1 500.0
 4 2.0 4.0 15.0 0.0 0.268 0.0 2
 0.01 0.142712 1235 1 1 1 -300 0 -1 0
 0.05
 0.6 4.6519512 37.881555



ประวัติผู้ศึกษา

นายพดล คูหาท้ชนะดีกุล เกิดเมื่อวันที่ 6 พฤศจิกายน พ.ศ.2512 ที่เขตยานนาวา กรุงเทพมหานคร สำเร็จการศึกษาวิศวกรรมศาสตรบัณฑิต (เกียรตินิยมอันดับหนึ่ง) สาขาวิศวกรรมโยธาจากสถาบันเทคโนโลยีพระจอมเกล้า ธนบุรี เมื่อปีการศึกษา 2533 เข้าศึกษาหลักสูตรวิศวกรรมศาสตรมหาบัณฑิต สาขาวิศวกรรมโครงสร้าง จุฬาลงกรณ์มหาวิทยาลัย เมื่อปีการศึกษา 2534



ศูนย์วิทยพัชการ
จุฬาลงกรณ์มหาวิทยาลัย