

APPENDIX - C

PROGRAM FOR ACQUIRING CURRENT-VOLTAGE CHARACTERISTICS DATA IN THE SUPERCONDUCTING STATE OF THE SAMPLES

At the beginning of the program, the IEEE-488 driver declaration functions need to be loaded.

```
5           M = 0
6           L = 1
7           NOOFDATA = 2500
10          INPUT "ENTER A FILE NAME : " ; A$
15          OPEN "O",3,A$
20          IF (A$ = "q") OR (A$ = "Q") THEN GOTO 2050
50          OPEN "COM1:9600, N,B,2,CS,DS,CD"AS # 1
60          OPEN "COM2:1200, N,B,1,CS,DS,CD"AS # 2
400         PRINT " TEMPERATURE", " CH1", "CH2", "SL.NO."
600         IF M > NOOFDATA THEN GOTO 2000
605        PRINT #1, "   "
610        PRINT #1, " I1 "
620        For I = 1 to 200 : NEXT I
710        J$ = INKEY$
720        IF (J$ = "Q") OR (J$ = "q") THEN GOTO 2050
1400       PRINT # 1, "Q1"
1410       PRINT #1, CHR$ (13)
1420       PRINT #1, CHR$ (10)
1422       FOR DELAY = 1 TO 50000 !
1424       NEXT DELAY
```

```

1430     INPUT #1, V1
1440     PRINT # 1, "Q2"
1445     PRINT # 1, CHR # (13)
1450     PRINT # 1, CHR # (10)
1455     FOR DELAY = 1 TO 50000 !
1475     NEXT DELAY
1500     INPUT #1, V2
1510     PRINT # 2, "T"
1520     PRINT # 2, CHR # (13)
1550     PRINT # 2, CHR # (10)
1555     FOR DELAY = 1 TO 50000 !
1575     NEXT DELAY
1600     INPUT #2, TEMPER$
1605     TEMPS = RIGHTS (TEMPER$, 5)
1620     PRINT TEMPS,V1, V2, L
1630     PRINT
1650     PRNT #3, TEMPS, V1, V2
1700     OPEN "PWROFF.SAV" FOR APPEND AS #4
1705     PRINT #4, TEMPS,V1,V2
1720     CLOLE #4
1750     M = M+1
1755     L = L+1
1800     GOTO 600
2000     PRINT "DATA STORED IN :      "; A$
        GOTO 2100
2050     PRINT "PROGRAMM TERMINATED WITH OUT
        STORING DATA"
2100     CLOSE #1
2150     CLOSE #2
2200     CLOSE #3
2300     END

```

```
2650     DR = (D21 - D22)/2
2660     D = DR/C
2700     PRINT TEMP$,D,D21,D22
2750     PRINT
2755     PRINT #2, TEMP$,D,D21,D22
2800     OPEN "PWROFF.SAV" FOR APPEND AS #3
2810     PRINT #3,TEMP$,D,D21,D22
2900     CALL IBCLR (DVM%)
2950     CLOSE #3
3000     M = M+1
3050     L = L+1
3100     GOTO 600
3200     PRINT " data stored in: " A$
3240     GOTO 3300
3250     PRINT " PROGRAM TERMINATED WITHOUT STORING
DATA"
3300     CLOSE #1
3310     CLOSE #2
3340     GOTO 3500
3400     PRINT "ibfind error"
3500     END
```