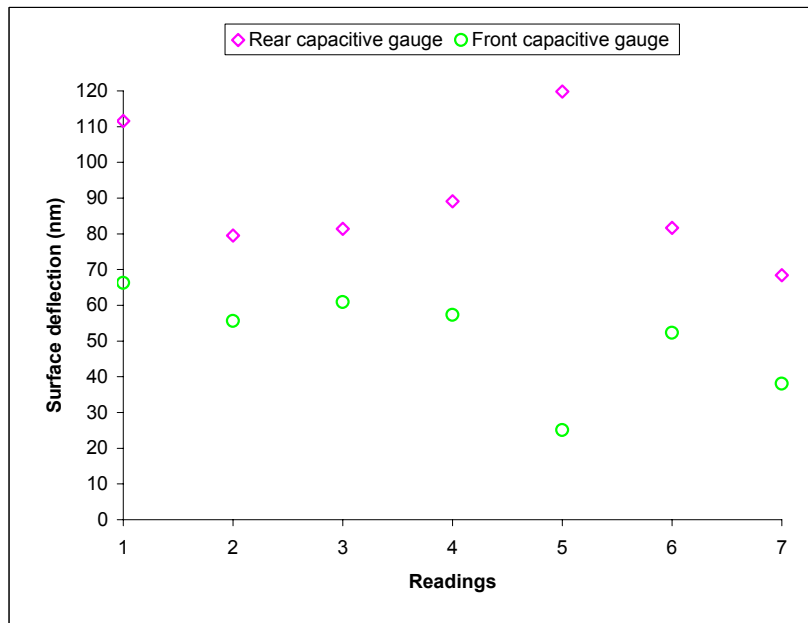


DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St1* SURFACE USING 15g DEAD-WEIGHT

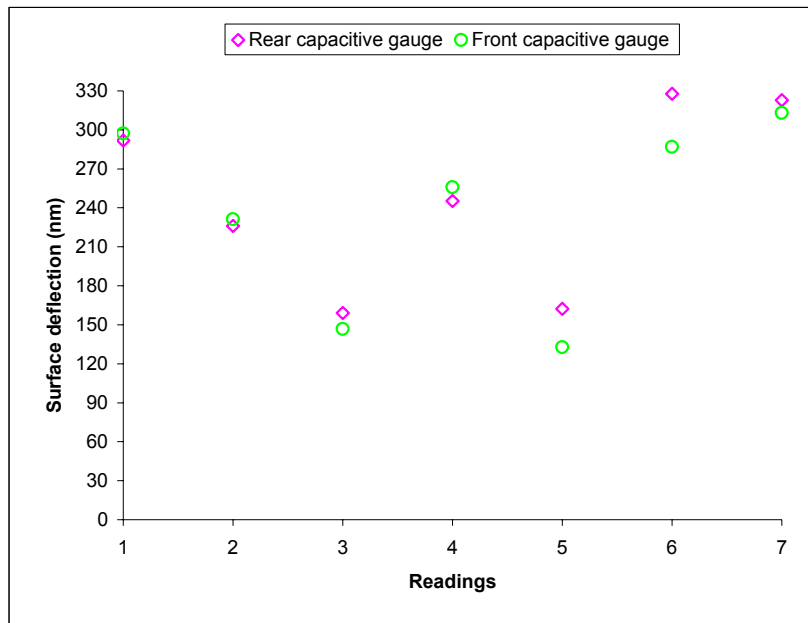
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.22540	1.26422	6.38474	6.37754	6.38646	6.38244	10.734	111.6	66.3	89.0
2	1.22809	1.26905	6.13611	6.13098	6.12009	6.11672	11.325	79.5	55.6	67.6
3	1.22534	1.26619	6.26951	6.26426	6.24331	6.23962	11.295	81.4	60.9	71.2
4	1.22748	1.26540	6.27047	6.26472	6.24477	6.24130	10.485	89.1	57.3	73.2
5	1.22834	1.26576	6.45222	6.44449	6.35772	6.35620	10.347	119.8	25.1	72.5
6	1.22823	1.26671	6.55301	6.54774	6.44869	6.44552	10.640	81.7	52.3	67.0
7	1.22568	1.26333	6.98921	6.98480	6.95961	6.95730	10.410	68.4	38.1	53.3
								90.2	50.8	



RESULTS			
10.748	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	70.5
		<i>and its standard devia.</i>	10.6

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St1* SURFACE USING 35g DEAD-WEIGHT

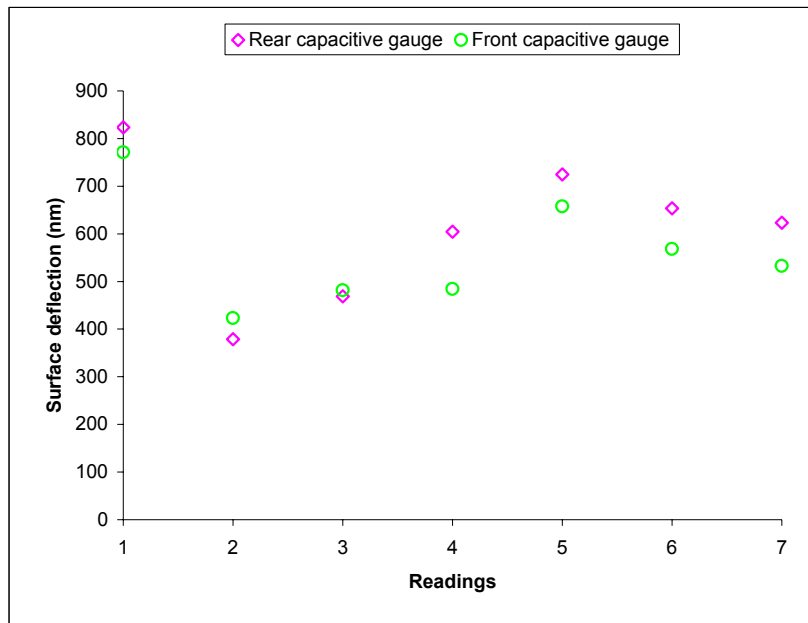
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	0.98840	1.10783	7.09885	7.08002	7.09278	7.07477	33.023	291.9	297.2	294.6
2	0.99315	1.11460	7.56776	7.55318	7.56231	7.54830	33.581	226.0	231.2	228.6
3	0.99321	1.12092	7.52529	7.51503	7.52975	7.52085	35.312	159.0	146.8	152.9
4	1.00021	1.12332	7.91077	7.89494	7.93429	7.91878	34.040	245.4	255.9	250.7
5	0.99996	1.12406	7.46153	7.45105	7.43690	7.42885	34.314	162.4	132.8	147.6
6	0.99700	1.12373	7.66361	7.64246	7.63939	7.62201	35.041	327.8	286.8	307.3
7	1.00176	1.12785	7.50021	7.47938	7.46765	7.44868	34.864	322.9	313.0	318.0
								247.9	237.7	



RESULTS			
34.311	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	242.8
		<i>and its standard devia.</i>	70.6

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St1* SURFACE USING 75g DEAD-WEIGHT

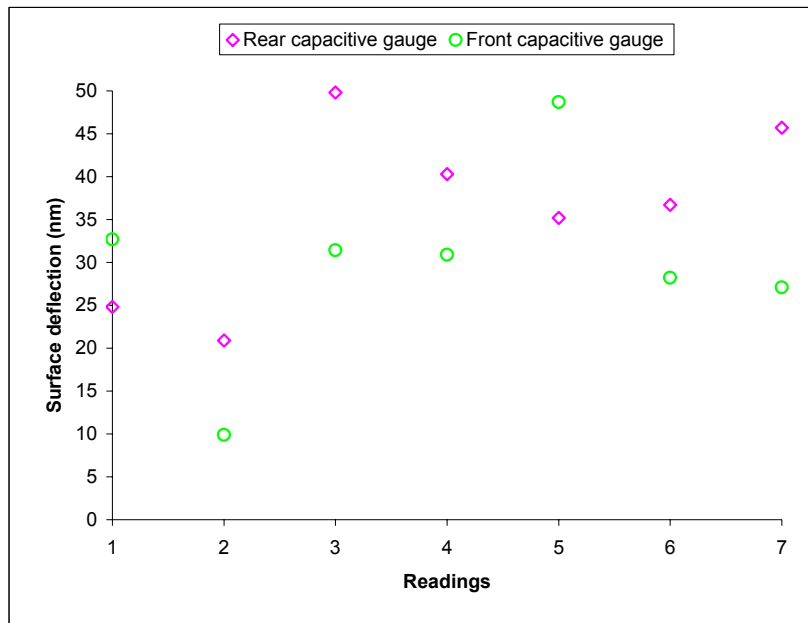
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.22437	1.49949	6.83074	6.77763	6.80728	6.76056	76.071	823.2	770.9	797.1
2	1.21630	1.49049	6.60246	6.57803	6.59537	6.56973	75.814	378.7	423.1	400.9
3	1.23226	1.50814	6.33905	6.30880	6.26720	6.23800	76.281	468.9	481.8	475.4
4	1.21993	1.49324	6.55555	6.51657	6.55298	6.52363	75.571	604.2	484.3	544.3
5	1.21815	1.49113	6.10262	6.05588	6.11435	6.07449	75.479	724.5	657.7	691.1
6	1.21862	1.49168	6.37793	6.33576	6.39253	6.35808	75.501	653.6	568.4	611.0
7	1.23664	1.51200	6.10003	6.05982	6.13251	6.10023	76.137	623.3	532.6	578.0
								610.9	559.8	



RESULTS			
75.836	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	585.4
		<i>and its standard devia.</i>	132.0

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON *St2* SURFACE USING 15g DEAD-WEIGHT

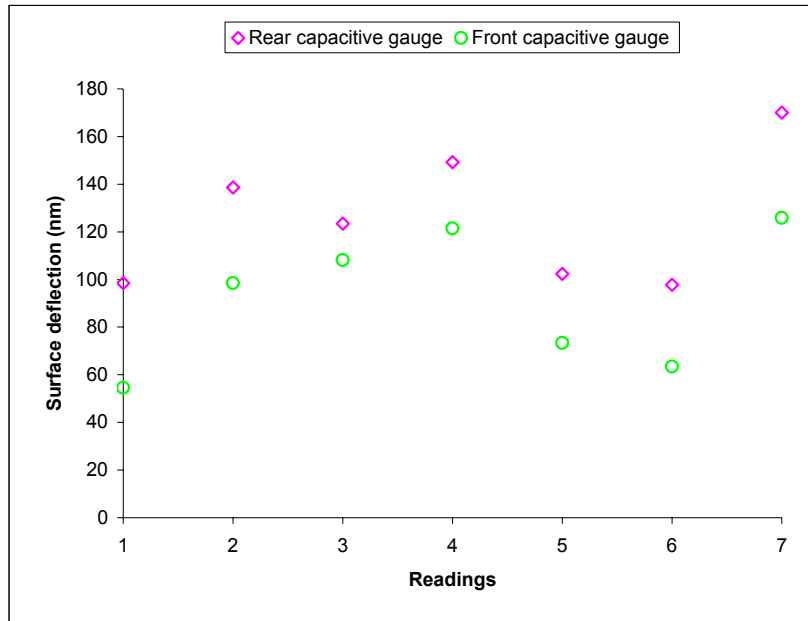
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.17318	1.19881	7.42820	7.42660	7.35206	7.35008	7.087	24.8	32.7	28.8
2	1.16929	1.19760	6.60245	6.60110	6.57285	6.57225	7.828	20.9	9.9	15.4
3	1.17547	1.20354	7.54817	7.54496	7.44917	7.44727	7.761	49.8	31.4	40.6
4	1.17346	1.20049	7.52457	7.52197	7.44900	7.44713	7.474	40.3	30.9	35.6
5	1.17479	1.20005	7.28657	7.28430	7.20433	7.20138	6.984	35.2	48.7	42.0
6	1.17017	1.19625	6.46968	6.46731	6.43811	6.43640	7.211	36.7	28.2	32.5
7	1.16963	1.19704	6.88321	6.88026	6.82808	6.82644	7.579	45.7	27.1	36.4
								36.2	29.8	



RESULTS			
7.418	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	33.0
		<i>and its standard devia.</i>	9.0

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St2* SURFACE USING 35g DEAD-WEIGHT

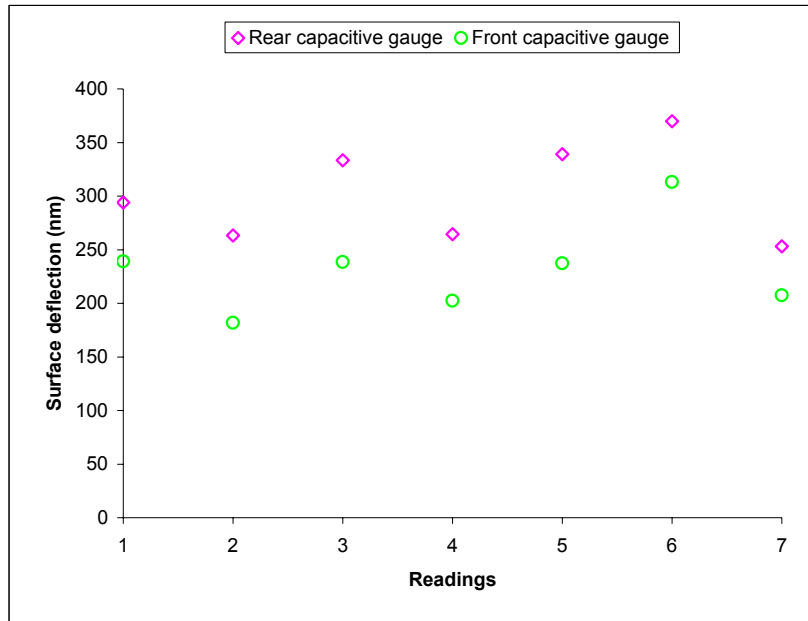
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.17285	1.26825	7.18325	7.17690	7.11983	7.11652	26.378	98.4	54.6	76.5
2	1.16975	1.26066	6.60490	6.59596	6.59141	6.58544	25.137	138.6	98.5	118.6
3	1.16879	1.26121	7.00012	6.99216	6.94671	6.94016	25.554	123.4	108.1	115.8
4	1.17297	1.26592	7.17754	7.16791	7.11658	7.10922	25.701	149.3	121.4	135.4
5	1.17503	1.26793	7.19804	7.19144	7.13994	7.13550	25.687	102.3	73.3	87.8
6	1.17474	1.27196	7.22188	7.21557	7.15675	7.15291	26.881	97.8	63.4	80.6
7	1.16681	1.26050	6.56203	6.55106	6.53777	6.53014	25.905	170.0	125.9	148.0
								125.7	92.2	



RESULTS			
25.892	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	108.9
			27.9

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St2* SURFACE USING 75g DEAD-WEIGHT

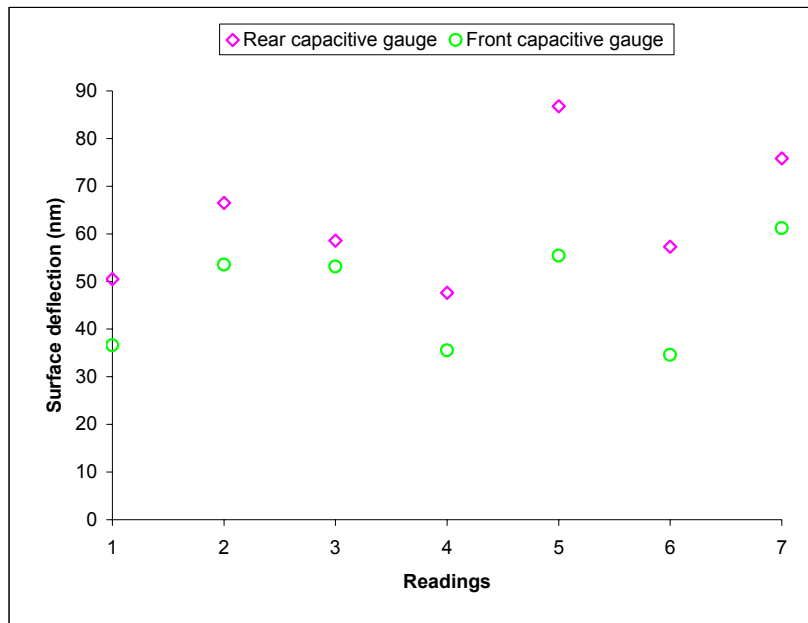
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.18424	1.42637	6.93960	6.92063	6.89458	6.88009	66.949	294.0	239.1	266.6
2	1.17767	1.42458	7.17269	7.15570	7.12399	7.11298	68.271	263.3	181.7	222.5
3	1.17700	1.41910	6.56466	6.54315	6.54278	6.52832	66.941	333.4	238.6	286.0
4	1.17847	1.42398	7.00407	6.98701	6.96094	6.94867	67.884	264.4	202.5	233.5
5	1.18432	1.43387	7.51301	7.49114	7.43622	7.42183	69.001	339.0	237.4	288.2
6	1.17616	1.42450	7.00444	6.98057	6.96324	6.94427	68.666	370.0	313.0	341.5
7	1.18107	1.42313	7.07842	7.06210	7.03831	7.02574	66.930	253.0	207.4	230.2
								302.4	231.4	



RESULTS			
67.806	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	266.9
		<i>and its standard devia.</i>	42.5

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St3* SURFACE USING 15g DEAD-WEIGHT

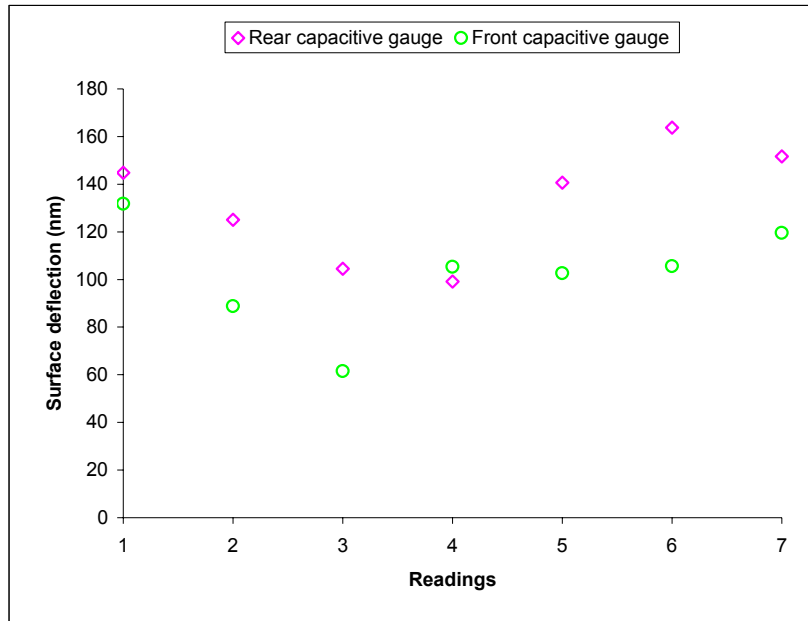
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06410	1.11168	7.54819	7.54493	7.55493	7.55271	13.156	50.5	36.6	43.6
2	1.04814	1.09162	6.65469	6.65040	6.67073	6.66749	12.022	66.5	53.5	60.0
3	1.07142	1.11709	7.34876	7.34498	7.35339	7.35017	12.628	58.6	53.1	55.9
4	1.06244	1.10409	7.30643	7.30336	7.31576	7.31361	11.516	47.6	35.5	41.6
5	1.04124	1.08362	7.57677	7.57117	7.59716	7.59380	11.718	86.8	55.4	71.1
6	1.05376	1.09689	7.69511	7.69141	7.69799	7.69589	11.925	57.3	34.6	46.0
7	1.03845	1.08374	6.68061	6.67572	6.69777	6.69406	12.523	75.8	61.2	68.5
								63.3	47.1	



RESULTS			
12.213	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	55.2
		<i>and its standard devia.</i>	12.0

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St3* SURFACE USING 35g DEAD-WEIGHT

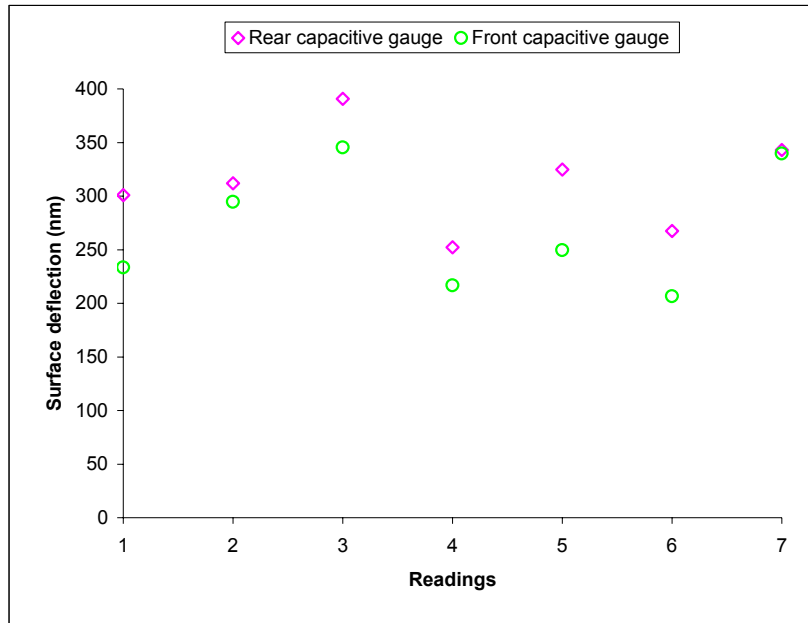
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06547	1.17792	6.50931	6.49997	6.52498	6.51699	31.093	144.8	131.8	138.3
2	1.06291	1.17603	7.18277	7.17470	7.20941	7.20403	31.278	125.1	88.8	107.0
3	1.05862	1.16709	6.73703	6.73029	6.75783	6.75410	29.992	104.5	61.5	83.0
4	1.04733	1.16425	7.59885	7.59245	7.60884	7.60246	32.329	99.2	105.3	102.3
5	1.05058	1.16629	7.11903	7.10996	7.12420	7.11798	31.994	140.6	102.6	121.6
6	1.05948	1.17998	7.23661	7.22604	7.26032	7.25392	33.318	163.8	105.6	134.7
7	1.04601	1.16834	6.14929	6.13950	6.16228	6.15504	33.824	151.7	119.5	135.6
								132.8	102.2	



RESULTS			
31.975	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	117.5
		<i>and its standard devia.</i>	20.8

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *St3* SURFACE USING 75g DEAD-WEIGHT

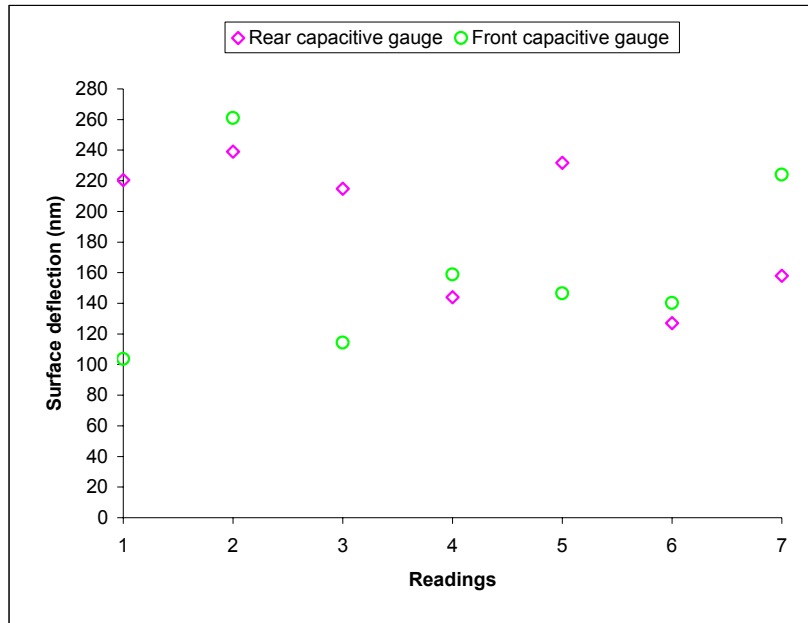
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06639	1.31975	6.87756	6.85814	6.91912	6.90497	70.054	301.0	233.5	267.3
2	1.05486	1.30939	7.25529	7.23517	7.26988	7.25202	70.378	311.9	294.7	303.3
3	1.08041	1.33781	7.02867	7.00347	7.04413	7.02319	71.171	390.6	345.5	368.1
4	1.07531	1.33137	6.58051	6.56424	6.60587	6.59273	70.801	252.2	216.8	234.5
5	1.06340	1.32075	7.42833	7.40737	7.44701	7.43189	71.158	324.9	249.5	287.2
6	1.05741	1.31125	7.04674	7.02949	7.05862	7.04610	70.187	267.4	206.6	237.0
7	1.05024	1.30606	6.67043	6.64831	6.67660	6.65602	70.735	342.9	339.6	341.3
								313.0	269.5	



RESULTS			
70.641	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	291.2
		<i>and its standard devia.</i>	50.5

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *Co1* SURFACE USING 15g DEAD-WEIGHT

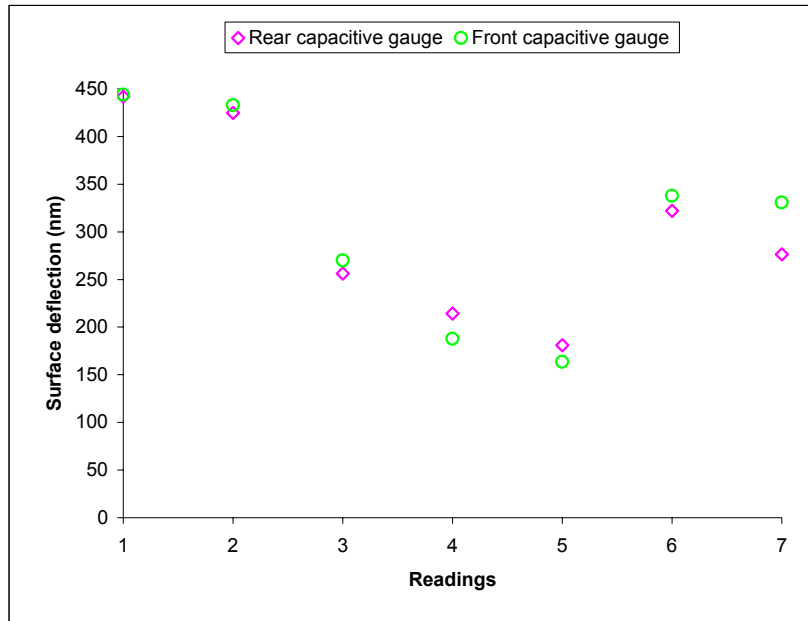
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.00795	1.05069	6.73309	6.71887	6.73074	6.72446	11.818	220.4	103.6	162.0
2	1.02095	1.06368	6.94531	6.92989	7.00394	6.98813	11.815	239.0	260.9	250.0
3	1.01891	1.06648	7.21543	7.20157	7.25777	7.25084	13.153	214.8	114.3	164.6
4	1.01177	1.06050	6.71307	6.70378	6.76263	6.75300	13.474	144.0	158.9	151.5
5	1.04053	1.08834	7.85590	7.84095	7.83578	7.82691	13.220	231.7	146.4	189.1
6	1.02682	1.07752	7.02157	7.01337	7.02668	7.01818	14.019	127.1	140.2	133.7
7	1.01608	1.06416	6.18195	6.17176	6.17542	6.16185	13.294	157.9	223.9	190.9
								190.7	164.0	



RESULTS			
12.970	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	177.4
			37.8

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *Co1* SURFACE USING 35g DEAD-WEIGHT

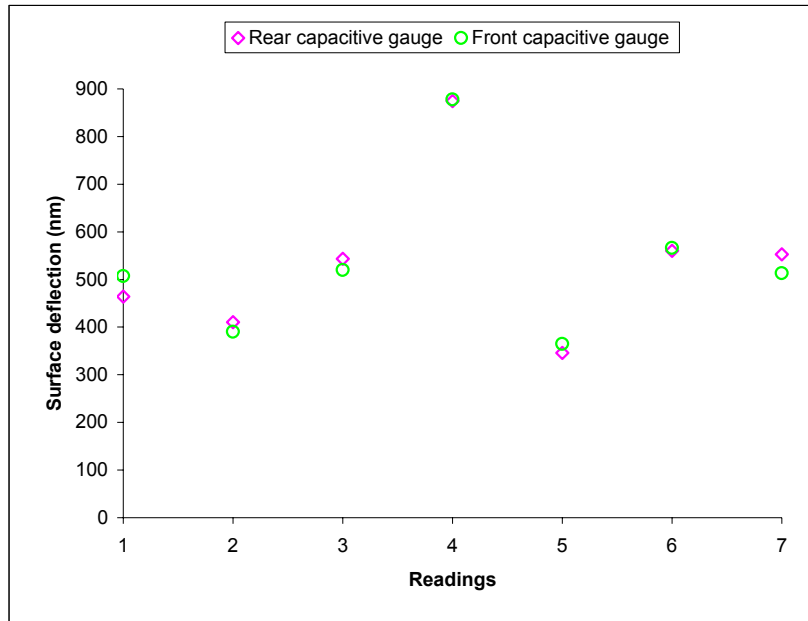
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06868	1.18606	6.52535	6.49683	6.53039	6.50348	32.456	442.1	444.0	443.1
2	1.06998	1.18839	6.42407	6.39666	6.43387	6.40764	32.740	424.9	432.8	428.9
3	1.07189	1.18947	6.29511	6.27859	6.29581	6.27945	32.511	256.1	269.9	263.0
4	1.06785	1.17971	6.56436	6.55054	6.57315	6.56178	30.929	214.2	187.6	200.9
5	1.08457	1.20477	7.04537	7.03370	7.05664	7.04674	33.235	180.9	163.4	172.2
6	1.08646	1.20660	7.55217	7.53138	7.56268	7.54220	33.219	322.2	337.9	330.1
7	1.07371	1.18874	7.29401	7.27618	7.30694	7.28689	31.806	276.4	330.8	303.6
								302.4	309.5	



RESULTS			
32.414	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	305.9
			104.3

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON *Co1* SURFACE USING 75g DEAD-WEIGHT

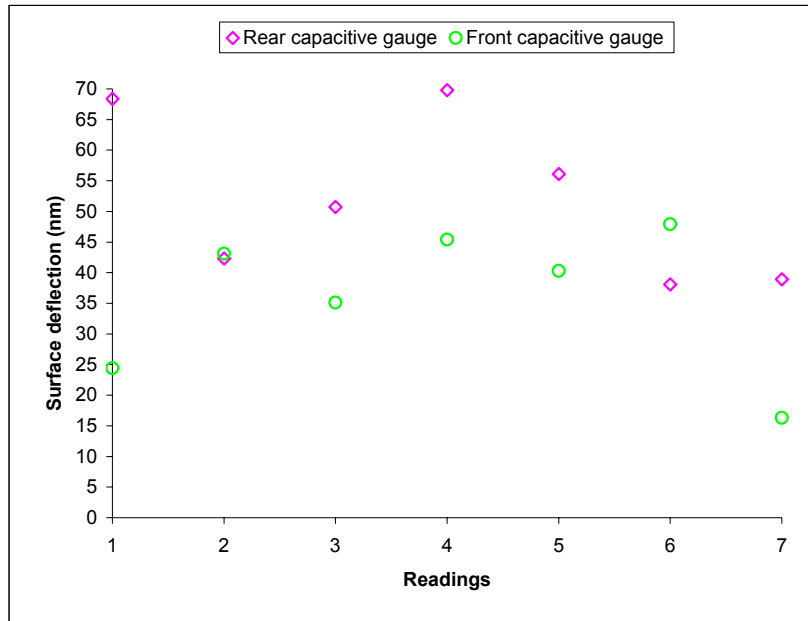
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.08438	1.35072	6.97393	6.94397	6.99383	6.96309	73.643	464.4	507.2	485.8
2	1.07176	1.33821	6.94071	6.91422	6.95910	6.93547	73.674	410.6	389.9	400.3
3	1.08063	1.34651	6.63069	6.59564	6.64072	6.60923	73.516	543.3	519.6	531.5
4	1.07610	1.34381	6.95696	6.90054	6.96369	6.91049	74.022	874.5	877.8	876.2
5	1.07746	1.34702	7.47378	7.45147	7.48680	7.46469	74.534	345.8	364.8	355.3
6	1.07781	1.34051	7.07916	7.04302	7.09172	7.05742	72.637	560.2	566.0	563.1
7	1.06600	1.33018	6.73723	6.70156	6.75081	6.71970	73.046	552.9	513.3	533.1
								536.0	534.1	



RESULTS			
73.582	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	535.0
		<i>and its standard devia.</i>	168.4

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₂ SURFACE USING 15g DEAD-WEIGHT

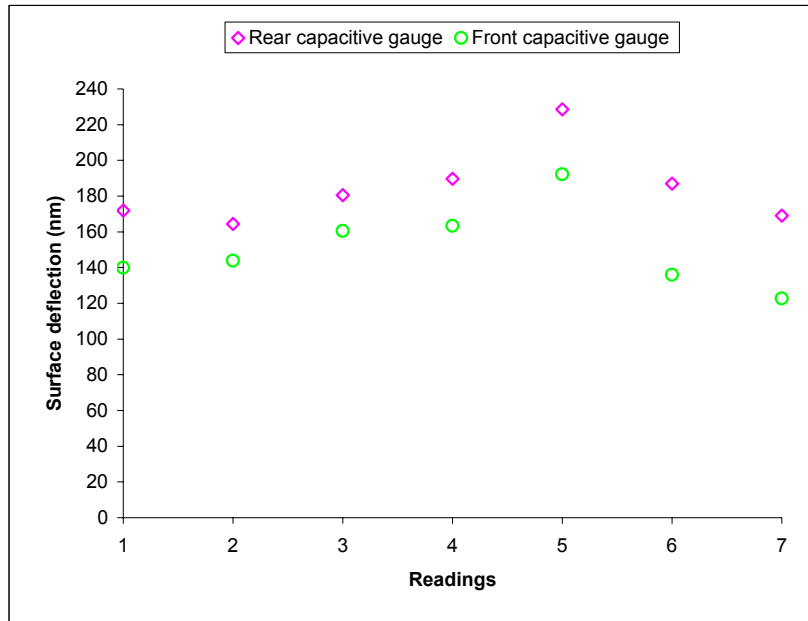
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.15312	1.18810	6.95212	6.94771	6.75825	6.75677	9.672	68.4	24.4	46.4
2	1.14313	1.17674	6.13589	6.13316	6.01979	6.01718	9.293	42.3	43.1	42.7
3	1.13817	1.17143	6.68782	6.68455	6.51047	6.50834	9.196	50.7	35.1	42.9
4	1.15334	1.18689	6.67953	6.67503	6.51375	6.51100	9.277	69.8	45.4	57.6
5	1.13292	1.16797	6.12567	6.12205	6.01765	6.01521	9.691	56.1	40.3	48.2
6	1.13392	1.16611	6.49599	6.49353	6.35700	6.35410	8.901	38.1	47.9	43.0
7	1.14915	1.18287	7.41235	7.40984	7.21827	7.21728	9.324	38.9	16.3	27.6
								52.0	36.1	



RESULTS			
9.336	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	44.1
		<i>and its standard devia.</i>	9.0

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₂ SURFACE USING 35g DEAD-WEIGHT

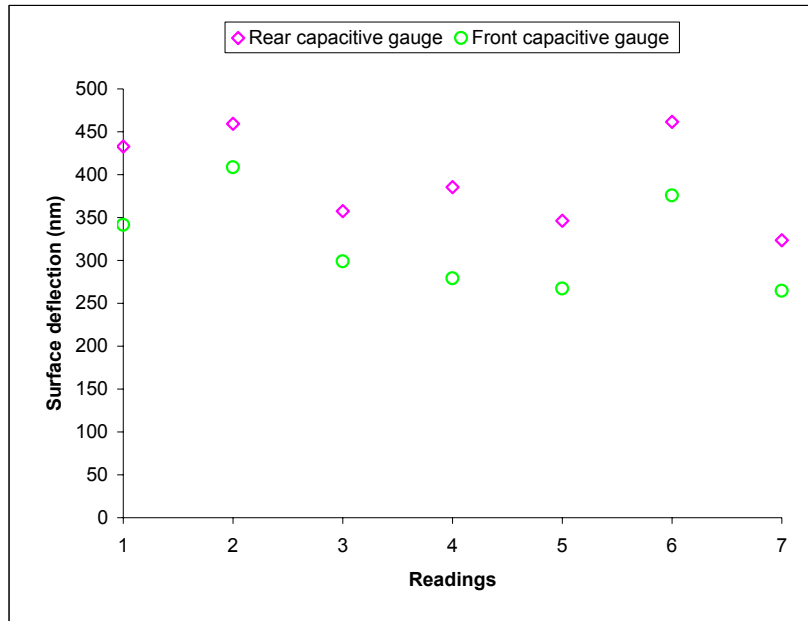
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.15384	1.26865	7.14391	7.13281	6.92805	6.91957	31.745	172.0	139.9	156.0
2	1.15848	1.27247	7.55033	7.53972	7.30620	7.29748	31.518	164.5	143.9	154.2
3	1.15571	1.26742	6.26622	6.25457	6.10397	6.09425	30.888	180.6	160.4	170.5
4	1.15286	1.26471	7.09891	7.08667	6.86107	6.85117	30.927	189.7	163.4	176.6
5	1.16295	1.27367	7.50973	7.49498	7.26186	7.25021	30.614	228.6	192.2	210.4
6	1.15259	1.25930	6.33624	6.32418	6.15531	6.14707	29.505	186.9	136.0	161.5
7	1.15110	1.26239	6.57465	6.56375	6.37950	6.37207	30.772	169.0	122.6	145.8
								184.5	151.2	



RESULTS			
30.853	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	167.8
		<i>and its standard devia.</i>	21.4

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₂ SURFACE USING 75g DEAD-WEIGHT

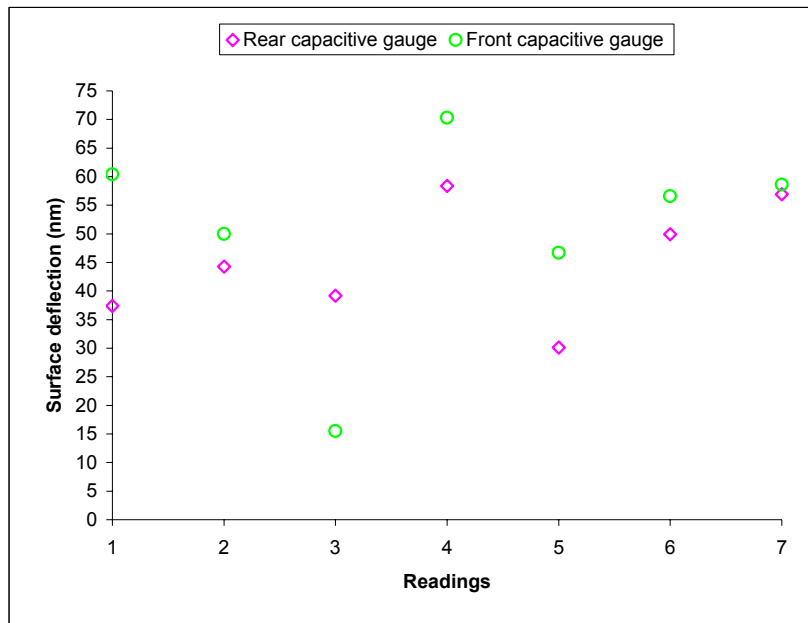
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.15386	1.42095	6.48410	6.45617	6.28645	6.26576	73.851	432.9	341.4	387.2
2	1.14893	1.41396	6.30893	6.27929	6.14134	6.11657	73.281	459.4	408.7	434.1
3	1.16738	1.42634	6.91722	6.89417	6.73348	6.71538	71.603	357.3	298.7	328.0
4	1.16262	1.42702	6.96312	6.93825	6.74966	6.73274	73.107	385.5	279.2	332.4
5	1.16263	1.42878	7.33404	7.31170	7.09882	7.08264	73.591	346.3	267.0	306.7
6	1.15620	1.42334	6.82296	6.79319	6.62606	6.60328	73.864	461.4	375.9	418.7
7	1.16275	1.42573	7.32964	7.30877	7.11530	7.09926	72.714	323.5	264.7	294.1
								395.2	319.4	



RESULTS			
73.144	Ave. change of load	Ave. resultant deflec.	357.3
		and its standard devia.	55.7

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₃ SURFACE USING 15g DEAD-WEIGHT

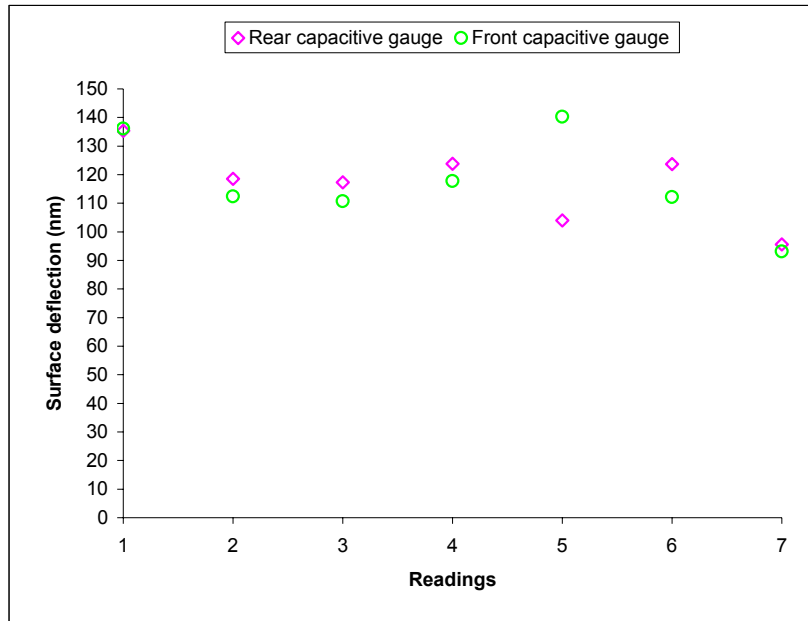
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.09302	1.13646	7.80400	7.80159	7.81242	7.80876	12.011	37.4	60.4	48.9
2	1.06203	1.10387	6.49186	6.48900	6.50753	6.50450	11.569	44.3	50.0	47.2
3	1.06880	1.11093	7.23963	7.23710	7.25619	7.25525	11.649	39.2	15.5	27.4
4	1.06231	1.10627	6.66940	6.66563	6.67808	6.67382	12.155	58.4	70.3	64.4
5	1.07472	1.11844	7.43291	7.43097	7.44578	7.44295	12.089	30.1	46.7	38.4
6	1.07239	1.11450	6.68616	6.68294	6.69576	6.69233	11.643	49.9	56.6	53.3
7	1.07044	1.11532	6.18592	6.18225	6.20676	6.20321	12.409	56.9	58.6	57.8
								45.2	51.2	



RESULTS			
11.932	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	48.2
		<i>and its standard devia.</i>	12.3

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₃ SURFACE USING 35g DEAD-WEIGHT

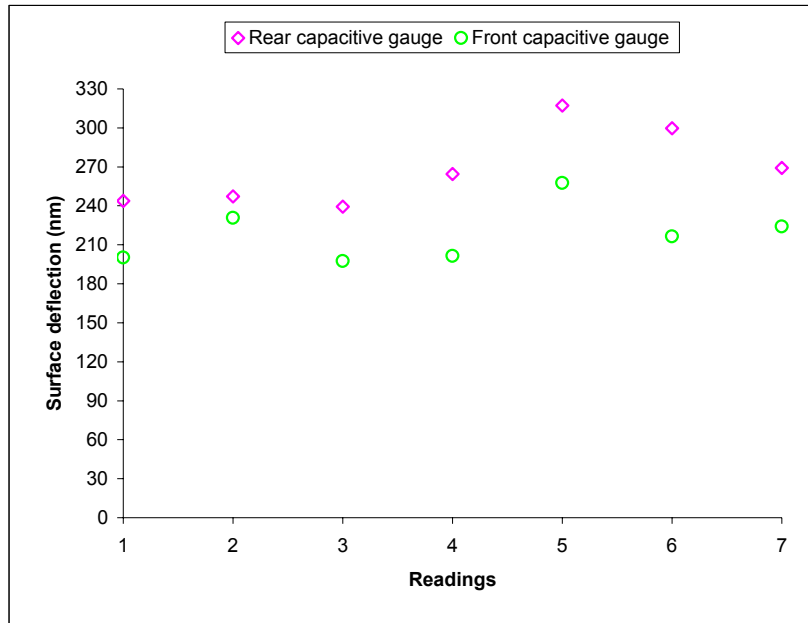
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.08637	1.20146	6.57893	6.57020	6.58755	6.57930	31.823	135.3	136.1	135.7
2	1.07036	1.18465	6.95795	6.95030	6.98004	6.97323	31.601	118.6	112.4	115.5
3	1.07141	1.18146	6.23404	6.22647	6.24431	6.23760	30.429	117.3	110.7	114.0
4	1.06269	1.17758	7.60738	7.59939	7.63067	7.62353	31.767	123.8	117.8	120.8
5	1.08809	1.20148	7.56973	7.56302	7.57530	7.56680	31.352	104.0	140.3	122.2
6	1.06503	1.18010	7.19998	7.19200	7.20902	7.20222	31.817	123.7	112.2	118.0
7	1.06427	1.17954	7.21857	7.21240	7.22737	7.22173	31.872	95.6	93.1	94.4
								116.9	117.5	



RESULTS			
31.523	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	117.2
		<i>and its standard devia.</i>	12.4

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON CO₃ SURFACE USING 75g DEAD-WEIGHT

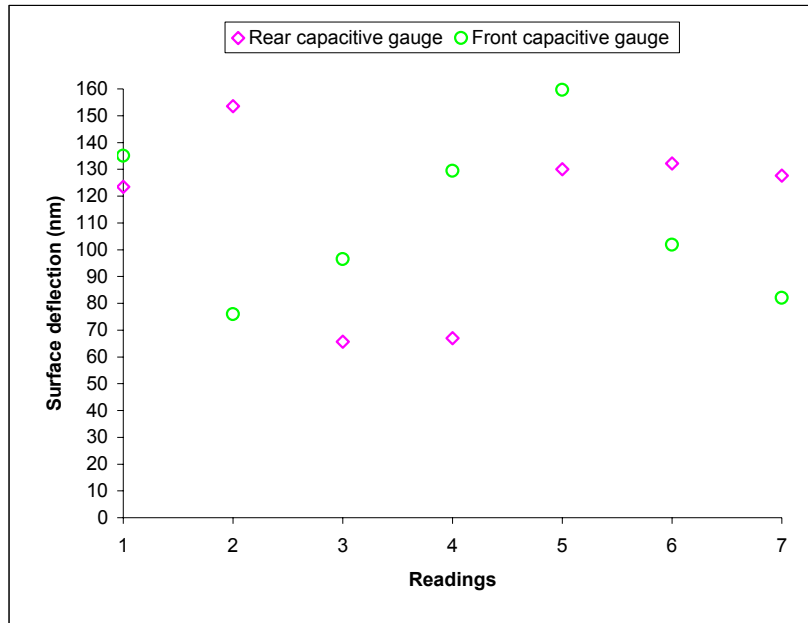
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.06893	1.34152	7.01084	6.99512	7.01641	7.00428	75.371	243.7	200.1	221.9
2	1.07490	1.34584	7.38810	7.37215	7.39196	7.37798	74.915	247.2	230.7	239.0
3	1.06324	1.33136	6.23212	6.21668	6.24216	6.23019	74.135	239.3	197.5	218.4
4	1.06647	1.33468	6.28862	6.27156	6.29740	6.28519	74.160	264.4	201.5	233.0
5	1.06750	1.33639	6.52475	6.50429	6.53760	6.52198	74.348	317.1	257.7	287.4
6	1.06602	1.33619	6.37475	6.35541	6.37962	6.36650	74.702	299.8	216.5	258.2
7	1.06639	1.33945	6.71910	6.70173	6.72488	6.71130	75.501	269.2	224.1	246.7
								268.7	218.3	



RESULTS			
74.733	Ave. change of load	Ave. resultant deflec.	243.5
		and its standard devia.	23.7

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/1 SURFACE USING 15g DEAD-WEIGHT

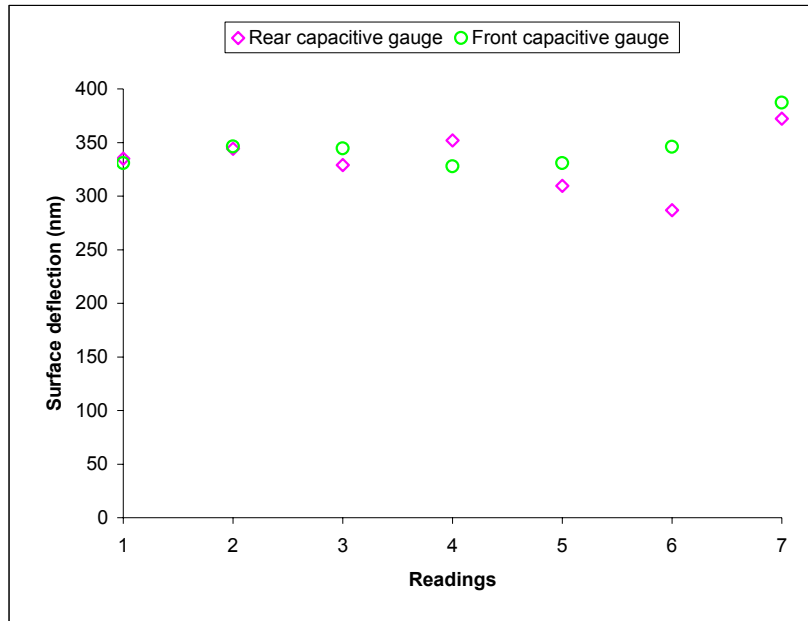
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.22710	1.26682	6.57271	6.56474	6.38445	6.37626	10.983	123.5	135.1	129.3
2	1.23054	1.26596	7.09855	7.08865	7.01504	7.01044	9.794	153.5	75.9	114.7
3	1.22377	1.25840	6.54248	6.53824	6.41121	6.40536	9.575	65.7	96.5	81.1
4	1.22398	1.26112	7.26436	7.26004	7.09854	7.09070	10.269	67.0	129.4	98.2
5	1.24029	1.28121	6.82784	6.81945	6.67848	6.66881	11.314	130.0	159.6	144.8
6	1.23049	1.26632	6.26830	6.25977	6.11940	6.11323	9.907	132.2	101.8	117.0
7	1.22350	1.25789	7.16131	7.15307	7.05585	7.05088	9.509	127.7	82.0	104.9
								114.2	111.5	



RESULTS			
10.193	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	112.9
		<i>and its standard devia.</i>	20.8

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/1 SURFACE USING 35g DEAD-WEIGHT

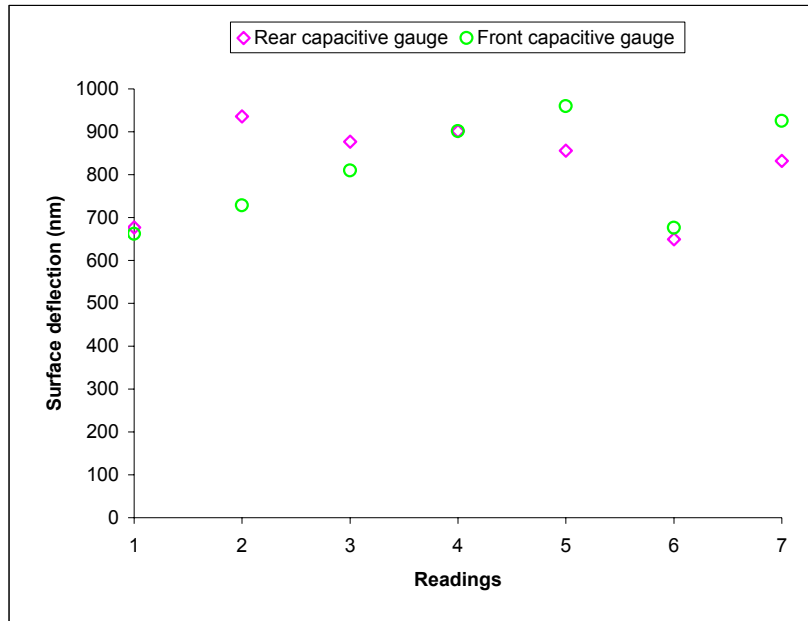
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.23450	1.34609	6.92639	6.90478	6.84612	6.82608	30.855	335.0	330.7	332.9
2	1.22444	1.34044	7.47198	7.44977	7.34864	7.32766	32.074	344.3	346.2	345.3
3	1.22932	1.34118	6.93652	6.91530	6.84719	6.82631	30.929	328.9	344.5	336.7
4	1.23062	1.34339	7.74678	7.72408	7.61730	7.59744	31.181	351.9	327.7	339.8
5	1.24226	1.36131	6.92350	6.90352	6.76795	6.74791	32.917	309.7	330.7	320.2
6	1.22512	1.34099	6.52677	6.50826	6.38988	6.36891	32.038	286.9	346.0	316.5
7	1.23153	1.34548	6.49124	6.46722	6.37507	6.35160	31.507	372.3	387.3	379.8
								332.7	344.7	



RESULTS			
31.643	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	338.7
			20.9

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/1 SURFACE USING 75g DEAD-WEIGHT

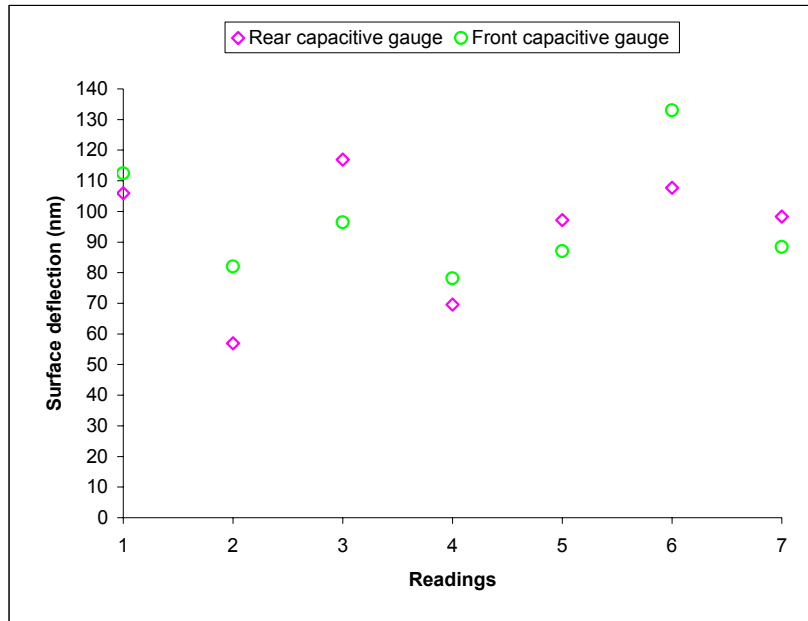
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.22573	1.48961	7.82990	7.78625	7.68174	7.64163	72.963	676.6	661.8	669.2
2	1.23876	1.50528	6.13081	6.07043	6.10623	6.06211	73.693	935.9	728.0	832.0
3	1.23689	1.49868	7.06986	7.01328	6.99854	6.94946	72.385	877.0	809.8	843.4
4	1.22691	1.48924	6.94650	6.88836	6.78050	6.72586	72.535	901.2	901.6	901.4
5	1.24898	1.51714	7.55690	7.50167	7.37060	7.31245	74.147	856.1	959.5	907.8
6	1.22825	1.49645	6.96943	6.92753	6.87326	6.83229	74.158	649.5	676.0	662.8
7	1.24222	1.51114	7.36343	7.30974	7.21643	7.16035	74.357	832.2	925.3	878.8
								818.4	808.9	



RESULTS			
73.463	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	813.6
			104.6

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/2 SURFACE USING 15g DEAD-WEIGHT

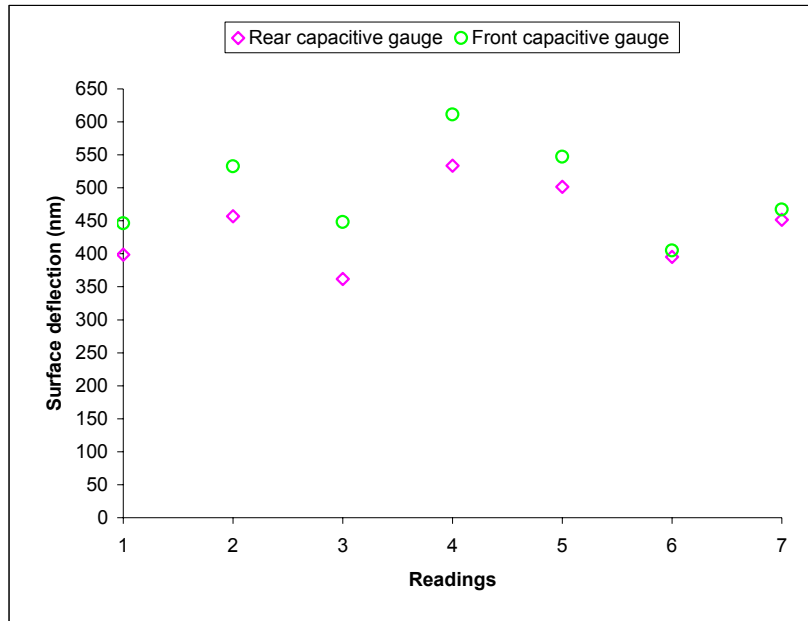
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.09878	1.12657	6.32829	6.32146	6.31697	6.31016	7.684	105.9	112.4	109.2
2	1.11828	1.15133	7.09976	7.09609	7.08663	7.08166	9.138	56.9	82.0	69.5
3	1.12375	1.15508	7.18634	7.17880	7.17544	7.16960	8.663	116.9	96.4	106.7
4	1.10771	1.14113	6.27972	6.27523	6.29885	6.29411	9.241	69.6	78.2	73.9
5	1.10059	1.12941	6.87123	6.86496	6.89021	6.88494	7.969	97.2	87.0	92.1
6	1.09681	1.12549	6.58204	6.57509	6.58040	6.57234	7.930	107.7	133.0	120.4
7	1.09320	1.12142	7.84152	7.83518	7.87605	7.87069	7.803	98.3	88.4	93.4
								93.2	96.8	



RESULTS			
8.347	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	95.0
			18.7

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON A/2 SURFACE USING 35g DEAD-WEIGHT

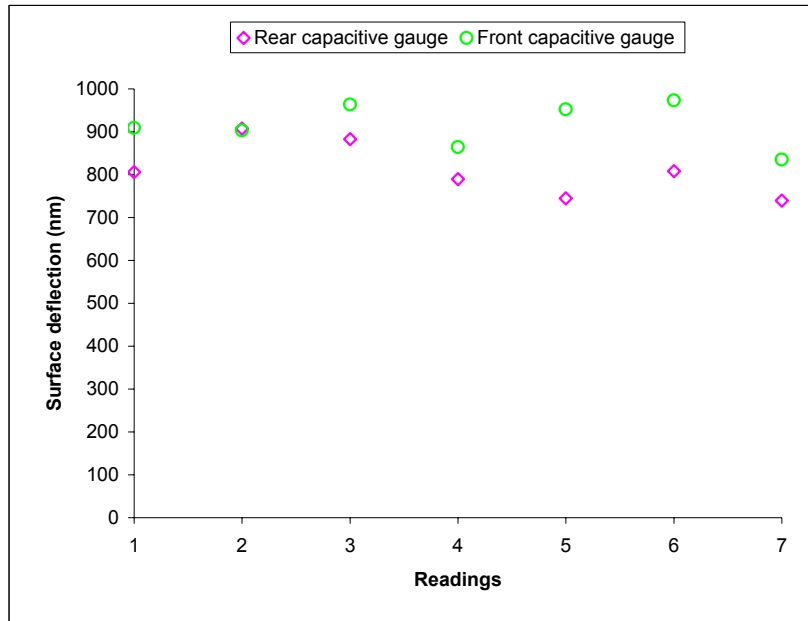
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.10735	1.21752	6.79847	6.77276	6.78495	6.75790	30.462	398.5	446.3	422.4
2	1.10656	1.21123	7.38794	7.35847	7.40044	7.36815	28.941	456.8	532.8	494.8
3	1.10247	1.21007	6.70125	6.67790	6.72808	6.70093	29.752	361.9	448.0	405.0
4	1.11455	1.22306	6.62929	6.59486	6.63422	6.59718	30.003	533.7	611.2	572.5
5	1.10730	1.21315	6.82952	6.79716	6.83391	6.80076	29.268	501.6	547.0	524.3
6	1.11563	1.23030	7.18680	7.16129	7.19759	7.17303	31.706	395.4	405.2	400.3
7	1.10126	1.21092	7.05053	7.02141	7.05670	7.02839	30.321	451.4	467.1	459.3
								442.8	493.9	



RESULTS			
30.065	Ave. change of load	Ave. resultant deflec.	468.4
		and its standard devia.	65.2

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/2 SURFACE USING 75g DEAD-WEIGHT

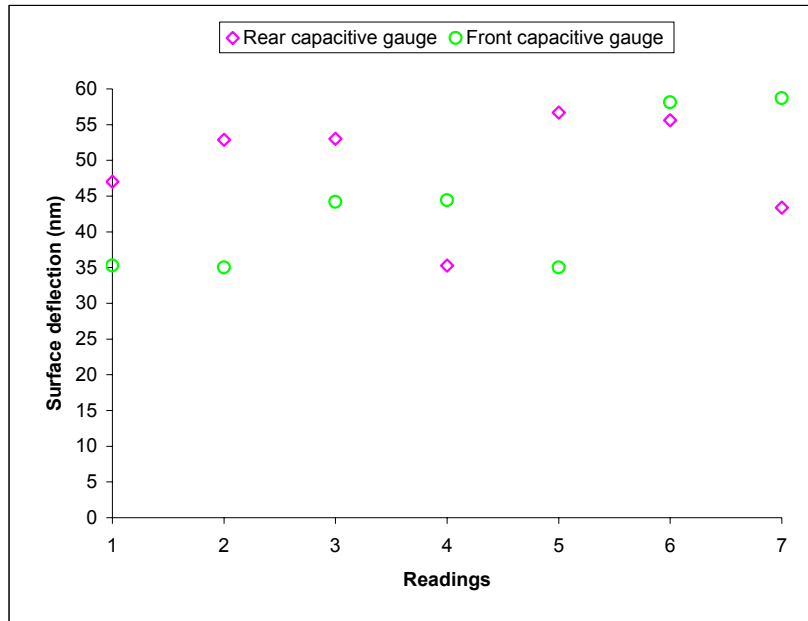
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.10689	1.36762	7.00630	6.95429	6.98985	6.93478	72.092	806.2	908.7	857.5
2	1.08632	1.34611	7.34860	7.29006	7.36332	7.30861	71.832	907.4	902.7	905.1
3	1.09478	1.35291	7.50869	7.45175	7.49896	7.44059	71.373	882.6	963.1	922.9
4	1.10314	1.35834	6.42253	6.37158	6.45374	6.40135	70.563	789.7	864.4	827.1
5	1.10972	1.36948	7.42293	7.37486	7.45009	7.39240	71.824	745.1	951.9	848.5
6	1.11782	1.38061	7.43552	7.38338	7.43090	7.37193	72.662	808.2	973.0	890.6
7	1.10856	1.36890	7.20742	7.15972	7.19776	7.14714	71.984	739.3	835.2	787.3
								811.2	914.1	



RESULTS			
71.761	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	862.7
			47.2

DIFFERENT-POINT REPEATED CONTACTS WITH 5MM TIP ON A/3 SURFACE USING 15g DEAD-WEIGHT

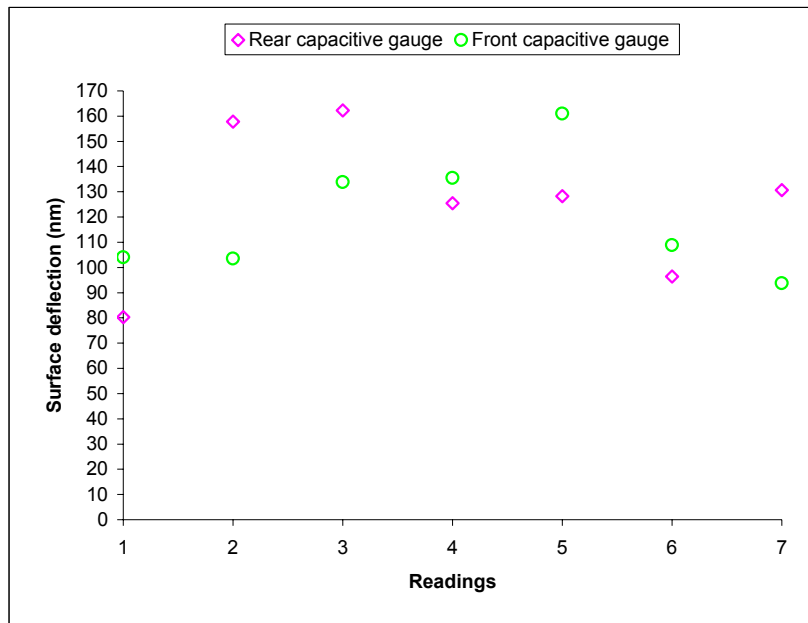
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.04047	1.07567	6.87808	6.87505	6.89499	6.89285	9.733	47.0	35.3	41.2
2	1.05763	1.09024	7.72398	7.72057	7.74128	7.73916	9.017	52.9	35.0	44.0
3	1.08285	1.11688	6.89834	6.89492	6.91490	6.91222	9.409	53.0	44.2	48.6
4	1.06364	1.09685	6.03723	6.03495	6.05255	6.04986	9.183	35.3	44.4	39.9
5	1.05471	1.08944	7.17725	7.17359	7.20187	7.19975	9.603	56.7	35.0	45.9
6	1.05767	1.09653	7.22688	7.22329	7.24537	7.24185	10.745	55.6	58.1	56.9
7	1.07165	1.10855	7.21747	7.21467	7.23625	7.23269	10.203	43.4	58.7	51.1
								49.1	44.4	



RESULTS			
9.699	<i>Ave. change of load</i>	<i>Ave. resultant deflec. and its standard devia.</i>	46.8
			5.9

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/3 SURFACE USING 35g DEAD-WEIGHT

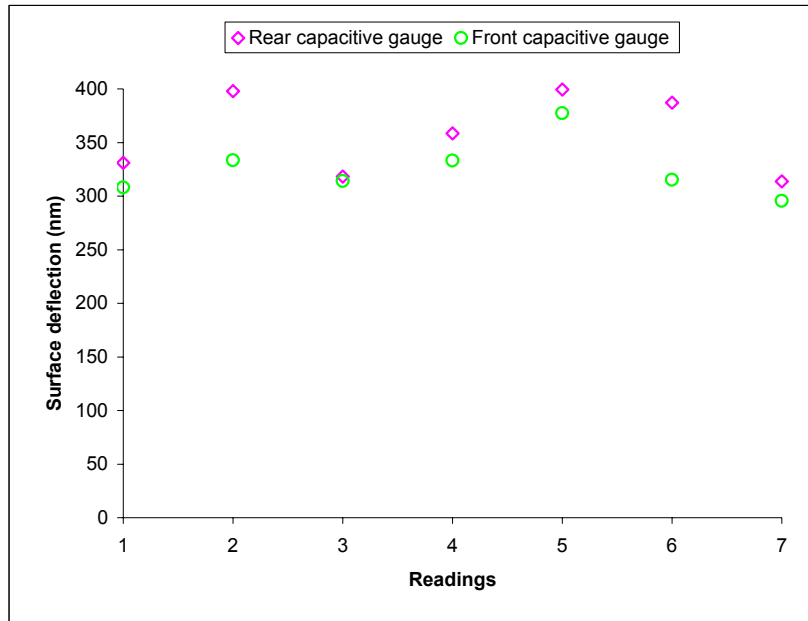
Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.07971	1.18120	7.87547	7.87029	7.87649	7.87019	28.062	80.3	104.0	92.2
2	1.07741	1.18089	7.65435	7.64417	7.66667	7.66040	28.612	157.8	103.5	130.7
3	1.05655	1.16004	6.30916	6.29869	6.30487	6.29676	28.615	162.3	133.8	148.1
4	1.07247	1.17566	7.28608	7.27798	7.28536	7.27715	28.532	125.5	135.5	130.5
5	1.04991	1.15299	6.74804	6.73976	6.75970	6.74994	28.502	128.3	161.0	144.7
6	1.07612	1.18297	7.69499	7.68877	7.70279	7.69619	29.544	96.4	108.9	102.7
7	1.05606	1.15430	7.34095	7.33252	7.35443	7.34875	27.163	130.7	93.7	112.2
								125.9	120.1	



RESULTS			
28.433	Ave. change of load	Ave. resultant deflec.	123.0
		and its standard devia.	21.2

DIFFERENT-POINT REPEATED CONTACTS WITH 5mm TIP ON A/3 SURFACE USING 75g DEAD-WEIGHT

Readings	Mean voltage of loadcell		Mean voltage of rear capacitive gauge		Mean voltage of front capacitive gauge		Change of load on surface (g)	Rear capacitive gauge displacement (nm)	Front capacitive gauge displacement (nm)	Resultant deflection at contact tip (μm)
	before loading	after loading	before loading	after loading	before loading	after loading				
1	1.04815	1.30683	6.91083	6.88948	6.91335	6.89467	71.525	330.9	308.2	319.6
2	1.06038	1.32498	6.98803	6.96236	7.00255	6.98235	73.162	397.9	333.3	365.6
3	1.04024	1.30021	7.25198	7.23146	7.25588	7.23685	71.882	318.1	314.0	316.1
4	1.04827	1.29973	6.38585	6.36272	6.38561	6.36543	69.529	358.5	333.0	345.8
5	1.04313	1.30219	6.92452	6.89875	6.93025	6.90739	71.630	399.4	377.2	388.3
6	1.06704	1.32516	7.51134	7.48635	7.53438	7.51528	71.370	387.3	315.1	351.2
7	1.05736	1.31174	7.38002	7.35978	7.39691	7.37900	70.336	313.7	295.5	304.6
								358.0	325.2	



RESULTS			
71.348	<i>Ave. change of load</i>	<i>Ave. resultant deflec.</i>	341.6
		<i>and its standard devia.</i>	29.9