

Table 4.2 shows the stopping power of alpha particles as a function of energy for various foils.

Table 4.2 dE/dx in MeV/mg/cm² for Various Materials (Taken from Reference 7)

Energy (MeV)	Al	Ag	Au	Cu	N	O	Ne	Mylar	He
.050	.532	.223	.112	.311	.564	.530	.471	.713	.851
.080	.673	.282	.141	.401	.684	.644	.576	.889	.989
.128	.852	.358	.180	.670	.817	.777	.710	1.107	1.102
.201	1.040	.444	.226	.643	.956	.930	.865	1.346	1.211
.400	1.28	.575	.307	.764	1.303	1.262	1.201	1.757	1.572
.500	1.317	.604	.331	.780	1.442	1.389	1.327	1.888	1.745
.640	1.323	.622	.349	.781	1.604	1.546	1.466	2.021	1.955
.800	1.299	.622	.357	.770	1.734	1.665	1.574	2.096	2.117
1.000	1.248	.610	.357	.740	1.816	1.748	1.632	2.114	2.239
1.60	1.086	.555	.338	.660	1.776	1.688	1.529	1.947	2.237
2.00	.996	.520	.322	.630	1.640	1.561	1.396	1.786	2.112
2.401	.904	.480	.302	.580	1.458	1.385	1.238	1.593	1.926
2.80	.832	.448	.285	.550	1.292	1.227	1.098	1.427	1.756
3.20	.773	.422	.271	.520	1.152	1.098	.982	1.287	1.593
4.00	.682	.380	.250	.460	.949	.900	.802	1.073	1.329
5.00	.598	.340	.228	.410	.792	.756	.672	.895	1.113
6.40	.512	.297	.204	.360	.655	.626	.561	.730	.907
8.00	.442	.262	.183	.320	.556	.530	.479	.610	.750

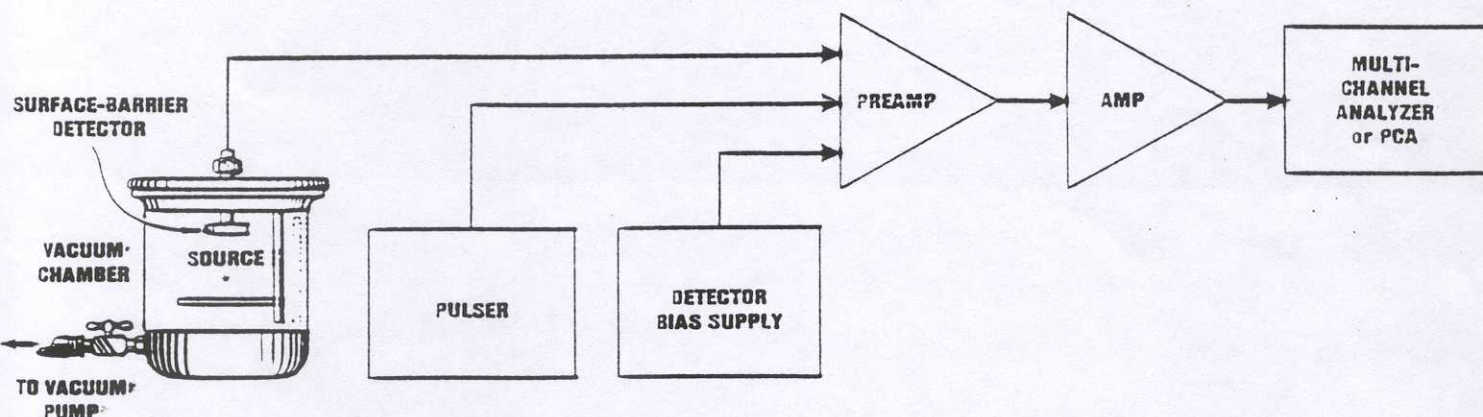


Figure 4.3. Electronics for dE/dx Experiment.