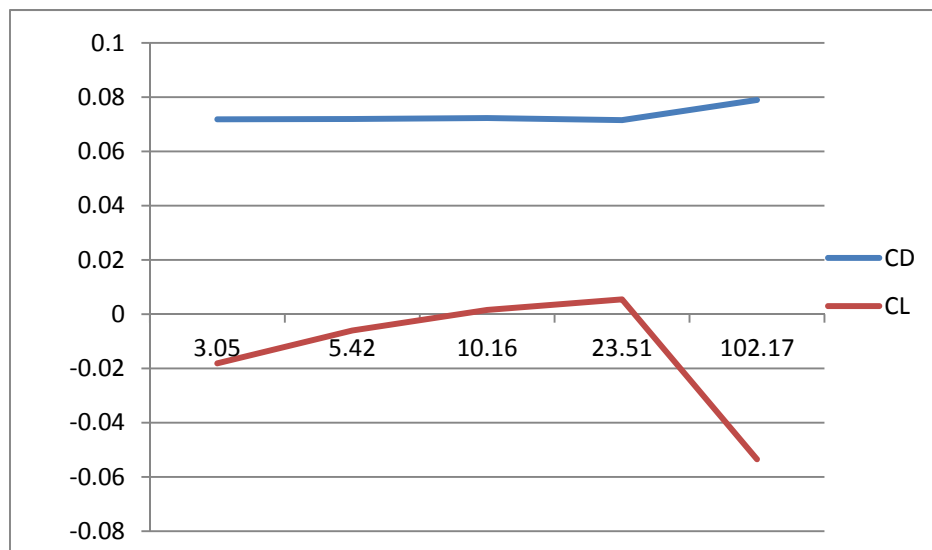


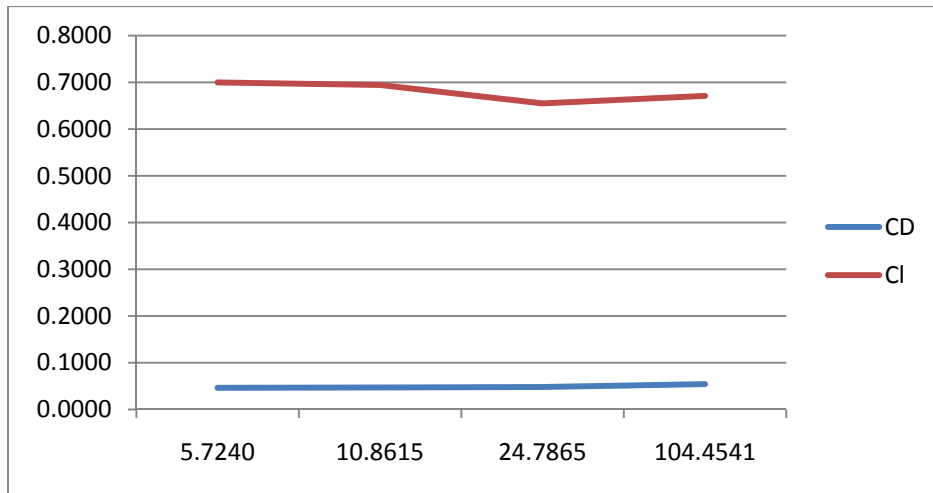
Exercise 4: Experimental determination of lift and drag coefficients of a T-foil

Peng Li

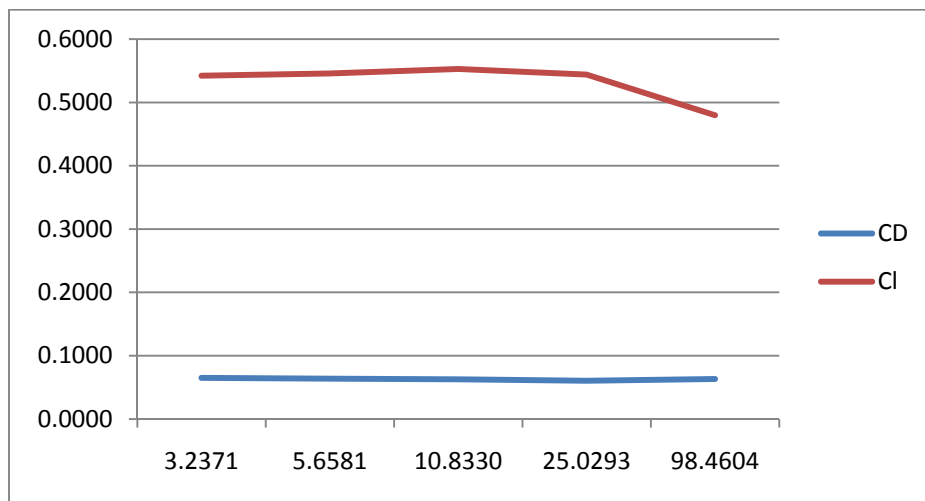
Name	Unit	-2.9 deg	-2.9 deg	-2.9 deg	-2.9 deg	-2.9 deg
Date	m-d-y	02-16-11	02-16-11	02-16-11	02-16-11	02-16-11
Time	h:m:s	13:20:15	13:19:55	13:19:31	13:19:04	13:18:40
Water_Speed_voltage	V-in	9.0727	5.7421	3.3271	1.5345	0.3692
Tunnel_Pressure	KPa	82.2623	92.2390	99.9617	106.5278	110.4108
Drag	N	227.4926	144.1733	83.9873	38.3101	10.0958
Lift	N	-57.4404	-12.1077	1.8019	2.9116	-6.8382
Water_velocity	m/s	7.2349	5.7557	4.3812	2.9750	1.4534
Sigma_V		3.0416	5.4080	10.1389	23.4896	104.8121
sigma		3.0476	5.4176	10.1550	23.5069	102.1689
C_D		0.0718	0.0719	0.0723	0.0715	0.0789
C_L		-0.0181	-0.0060	0.0015	0.0054	-0.0535



Name	Unit	6 deg	6 deg	6 deg	6 deg
Date	m-d-y	02-16-11	02-16-11	02-16-11	02-16-11
Time	h:m:s	13:06:15	13:05:58	13:05:40	13:05:08
Water_Speed_voltage	V-in	5.5079	3.1571	1.4731	0.3658
Tunnel_Pressure	KPa	93.4454	101.4159	107.7960	111.7097
Drag	N	89.6349	51.7830	24.6871	6.8843
Lift	N	1345.6985	765.0584	336.7003	84.8946
Water_velocity	m/s	5.6371	4.2678	2.9148	1.4460
Sigma_V		5.7142	10.8451	24.7729	107.4974
sigma		5.7240	10.8615	24.7865	104.4541
C_D		0.0466	0.0470	0.0480	0.0544
C_L		0.7000	0.6943	0.6550	0.6711

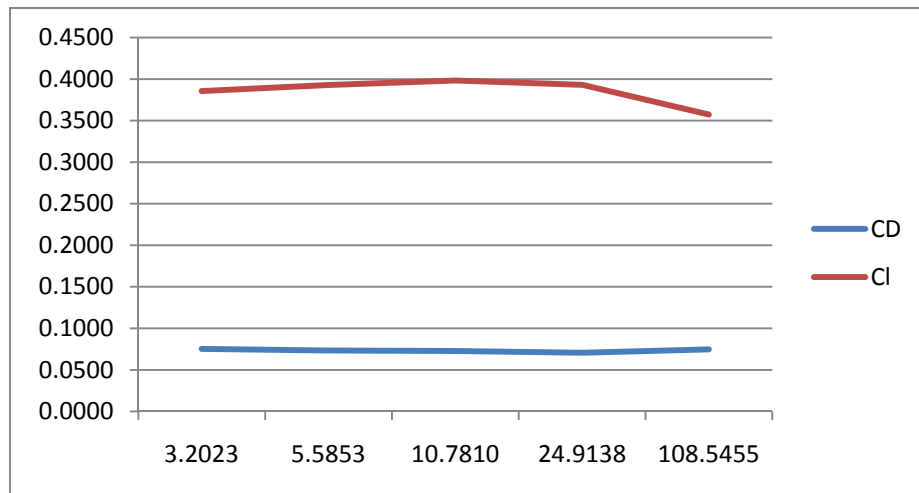


Name	Unit	4 deg	4 deg	4 deg	4 deg	4 deg
Date	m-d-y	02-16-11	02-16-11	02-16-11	02-16-11	02-16-11
Time	h:m:s	12:51:46	12:51:30	12:51:11	12:50:47	12:50:29
Water_Speed_voltage	V-in	8.7123	5.5724	3.1678	1.4610	0.3858
Tunnel_Pressure	KPa	83.8552	93.4518	101.4910	107.9586	111.8562
Drag	N	197.8988	123.8948	69.4328	30.7754	8.5019
Lift	N	1649.0584	1061.7920	611.1911	277.3741	64.4877
Water_velocity	m/s	7.0897	5.6700	4.2750	2.9029	1.4904
Sigma_V		3.2309	5.6481	10.8165	25.0133	98.9402
sigma		3.2371	5.6581	10.8330	25.0293	98.4604
C _D		0.0651	0.0637	0.0628	0.0604	0.0633
C _L		0.5423	0.5459	0.5528	0.5441	0.4799



Name	Unit	2 deg	2 deg	2 deg	2 deg	2 deg
Date	m-d-y	02-16-11	02-16-11	02-16-11	02-16-11	02-16-11
Time	h:m:s	12:39:22	12:39:05	12:38:47	12:38:30	12:38:13
Water_Speed_voltage	V-in	8.8072	5.6407	3.1876	1.4693	0.3533
Tunnel_Pressure	KPa	83.8580	93.3818	101.6304	108.0674	111.9925
Drag	N	231.0384	144.4597	80.9978	36.2169	9.1025
Lift	N	1185.0719	773.4508	443.0226	201.5673	43.5994

Water_velocity	m/s	7.1283	5.7046	4.2883	2.9111	1.4204
Sigma_V		3.1959	5.5755	10.7646	24.8993	112.0939
sigma		3.2023	5.5853	10.7810	24.9138	108.5455
C _D		0.0752	0.0734	0.0728	0.0706	0.0746
C _L		0.3855	0.3928	0.3982	0.3931	0.3572



Name	Unit	0 deg	0 deg	0 deg	0 deg	0 deg
Date	m-d-y	02-16-11	02-16-11	02-16-11	02-16-11	02-16-11
Time	h:m:s	12:27:54	12:27:24	12:27:05	12:26:30	12:26:03
Water_Speed_voltage	V-in	8.8325	5.6485	3.2184	1.4926	0.3662
Tunnel_Pressure	KPa	83.8868	93.4308	101.6852	108.1706	112.1566
Drag	N	243.2164	152.8222	87.2536	40.0430	10.3704
Lift	N	665.1731	449.4884	268.4671	119.9384	21.0448
Water_velocity	m/s	7.1385	5.7086	4.3090	2.9341	1.4469
Sigma_V		3.1879	5.5708	10.6683	24.5351	107.7783
sigma		3.1943	5.5806	10.6839	24.5498	104.7629
C _D		0.0789	0.0775	0.0777	0.0769	0.0819
C _L		0.2158	0.2280	0.2390	0.2303	0.1662

