

References

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APPENDIX

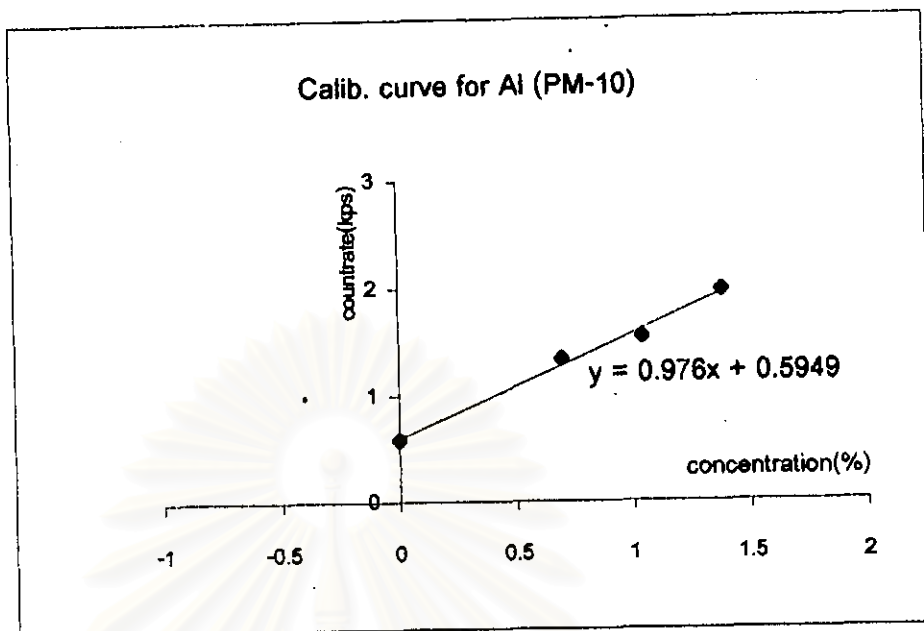
APPENDIX A

Calibration Curves for Elements Determined in TSP and PM-10



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X(%)	Y(kps)
0	0.5822
0.698	1.3378
1.044	1.5415
1.387	1.9721



X(%)	Y(kps)
0	4.9548
0.4	5.4316
0.796	5.9179
1.189	6.4033

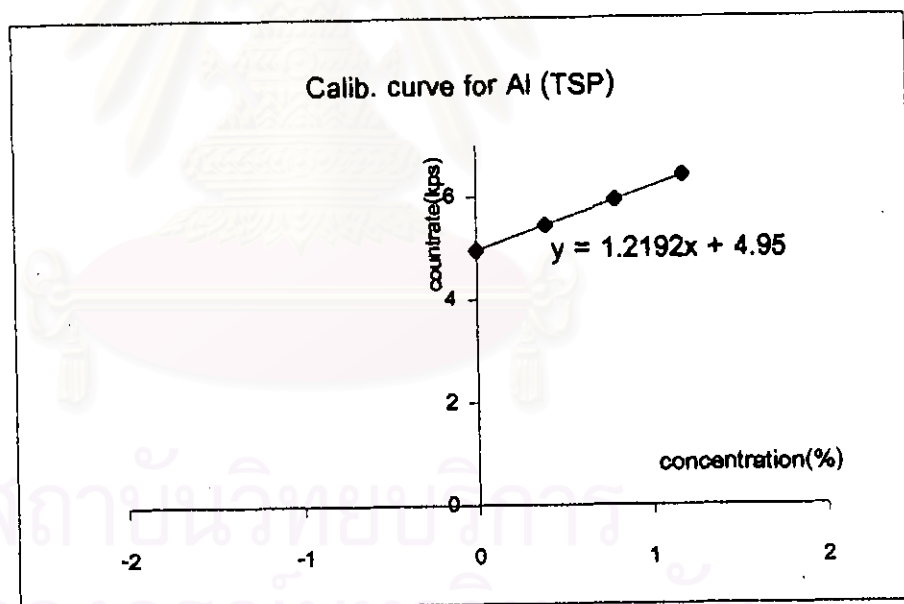
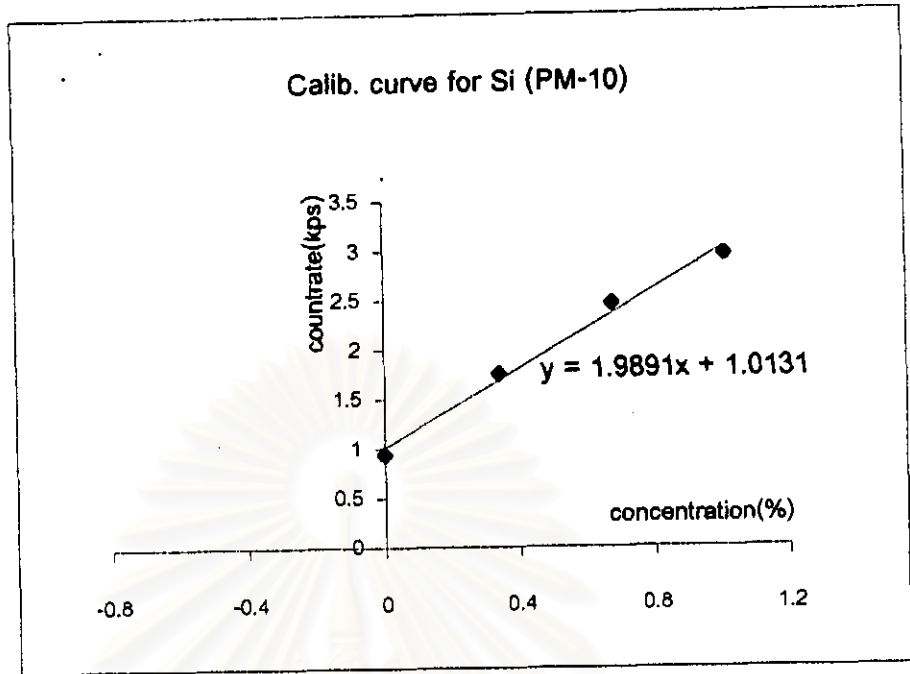


Figure A1 CALIBRATION CURVES FOR Al

X(%)	Y(kps)
0	0.9403
0.34	1.7487
0.678	2.4625
1.014	2.9428



X(%)	Y(kps)
0	9.4048
0.37	10.684
0.739	11.854
1.105	13.2885

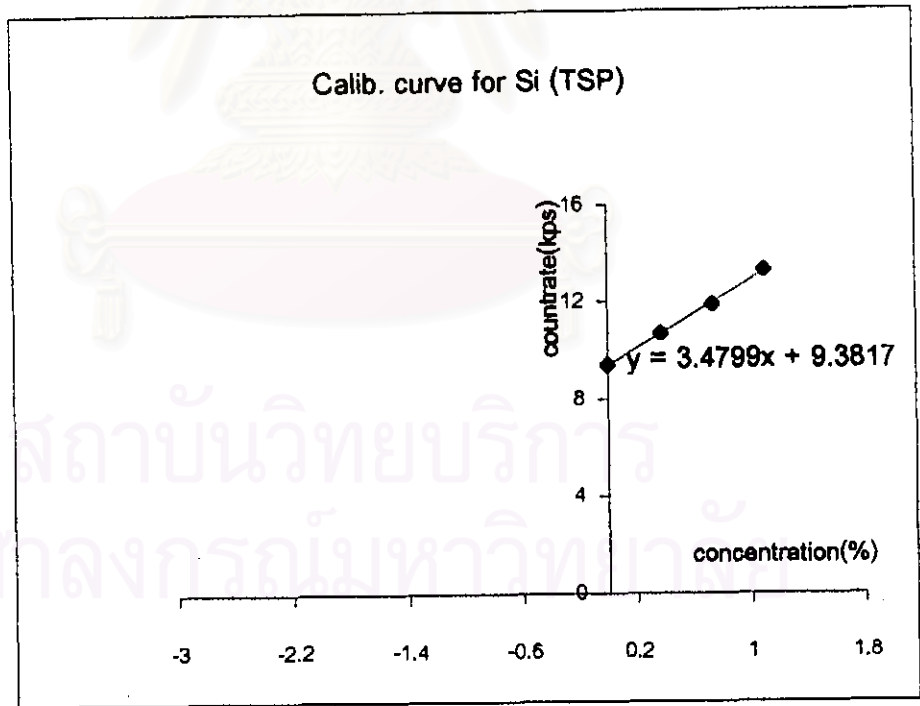
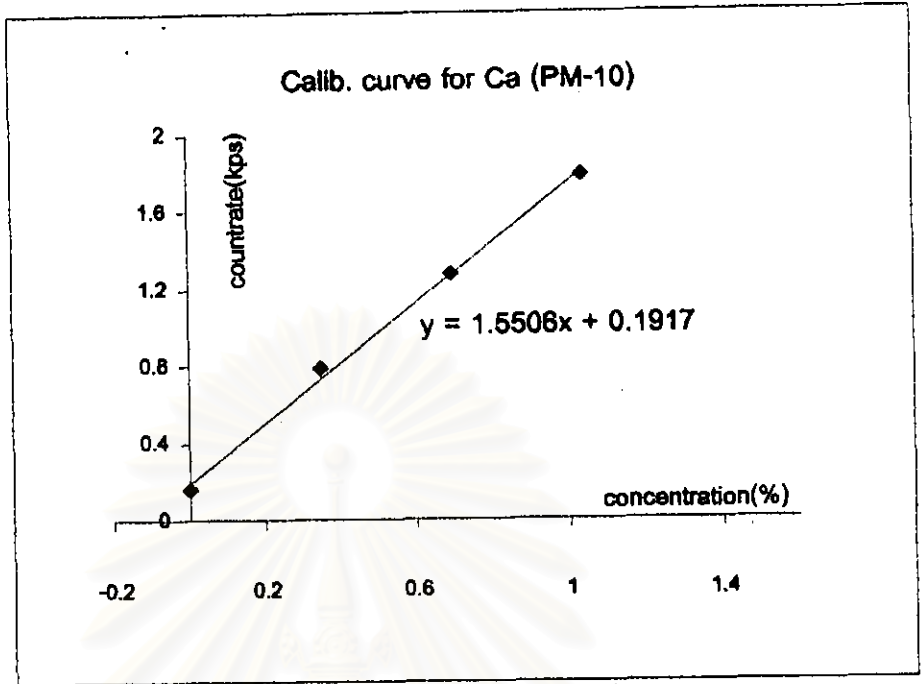


Figure A2 CALIBRATION CURVES FOR Si

X(%)	Y(kps)
0	0.1574
0.348	0.7821
0.6941	1.2692
1.037	1.7816



X(%)	Y(kps)
0	1.9876
0.39	2.8749
0.777	3.7129
1.161	4.5468

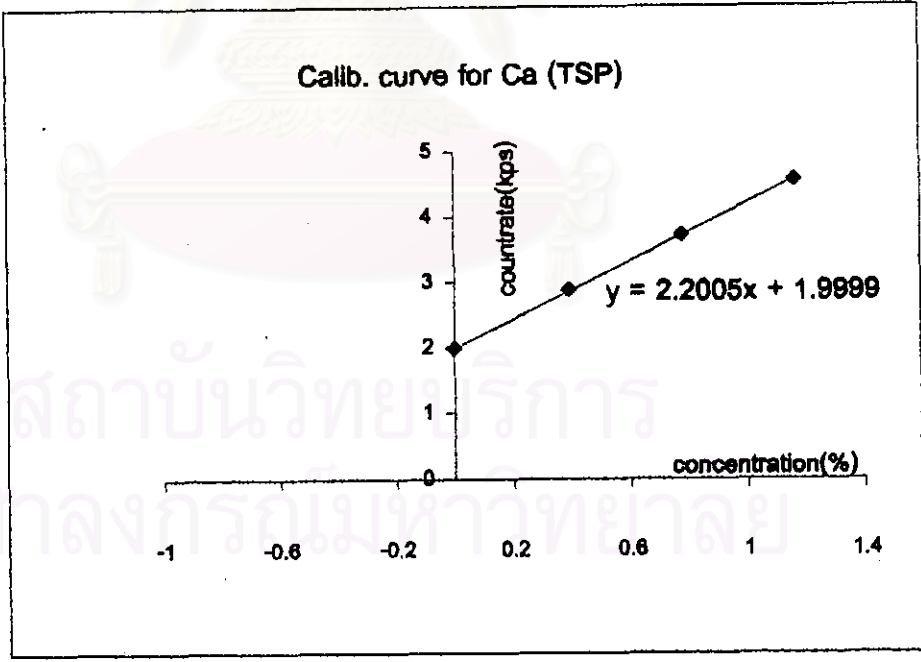
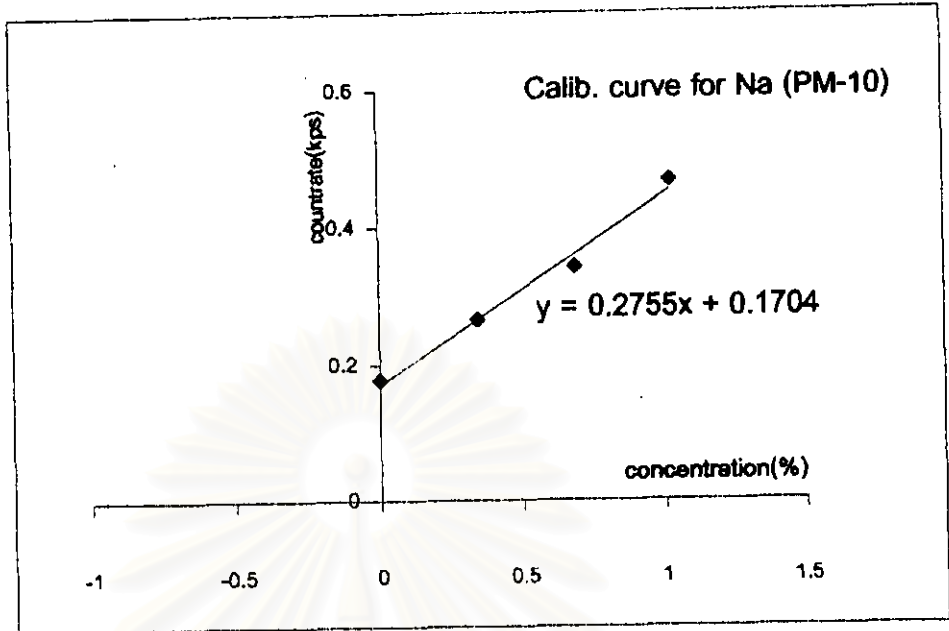


Figure A3 CALIBRATION CURVES FOR Ca

X(%)	Y(kps)
0	0.1768
0.345	0.2651
0.687	0.3409
1.027	0.466



X(%)	Y(kps)
0	0.6151
0.192	0.6322
0.383	0.7159
0.573	0.789

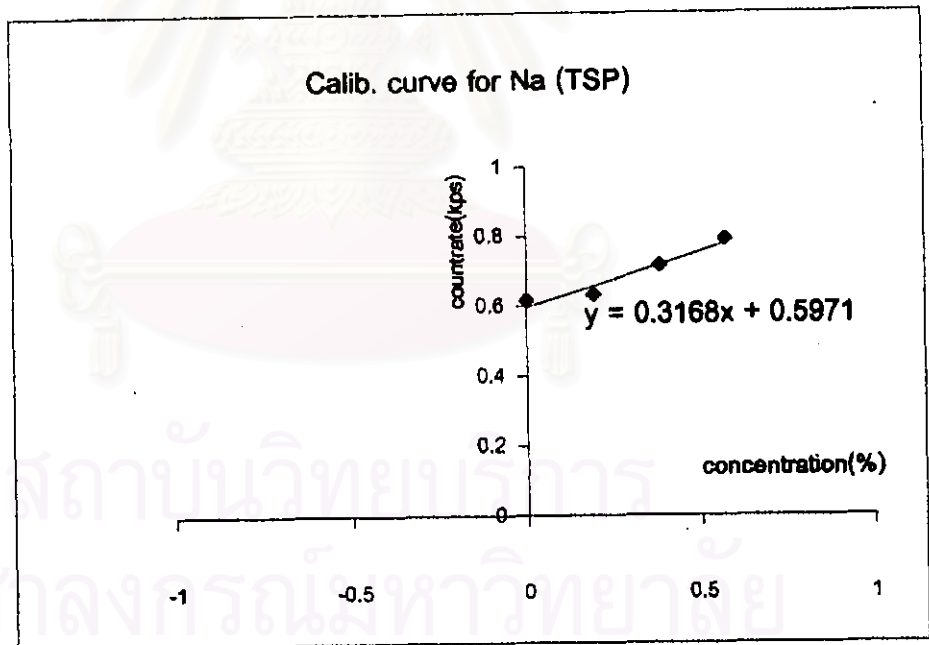
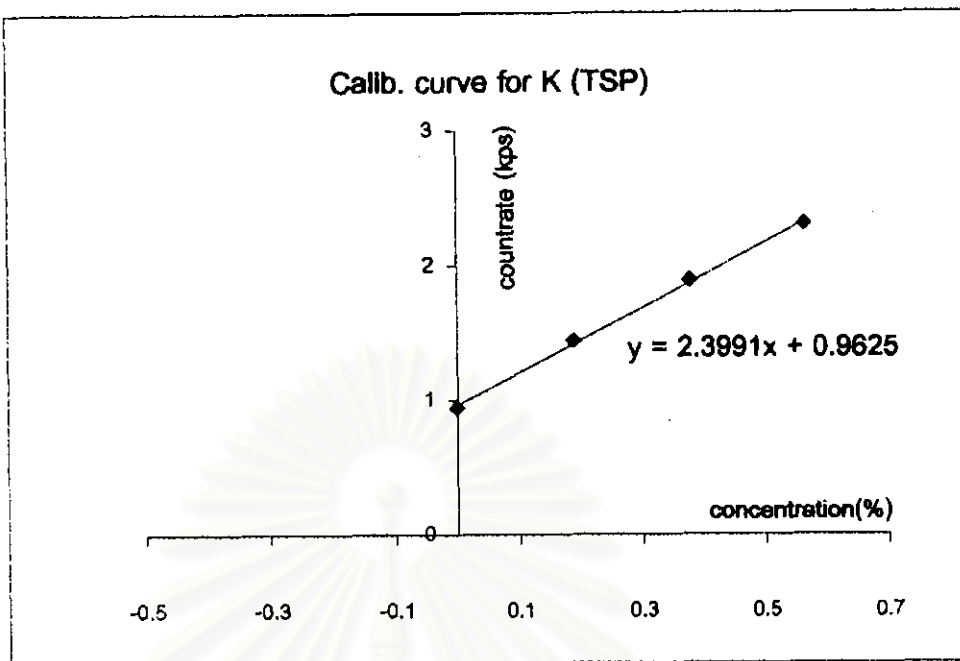


Figure A4 CALIBRATION CURVES FOR Na

X(%)	Y(kps)
0	0.9406
0.189	1.4396
0.378	1.8878
0.565	2.2977



X(%)	Y(kps)
0	0.1459
0.318	0.6574
0.633	1.2414
0.947	1.6568

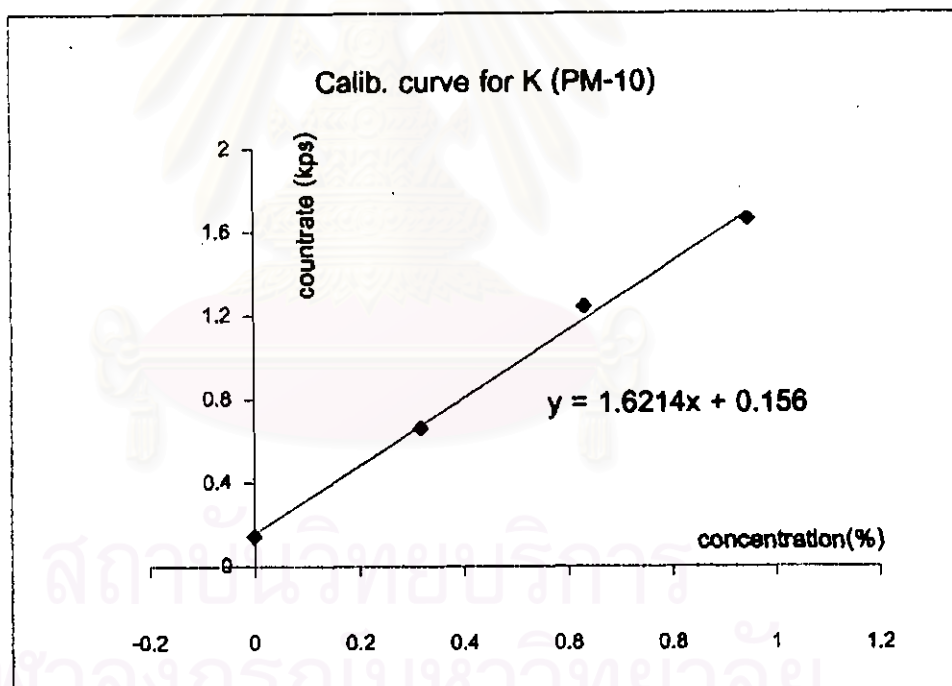
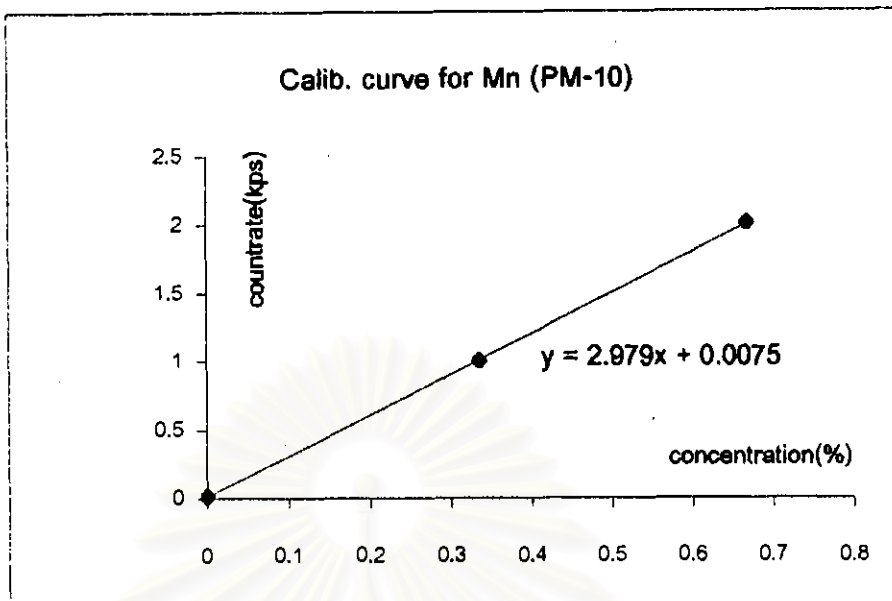


Figure A5 CALIBRATION CURVES FOR K .

X(%)	Y(kps)
0	0.012
0.336	0.9993
0.669	2.005



X(%)	Y(kps)
0	0.0457
0.189	1.0262
0.378	2.0919

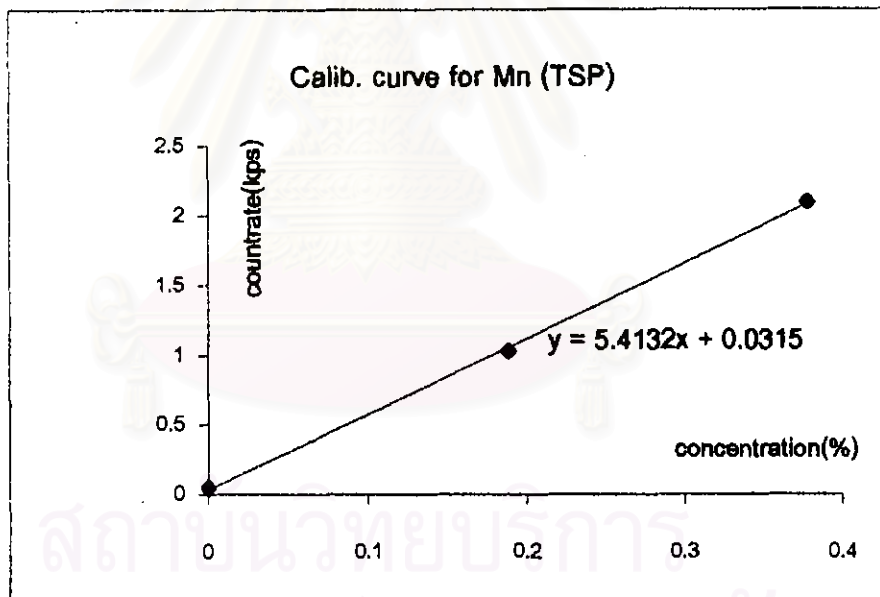
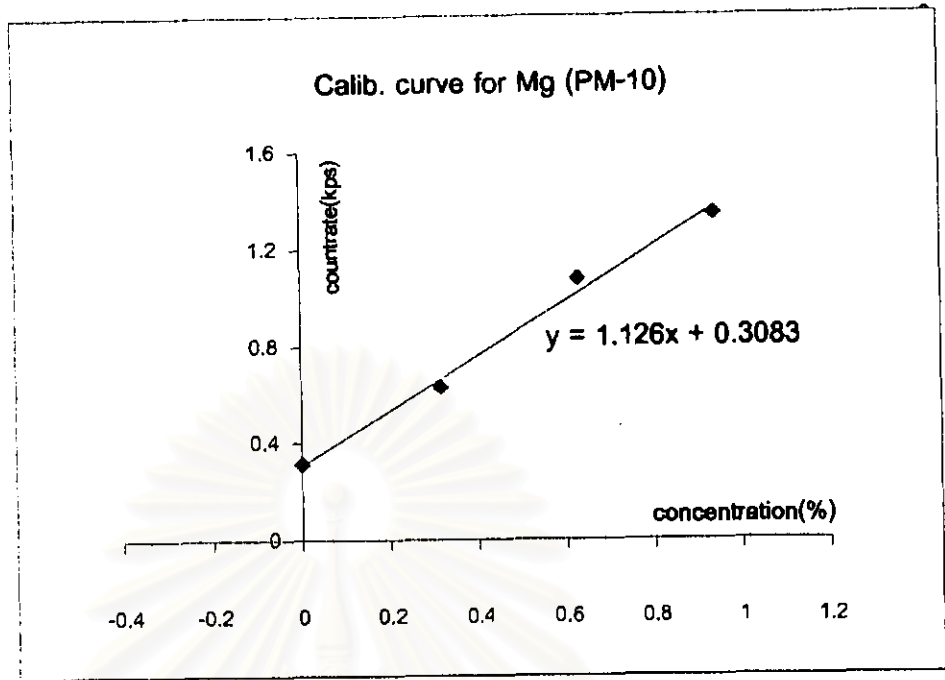


Figure A6 CALIBRATION CURVES FOR Mn

X(%)	Y(kps)
0	0.3118
0.315	0.6295
0.629	1.0734
0.94	1.34



X(%)	Y(kps)
0	1.1973
0.195	1.5182
0.389	1.8559
0.582	2.1693

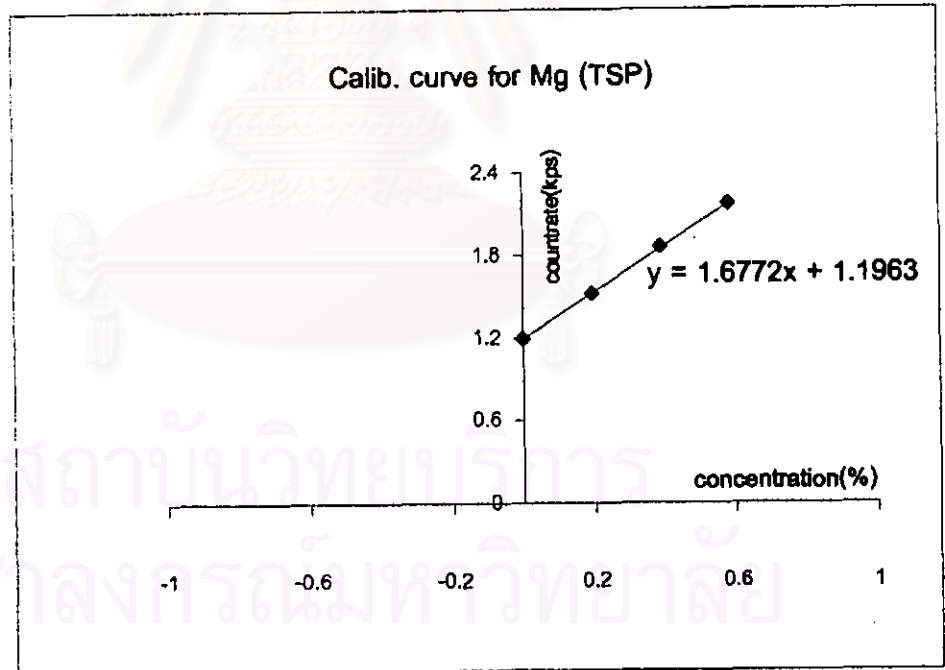


Figure A7 CALIBRATION CURVES FOR Mg

APPENDIX B

Program “errors” for calculating errors of concentration of element



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```

program error;
type

SR=array[1..10] of real;
var
M,i,t: integer;

D,S,C,N : SR;
xigC,sum6,sum1,sum2,sum3,sum4,sum5,sum7,denominator:real;
begin
writeln('program for calculating statistical error of concentration');
write('number of additions,M,='');readln(M);
write('measuring time,t, in sec. ='); readln(t);

for i:=1 to M do
begin
writeln('incremental concentrations in %, added to sample,C[',i,'],='');
readln(C[i]);
end;
for i:=1 to M do
begin
write('countrates,N[',i,'],='');readln(N[i]);
end;

begin
sum1:=0;
for i:=1 to M do
sum1:=sum1+sqr(C[i]);
end;

begin
sum2:=0;
for i:=1 to M do
sum2:=sum2+C[i];
end;

for i:=1 to M do
begin
S[i]:=N[i]/t;
end;

begin
sum3:=0;
for i:=1 to M do
sum3:=sum3+N[i];
end;

begin
sum4:=0;
for i:=1 to M do
sum4:=sum4+N[i]*C[i];
end;

```

```
denominator:=sqr(M*sum4-sum3*sum2);  
sum5:=M*sum4-sum3*sum2;  
sum6:=sum4*sum2-sum1*sum3;  
  
begin  
sum7:=0;  
for i:=1 to M do  
  
D[i]:=S[i]*sqr(((C[i]*sum2-sum1)*sum5-sum6*(M*C[i]-sum2))/  
denominator);  
  
sum7:=sum7+D[i];  
end;  
  
xigC:=SQRT(sum7);  
writeln('xigC=',xigC:10:8);  
end .
```



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Biography

Mr. Nguyen Tuan Khai was born in 2 November 1965 in Thanh hoa province, Vietnam. He got Bachelor Degree in Nuclear Physics from Faculty of Physics, Hanoi University of Technology, Hanoi, Vietnam.

Then he worked for Institute of Physics, National Centre for Natural Science and Technology, Hanoi, Vietnam.

From June, 1997 to June, 1999 he studied his course in master degree in Department of Nuclear Technology, Faculty of Engineering, Chulalongkorn University.



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