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AN INVENTORY OF PHOTOGRAPHS OF ZINC ELECTRODEPOSITED  
FROM ACID ELECTROLYTES

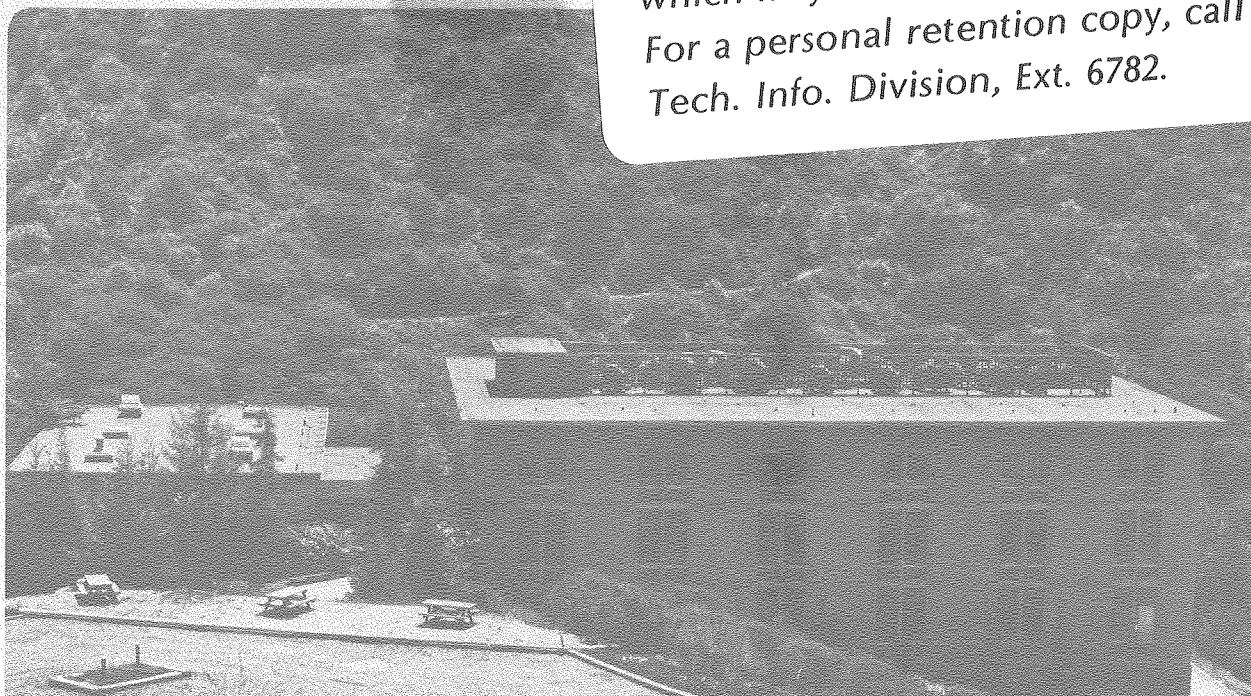
J.L. Faltemier, M.M. Jaksic, T. Tsuda,  
and C.W. Tobias

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AN INVENTORY OF PHOTOGRAPHS OF ZINC ELECTRODEPOSITED FROM ACID ELECTROLYTES

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## AN INVENTORY OF PHOTOGRAPHS OF ZINC ELECTRODEPOSITED FROM ACID ELECTROLYTES

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Electrodeposition of zinc from acid electrolytes has been studied by several investigators in this laboratory.\* A large number of zinc deposits have been observed and photographs (SEM, micrographs, experimental equipment, and line drawings) have been prepared over the years 1976-1983. These photos are compiled in this LBL report to facilitate their future use by others. The tables in this report list the experimental conditions and corresponding identification numbers of photographs that are on file in the Photography Services Laboratory at the Lawrence Berkeley Laboratory. Several samples of these zinc deposits are shown in Figures 1-6.

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\*Material prepared in collaboration with Vladimir Kommenic and Darko Rajhenbah is also included.

\*\*Present addresses:

James L. Faltemier, Gould, Inc.--Foil Division, 35129 Curtis Blvd., Eastlake, OH 44094

Professor Milan M. Jaksic, Faculty of Agriculture, University of Belgrade, Yu 11081 Belgrade YUGOSLAVIA

Tetsuaki Tsuda, Metal Finishing Lab., Central Research Labs., Sumitomo Metal Ind., Ltd., 1-3 Hondori, Nishinagasu, Amagasaki City 660, JAPAN

Photograph numbers are arranged into the following 11 tables:

Table 1	Rotating disk electrode	Jaksic or Jaksic & Faltemier
Table 2	Small flowcell	Jaksic or Jaksic & Faltemier
Table 3	Miscellaneous	
Table 4		Tsuda (LBL Report #13057)
Table 5	Rotating disk electrode	Faltemier, or Faltemier & Kommenic
Table 6	Small Flowcell	Faltemier, or Faltemier & Kommenic
Table 7	Large Flowcell	Faltemier
Table 8	In situ Flowcell	Faltemier
Table 9		Faltemier & Rajhenbah (LBL Report #15338)
Table 10		Faltemier (LBL Report #16485)
Table 11	Explanation of Legends and Abbreviations	

A compilation of experiments/photographs by M. Jaksic, and M. Jaksic and J. Faltemier on the rotating disk electrode (RDE) is listed in Table 1, and Table 2 lists their work in the Small Flowcell (SmC). SEM photographs prepared by M. Jaksic are not listed and are not available in LBL files. Table 3 lists miscellaneous photographs (composites, experimental apparatus, etc.) prepared by various investigators. Table 4 lists the photograph numbers (cross-referenced with Figure numbers) that are contained in T. Tsuda's Master's thesis (LBL Report # 13057). Table's 5 - 8 are taken from Appendix H of J. Faltemier's Ph. D. thesis (LBL Report # 16485). Table 9 is a list of the photographs and Figures from an LBL report authored by D. Rajhenbah, J. Faltemier, and C. W. Tobias (LBL Report No. 15338). Table 10 contains a listing of photographs (cross-referenced with Figure numbers) from J. Faltemier's Ph. D. thesis (LBL Report #16485). Table 11 identifies the abbreviation codes that are used in Tables 1 - 10. A complete explanation of experimental apparatus and conditions is presented in the published LBL reports.

The photographs are cross-indexed in the LBL Photo Labs' files  
under the following names and keywords:

Dr. Milan M. Jaksic	Zinc Morphology
James L. Faltemier	Zinc Deposition
Tetsuaki Tsuda	Hydrodynamic Flow
Vladimir Kommenic	SEM Photography
Darko Rajhenbah	Rotating Disk Electrode
Prof. Charles W. Tobias	Small Channel Flowcell
Dr. Rolf H. Muller	Large Channel Flowcell
	In situ Flowcell

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
1-2	J	XBB-784-11001	0.1C1	3.44	24.3	2160	1	120	C	
3	J	XBB-784-11002	0.1C1	4.4	24	720	1	120	Pt	
4	J	XBB-784-11003	0.1C1	3.9	25.4	720	1	120	Pt	
5	J	XBB-784-11004	0.1C1	4.5	25.3	720	1	310	Pt	
6	J	XBB-784-11005	0.1C1	3.7	25.2	720	1	240	C	
7	J	XBB-784-11006	0.1C1	4.2	25	2160	1	240	Pt	
8	J	XBB-784-11007	0.1C1	3.5	24.7	720	5	48	Pt	
9	J	XBB-784-11008	0.1C1	3.6	24.9	2160	6	48	Pt	
10	J	XBB-784-11009	0.1C1	4.4	25.0	720	0.2	2640	Pt	
11	J	XBB-784-11010	0.1C1	3.8	25	720	1	120	Ni	
12	J	XBB-784-11011	0.1C1	4.4	25	?	1	480	Pt	
13	J	XBB-784-11012	0.1C1	4.4	25	?	1	1200	Pt	
14	J	XBB-784-11012A	0.1C1	4.4	24.5	720	10	120	Pt	
15	J	XBB-784-11013	0.1C1	3.7	24.7	720	10	360	Pt	
16	J	XBB-784-11014	0.1C1	4.5	24.2	720	10	720	C	
17	J	XBB-784-11015	0.1C1	4.4	24.5	720	10	720	Pt	
18	J	XBB-784-11016	0.1C1	4.9	25	2160	10	120	C	
19	J	XBB-784-11017	0.1C1	5.1	25.5	240	10	120	Pt	
20	J	XBB-784-11017A	0.1C1	3.8	25.2	240	10	120	Pt	
21	J	XBB-760-11366	0.1C1	3.9	25.2	180	10	120	Ni	
22	J	XBB-784-11018	0.1C1	4.2	25.2	720	10	120	Ni	
23	J	XBB-784-11019	0.1C1	4.7	25	2870	10	120	Ni	
24	J	XBB-784-11020	0.1C1	5.4	25.2	2870	11.5	120	Pt	
25	J	XBB-784-11021	0.1C1	5.5	27.8	180	11.5	120	Pt	
26	J	XBB-784-11022	0.1C1	3.7	25.2	180	11.5	120	Pt	
27	J	XBB-784-11023	0.1C1	3.8	25.7	360	11.5	120	Pt	
28	J	XBB-784-11024	0.1C1	3.9	25.3	240	10	30	Pt	
29	J	XBB-784-11025	0.1C1	3.7	25.3	240	10	60	Pt	
30	J	XBB-784-11025A	0.1C1	3.8	25.2	720	10	60	Pt	
31	J	XBB-784-11025B	0.1C1	3.7	25	1440	10	60	Pt	
32	J	XBB-784-11026	0.1C1	3.65	24.9	2160	10	180	Pt	
33	J	XBB-784-11027	0.1C1	3.8	25	2870	11.5	60	Pt	
34	J	XBB-784-11028	0.1C1	3.7	24.9	2870	11.5	60	Pt	
35	J	XBB-784-11029	0.1C1	3.6	25	240	30	60	Pt	
36	J	XBB-784-11030	0.1C1	3.6	25.1	720	30	60	Pt	
37	J	XBB-784-11031	0.1C1	3.7	24.7	2160	30	60	C	
38	J	XBB-784-11032	0.1C1	3.7	24.6	240	30	60	C	
39	J	XBB-784-11033	0.1C1	3.5	25	240	30	60	Ni	
40	J	XBB-784-11034	0.1C1	3.3	27.2	720	30	60	Ni	
41	J	XBB-784-11035	0.1C1	3.5	24.5	2160	30	60	Ni	
42	J	XBB-784-11036	0.1C1	3.7	24.0	2160	60	60	Ni	
43a	J	XBB-784-11037	0.1C1	3.4	24.4	240	60	60	Pt	
43b	J	XBB-784-11038	0.1C1	3.4	24.4	240	60	60	Pt	
44a	J	XBB-784-11039	0.1C1	3.4	24.3	720	60	60	Pt	
44b	J	XBB-784-11040	0.1C1	3.4	24.3	720	60	60	Pt	
45	J	XBB-784-11041	0.1C1	3.4	25.7	240	100	60	Pt	
46a	J	XBB-784-11042	0.1C1	3.7	25.6	2160	100	60	Pt	



TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
46b	J	XBB-784-11043	0.1Cl	3.7	25.6	2160	100	60	Pt	
47	J	XBB-784-11044	0.1Cl	3.7	25.2	2870	60	30	Pt	
48	J	XBB-784-11045	0.1Cl	3.7	25	720	226	60	Pt	
49a	J	XBB-784-11046	0.1Cl	4.6	25.2	720	60	240	Pt	
49b	J	XBB-784-11047	0.1Cl	4.6	25.2	720	60	240	Pt	
50	J	XBB-784-11048	1Cl	5.2	24.6	240	10	120	Pt	
51	J	XBB-784-11049	1Cl	5.1	24.1	240	50	120	Pt	
52	J	XBB-784-11050	1Cl	5.0	24.2	720	50	120	Pt	
53	J	XBB-784-11051	1Cl	5.2	24.2	240	100	120	Pt	
54a	J	XBB-784-11051A	1Cl	4.9	24.5	240	300	60	Pt	
54b	J	XBB-784-11052	1Cl	4.9	24.5	240	300	60	Pt	
55	J	XBB-784-11053	1Cl	4.9	24.4	720	113	120	Pt	
56	J	XBB-784-11054	1Cl	3.0	25	720	113	120	Pt	
57	J	XBB-784-11055	1Cl	3.1	24.4	240	300	60	Pt	
58	J	XBB-784-11056	1Cl	3.2	24.3	100	300	60	Pt	
59a	J	XBB-784-11057	1Cl	3.3	25	240	600	30	Pt	
59b	J	XBB-784-11058	1Cl	3.3	25	240	600	30	Pt	
60	J	XBB-784-11059	1Cl	2.9	25.2	2160	680	30	Pt	
61	J	XBB-784-11060	1Cl	2.9	25.2	720	680	30	Pt	
62a	J	XBB-784-11061	1Cl	2.7	24.8	240	1000	35	Pt	
62b	J	XBB-784-11062	1Cl	2.7	24.8	240	1000	35	Pt	
63a	J	XBB-784-11063	1Cl	2.7	24.9	1440	?	30	Pt	
64	J	XBB-784-11064	1Cl	2.8	24.9	240	300	60	Pt	
65a	J	XBB-784-11065	1Cl	2.9	25.4	1440	3000	10	Pt	
65b	J	XBB-784-11066	1Cl	2.9	25.4	1440	3000	10	Pt	
65c	J	XBB-784-11067	1Cl	2.9	25.4	1440	3000	10	Pt	
66	J	XBB-784-11068	1Cl	4.1	24.6	0	50	120	Pt	
67	J	XBB-784-11069	1Cl	2.3	24.8	0	10	120	Pt	
68	J	XBB-784-11070	1Cl	2.2	25	0	100	60	Pt	
69	J	MISSING								
70	J	XBB-784-11073	1Cl	2.2	25.1	720	1000	30	Ni	
71	J	XBB-784-11074	1Cl	2.2	25.2	720	3000	15	Ni	
72	J	XBB-784-11075	1Cl	2.4	24.7	720	300	60	C	
73	J	XBB-784-11076	1Cl	2.4	26.0	720	1000	15	C	
74	J	XBB-784-11077	1Cl	2.5	25	0	300	60	Pt	
75	J	XBB-784-11078	1S	2.9	24.4	720	100	120	Pt	
76a	J	XBB-784-11079	1S	2.9	25.5	720	300	60	Pt	
76b	J	XBB-784-11080	1S	2.9	25.5	720	300	60	Pt	
77	J	XBB-784-11081	1S	2.9	25.4	720	680	30	Pt	
78	J	XBB-784-11082	1S	3.0	25.5	720	300	30	Ni	
79	J	XBB-784-11083	1S	3.0	25.2	720	100	120	Ni	
80	J	XBB-784-11084	1S	3.1	24.3	0	50	120	Pt	
81a	J	XBB-784-11085	1S	3.1	26.0	240	10	240	Ni	
81b	J	XBB-784-11086	1S	3.1	26.0	240	10	240	Ni	
82	J	MISSING	1S	3.2	25.6	720	1130	30	Pt	
83	J	XBB-784-11087	0.1Cl+A	3.0	25.8	720	.5	240	Pt	
84	J	XBB-784-11088	1Cl	3.4	24.7	240	10	60	Pt	
85	J	XBB-784-11089	1Cl	3.4	24.7	240	10	60	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
86	J	XBB-784-11090	1C1	3.5	25	240	10	60	Pt	
87	J	XBB-784-11091	1C1	3.6	25.1	240	10	60	Pt	
88	J	XBB-784-11092	1C1	3.6	25	240	10	60	Pt	
89	J	XBB-784-11093	1C1	3.7	25	240	34	60	Pt	
90	J	XBB-784-11094	1C1	3.0	25.1	240	34	60	Pt	
91	J	XBB-784-11095	1C1	3.0	24.7	240	34	60	Pt	
92	J	XBB-784-11096	1C1	3.1	25.2	240	34	60	Pt	
93	J	XBB-784-11097	1C1	2.4	24.7	100	10	60	Pt	
94	J	XBB-784-11098	1C1	2.4	24.5	100	10	60	Pt	
95	J	XBB-784-11099	1C1	2.4	24.8	100	10	60	Pt	
96	J	XBB-784-11100	1C1	2.4	24.9	100	30	60	Pt	
97	J	XBB-784-11101	1C1	2.4	25	100	30	60	Pt	
98	J	XBB-784-11102	1C1	2.4	24.9	100	30	60	Pt	
99	J	XBB-784-11103	1C1	2.4	26.1	100	30	60	Pt	
100	J	XBB-784-11104	1C1	2.4	26.1	100	30	30	Pt	
101	J	XBB-784-11105	1C1	2.4	26.1	100	68	30	Pt	
102	J	XBB-784-11106	1C1	2.4	24.9	100	34	60	Pt	
103	J	XBB-784-11107	1C1	2.4	24.9	100	34	60	Pt	
104	J	XBB-784-11108	1C1	2.4	24.8	100	10	60	Pt	
105	J	XBB-784-11109	1C1	2.4	25.2	240	10	15	Pt	
106	J	XBB-784-11110	1C1	2.4	25	240	10	15	Pt	
107	J	XBB-784-11111	1C1	2.4	25	240	10	15	Pt	
108	J	XBB-784-11112	1C1	2.4	25	240	10	15	Pt	
109	J	XBB-784-11113	1C1	2.4	25	240	10	15	Pt	
110	JF	XBB-784-11114	1C1	2.4	25.2	240	10	30	Pt	
111	JF	XBB-784-11115	1C1	2.4	25	240	10	30	Pt	
112	JF	XBB-784-11116	1C1	2.4	25	240	10	30	Pt	
113	JF	XBB-784-11117	1C1	2.4	25.1	240	10	30	Pt	
114	JF	XBB-784-11118	1C1	2.4	25.1	240	10	30	Pt	
115	JF	XBB-784-11119	1C1	2.4	25.2	240	10	45	Pt	
116	JF	XBB-784-11120	1C1	2.5	24.9	240	10	45	Pt	
117	JF	XBB-784-11121	1C1	2.5	24.9	240	10	45	Pt	
118	JF	XBB-784-11122	1C1	2.5	25	240	10	45	Pt	
119	JF	XBB-784-11123	1C1	2.5	25.1	240	10	45	Pt	
120	JF	XBB-784-11124	1C1	2.7	25.1	240	10	90	Pt	
121	JF	XBB-784-11125	1C1	2.8	24.9	240	10	90	Pt	
122	JF	XBB-784-11126	1C1	2.9	25	240	10	90	Pt	
123	JF	XBB-784-11127	1C1	2.8	22.5	240	10	120	Pt	
124	JF	XBB-784-11128	1C1	3.0	25.2	240	10	120	Pt	
125	JF	XBB-784-11129	1C1	2.9	25.2	240	10	240	Pt	
126	JF	XBB-784-11130	1C1	3.0	25	240	10	240	Pt	
127	JF	XBB-784-11131	1C1	3.2	25	240	10	5	Pt	
128	JF	XBB-784-11132	1C1	3.2	25	240	10	7.5	Pt	
129	JF	XBB-784-11133	1C1	3.4	25	240	10	14	Pt	
130	JF	XBB-784-11134	1C1	3.6	25	240	10	480	Pt	
131	JF	XBB-784-11135	1C1	2.9	25.4	720	10	7.5	Pt	
132	JF	XBB-784-11136	1C1	-	25	720	10	7.5	Pt	
133	JF	XBB-784-11137	1C1	-	24.8	720	10	7.5	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
134	JF	XBB-784-11138	1C1	-	24.8	720	10	7.5	Pt	
135	JF	XBB-784-11139	1C1	3.1	24.8	720	10	7.5	Pt	
136	JF	XBB-784-11139A	1C1	3.1	24.7	720	10	15	Pt	
137	JF	XBB-784-11140	1C1	-	24.8	720	10	15	Pt	
138	JF	XBB-784-11142	1C1	-	25	720	10	15	Pt	
139	JF	XBB-784-11144	1C1	3.2	25	720	10	15	Pt	
140	JF	XBB-784-11141	1C1	-	26.0	720	10	15	Pt	
141	JF	XBB-784-11141A	1C1	-	25.6	720	10	30	Pt	
142	JF	XBB-784-11143	1C1	3.4	25.1	720	10	60	Pt	
143	JF	XBB-784-11145	1C1	3.5	24.8	720	10	120	Pt	
144	JF	XBB-784-11146	1C1	3.5	25.1	720	10	15	Pt	
145	JF	XBB-784-11147	1C1	3.5	25.1	720	10	15	Pt	
146	JF	XBB-784-11148	1C1	3.6	25	720	10	15	Pt	
147	JF	XBB-784-11149	1C1	3.6	25	720	10	15	Pt	
148	JF	XBB-784-11150	1C1	3.2	25	720	10	15	Pt	
149	JF	XBB-784-11151	1C1	3.4	24.9	720	10	30	Pt	
150	JF	XBB-784-11152	1C1	3.4	24.8	720	10	30	Pt	
151	JF	XBB-784-11153	1C1	3.4	24.9	720	10	30	Pt	
152	JF	XBB-784-11154	1C1	3.4	25	720	10	60	Pt	
153	JF	XBB-784-11155	1C1	3.5	25	720	10	60	Pt	
154	JF	XBB-784-11156	1C1	3.1	25.2	720	10	240	Pt	
155	JF	XBB-784-11157	1C1	2.9	25	720	10	720	Pt	
156	JF	XBB-784-11158	1C1	3.1	25	720	10	480	Pt	
157	JF	XBB-784-11159	1C1	3.4	25.1	240	10	7.5	Pt	
158	JF	XBB-784-11160	1C1	3.4	25.1	240	10	7.5	Pt	
159	JF	XBB-784-11161	1C1	3.4	25.3	240	10	15	Pt	cont. from #157
160	J	XBB-784-11162	1C1	3.1	24.7	2160	10	15	Pt	
161	J	XBB-784-11163	1C1	3.4	25.1	2160	10	15	Pt	
162	J	XBB-784-11164	1C1	3.3	25.3	2160	10	15	Pt	
163	J	XBB-784-11165	1C1	-	25.5	2160	10	15	Pt	
164	J	XBB-784-11166	1C1	3.5	25.5	2160	10	15	Pt	
165	J	XBB-784-11167	1C1	3.3	25	2160	10	30	Pt	
166	J	XBB-784-11168	1C1	3.2	24.9	2160	10	30	Pt	
167	J	XBB-784-11169	1C1	3.4	25.2	2160	10	30	Pt	
168	J	XBB-784-11170	1C1	3.5	25.3	2160	10	30	Pt	
169	J	XBB-784-11171	1C1	3.6	25.4	2160	10	30	Pt	
170	J	XBB-784-11171A	1C1	3.7	25.1	2160	10	60	Pt	
171	J	XBB-784-11172	1C1	3.8	25	2160	11.3	120	Pt	
172	J	XBB-784-11173	1C1	3.8	25	2160	11.3	120	Pt	
173	J	XBB-784-11174	1C1	3.9	24.9	2160	11.3	120	Pt	
174	J	XBB-784-11175	1C1	4.1	24.7	2160	10	7.5	Pt	
175	J	XBB-784-11176	1C1	-	24.8	2160	10	7.5	Pt	
176	J	XBB-784-11177	1C1	4.1	24.9	2160	10	15	Pt	
177	J	XBB-784-11178	1C1	4.1	25.2	2160	10	15	Pt	
178	J	XBB-784-11179	1C1	4.1	25.3	2160	10	3.75	Pt	
179	J	XBB-784-11180	1C1	4.1	26.0	2160	10	7.5	Pt	cont. from #178
180	J	XBB-784-11181	1C1	4.1	25.5	2160	10	15	Pt	cont. from #174
181	J	XBB-784-11182	1C1	4.1	25.5	2160	10	30	Pt	cont. from #176

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TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
182	J	XBB-784-11183	1C1	4.1	25.2	2160	10	15	Pt	cont. from #179
183	J	XBB-784-11187	1C1	4.1	25	2160	10	30	Pt	cont. from #180
184	J	XBB-784-11186	1C1	4.1	24.9	2160	10	60	Pt	cont. from #181
185	J	XBB-784-11185	1C1	4.2	25	2160	10	30		
186	J	XBB-784-11184	1C1	4.1	25.1	2160	10	30	Pt	cont. from #182
187	J	XBB-784-11188	1C1	4.1	25	2160	10	60	Pt	cont. from #183
188	J	XBB-784-11189	1C1	4.1	25	2160	10	120	Pt	cont. from #184
189	J	XBB-784-11190	1C1	4.1	25	2160	10	60	Pt	cont. from #186
190	J	XBB-784-11191	1C1	4.1	25	2160	10	120	Pt	cont. from #187
191	J	XBB-784-11192	1C1	4.2	25	2160	10	120	Pt	cont. from #189
192	J	XBB-784-11193	1C1	4.2	24.7	2160	10	30	Pt	
193	J	XBB-784-11194	1C1	2.4	25	2160	10	30	Pt	
194	J	XBB-784-11195	1C1	2.4	25.1	2160	10	30	Pt	
195	J	XBB-784-11196	1C1	2.4	25	2160	10	30	Pt	
195A	J	XBB-784-11197	1C1	2.4	25	2160	10	30	Pt	
196	J	XBB-784-11198	1C1	2.4	25	720	30	20	Pt	
197	J	XBB-784-11199	1C1	2.4	25.1	720	30	10	Pt	
198	J	XBB-784-11200	1C1	2.4	25.1	720	30	5	Pt	
199	J	XBB-784-11201	1C1	2.5	25.2	720	30	2.5	Pt	
200	J	XBB-784-11202	1C1	5.2	25.4	720	30	5	Pt	
201	J	XBB-784-11203	1C1	5.2	25.4	720	30	2.5	Pt	
202	J	XBB-784-11204	1C1	5.2	25.3	720	30	10	Pt	
203	J	XBB-784-11205	1C1	5.0	25	720	30	20	Pt	
204	JF	XBB-784-11206	1C1	2.4	25.1	720	30	5	Pt	
205	JF	XBB-784-11207	1C1	2.4	25.2	2160	30	2.5	Pt	
206	JF	XBB-784-11208	1C1	2.4	25.1	720	30	10	Pt	
207	JF	XBB-784-11209	1C1	2.4	25.1	720	30	20	Pt	
208	JF	XBB-784-11210	1C1	2.4	25	720	30	2.5	Pt	
209	JF	XBB-784-11211	1C1	2.4	25.3	720	30	5	Pt	
210	JF	XBB-784-11212	1C1	2.4	25.3	720	30	20	Pt	
211	JF	XBB-784-11213	1C1	2.4	25.1	720	30	10	Pt	
212	JF	XBB-784-11214	1C1	2.6	24.6	720	30	1.25	Pt	
213	JF	XBB-784-11215	1C1	-	24.8	720	30	1.25	Pt	
214	JF	XBB-784-11216	1C1	-	25.1	720	30	2.5	Pt	cont. from #212
215	JF	XBB-784-11217	1C1	-	25.2	720	30	2.5	Pt	cont. from #213
216	JF	XBB-784-11218	1C1	-	25.2	720	30	2.5	Pt	
217	JF	XBB-784-11219	1C1	2.6	25.2	720	30	2.5	Pt	
218	JF	XBB-784-11220	1C1	2.6	25.3	720	30	5	Pt	cont. from #214
219	JF	XBB-784-11221	1C1	-	25.3	720	30	5	Pt	cont. from #215
220	JF	XBB-784-11222	1C1	-	25.3	720	30	5	Pt	cont. from #216
221	JF	XBB-784-11223	1C1	2.6	25.3	720	30	5	Pt	cont. from #217
222	JF	XBB-784-11224	1C1	2.6	25.2	720	30	10	Pt	cont. from #218
223	JF	XBB-784-11225	1C1	-	25.2	720	30	10	Pt	cont. from #219
224	JF	XBB-784-11226	1C1	-	25.2	720	30	10	Pt	cont. from #220
225	JF	XBB-784-11227	1C1	-	25.2	720	30	10	Pt	cont. from #221
226	JF	XBB-784-11228	1C1	-	25.1	720	30	20	Pt	cont. from #222
227	JF	XBB-784-11229	1C1	-	25.1	720	30	20	Pt	cont. from #223
228	JF	XBB-784-11230	1C1	-	25.2	720	30	20	Pt	cont. from #224

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
229	JF	XBB-784-11231	1C1	2.7	25.1	720	30	20	Pt	cont. from #225
230	JF	XBB-784-11232	1C1	2.7	25.1	720	30	40	Pt	cont. from #226
231	JF	XBB-784-11233	1C1	-	25.1	720	30	40	Pt	cont. from #227
232	JF	XBB-784-11234	1C1	-	25.1	720	30	40	Pt	cont. from #228
233	JF	XBB-784-11235	1C1	2.7	25.1	720	30	40	Pt	cont. from #229
234	JF	XBB-784-11236	1C1	2.7	25.2	720	30	80	Pt	cont. from #230
235	JF	XBB-784-11237	1C1	-	25.1	720	30	80	Pt	cont. from #231
236	JF	XBB-784-11238	1C1	-	25	400	30	80	Pt	cont. from #232
237	JF	XBB-784-11239	1C1	2.9	25	400	30	40	Pt	
238	JF	XBB-784-11239A	1C1	3.1	25.3	1600	30	40	Pt	
239	JF	XBB-784-11240	1C1	3.1	25.4	1600	30	60	Pt	
240	JF	XBB-784-11241	1C1	3.1	25.5	1600	60	5	Pt	
241	JF	XBB-784-11242	1C1	3.1	25.5	1600	60	5	Pt	
242	JF	XBB-784-11243	1C1	3.1	25.5	1600	60	5	Pt	
243	JF	XBB-784-11244-5	1C1	3.7	25	2160	100	6	Pt	
244	JF	XBB-784-11246	1C1	2.4	24.8	2160	100	3	Pt	
245	JF	XBB-784-11247	1C1	2.4	24.8	2160	100	1.5	Pt	
246	JF	XBB-784-11249	1C1	2.4	24.8	2160	100	0.75	Pt	
247	JF	XBB-784-11248	1C1	2.5	25	2160	100	6	Pt	
248	JF	XBB-784-11250	1C1	2.5	24.9	2160	100	3	Pt	
249	JF	XBB-784-11251	1C1	2.5	24.9	2160	100	1.5	Pt	
250	JF	XBB-784-11252	1C1	2.5	25	2160	100	0.75	Pt	
251	JF	XBB-784-11255	1C1	3.6	25.3	2160	100	12	Pt	
252	JF	XBB-784-11253	1C1	3.7	25.2	2160	100	24	Pt	
253	JF	XBB-784-11254	1C1	3.8	25	2160	100	0.75	Pt	
254	JF	XBB-784-11256	1C1	3.8	25	720	30	20	Pt	
255	JF	XBB-784-11257	1C1	2.6	25.3	720	33.9	30	Pt	
256	JF	XBB-784-11258	1C1	2.6	25.2	720	113	24	Pt	
257	J	XBB-784-11259	1C1	2.6	25.5	720	113	24	Pt	+10 ppm FeCl <sub>3</sub>
258	J	XBB-784-11260	1C1	2.6	25.5	720	33.9	30	Pt	+10 ppm FeCl <sub>3</sub>
259	J	XBB-784-11261	1C1	2.8	25.1	720	33.9	30	Pt	+20 ppm FeCl <sub>3</sub>
260	J	XBB-784-11262	1C1	2.8	25.4	720	33.9	30	Pt	+50 ppm FeCl <sub>3</sub>
261	J	XBB-784-11263	0.1C1	3.2	25.5	2160	10	30	Pt	
262	J	XBB-784-11264	0.1C1	3.3	25.2	2160	10	30	Pt	
263	J	XBB-784-11265	0.1C1	3.2	25.2	2160	10	45	Pt	
264	J	XBB-784-11266	0.1C1	3.7	25.2	2160	10	60	Pt	
265	J	XBB-784-11267	0.1C1	3.0	25.1	2160	10	60	Pt	
266	J	XBB-784-11268	0.1C1	3.3	25.7	2160	10	120	Pt	
266B	J	XBB-784-11269	0.1C1	3.3	25.7	2160	10	120	Pt	
267	J	XBB-784-11270	1C1	3.8	25.3	720	30	60	Pt	
268	J	XBB-784-11271	1C1	3.9	25.6	720	30	60	Pt	+10 ppm FeCl <sub>3</sub>
269	J	XBB-784-11272	1C1	3.4	26.0	720	30	60	Pt	+20 ppm FeCl <sub>3</sub>
270	J	XBB-784-11273	1C1	2.9	26.0	720	30	60	Pt	+50 ppm FeCl <sub>3</sub>
271	J	XBB-784-11276	1C1	2.6	25.5	720	30	60	Pt	+100 ppm FeCl <sub>3</sub>
272	J	XBB-784-11274	1S	2.9	25.5	720	10	60	Pt	
273	J	XBB-784-11275	1S	2.9	25.5	720	10	60	Pt	
274	J	XBB-784-11277	1S	2.9	24.6	2160	10	60	Pt	
275	J	XBB-784-11278	1S	3.0	25	2160	10	120	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
276	J	XBB-784-11279	1S	3.0	25.5	720	10	120	Pt	
277	J	XBB-784-11280	1S	3.0	25.5	720	11.3	120	Pt	
278	J	XBB-784-11281	1S	3.1	24.7	2160	33.9	40	Pt	
279	J	XBB-784-11282	1S	3.1	24.9	2160	33.9	80	Pt	
280	J	XBB-784-11283	1S	3.2	25	2160	33.9	120	Pt	
281	J	XBB-784-11284	1S	3.3	24.9	2160	33.9	80	Pt	cont. from #278
282	J	XBB-784-11285	1S	3.4	24.9	2160	33.9	180	Pt	cont. from #279
283	J	XBB-784-11286	1S	2.9	25.1	2160	30	80	Pt	
284	J	XBB-784-11287	1S	3.0	25.1	2160	30	80	Pt	+10 ppm FeCl <sub>2</sub>
285	J	XBB-784-11288	1S	3.0	25	2160	30	80	Pt	+20 ppm FeCl <sub>2</sub>
286	J	XBB-784-11289	1S	3.1	25	2160	30	80	Pt	+50 ppm FeCl <sub>2</sub>
287	JF	XBB-784-11290	4C1	3.0	24.8	2160	30	1.25	Pt	
288	JF	XBB-784-11291	4C1	3.1	24.8	2160	30	2.5	Pt	
289	JF	XBB-784-11292	4C1	3.1	24.8	2160	30	5	Pt	
290	JF	XBB-784-11293	4C1	3.1	24.6	2160	30	10	Pt	
291	JF	XBB-784-11294	4C1	3.1	25.6	2160	30	15	Pt	
292	JF	XBB-784-11295	4C1	3.1	25.4	2160	30	20	Pt	
293	JF	XBB-784-11296	4C1	3.1	25.2	2160	30	30	Pt	
294	JF	XBB-784-11297	4C1	3.1	25.1	2160	30	40	Pt	
295	JF	XBB-784-11298	4C1	3.1	25.3	2160	30	80	Pt	
296	JF	XBB-784-11299	4C1	3.1	25	2160	30	60	Pt	
297a	JF	XBB-784-11300	4C1	3.1	25.2	2160	30	60	Pt	
297b	JF	XBB-784-11301	4C1	3.1	25.2	2160	30	60	Pt	
298	JF	XBB-784-11302	4C1	3.1	25.2	2160	30	15	Pt	
299	JF	XBB-784-11303	4C1	3.1	25.1	2160	30	10	Pt	
300	JF	XBB-784-11304	4C1	3.1	25	2160	30	10	Pt	
301	JF	XBB-784-11305	4C1	3.1	25	2160	30	5	Pt	
302a	JF	XBB-784-11306	4C1	3.1	25	2160	30	2.5	Pt	
302b	JF	XBB-784-11307	4C1	3.1	25	2160	30	2.5	Pt	
303	J	XBB-784-11308-10	4C1	3.0	24.9	720	10	60	Pt	
304	J	XBB-784-11311	4C1	3.0	25.1	720	10	60	Pt	
305	J	XBB-784-11312	4C1	3.0	25.2	720	30	60	Pt	+10 ml liq. soap
306	J	XBB-784-11313	4C1	3.0	25	720	10	60	Pt	
307	J	XBB-784-11314	4C1	3.0	24.9	2160	30	60	Pt	
308a	J	XBB-784-11315	4C1	2.9	25	2160	30	180	Pt	
308b	J	XBB-784-11316	4C1	2.9	25	2160	30	180	Pt	
309A	J	XBB-784-11316A	4C1	2.9	25	720	30	180	Pt	
309B	J	XBB-784-11317	4C1	2.9	25	720	30	180	Pt	
310A	J	XBB-784-11318	4C1	2.9	25	240	30	180	Pt	
310B	J	XBB-784-11319	4C1	2.9	25	240	30	180	Pt	
311A	J	XBB-784-11320	4C1	2.9	25	2160	30	240	Pt	
311B	J	XBB-784-11321	4C1	2.9	25	2160	30	240	Pt	
312A	J	XBB-784-11322	4C1	-	25	180	30	180	Pt	
312B	J	XBB-784-11323	4C1	-	25	180	30	180	Pt	
313A	J	XBB-784-11324	4C1	3.0	25	240	10	180	Pt	
313B	J	XBB-784-11326	4C1	3.0	25	240	10	180	Pt	
314A	J	XBB-784-11325	4C1	3.0	25	720	10	180	Pt	
314B	J	XBB-784-11327	4C1	3.0	25	720	10	180	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
315	J	XBB-784-11327A	4Cl	3.0	25	2160	10	180	Pt	
316	J	MISSING	4Cl	3.0	25	720	60	90	Pt	
317	J	MISSING	4Cl	3.0	25.0	2160	50	90	Pt	
318	J	MISSING	4Cl	3.0	25.0	240	60	90	Pt	
319	J	XBB-784-11328	0.1Cl+A	2.1	24.5	720	30	60	Pt	
320	J	XBB-784-11329	0.1Cl+A	2.1	24.8	720	30	120	Pt	
321	J	XBB-784-11330	0.1Cl+A	2.1	25.3	720	30	240	Pt	
322	J	XBB-784-11331	0.1Cl+A	2.4	24.5	720	10	120	Pt	
323	J	XBB-784-11332	0.1Cl+A	2.6	25.1	720	10	240	Pt	
324	J	XBB-784-11333	0.1Cl+A	2.9	25.5	720	10	180	Pt	
325	J	XBB-784-11334	0.1Cl+A	3.8	24.5	720	30	60	Pt	
326	J	XBB-784-11335	0.1Cl+A	3.0	24.7	720	30	120	Pt	
327	J	XBB-784-11336	0.1Cl+A	3.9	25	720	10	120	Pt	
328	J	XBB-784-11337	0.1Cl+A	2.3	25	720	10	120	Pt	
329	J	XBB-784-11337A	0.1Cl+A	2.5	24.3	720	30	120	Pt	
330	J	XBB-784-11338	MISSING DATA							
331	J	XBB-784-11338A	0.1Cl+A	2.6	25	720	30	60	Pt	
332	J	XBB-784-11339	0.1Cl+A	2.7	25.1	720	30	30	Pt	
333	J	XBB-784-11340	0.1Cl+A	2.7	25.1	720	30	15	Pt	
334	J	XBB-784-11341	0.1Cl+A	2.9	24.8	720	30	90	Pt	
335	J	XBB-784-11341A	0.1Cl+A	2.5	24.5	720	30	90	Pt	
336	J	XBB-784-11341B	0.1Cl+A	2.5	25	720	30	240	Pt	
337	J	XBB-784-11342	0.1Cl+A	2.5	25.2	720	30	120	Pt	
338	J	XBB-784-11343	0.1Cl+A	2.3	24.5	720	30	15	Pt	
339	J	XBB-784-11344	0.1Cl+A	2.3	24.8	720	30	45	Pt	
340	J	XBB-784-11345	0.1Cl+A	-	25	720	30	60	Pt	+10 ml liq. soap
341	J	XBB-784-11346	0.1Cl+A	-	25	720	30	60	Pt	+10 ml liq. soap
342	J	XBB-784-11347	0.1Cl+A	2.2	24.5	720	30	15	Pt	
343	J	XBB-784-11348	0.1Cl+A	2.2	24.5	720	30	30	Pt	
344	J	XBB-784-11349	0.1Cl+A	2.2	24.8	720	30	45	Pt	
345	J	XBB-784-11350	0.1Cl+A	2.2	25	720	30	15	Pt	
346	J	XBB-784-11351	0.1Cl+A	2.3	25.1	720	30	60	Pt	
347	J	XBB-784-11351A	0.1Cl+A	2.4	25.2	720	30	120	Pt	
348	J	XBB-784-11352	0.1Cl+A	2.5	25	720	30	120	Pt	
349	J	XBB-784-11353	0.1Cl+A	2.1	25.4	720	10	60	Pt	
350	J	XBB-784-11354	0.1Cl+A	2.1	25.3	720	10	45	Pt	
351	J	XBB-784-11355	0.1Cl+A	2.1	25.3	720	10	90	Pt	
352	J	XBB-784-11356	0.1Cl+A	2.2	25.3	720	10	60	Pt	
353	J	XBB-784-11356A	0.1Cl+A	2.2	25.1	720	10	120	Pt	
354	J	XBB-784-11356B	0.1Cl+A	2.4	25	720	10	240	Pt	
355	J	XBB-784-11357	0.1Cl+A	2.1	25	720	10	60	Pt	
356	J	XBB-784-11358	0.1Cl+A	2.1	25	720	10	30	Pt	
357	J	XBB-784-11359	0.1Cl+A	2.1	25	720	10	45	Pt	
358	J	XBB-784-11360	0.1Cl+A	2.1	25	720	10	90	Pt	
359	J	XBB-784-11361	0.1Cl+A	2.3	25	720	10	120	Pt	
360	J	XBB-784-11362	0.1Cl+A	2.2	25	720	10	90	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
361	J	XBB-784-11363	0.1Cl+A	2.3	25	720	10	120	Pt	
362	J	XBB-784-11363A	0.1Cl+A	2.3	25	720	10	240	Pt	
363	J	XBB-784-11364	0.1Cl+A	2.4	25.2	2160	30	120	Pt	
364	J	XBB-784-11365-6	0.1Cl+A	2.3	25	2160	30	240	Pt	
365	J	XBB-784-11367	0.1Cl+A	2.1	25.2	720	60	120	Pt	
366	J	XBB-784-11369	0.1Cl+A	2.3	25.1	2160	30	120	Pt	
367	J	XBB-784-11368	0.1Cl+A	2.4	25.2	720	30	120	Pt	
368	J	XBB-784-11370	0.1Cl+A	2.6	25.1	2160	30	240	Pt	
369	J	XBB-784-11371	0.1Cl+A	2.4	25.1	720	10	240	Pt	
370	J	XBB-784-11371A	0.1Cl+B	2.6	25.2	720	10	60	Pt	
371	J	XBB-784-11372	0.1Cl+B	2.7	25.5	720	10	120	Pt	
372	J	XBB-784-11374	0.1Cl+B	2.7	25.5	720	10	240	Pt	
373	J	XBB-784-11373	0.1Cl+B	2.7	25	2160	10	240	Pt	
374	J	XBB-784-11375	0.1Cl+B	2.8	25.2	720	10	240	Pt	
375	J	XBB-784-11376	0.1Cl+B	2.8	25.2	720	30	60	Pt	
366P	J	XBB-784-11377	0.1Cl+B	2.8	-	720	30	240	Pt	
367P	J	XBB-784-11378	1Cl+C	2.0	26.0	720	30	120	Pt	
368P	J	XBB-784-11379	1Cl+C	2.1	26.0	720	30	60	Pt	
369P	J	XBB-784-11380	1Cl+C	2.2	26.0	720	30	30	Pt	
370P	J	XBB-784-11381	1Cl+C	2.3	26.0	720	30	15	Pt	
371P	J	XBB-784-11382	1Cl+C	2.3	26.0	720	30	45	Pt	
372P	J	XBB-784-11383-5	1Cl+C	2.4	26.0	720	30	240	Pt	
373P	JF	XBB-784-11386	4Cl	2.7	26.0	720	10	60	Pt	
374P	JF	XBB-784-11390	4Cl	2.7	26.0	720	10	60	Pt	
375P	JF	XBB-784-11387	4Cl	2.7	26.0	720	10	30	Pt	
376P	JF	XBB-784-11388	4Cl	2.7	26.0	720	10	45	Pt	
377P	JF	XBB-784-11389	4Cl	2.7	26.0	720	10	15	Pt	
378P	JF	XBB-784-11391	4Cl	2.8	25.4	720	10	7.5	Pt	
379P	JF	XBB-784-11392	4Cl	2.8	25	720	10	7.5	Pt	
380P	JF	XBB-784-11393	4Cl	2.8	25	720	10	60	Pt	
381P	JF	XBB-784-11394	4Cl	2.8	25.1	720	10	120	Pt	
382P	JF	XBB-784-11395	4Cl	2.8	25.2	720	10	240	Pt	
383P	JF	XBB-784-11396	4Cl	2.7	25	720	10	240	Pt	
384P	JF	XBB-784-11397	4Cl	2.7	25	720	10	120	Pt	
385	J	XBB-784-11398	0.01Cl+A	3.0	25.2	720	10	120	Pt	
386	J	XBB-784-11399	0.01Cl+A	3.0	25.2	720	10	60	Pt	
387	J	XBB-784-11401	0.01Cl+A	2.9	25.2	720	10	240	Pt	
389	J	XBB-784-11402	4Cl	2.8	25.5	720	10	30	Pt	
390	J	XBB-784-11403	4Cl	2.9	25	720	10	60	Pt	
391	J	XBB-784-11404	4Cl	2.8	25	720	10	240	Pt	
392A	J	XBB-784-11405	4Cl	2.8	25.1	720	10	15	Pt	
392B	J	XBB-784-11406	4Cl	2.8	25.1	720	10	15	Pt	
393	J	XBB-784-11407	4Cl	2.7	25	720	10	45	Pt	
394	J	XBB-784-11408	4Cl	2.7	25	720	10	30	Pt	
395	J	XBB-784-11409-10	4Cl	2.7	25	720	10	120	Pt	
396A	J	XBB-784-11411	4Cl+ZC	2.8	25	720	10	180	Pt	
396B	J	XBB-784-11412	4Cl+ZC	2.8	25	720	10	180	Pt	
397A	J	XBB-784-11413	4Cl+ZC	2.7	25	2160	10	180	Pt	



TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
397B	J	XBB-784-11414	4Cl+ZC	2.7	25	2160	10	180	Pt	
397C	J	XBB-784-11415	4Cl+ZC	2.7	25	2160	10	180	Pt	
397D	J	XBB-784-11416	4Cl+ZC	2.7	25	2160	10	180	Pt	
398A	J	XBB-784-11419	4Cl+ZC	2.7	26.0	240	10	180	Pt	
398B	J	XBB-784-11417	4Cl+ZC	2.7	26.0	240	10	180	Pt	
399A	J	XBB-784-11418	4Cl+ZC	2.7	25	720	10	180	Pt	
399B	J	XBB-784-11420	4Cl+ZC	2.7	25	720	10	180	Pt	
399C	J	XBB-784-11421	4Cl+ZC	2.7	25	720	10	180	Pt	
400A	J	XBB-784-11422	4Cl+ZC	2.7	25	1440	10	180	Pt	
400B	J	XBB-784-11423	4Cl+ZC	2.7	25	1440	10	180	Pt	
401A	J	XBB-784-11424	4Cl+ZC	2.7	25.2	1440	30	180	Pt	
401B	J	XBB-784-11425	4Cl+ZC	2.7	25.2	1440	30	180	Pt	
402A	J	XBB-784-11426	4Cl+ZC	2.6	25	240	30	180	Pt	
402B	J	XBB-784-11427	4Cl+ZC	2.6	25	240	30	180	Pt	
403A	J	XBB-784-11428	4Cl+ZC	2.6	25	720	30	180	Pt	
403B	J	XBB-784-11429	4Cl+ZC	2.6	25	720	30	180	Pt	
404A	J	XBB-784-11430	4Cl+ZC	2.7	25	240	60	180	Pt	
404B	J	XBB-784-11431	4Cl+ZC	2.7	25	240	60	180	Pt	
405A	J	XBB-784-11432	4Cl+ZC	2.7	25.2	720	60	180	Pt	
405B	J	XBB-784-11433	4Cl+ZC	2.7	25.2	720	60	180	Pt	
406A	J	XBB-784-11434	4Cl+ZC	2.7	25.5	1440	60	180	Pt	
406B	J	XBB-784-11435	4Cl+ZC	2.7	25.5	1440	60	180	Pt	
407A	J	XBB-784-11436	4Cl+ZC	2.7	25.5	720	100	60	Pt	
407B	J	XBB-784-11437	4Cl+ZC	2.7	25.5	720	100	60	Pt	
408	J	XBB-784-11438	4Cl+ZC	2.7	25.3	720	90	20	Pt	
409A	J	XBB-784-11439	4Cl+ZC	2.7	25.3	720	30	60	Pt	
409B	J	XBB-784-11440	4Cl+ZC	2.7	25.3	720	30	60	Pt	
410A	J	XBB-784-11441	4Cl+ZC	2.7	-	720	60	30	Pt	
410B	J	XBB-784-11442	4Cl+ZC	2.7	-	720	60	30	Pt	
411A	J	XBB-784-11443	4Cl+ZC	2.7	25	2160	30	180	Pt	
411B	J	XBB-784-11444	4Cl+ZC	2.7	25	2160	30	180	Pt	
412A	J	XBB-784-11445	4Cl+ZC	2.7	25	720	30	60	Pt	
412B	J	XBB-784-11446	4Cl+ZC	2.7	25	720	30	60	Pt	
413A	J	XBB-784-11447	4Cl+ZC	2.7	25	1440	30	60	Pt	
413B	J	XBB-784-11448	4Cl+ZC	2.7	25	1440	30	60	Pt	
414	J	XBB-784-11449	4Cl+ZB	2.6	25.2	720	30	180	Pt	
415	J	XBB-784-11450	4Cl+ZB	2.7	25	240	30	180	Pt	
416	J	XBB-784-11452	4Cl+ZB	2.7	25	1440	30	180	Pt	
417	J	XBB-784-11453	4Cl+ZB	2.7	25	2160	30	180	Pt	
418	J	XBB-784-11454	4Cl+ZB	2.7	25	240	30	180	Pt	
419A	J	XBB-784-11455	4Cl+ZB	2.7	25	240	30	180	Pt	
419B	J	XBB-784-11456	4Cl+ZB	2.7	25	240	30	180	Pt	
420	J	XBB-784-11457	4Cl+ZB	2.7	25	720	30	180	Pt	
421	J	XBB-784-11458	4Cl+ZB	2.7	25	720	60	180	Pt	
422	J	XBB-784-11459	4Cl+ZB	2.7	25	240	60	180	Pt	
423	J	XBB-784-11460	4Cl+ZB	2.7	25	1440	60	180	Pt	
424A	J	XBB-784-11461	4Cl+ZB	2.7	25	240	60	180	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
424B	J	XBB-784-11462	4Cl+ZB	2.7	25	240	60	180	Pt	
425	J	XBB-784-11463	4Cl+ZB	2.7	25	720	10	180	Pt	
426	J	XBB-784-11464	4Cl+ZB	2.7	25	1440	10	180	Pt	
427	J	XBB-784-11465	4Cl+ZB	2.7	25	240	10	180	Pt	
428A	J	XBB-784-11466	4Cl+ZB	2.7	25	1440	10	180	Pt	
428B	J	XBB-784-11467	4Cl+ZB	2.7	25	1440	10	180	Pt	
429A	J	XBB-784-11468	4Cl+ZB	2.7	25	240	60	180	Pt	
429B	J	XBB-784-11469	4Cl+ZB	2.7	25	240	60	180	Pt	
430	J	MISSING	4Cl+ZB	2.7	25	720	100	60	Pt	
431A	J	XBB-784-11470	4Cl+ZB	2.7	25	240	100	60	Pt	
431B	J	XBB-784-11471	4Cl+ZB	2.7	25	240	100	60	Pt	
432	J	XBB-784-11473	4Cl+ZB	2.7	25	1440	100	60	Pt	
433	J	XBB-784-11472	4Cl+ZB	2.7	25	720	30	60	Pt	
434	J	XBB-784-11474	4Cl+ZB	2.7	25	720	30	30	Pt	
435	J	XBB-784-11475	4Cl+ZB	2.7	25	720	30	15	Pt	
436	J	XBB-784-11476	4Cl+ZB	2.7	25	720	30	7.5	Pt	
437	J	XBB-784-11479	4Cl+ZB	2.7	25	720	30	3.75	Pt	
438A	J	XBB-784-11477	4Cl+ZB	2.7	25	720	30	2	Pt	
438B	J	XBB-784-11478	4Cl+ZB	2.7	25	720	30	2	Pt	
439A	J	XBB-784-11480	4Cl+ZB	2.7	25	720	30	1	Pt	
439B	J	XBB-784-11481	4Cl+ZB	2.7	25	720	30	1	Pt	
440	J	XBB-784-11482	4Cl+ZB	2.7	25	720	30	7.5	Pt	
441	J	XBB-784-11483	4Cl+ZB	2.7	25	720	30	45	Pt	
442	J	XBB-784-11483A	4Cl+ZB	2.7	25	720	30	120	Pt	
443	J	MISSING	4Cl+ZB	2.7	25	720	30	180	Pt	
444A	J	XBB-784-11484	4Cl+ZB	2.7	25	720	60	30	Pt	
445	J	XBB-784-11485	4Cl+ZB	2.7	25	720	100	18	Pt	
446	J	XBB-784-11486	4Cl+ZB	2.7	25	100	30	180	Pt	
447	J	XBB-784-11486A	4Cl+ZB	2.7	25	1440	30	180	Pt	
448A	J	XBB-784-11487	4Cl+ZB	2.7	25	720	10	60	Pt	
448B	J	XBB-784-11488	4Cl+ZB	2.7	25	720	10	60	Pt	
449	J	XBB-784-11489	4Cl+ZB	2.7	25	720	10	45	Pt	
450	J	XBB-784-11490	4Cl+ZB	2.7	25	720	10	30	Pt	
451	J	XBB-784-11491	4Cl+ZB	2.7	25	720	10	20	Pt	
452A	J	XBB-784-11492	4Cl+ZB	2.7	25	720	10	15	Pt	
452B	J	XBB-784-11493	4Cl+ZB	2.7	25	720	10	15	Pt	
453	J	XBB-784-11494	4Cl+ZB	2.7	25	720	10	10	Pt	
454	J	XBB-784-11495	4Cl+ZB	2.7	25	720	60	180	Pt	
455	J	XBB-784-11496	4Cl+ZB	2.7	25	1440	60	180	Pt	
456A	J	XBB-784-11497	4Cl+ZB	2.7	25	720	10	5	Pt	
456B	J	XBB-784-11498	4Cl+ZB	2.7	25	720	10	5	Pt	
456C	J	XBB-784-11499	4Cl+ZB	2.7	25	720	10	5	Pt	
457A	J	XBB-784-11500	4Cl+ZB	2.7	25	720	10	2.5	Pt	
457B	J	XBB-784-11500A	4Cl+ZB	2.7	25	720	10	2.5	Pt	
458	J	XBB-784-11501	4Cl+ZB	2.7	25	720	10	120	Pt	
459A	J	XBB-784-11502	4Cl+ZB	2.7	25	720	10	1	Pt	
459B	J	XBB-784-11502A	4Cl+ZB	2.7	25	720	10	1	Pt	
460	J	XBB-784-11503	1Cl	2.9	25	720	30	60	Zn-SC	Area = 0.713 cm <sup>2</sup>

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
461	J	XBB-784-11504	1Cl	2.9	25	720	30	45	Zn-SC	Area = 0.713 cm <sup>2</sup>
462	J	XBB-784-11505	1Cl	2.9	25	720	30	30	Zn-SC	Area = 0.713 cm <sup>2</sup>
463	J	XBB-784-11506	1Cl	2.9	25	720	30	15	Zn-SC	Area = 0.713 cm <sup>2</sup>
464	J	XBB-784-11507	1Cl	2.9	25	720	30	10	Zn-SC	Area = 0.713 cm <sup>2</sup>
465A	J	XBB-784-11508	1Cl	2.9	25	720	30	5	Zn-SC	Area = 0.713 cm <sup>2</sup>
465B	J	XBB-784-11509	1Cl	2.9	25	720	30	5	Zn-SC	Area = 0.713 cm <sup>2</sup>
466A	J	XBB-784-11510	1Cl	2.9	25	720	30	3	Zn-SC	Area = 0.713 cm <sup>2</sup>
466B	J	XBB-784-11511	1Cl	2.9	25	720	30	3	Zn-SC	Area = 0.713 cm <sup>2</sup>
467A	J	XBB-784-11512	1Cl	2.9	25	720	30	2	Zn-SC	Area = 0.713 cm <sup>2</sup>
467B	J	XBB-784-11513	1Cl	2.9	25	720	30	2	Zn-SC	Area = 0.713 cm <sup>2</sup>
468A	J	XBB-784-11514	1Cl	2.8	25	720	30	1	Zn-SC	Area = 0.713 cm <sup>2</sup>
468B	J	XBB-784-11515	1Cl	2.8	25	720	30	1	Zn-SC	Area = 0.713 cm <sup>2</sup>
469	J	XBB-784-11515A	1Cl	2.8	25	720	30	180	Pt	
470A	J	XBB-784-11515B	1Cl	2.5	25	1440	30	60	Pt	
471	J	XBB-784-11516	1Cl	2.6	25	1440	30	60	Pt	+2X10 <sup>-5</sup> M CuCl <sub>2</sub>
472	J	XBB-784-11517	1Cl	2.8	25	1440	30	60	Pt	+4X10 <sup>-5</sup> M CuCl <sub>2</sub>
473	J	XBB-784-11518	1Cl	3.3	25	1440	30	60	Pt	+6X10 <sup>-5</sup> M CuCl <sub>2</sub>
474	J	XBB-784-11519	1Cl	3.4	25	1440	30	60	Pt	+1X10 <sup>-4</sup> M CuCl <sub>2</sub>
475	J	XBB-784-11520	1Cl	2.3	25	720	30	60	Pt	
476	J	XBB-784-11521	1Cl	2.3	25	720	30	60	Pt	+2X10 <sup>-5</sup> M Na <sub>2</sub> MoO <sub>4</sub>
477	J	XBB-784-11522	1Cl	2.3	25	720	30	60	Pt	+4X10 <sup>-5</sup> M Na <sub>2</sub> MoO <sub>4</sub>
478	J	XBB-784-11523	1Cl	2.5	25	720	30	60	Pt	+6X10 <sup>-5</sup> M Na <sub>2</sub> MoO <sub>4</sub>
479	J	MISSING	1Cl	2.6	25	720	30	60	Pt	+1X10 <sup>-4</sup> M Na <sub>2</sub> MoO <sub>4</sub>
480A	J	MISSING	1Cl	2.9	25	720	30	60	Pt	+10 <sup>-4</sup> M Na <sub>2</sub> MoO <sub>4</sub> , 10 ppm FeCl <sub>3</sub>
480B	J	XBB-784-11524	1Cl	2.9	25	720	30	60	Pt	
481	J	XBB-784-11524A	1Cl	3.4	25	720	30	60	Pt	
482	J	XBB-784-11525	1Cl	2.5	25	720	30	60	Pt	
483	J	XBB-784-11526	1Cl	2.7	25	720	30	60	Pt	+1X10 <sup>-5</sup> M NiSO <sub>4</sub>
484	J	XBB-784-11527	1Cl	2.7	25	720	30	60	Pt	+2X10 <sup>-5</sup> M NiSO <sub>4</sub>
485	J	XBB-784-11528	1Cl	2.8	25	720	30	60	Pt	+5X10 <sup>-5</sup> M NiSO <sub>4</sub>
486	J	XBB-784-11529	1Cl	2.8	25	720	30	60	Pt	+1X10 <sup>-4</sup> M NiSO <sub>4</sub>
487	J	XBB-784-11530	1Cl	3.1	25	720	30	60	Pt	+10 <sup>-4</sup> M NiSO <sub>4</sub> , 10 ppm FeCl <sub>3</sub>
488	J	XBB-784-11531	1Cl	3.2	25	720	30	60	Pt	+10 <sup>-4</sup> M NiSO <sub>4</sub> , 10 ppm CoCl <sub>2</sub> , 10 ppm FeCl <sub>3</sub>
489	J	XBB-784-11532	1Cl	2.1	25	720	30	60	Pt	
490	J	XBB-784-11533	1Cl	2.1	25	720	30	60	Pt	+1X10 <sup>-5</sup> M RuCl <sub>3</sub>
491	J	XBB-784-11534	1Cl	2.1	25	720	30	60	Pt	+2X10 <sup>-5</sup> M RuCl <sub>3</sub>
492	J	XBB-784-11535	1Cl	2.2	25	720	30	60	Pt	+5X10 <sup>-5</sup> M RuCl <sub>3</sub>
493	J	XBB-784-11536	1Cl	2.3	25	720	30	60	Pt	+10 <sup>-4</sup> M RuCl <sub>3</sub>
494	J	XBB-784-11537	1Cl	1.7	25	720	30	60	Pt	+10 <sup>-4</sup> M RuCl <sub>3</sub> , 10 ppm FeCl <sub>3</sub>
495	J	XBB-784-11538	1Cl	1.8	25	720	30	60	Pt	+10 <sup>-4</sup> M RuCl <sub>3</sub> , 10 ppm FeCl <sub>3</sub> , 10 ppm AgNO <sub>3</sub>
496a	J	XBB-784-11539	1Cl+D	1.4	25	720	30	60	Pt	
496b	J	XBB-784-11540	1Cl+D	1.4	25	720	30	60	Pt	
497	J	XBB-784-11541	1Cl+D	1.4	25	720	30	30	Pt	
498	J	XBB-784-11542	1Cl+D	1.4	25	720	30	120	Pt	
499	J	XBB-784-11543	1Cl+D	1.5	25	720	30	45	Pt	
500	J	XBB-784-11544	1Cl+D	1.6	25	720	30	240	Pt	
501a	J	XBB-784-11545	1Cl+D	1.6	25	720	30	180	Pt	
501b	J	XBB-784-11546	1Cl+D	1.6	25	720	30	180	Pt	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
501b	J	XBB-784-11546	1C1+D	1.6	25	720	30	180	Pt	
502	J	XBB-784-11547	1C1+D	1.7	-	720	10	60	Pt	
503	J	XBB-784-11548	1C1+D	1.7	-	720	10	30	Pt	
504	J	XBB-784-11549	1C1+D	1.7	-	720	10	120	Pt	
505	J	XBB-784-11550	1C1+D	1.8	-	720	10	240	Pt	
506	J	XBB-784-11551	1C1+D	1.9	-	720	30	60	Pt	
507	J	XBB-784-11552	1C1+D	2.0	-	720	30	120	Pt	
508	J	XBB-784-11553	1C1+D	2.0	-	720	30	240	Pt	
509	J	XBB-784-11554	1C1+D	2.0	-	720	30	30	Pt	
510	J	XBB-784-11555	1C1+D	2.0	25	720	60	60	Pt	
511	J	XBB-784-11556	1C1+D	2.0	25	720	60	30	Pt	
512	J	XBB-784-11600	1C1+D	2.0	-	720	60	120	Pt	
513	J	XBB-784-11557	0. 1C1+E	1.6	25	720	10	60	Pt	
514	J	XBB-784-11559	0. 1C1+E	1.6	-	720	10	120	Pt	
515A	J	XBB-784-11558	1C1+E	2.9	-	720	10	60	Pt	
516	J	XBB-784-11560	1C1+E	2.9	-	720	10	120	Pt	
517	J	XBB-784-11561	1C1+E	2.6	-	720	10	240	Pt	
518	J	XBB-784-11562	1C1+E	2.3	25	720	10	60	Pt	
519	J	XBB-784-11563	1C1+E	2.3	-	720	10	30	Pt	
520	J	XBB-784-11564	1C1+E	2.3	-	720	10	45	Pt	
521	J	XBB-784-11565	1C1+E	-	-	720	30	30	Pt	
522	J	XBB-784-11566	1C1+E	-	-	720	30	60	Pt	
523	J	XBB-784-11567	1C1+E	-	-	720	30	120	Pt	
524	J	XBB-784-11568	1C1+E	3.0	-	720	30	90	Pt	
525	J	XBB-784-11569	1C1+E	3.0	-	720	30	60	Pt	
526	J	XBB-784-11570	1C1+F	1.5	-	720	30	240	Pt	
526a	J	XBB-784-11571	1C1+F	1.5	-	720	30	240	Pt	
527	J	XBB-784-11572	1C1+F	1.7	-	720	30	120	Pt	
528	J	XBB-784-11573	1C1+F	1.8	-	720	30	60	Pt	
529	J	XBB-784-11574	1C1+F	1.9	-	720	30	45	Pt	
530	J	XBB-784-11575	1C1+F	1.9	-	720	30	30	Pt	
531	J	XBB-784-11576	1C1+F	3.5	-	720	10	60	Pt	
532	J	XBB-784-11577	1C1+F	3.7	-	720	10	120	Pt	
533	J	XBB-784-11578	1C1+F	3.8	-	720	10	45	Pt	
534	J	XBB-784-11579	1C1+F	3.9	-	720	10	30	Pt	
535	J	XBB-784-11580	1C1+F	4.0	-	720	10	240	Pt	
536	J	XBB-784-11581	1C1+F	2.0	-	720	10	30	Pt	
537	J	XBB-784-11582	1C1+F	2.5	-	720	10	120	Pt	
538	J	XBB-784-11583	1C1+F	3.4	-	720	10	30	Pt	
539	J	XBB-784-11584	1C1+F	3.6	-	720	10	60	Pt	
540	J	XBB-784-11585	1C1+F	3.8	-	720	10	60	Pt	
541	J	XBB-784-11586	1C1+F	2.1	-	720	10	120	Pt	
542	J	XBB-784-11587	1C1+F	2.5	-	240	10	120	Pt	
543a	J	XBB-784-11588	1C1+F	3.2	-	1440	10	120	Pt	
543b	J	XBB-784-11589	1C1+F	3.2	-	1440	10	120	Pt	
544	J	XBB-784-11590	1C1+F	0.7	-	2160	10	120	Pt	
545	J	XBB-784-11591	1C1+F	1.6	-	240	10	120	Pt	
546	J	XBB-784-11592	1C1+F	1.8	-	720	10	120	Ni	

TABLE 1  
Rotating Disk Electrode Experiments by Jaksic or Jaksic/Faltemier (con't)

Lab #	Code	Photo #	Soln	pH	T	rpm	C.D.	Time	Substr	Special
547	J	XBB-784-11593	4Cl	2.3	-	720	5	240	Pt	
548	J	XBB-784-11594	4Cl	2.1	-	720	10	120	Pt-QE	Area = 0.713 cm <sup>2</sup>
549B	J	XBB-784-11595	4Cl	2.5	-	720	10	120	Pt-HE	Area = 0.713 cm <sup>2</sup>
549	J	XBB-784-11596	4Cl	2.5	-	720	10	120	Pt-HE	Area = 0.713 cm <sup>2</sup>
550	J	XBB-784-11597	4Cl	-	-	720	10	60	Pt-QE	Area = 0.713 cm <sup>2</sup>
551	J	XBB-784-11598	4Cl	-	-	720	10	60	Pt-HE	Area = 0.713 cm <sup>2</sup>
552	J	XBB-784-11599	4Cl+ZB	-	-	720	10	180	Pt-HE	Area = 0.713 cm <sup>2</sup>
553	J	XBB-784-11600	4Cl+ZB	-	-	240	10	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
553a	J	XBB-784-11600A	4Cl+ZB	-	-	240	10	180	Pt	
554	J	XBB-784-11601	4Cl+ZB	-	-	240	10	180	Pt-HE	Area = 0.713 cm <sup>2</sup>
555	J	XBB-784-11602	4Cl+ZB	-	-	720	10	180	Pt-HE	Area = 0.713 cm <sup>2</sup>
555a	J	XBB-784-11602A	4Cl+ZB	-	-	720	10	180	Pt-HE	Area = 0.713 cm <sup>2</sup>
556	J	MISSING								
557	J	XBB-784-11935	4Cl+ZB	-	-	720	10	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
558	J	XBB-784-11603	4Cl+ZB	-	-	720	30	180	Pt-HE	Area = 0.713 cm <sup>2</sup>
559	J	MISSING	Cl+ZB							
560	J	XBB-784-11604	4Cl+ZB	-	-	720	10	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
560a	J	XBB-784-11604A	4Cl+ZB	-	-	720	10	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
561	J	XBB-784-11925	4Cl+ZB	-	-	1440	30	180	Pt	
562	J	XBB-784-11926	4Cl+ZB	-	-	1440	10	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
563	J	XBB-784-11927	4Cl+ZB	-	-	1440	10	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
564	J	XBB-784-11928	4Cl+ZB	-	-	1440	10	180	Pt	
565	J	XBB-784-11929	4Cl+ZB	-	-	1440	30	180	Pt	
566	J	XBB-784-11930	4Cl+ZB	-	-	240	30	180	Pt-HE	Area = 0.713 cm <sup>2</sup>
567	J	XBB-784-11931	4Cl+ZB	-	-	240	30	180	Pt-FE	Area = 0.713 cm <sup>2</sup>
568	J	XBB-784-11932	4Cl+ZB	-	-	240	10	180	Pt-HE	Area = 0.713 cm <sup>2</sup>

TABLE 2  
Small Flowcell Experiments by Jaksic or Jaksic/Faltemier

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-1	J	XBB-784-11606	1Cl	2.5	20	10	120
P-2	J	XBB-784-11607	1Cl	2.5	20	10	120
P-3	J	XBB-784-11608	1Cl	2.5	20	10	120
P-4	J	XBB-784-11609	1Cl	2.5	20	10	240
P-5	J	XBB-784-11610	1Cl	2.5	20	10	30
P-6	J	XBB-784-11611	1Cl	2.5	20	10	45
P-7	J	XBB-784-11612	1Cl	2.3	20	10	15
P-8	J	XBB-784-11613	1Cl	2.2	20	10	15
P-9	J	XBB-784-11614	1Cl	2.2	20	10	15
P-10	J	XBB-784-11615	1Cl	2.1	20	10	10
P-11	J	XBB-784-11616	1Cl	2.1	20	10	10
P-12	J	XBB-784-11617	1Cl	2.1	20	10	10
P-13	J	XBB-784-11618	1Cl	2.1	20	10	5
P-14	J	XBB-784-11619	1Cl	2.1	20	10	30
P-15	J	XBB-784-11620	1Cl	2.1	20	10	5
P-16	J	XBB-784-11621	1Cl	2.1	20	10	5
P-17	J	XBB-784-11622	1Cl	2.1	20	10	45
P-18	J	XBB-784-11623	1Cl	2.1	20	10	60
P-19	J	XBB-784-11624	1Cl	2.1	20	10	240
P-20	J	XBB-784-11625	1Cl	2.1	20	10	120
P-21	J	XBB-784-11626	1Cl	2.0	20	10	60
P-22	J	XBB-784-11627	1Cl	2.0	90	10	120
P-23	J	XBB-784-11628	1Cl	2.1	90	10	60
P-24	J	XBB-784-11629	1Cl	2.1	90	10	45
P-25	J	XBB-784-11630	1Cl	2.1	90	10	240
P-26	J	XBB-784-11630A	1Cl	2.1	90	10	60
P-27	J	XBB-784-11631	1Cl	2.1	90	10	30
P-28	J	XBB-784-11632	1Cl	2.1	90	10	15
P-29	J	XBB-784-11633	1Cl	2.1	90	10	30
P-30	J	XBB-784-11633A	1Cl	2.1	90	10	15
P-31	J	XBB-784-11634	1Cl	2.1	90	10	45
P-32	J	XBB-784-11635	1Cl	2.1	90	10	120
P-33	J	XBB-784-11636	1Cl	2.1	90	10	10
P-34	J	XBB-784-11637	1Cl	2.1	90	10	10
P-35	J	XBB-784-11638	1Cl	2.1	90	10	5
P-36	J	XBB-784-11639	1Cl	2.1	90	10	10
P-37	J	XBB-784-11640	1Cl	2.1	90	10	5
P-38	J	XBB-784-11641	1Cl	2.1	90	10	5
P-39	J	XBB-784-11642	1Cl	2.1	90	10	10
P-40	J	XBB-784-11643	1Cl	2.1	90	10	240
P-41	J	XBB-784-11644	1Cl	2.1	55	10	15
P-42	J	XBB-784-11645	1Cl	2.0	55	10	10
P-43	J	XBB-784-11646	1Cl	1.9	55	10	5
P-44	J	XBB-784-11647	1Cl	1.7	55	10	10
P-45	J	XBB-784-11648	1Cl	1.6	55	10	5
P-46	J	XBB-784-11649	1Cl	1.6	55	10	30
P-47	J	XBB-784-11650	1Cl	1.6	55	10	15
P-48	J	XBB-784-11650A	1Cl	-	55	10	60

TABLE 2 Continued

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-49	J	XBB-784-11651	1C1	-	55	10	45
P-50	J	XBB-784-11653	1C1	-	55	10	60
P-51	J	XBB-784-11652	1C1	-	55	10	120
P-52	J	XBB-784-11654	1C1	-	55	10	45
P-53	J	XBB-784-11655	1C1	-	55	10	15
P-54	J	XBB-784-11656	1C1	2.0	55	10	120
P-55	J	XBB-784-11657	1C1	2.0	55	10	45
P-56	J	XBB-784-11658	1C1	-	10	10	60
P-57	J	XBB-784-11659	1C1	2.0	10	10	120
P-58	J	XBB-784-11660	1C1	2.0	10	10	60
P-59	J	XBB-784-11661	1C1	2.0	10	10	45
P-60	J	XBB-784-11662	1C1	2.0	10	10	45
P-61	J	XBB-784-11663	1C1	2.0	10	10	30
P-62a	J	XBB-784-11664	1C1	2.0	10	10	30
P-62b	J	XBB-784-11665	1C1	2.0	10	10	120
P-63	J	XBB-784-11671	1C1	2.0	10	10	15
P-64	J	XBB-784-11674	1C1	2.0	10	10	15
P-65	J	XBB-784-11673	1C1	2.0	10	10	5
P-66	J	XBB-784-11676	1C1	2.0	10	10	10
P-67	J	XBB-784-11675	1C1	2.0	10	10	10
P-68	J	XBB-784-11679	1C1	2.0	10	10	5
P-69	J	XBB-784-11681	1C1	2.1	5	10	120
P-70	J	XBB-784-11666	1C1	-	5	10	60
P-71	J	XBB-784-11667	1C1	-	5	10	45
P-72	J	XBB-784-11668	1C1	-	5	10	45
P-73	J	XBB-784-11669	1C1	-	5	10	45
P-74	J	XBB-784-11670	1C1	-	5	10	30
P-75	J	XBB-784-11672	1C1	-	5	10	30
P-76	J	XBB-784-11677	1C1	-	5	10	15
P-77	J	XBB-784-11678	1C1	-	5	10	15
P-78	J	XBB-784-11680	1C1	-	5	10	10
P-79	J	XBB-784-11682	1C1	-	5	10	10
P-80	J	XBB-784-11683	1C1	-	5	10	5
P-81	J	XBB-784-11684	1C1	-	5	10	5
P-82	J	XBB-784-11685	1C1	-	5	10	60
P-83	J	XBB-784-11686	1C1	-	5	10	120
P-84	J	XBB-784-11687	1C1	-	20	10	60
P-85a	JF	XBB-784-11688	1C1	2.2	90	30	60
P-85b	JF	XBB-784-11689	1C1	2.2	90	30	60
P-86	JF	XBB-784-11690	1C1	2.4	90	30	120
P-87	JF	XBB-784-11691	1C1	2.4	90	30	30
P-88	JF	XBB-784-11692	1C1	2.4	90	30	45
P-89	JF	XBB-784-11693	1C1	2.4	90	30	15
P-90	JF	XBB-784-11694	1C1	2.4	90	30	15
P-91	JF	XBB-784-11695	1C1	2.4	90	30	10
P-92	JF	XBB-784-11696	1C1	2.4	90	30	10
P-93	JF	XBB-784-11697	1C1	2.4	90	30	5
P-94	JF	XBB-784-11698	1C1	2.4	90	30	240

TABLE 2 Continued

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-95	JF	XBB-784-11699	1Cl	2.4	10	30	60
P-96	JF	XBB-784-11700	1Cl	2.4	10	30	45
P-97	JF	XBB-784-11701	1Cl	2.4	10	30	15
P-98	JF	XBB-784-11702	1Cl	2.4	10	30	30
P-99	JF	XBB-784-11703	1Cl	2.4	10	30	30
P-100	JF	XBB-784-11704	1Cl	2.4	10	30	10
P-101	JF	XBB-784-11705	1Cl	2.4	10	30	10
P-102	JF	XBB-784-11706	1Cl	2.4	10	30	5
P-103	JF	XBB-784-11707	1Cl	2.4	10	30	15
P-104	JF	XBB-784-11708	1Cl	-	10	30	120
P-105	JF	XBB-784-11709	1Cl	-	55	30	60
P-106	JF	XBB-784-11710	1Cl	-	55	30	45
P-107	JF	XBB-784-11711	1Cl	-	55	30	30
P-108	JF	XBB-784-11712	1Cl	-	55	30	15
P-109	JF	XBB-784-11713	1Cl	-	55	30	120
P-110	JF	XBB-784-11714	1Cl	-	55	30	10
P-111	JF	XBB-784-11715	1Cl	-	55	30	30
P-112	JF	XBB-784-11716	1Cl	-	55	30	5
P-113	JF	XBB-784-11717	1Cl	-	55	30	10
P-114	JF	XBB-784-11718	1Cl	-	20	30	60
P-115	JF	XBB-784-11719	1Cl	-	20	30	30
P-116	JF	XBB-784-11720	1Cl	-	90	100	30
P-117	JF	XBB-784-11721	1Cl	-	90	100	60
P-118	JF	XBB-784-11722	1Cl	-	90	100	45
P-119	JF	XBB-784-11723	1Cl	-	90	100	15
P-120	JF	XBB-784-11724	1Cl	-	90	100	30
P-121	JF	XBB-784-11725	1Cl	-	90	100	10
P-122	JF	XBB-784-11726	1Cl	-	90	100	5
P-123	JF	XBB-784-11727	1Cl	-	90	100	1
P-124	JF	XBB-784-11728	1Cl	-	20	100	1
P-125	JF	XBB-784-11729	1Cl	-	20	100	45
P-126	JF	XBB-784-11730	1Cl	-	20	100	30
P-127	JF	XBB-784-11731	1Cl	-	20	100	15
P-128	JF	XBB-784-11732	1Cl	-	20	100	30
P-129	JF	XBB-784-11733	1Cl	-	20	100	10
P-130	JF	XBB-784-11734	1Cl	-	20	100	5
P-131	JF	XBB-784-11735	1Cl	-	20	100	1
P-132	J	XBB-784-11736	0.1Cl+A	1.9	85	10	60
P-133	J	XBB-784-11737	0.1Cl+A	1.9	85	10	45
P-134	J	XBB-784-11738	0.1Cl+A	-	85	10	30
P-135	J	XBB-784-11739	0.1Cl+A	-	85	10	45
P-136	J	XBB-784-11740	0.1Cl+A	-	85	10	15
P-137	J	XBB-784-11741	0.1Cl+A	-	85	10	10
P-138	J	XBB-784-11742	0.1Cl+A	-	85	10	5
P-139	J	XBB-784-11743	0.1Cl+A	1.9	85	10	120
P-140	J	XBB-784-11744	0.1Cl+A	1.9	20	10	60
P-141	J	XBB-784-11745	0.1Cl+A	1.7	20	10	45
P-142	J	XBB-784-11746	0.1Cl+A	1.7	20	10	30



TABLE 2 Continued

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-143	J	XBB-784-11747	0.1Cl+A	1.8	20	10	15
P-144	J	XBB-784-11748	0.1Cl+A	1.8	20	10	15
P-145	J	XBB-784-11749	0.1Cl+A	-	20	10	5
P-146	J	XBB-784-11750	0.1Cl+A	1.7	20	10	15
P-147	J	XBB-784-11751	0.1Cl+A	1.6	20	10	120
P-148	J	XBB-784-11752	0.1Cl+A	1.9	85	30	30
P-149	J	XBB-784-11753	0.1Cl+A	1.8	85	30	15
P-150	J	XBB-784-11754	0.1Cl+A	-	85	30	45
P-151	J	XBB-784-11755	0.1Cl+A	1.6	85	30	10
P-152	J	XBB-784-11756	0.1Cl+A	1.6	85	30	5
P-153	J	XBB-784-11757	0.1Cl+A	1.7	85	30	60
P-154	J	XBB-784-11758	0.1Cl+A	1.7	85	30	120
P-155	J	XBB-784-11759	0.1Cl+A	1.9	20	30	60
P-156	J	XBB-784-11760	0.1Cl+A	1.8	20	30	45
P-157	J	XBB-784-11761	0.1Cl+A	1.6	20	30	30
P-158	J	XBB-784-11762	0.1Cl+A	1.6	20	30	15
P-159	J	XBB-784-11763	0.1Cl+A	1.6	20	30	10
P-160	J	XBB-784-11764	0.1Cl+A	1.6	20	30	10
P-161	J	XBB-784-11765	0.1Cl+A	1.6	20	30	5
P-162	J	XBB-784-11766	0.1Cl+A	1.5	20	30	120
P-163	J	XBB-784-11767	0.1Cl+A	1.9	85	30	120
P-164	J	XBB-784-11768	0.1Cl+A	1.7	20	30	120
P-165	J	XBB-784-11769	0.1Cl+A	1.8	85	10	120
P-166	J	XBB-784-11770	0.1Cl+A	1.9	20	10	120
P-167	J	XBB-784-11771	0.1Cl+A	1.8	85	10	120
P-168	J	XBB-784-11772	1Cl	1.6	90	10	60
P-169	J	XBB-784-11773	1Cl	1.7	90	10	60
P-170	J	XBB-784-11774	1Cl	1.6	90	10	45
P-171	J	XBB-784-11775	1Cl	1.4	90	10	30
P-172	J	XBB-784-11776	1Cl	1.3	90	10	15
P-173	J	XBB-784-11777	1Cl	-	90	10	10
P-174	J	XBB-784-11778	1Cl	-	90	10	5
P-175	J	XBB-784-11779	1Cl	-	90	10	120
P-176	J	XBB-784-11780	1Cl	1.5	20	10	60
P-177	J	XBB-784-11781	1Cl	1.8	20	10	45
P-178	J	XBB-784-11782	1Cl	1.4	20	10	30
P-179	J	XBB-784-11783	1Cl	-	20	10	15
P-180	J	XBB-784-11784	1Cl	1.3	20	10	10
P-181	J	XBB-784-11785	1Cl	1.3	20	10	5
P-182	J	XBB-784-11786	1Cl	1.7	20	10	120
P-183	J	XBB-784-11787	1Cl	2.4	90	30	45
P-184	J	XBB-784-11788	1Cl	2.2	90	30	30
P-185	J	XBB-784-11789	1Cl	2.2	90	30	60
P-186	J	XBB-784-11790	1Cl	-	90	30	15
P-187	J	XBB-784-11791	1Cl	2.0	90	30	10
P-188	J	XBB-784-11792	1Cl	-	90	30	5
P-189	J	XBB-784-11793	1Cl	1.7	90	30	120
P-190	J	XBB-784-11794	1Cl	1.9	20	30	45

TABLE 2 Continued

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-191	J	XBB-784-11795	1C1	1.6	20	30	30
P-192	J	XBB-784-11796	1C1	1.4	20	30	60
P-193	J	XBB-784-11797	1C1	1.3	20	30	15
P-194	J	XBB-784-11798	1C1	-	20	30	10
P-195	J	XBB-784-11799	1C1	-	20	30	5
P-196	J	XBB-784-11800	1C1	-	20	30	120
P-197	JF	XBB-784-11801	4C1	2.4	100	10	45
P-198	JF	XBB-784-11802	4C1	2.2	100	10	30
P-199	JF	XBB-784-11803	4C1	2.0	100	10	60
P-200	JF	XBB-784-11804	4C1	2.0	100	10	15
P-201	JF	XBB-784-11805	4C1	2.0	100	10	10
P-202	JF	XBB-784-11806	4C1	2.4	100	10	5
P-203	JF	XBB-784-11807	4C1	2.4	100	10	120
P-204	JF	XBB-784-11808	4C1	2.4	20	10	45
P-205	JF	XBB-784-11809	4C1	2.4	20	10	30
P-206	JF	XBB-784-11810	4C1	2.4	20	10	60
P-207	JF	XBB-784-11811	4C1	-	20	10	15
P-208	JF	XBB-784-11812	4C1	-	20	10	10
P-209	JF	XBB-784-11813	4C1	-	20	10	5
P-210	JF	XBB-784-11814	4C1	-	20	10	10
P-211	JF	XBB-784-11815	4C1	2.4	20	10	120
P-212	JF	XBB-784-11816	4C1	2.4	100	30	60
P-213	JF	XBB-784-11817	4C1	-	100	30	45
P-214	JF	XBB-784-11818	4C1	-	100	30	15
P-215	JF	XBB-784-11819	4C1	-	100	30	120
P-216	JF	XBB-784-11820	4C1	-	100	30	30
P-217	JF	XBB-784-11821	4C1	-	100	30	10
P-218	JF	XBB-784-11822	4C1	-	100	30	5
P-219	JF	XBB-784-11823	4C1	-	20	30	30
P-220	JF	XBB-784-11824	4C1	-	20	30	15
P-221	JF	XBB-784-11825	4C1	-	20	30	60
P-222	JF	XBB-784-11826	4C1	-	20	30	10
P-223	JF	XBB-784-11827	4C1	-	20	30	5
P-224	JF	XBB-784-11828	4C1	-	20	30	45
P-225	J	XBB-784-11829	4C1+ZB	-	100	30	45
P-226	J	XBB-784-11830	4C1+ZB	2.7	100	30	15
P-227	J	XBB-784-11831	4C1+ZB	2.6	100	30	30
P-228	J	XBB-784-11832	4C1+ZB	3.4	100	30	60
P-229	J	XBB-784-11833	4C1+ZB	-	100	30	10
P-230	J	XBB-784-11834	4C1+ZB	2.7	100	30	120
P-231	J	XBB-784-11835	4C1+ZB	-	100	30	5
P-232	J	XBB-784-11836	4C1+ZB	-	100	30	2
P-233	J	XBB-784-11837	4C1+ZB	-	100	30	2
P-234	J	XBB-784-11838	4C1+ZB	-	100	30	30
P-235	J	XBB-784-11839	4C1+ZB	-	100	30	1
P-236	J	XBB-784-11840	4C1+ZB	-	100	30	15
P-237	J	XBB-784-11841	4C1+ZB	-	100	30	1
P-238	J	XBB-784-11842	4C1+ZB	-	100	30	1

TABLE 2 Continued

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-239a	J	XBB-784-11843	4Cl+ZB	2.7	20	30	60
P-239b	J	XBB-784-11844	4Cl+ZB	2.7	20	30	60
P-240	J	XBB-784-11845	4Cl+ZB	-	20	30	30
P-241	J	XBB-784-11846	4Cl+ZB	-	20	30	45
P-242	J	XBB-784-11847	4Cl+ZB	-	20	30	15
P-243	J	XBB-784-11848	4Cl+ZB	-	20	30	10
P-244	J	XBB-784-11850	4Cl+ZB	2.7	20	30	5
P-245	J	XBB-784-11849	4Cl+ZB	-	20	30	5
P-246	J	XBB-784-11851	4Cl+ZB	2.9	20	30	5
P-247	J	XBB-784-11852	4Cl+ZB	2.8	20	30	2
P-248	J	XBB-784-11853	4Cl+ZB	-	20	30	2
P-249	J	XBB-784-11854	4Cl+ZB	-	20	30	2
P-250	J	XBB-784-11855	4Cl+ZB	-	20	30	1
P-251	J	XBB-784-11856	4Cl+ZB	-	20	30	1
P-252	J	XBB-784-11857	4Cl+ZB	-	20	30	1
P-253	J	XBB-784-11858	4Cl+ZB	-	20	30	1
P-254	J	XBB-784-11859	4Cl+ZB	-	20	30	120
P-255	J	XBB-784-11860	4Cl+ZB	1.7	100	10	30
P-256	J	XBB-784-11861	4Cl+ZB	-	100	10	15
P-257	J	XBB-784-11862	4Cl+ZB	-	100	10	10
P-258	J	XBB-784-11863	4Cl+ZB	-	100	10	5
P-259	J	XBB-784-11864	4Cl+ZB	2.7	100	10	60
P-260	J	XBB-784-11865	4Cl+ZB	-	100	10	2
P-261	J	XBB-784-11866	4Cl+ZB	-	100	10	1
P-262	J	XBB-784-11867	4Cl+ZB	-	100	10	1
P-263	J	XBB-784-11868	4Cl+ZB	-	100	10	1
P-264	J	XBB-784-11869	4Cl+ZB	-	100	10	2
P-265	J	XBB-784-11870	4Cl+ZB	2.9	100	10	45
P-266	J	XBB-784-11871	4Cl+ZB	-	100	10	120
P-267	J	XBB-784-11872	4Cl+ZB	2.7	20	10	60
P-268	J	XBB-784-11873	4Cl+ZB	-	20	10	30
P-269	J	XBB-784-11874	4Cl+ZB	-	20	10	15
P-270	J	XBB-784-11875	4Cl+ZB	-	20	10	10
P-271	J	XBB-784-11876	4Cl+ZB	-	20	10	5
P-272	J	XBB-784-11877	4Cl+ZB	-	20	10	2
P-273	J	XBB-784-11877A	4Cl+ZB	-	20	10	2
P-274	J	XBB-784-11878	4Cl+ZB	-	20	10	2
P-275	J	XBB-784-11879	4Cl+ZB	-	20	10	1
P-276	J	XBB-784-11880	4Cl+ZB	-	20	10	1
P-277	J	XBB-784-11881	4Cl+ZB	-	20	10	1
P-278	J	XBB-784-11889	4Cl+ZB	-	20	10	45
P-279	J	XBB-784-11882	1Br	1.4	90	10	45
P-280	J	XBB-784-11883	1Br	1.3	90	10	60
P-281	J	XBB-784-11884	1Br	-	90	10	15
P-282	J	XBB-784-11885	1Br	1.4	90	10	30
P-283	J	XBB-784-11886	1Br	-	90	10	10
P-284	J	XBB-784-11887	1Br	-	90	10	10
P-285	J	XBB-784-11888	1Br	-	90	10	15

TABLE 2 Continued

Lab #	Code	Photo #	Soln	pH	Flow	C.D.	Time
P-286	J	XBB-784-11890	1Br	-	90	10	5
P-287	J	XBB-784-11891	1Br	-	90	10	120
P-288	J	XBB-784-11892	1Br	-	20	10	45
P-289	J	XBB-784-11893	1Br	-	20	10	30
P-290	J	XBB-784-11894	1Br	-	20	10	15
P-291	J	XBB-784-11895	1Br	-	20	10	60
P-292	J	XBB-784-11896	1Br	-	20	10	10
P-293	J	XBB-784-11897	1Br	-	20	10	5
P-294	J	XBB-784-11898	1Br	-	20	10	120
P-295	J	XBB-784-11899	1Br	-	90	30	60
P-296	J	XBB-784-11900	1Br	1.3	90	30	30
P-297	J	XBB-784-11901	1Br	-	90	30	15
P-298	J	XBB-784-11902	1Br	-	90	30	10
P-299	J	XBB-784-11903	1Br	-	90	30	5
P-300	J	XBB-784-11904	1Br	-	90	30	120
P-301	J	XBB-784-11905	1Cl+G	2.0	90	30	45
P-302	J	XBB-784-11906	1Cl+G	-	90	30	60
P-303	J	XBB-784-11907	1Cl+G	-	90	30	30
P-304	J	XBB-784-11908	1Cl+G	1.9	90	30	15
P-305	J	XBB-784-11909	1Cl+G	-	90	30	10
P-306	J	XBB-784-11910	1Cl+G	-	90	30	5
P-307	J	XBB-784-11911	1Cl+G	1.9	90	30	120
P-308	J	XBB-784-11912	1Cl+G	-	90	30	15
P-309	J	XBB-784-11913	1Cl+G	-	90	10	45
P-310	J	XBB-784-11914	1Cl+G	-	90	10	60
P-311	J	XBB-784-11915	1Cl+G	-	90	10	30
P-312	J	XBB-784-11916	1Cl+G	-	90	10	15
P-313	J	XBB-784-11917	1Cl+G	-	90	10	10
P-314	J	XBB-784-11918	1Cl+G	-	90	10	5
P-315	J	XBB-784-11919	1Cl+G	-	90	10	120
	J	XBB-784-11920	Anode, after Expt. #3				
	J	XBB-784-11921	Anode, after Expt. #2				
	J	XBB-784-11922	Anode, after Expt. #115				
	J	XBB-784-11923	Anode, after Expt. #120				
	J	XBB-784-11924	Anode, after Expt. #125				

TABLE 3  
Miscellaneous Photographs

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XBB-7612-11366 thru 11367	RDE, SEM, Zinc deposits (Rolf Muller)
XBB-7701-350	MMRD Annual Report 1976
XBB-7801-793 thru 794	MMRD Annual Report 1977
XBB-780-15269	MMRD Annual Report 1978
XBB-7802-1141 thru 1149	RDE, Zinc deposits
XBB-7805-6146 thru 6148	SmC, Zinc deposits
XBB-7812-15269 thru 15269C	SmC, Zinc deposits
CBB-7812-15938 and 15940	SmC, Equip, B & W
BBC-7812-15939 and 15941	SmC, Equip, Color
XBB-8008-9252	RDE, Zinc deposits
XBB-8008-9258 thru 9260	RDE, Zinc deposits
CBB-8203-2848 thru 2856 (even)	InC, Equip, B & W
BBC 8203-2849 thru 2857 (odd)	InC, Equip, Color
CBB 833-2344 thru 2350 (even)	LC, Equip, B & W
BBC 833-2343 thru 2349 (odd)	LC, Equip., Color
CBB 820-10750 thru 10762 (even)	InC, Equip., B & W
BBC 820-10749 thru 10761 (odd)	InC, Equip., Color

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TABLE 4

Photographs from LBL Report #13057 by Tetsuaki Tsuda

Figure	Photograph #	Explanation
3.1	XBB-816-5236B	RDE Cathodes
3.2	XBB-816-5238B	RDE Cell
3.3	XBB-816-5237B	RDE Apparatus
3.4	XBB-813-2169C	RDE Apparatus
4.1	XBB-817-5960A	Effect of Lead
4.2	XBB-817-6760A	Effect of purity on spiral formation
4.3	XBB-817-6476A	Effect of c.d. on number density of spirals
4.43	XBB-817-6215A	Logarithmic spiral outlining
4.4	XBB-817-6769A	Effect of rpm on spiral formation
4.5	XBB-817-6788A	Effect of rpm on spiral morphology, 10 mA/cm <sup>2</sup>
4.6	XBB-817-6787A	Effect of rpm on spiral morphology, 30 mA/cm <sup>2</sup>
4.7	XBB-817-6789A	Effect of artificial depressions
4.8	XBB-817-6765A	Effect of lead concentration on spiral formation
4.9	XBB-817-6790A	Effect of lead on spiral morphology
4.10	XBB-817-5959A	Effect of pulse deposition in AR grade ZnCl <sub>2</sub>
4.11	XBB-817-6479A	Effect of pulse deposition, 5 x 10 <sup>-6</sup> M Pb
4.12	XBB-817-6478A	Effect of pulse deposition, 5 x 10 <sup>-5</sup> M Pb
4.13	XBB-817-6761A	Effect of crystal orientation of Pt substrate
4.14	XBB-817-6791A	Effect of c.d. on initial protrusions
4.15	XBB-817-6792A	Effect of prm on initial protrusions
4.16	XBB-817-6781A	Effect of lead on initial protrusions
4.17	XBB-817-6768A	Effect of c.d. on initial protrusions
4.18	XBB-817-6759A	Effect of pulse deposition on initial protrusions
4.19	XBB-817-6758A	Effect of pulse deposition on initial protrusions
4.20	XBB-817-6783A	Sequence of protrusion growth
4.21	XBB-817-6782A	Spiral development, initial protrusions
4.22	XBB-817-6779A	Sequence of protrusion growth and coalescence
4.23	XBB-817-6780A	Sequence of protrusion growth and coalescence
4.24	XBB-817-6766A	Sequence of crystal growth at 120 mA/cm <sup>2</sup>
4.25	XBB-817-6778A	Magnification of Figure 4.24
4.26	XBB-817-6762A	Influence of substrate
4.27	XBB-817-6784A	Joining of protrusions into spirals
4.28	XBB-817-6786A	Spiral development at 30 mA/cm <sup>2</sup> , 5 x 10 <sup>-5</sup> M Pb
4.29	XBB-817-6775A	Spiral development at 60 mA/cm <sup>2</sup> , 5 x 10 <sup>-5</sup> M Pb
4.30	XBB-817-6776A	Spiral development at 10 mA/cm <sup>2</sup> , 5 x 10 <sup>-6</sup> M Pb
4.31	XBB-817-6777A	Spiral development at 30 mA/cm <sup>2</sup> , 5 x 10 <sup>-6</sup> M Pb
4.32	XBB-817-6785A	Spiral development from protrusions to ridges
4.33	XBB-817-6772A	SEM, spirals, lead X-ray map
4.34	XBB-817-6477A	Elemental Auger spiral mapping
4.35	XBB-817-6767A	Spirals obtained from ultrapure solution
4.36	XBB-817-6763A	Crystal structure of initial protrusions
4.37	XBB-817-6773A	Crystal structure from ultrapure solution
4.38	XBB-817-6764A	Effect of c.d., ultrapure solution
4.39	XBB-817-6774A	Sequence of protrusion growth, ultrapure solution
4.40	XBB-817-6770A	Effect of substrate, ultrapure solution

TABLE 4  
Photographs from LBL Report #13057 by Tetsuaki Tsuda (con't)

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Figure	Photograph #	Explanation
4.41	XBB-817-6771A	Effect of pH, ultrapure solution
4.42	XBB-817-10779A	Auger spectra
A-1	XBB-817-10821	Lead removal rates with zinc dust purification
A-2	XBB-817-10820	Lead cementation rates with zinc dust purification
B	XBB-817-6475A	Pt ring electrodes, effect of rpm
C-1	XBB-817-5955A	Effect of codeposition of cobalt
C-2	XBB-817-5956A	Effect of codeposition of thallium
C-3	XBB-817-5957A	Effect of codeposition of cadmium
C-4	XBB-817-5858A	Effect of codeposition of tin or mercury

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TABLE 5  
Rotating Disk Electrode Experiments by Faltemier or Faltemier/Komnenic

Photo #	Code	Soln	pH	rpm	C.D.	Time	Subst	Spec
XBB-838-7360	J	1C1	2.0	400	30	10	Pt	
XBB-838-7361	J	1C1	2.0	800	30	30	Pt	
XBB-838-7362	J	1C1	2.0	800	30	5	Pt	
XBB-838-7363	J	1C1	2.0	800	30	10	Pt	
XBB-838-7364	J	1C1	2.0	1600	30	15	Pt	
XBB-838-7365	J	1C1	2.0	400	30	0.5	Zn	
XBB-838-7366	J	1C1	2.0	400	30	1.5 #	Zn	
XBB-838-7367	J	1C1	2.0	400	30	2.5 #	Zn	
XBB-838-7368	J	1C1	2.0	400	30	3.5 #	Zn	
XBB-838-7369	J	1C1	2.0	400	30	0.5	Zn	
XBB-838-7370	J	1C1	2.0	400	30	1.5 #	Zn	
XBB-838-7371	J	1C1	2.0	400	30	7 #	Zn	
XBB-838-7372	J	1C1	2.4	800	30	5	Pt	(also, see XBB 831-377)
XBB-838-7373	J	1C1	2.4	800	30	10 #	Pt	(also, see XBB 831-377)
XBB-838-7374	J	1C1	2.4	800	30	15 #	Pt	(also, see XBB 831-377)
XBB-838-7375	J	1C1	2.4	400	30	10	Pt	
XBB-838-7376	J	1C1	2.4	400	30	20	Pt	
XBB-838-7377	J	1C1	2.4	400	30	30	Pt	
XBB-838-7378	J	1C1	2.4	400	30	60	Pt	
XBB-838-7379	J	1C1	2.4	600	30	20	Pt	
XBB-838-7380	J	1C1	2.4	600	30	30	Pt	
XBB-838-7381	J	1C1	2.4	600	30	45	Pt	
XBB-838-7382	J	1C1	2.4	600	30	60	Pt	
XBB-838-7383	J	1S	4.6	400	5	10	Pt	
XBB-838-7384	J	1S	4.6	1600	5	8.5	Pt	
XBB-838-7385	J	1S	4.6	400	5	20	Pt	
XBB-838-7386	J	1S	4.6	400	5	41	Pt	
XBB-838-7387	J	1S	4.6	1600	5	20	Pt	
XBB-838-7388	J	1S	4.6	400	5	40	Pt	
XBB-838-7389	J	1S	4.6	1600	5	20	Pt	
XBB-838-7390	J	1S	4.6	400	20	66	Pt	
XBB-838-7391	J	1S	4.6	720	20	20	Pt	
XBB-838-7392	J	1S	4.6	1600	20	20	Pt	
XBB-838-7393	J	1S	4.6	400	50	20	Pt	
XBB-838-7394	J	1S	4.6	1600	50	20	Pt	
XBB-838-7395	J	1S	4.6	400	5	20	Pt	
XBB-838-7396	J	1S	4.6	400	5	20	Pt	
XBB-838-7397	J	1S	4.6	400	2	46	Pt	
XBB-838-7398	J	1S	4.6	1600	2	50	Pt	
XBB-838-7399	J	1S	4.6	400	2	50	Pt	(also, see XBB 831-376)
XBB-838-7400	J	1S	4.6	400	2	90 #	Pt	(also, see XBB 831-376)
XBB-838-7401	J	1S	4.6	400	2	120 #	Pt	(also, see XBB 831-376)
XBB-838-7402	J	1S	4.6	400	5	40	Pt	
XBB-838-7403	J	1S	4.6	400	5	10	Pt	
XBB-838-7404	J	1S	4.6	1600	5	10	Pt	



TABLE 5  
Rotating Disk Electrode Experiments by Faltemier or Faltemier/Kommenic (con't)

Photo #	Code	Soln	pH	rpm	C.D.	Time	Subst	Spec
XBB-838-7405	J	1S	4.6	400	5	20	Pt	(also, see XBB 808-9258)
XBB-838-7406	J	1S	4.6	400	5	8.5	Pt	(also, see XBB 808-9260)
XBB-838-7407	J	1S	4.6	1600	5	8.5	Pt	(also, see XBB 808-9260)
XBB-838-7408	J	1S	4.6	400	2	20	Pt	
XBB-838-7409	J	1S	4.6	400	2	40	Pt	
XBB-838-7410	JK	1S	4.6	1600	5	10	Pt	200X
XBB-838-7411	JK	1S	4.6	400	5	10	Pt	200X
XBB-838-7412	JK	1S	4.6	0	5	10	Pt	200X
XBB-838-7413	JK	1S	4.6	400	5	25	Pt	400X (also, see XBB 831-371)
XBB-838-7414	JK	1S	4.6	400	5	25	Pt	400X (also, see XBB 831-371)
Pulsed Deposition								
XBB 838-7415	JK	1Cl	4.6	400	30 avg	10	Pt	120 mA/cm <sup>2</sup> - 1 sec, 20 mA/cm <sup>2</sup> - 9 sec
XBB-838-7416	JK	1Cl	4.6	400	30 avg	30	Pt	120-1,20-9
XBB 835-4531	JK	1Cl	4.6	400	30 avg	60	Pt	120-1,20-9
XBB 838-7417	JK	1S	4.6	1600	5 avg	20	Pt	25-1,3-10
XBB-838-7418	JK	1S	4.6	400	5 avg	20	Pt	25-1,3-10
XBB-838-7419	JK	1S	4.6	1600	5 avg	30	Pt	25-1,3-10
XBB 838-7420	JK	1S	2.5	400	5	10	Pt	
XBB-838-7421	JK	1S	2.5	1600	5	15	Pt	
XBB-838-7422	JK	1S	2.5	1600	5	20	Pt	
XBB-838-7423	JK	1Cl	4.6	800	30	10	Pt	
XBB-838-7424	JK	1Cl	4.6	800	100	10	Pt	
XBB-838-7425	JK	1Cl	4.6	800	100	90	Pt	
XBB-838-7426	JK	1Cl	4.6	800	20	1	Pt	250X
XBB-838-7427	JK	1Cl	4.6	800	20	1	Pt	300X
XBB-838-7428	JK	1Cl	4.6	800	10	9	Pt	(also, see XBB 831-372)
XBB-838-7429	JK	1Cl	4.6	800	10	9	Pt	(also, see XBB 831-372)
XBB 838-7455	J	1Cl	2.2	1600	18	28	Pt	
XBB-838-7456	J	1Cl	2.2	1600	18	5	Pt	
XBB-838-7457	J	1Cl	2.2	1600	18	2	Pt	
XBB-838-7458	J	1Cl	2.2	1600	18	10	Pt	
XBB-838-7459	J	1Cl	2.2	1600	18	75	Pt	
XBB-838-7460	J	1Cl	2.2	200	18	10	Pt	
XBB-838-7461	J	1Cl	2.2	200	18	2	Pt	
XBB-838-7462	J	1Cl	2.2	200	18	30	Pt	
XBB-838-7463	J	1Cl	2.2	200	18	10	Pt	
XBB-838-7464	J	1Cl	2.2	200	18	30	Pt	

TABLE 5  
 Rotating Disk Electrode Experiments by Faltemier or Faltemier/Kommenic (con't)

Photo #	Code	Soln	pH	rpm	C.D.	Time	Subst	Spec
XBB-838-7465	J	1S	4.6	1600	18	2	Pt	
XBB-838-7466	J	1S	4.6	200	18	21	Pt	
XBB-838-7467	J	1S	4.6	200	18	30	Pt	
XBB-838-7468	J	1S	5.0	200	30	72 sec	Pt	
XBB-838-7469	J	1S	5.0	200	30	6	Pt	
XBB-838-7470	J	1S	5.0	200	30	18	Pt	
XBB-838-7471	J	1S	5.0	1600	30	18	Pt	
XBB-838-7472	J	1S	5.0	1600	30	6	Pt	
XBB-838-7473	J	1S	5.0	1600	30	72 sec	Pt	
XBB-838-7474	J	1S	5.0	200	10	3.5	Pt	
XBB-838-7475	J	1S	5.0	200	10	18	Pt	
XBB-838-7476	J	1S	5.0	200	10	18	Pt	
XBB-838-7477	J	1S	5.0	200	10	54	Pt	
XBB-838-7478	J	1S	5.0	200	10	18	Pt	
XBB-838-7479	J	1S	5.0	1600	10	3.5	Pt	
XBB-838-7480	J	1S	5.0	1600	10	54	Pt	
XBB-838-7481	J	1S	5.0	200	5	7.25	Pt	
XBB-838-7482	J	1S	5.0	200	5	36	Pt	
XBB-838-7483	J	1S	5.0	200	5	108	Pt	
XBB-838-7484	J	1S	5.0	1600	5	36	Pt	
XBB-838-7485	J	1S	5.0	1600	5	7.25	Pt	
XBB-838-7486	J	1S	5.0	1600	5	108	Pt	

TABLE 6  
Small Flowcell Experiments by Faltemier

Photo #	Soln	pH	Flow	C.D.	Time	Subs
XBB-838-7338	1Cl	4.8	90	30	15	Pt
XBB-838-7339	1Cl	4.8	90	30	15	Pt
XBB-838-7340	1Cl	4.8	90	30	1	Pt
XBB-838-7341	1Cl	4.8	90	30	2	Pt
XBB-838-7342	1Cl	4.8	90	30	5 *	Pt
XBB-838-7343	1Cl	1.9	90	30	10	Pt
XBB-838-7344	1Cl	1.9	90	30	5	Pt
XBB-838-7345	1Cl	1.9	50	30	10	Pt
XBB-838-7346	1Cl	1.9	50	30	5	Pt
XBB-838-7347	1Cl	1.9	20	30	10	Pt
XBB-838-7348	Zinc Anode after above expt.					
XBB-838-7349	1Cl	1.9	20	30	5	Pt
XBB-838-7350	1Cl	2.2	70	20	18	Zn
XBB-838-7351	1Cl	2.2	70	100	1	Zn
XBB-838-7352	1Cl	2.2	70	2	50	Zn

3-Dimensional (Stereo Pair) Photos

	1Cl	2.1	85	30	120	Pt
XBB-837-6184	100X - Left					
XBB-837-6187	100X - Right					
XBB-837-6185	500X - Left					(also, see XBB-837-6188A)
XBB-837-6188	500X - Right					(also, see XBB-837-6188A)
XBB-837-6186	2000X - Left					
XBB-837-6189	2000X - Right					
XBB-837-6195	1000X - Left					(also, see XBB-837-6190A)
XBB-837-6190	1000X - Right					(also, see XBB-837-6190A)
XBB-837-6193	2000X - Left					
XBB-837-6191	2000X - Right					
XBB-837-6194	5000X - Left					
XBB-837-6192	5000X - Right					
XBB-838-7353	1Cl	2.1	90	30	45	Zn-SC
XBB-838-7160	1Cl	2.1	90	30	30	Zn-SC
XBB-838-7354	1Cl	2.1	50	30	45	Zn-SC
XBB-838-7355	1Cl	2.1	50	30	60	Zn-SC
XBB-838-7356	1Cl	2.1	80	100	20	Zn-SC
XBB-838-7357	1Cl	2.1	80	20	5	Zn-SC
XBB-838-7358	1Cl	2.1	80	100	5	Zn-SC
XBB-838-7359	1Cl	2.1	70	40	40	Zn-SC

TABLE 7  
Large Flowcell Experiments by Faltemier

1 M ZnCl<sub>2</sub>, "AR" grade, pH 4.6, 25°C

Expt #	Photo #	Flow	I	Time	Cath	Loc
1	XBB-838-7260	1600	1.8	30	Zn	l.e.
	XBB-838-7261					...
	XBB-838-7262					...
	XBB-838-7263					...
	XBB-838-7264					...
	XBB-838-7265					...
	XBB-838-7266					...
	XBB-838-7267					r.e. edge
	XBB-838-7268					l.e. - 10X
	XBB-838-7269					l.e. - 25X
2	XBB-838-7270	1600	2.7	60	Zn	l.e.
	XBB-838-7271					...
	XBB-838-7272					...
	XBB-838-7273					...
	XBB-838-7274					near l.e. - 10X
	XBB-838-7275					...
	XBB-838-7276					near l.e. - 25X
	XBB-838-7277					near mid. - 25X
3	XBB-838-7278	1600	2.7	30	Pt	l.e.
	XBB-838-7279					...
	XBB-838-7280					l.e. - 10X
	XBB-838-7281					...
4	XBB-838-7282	2300	2.7	30	Pt	l.e.
	XBB-838-7283					...
	XBB-838-7284					...
	XBB-838-7285					...
	XBB-838-7286					...
	XBB-838-7287					r.e.
	XBB-838-7288					l.e. - 10X
	XBB-838-7289					...
XBB-838-7290	near mid. - 10X					
5	XBB-838-7291	2300	2.7	60	Pt	l.e.

(also, see XBB 831-379)

(also, see XBB 831-378)

TABLE 7  
Large Flowcell Experiments by Faltemier (con't)

1 M ZnCl<sub>2</sub>, "AR" grade, pH 4.6, 25°C

Expt #	Photo #	Flow	I	Time	Cath	Loc
	XBB-838-7292					...
	XBB-838-7293					l.e. - 10X
	XBB-838-7294					...
6	XBB-838-7295	2300	0.9	30	Pt	l.e.
	XBB-838-7296					...
	XBB-838-7297					...
	XBB-838-7298					...
	XBB-838-7299					...
	XBB-838-7300					...
	XBB-838-7301					r.e.
	XBB-838-7302					l.e. - 10X
	XBB-838-7303					...
7	XBB-838-7304	2300	0.9	60	Pt	l.e.
	XBB-838-7305					...
	XBB-838-7306					...
	XBB-838-7307					...
	XBB-838-7308					...
	XBB-838-7309					...
	XBB-838-7310					r.e.
	XBB-838-7311					l.e. - 10X
	XBB-838-7312					...
8	XBB-838-7313	2300	9.0	30	Pt	l.e. (also, see XBB 831-379)
	XBB-838-7314					...
	XBB-838-7315					...
	XBB-838-7316					...
	XBB-838-7317					...
	XBB-838-7318					...
	XBB-838-7319					r.e.
	XBB-838-7320					l.e. - 10X (also, see XBB 831-378)
	XBB-838-7321					...
9	XBB-838-7322	1600	9.0	6	Pt	l.e.
	XBB-838-7323					...
	XBB-838-7324					l.e. - 10X
10	XBB-838-7325	2300	9.0	3	Pt	l.e.
	XBB-838-7326					...
	XBB-838-7327					l.e. - 10X

TABLE 7  
Large Flowcell Experiments by Faltemier (con't)

1 M ZnCl<sub>2</sub>, "AR" grade, pH 4.6, 25 °C

Expt #	Photo #	Flow	I	Time	Cath	Loc
11	XBB-838-7328 XBB-838-7329	1600	2.7	20	Pt	l.e. l.e. - 10X
12	XBB-838-7330 XBB-838-7331 XBB-838-7332 XBB-838-7333 XBB-838-7334 XBB-838-7335 XBB-838-7336 XBB-838-7337	2300	0.9	90	Pt	l.e. ... ... ... ... r.e. l.e. - 10X ... (also, see XBB 831-379)        (also, see XBB 831-378)

TABLE 8  
In situ Flowcell Experiments by Faltemier

1 M ZnCl<sub>2</sub>, "AR" grade, 25°C

Flm #	pH	Flow	C.D.	E.T.	Fstp	Fr/s	Fr.	Time	Subst.
1	4.6	65	30	sm	11	1	200	3.3	Pt
		65	10	sm	11	1	349	5.8	Pt
		65	30	sm	11	1	1200	20	Pt
		65	30	med	5.6	1	814	13.6	Pt
2	4.6	65	30	sm	11	1+4	1350		Pt
		65	30	sm+med	8	1+4	1575		Pt
		65	30	lrg	4	1+4	1025		Pt
3	4.6	65	10	sm	11	1+4	1125	45	Pt
		65	10	med	8	1+4	1125	45	Pt
		65	10	lrg	4	1+4	1125	45	Pt
		65	10	med	5.6	1	555	22	Zn-SC
4	4.6	65	100	sm	8	1	360	6	Pt
		65	100	med	5.6	1+4	580	20	Pt
		65	100	lrg	2.8	1	360	6	Zn-SC
testing of F-STOP									
5	4.6	65	30	sm	11	1	1200	20	C
		65	30	med	8	1	1200	20	Pt
		65	30	lrg	4	1	1200	20	Pt
		65	100	lrg	4	1	300	5	Pt
6	4.6	65	10	med	8	1+4	1350	60	Pt
		65	10	lrg	4	1+4	1350	60	Pt
		0	100	med	8	1	360	6	Pt
		65	100	med	8	1	615	10	Pt
7	4.6	65	10	med	16	1	1200	20	Pt
		65	30	med	11	1+4	1825	60	Pt
		65	10	med	11	1+4	905	30	Pt
8	4.6	65	30	lrg	5.6	1+4	1800	60	Pt
		65	30	lrg	8	1+12	1800	250	Pt
9	4.6	25	100	med	8	1	1080	18	Pt
		25	30	med	8	1+4	1600	45	Pt
		25	100	med	8	1	1200	20	Pt
10	4.6	25	30	med	8	1	600	10	Pt
		5	30	med	8	1	600	10	Pt
		5	100	med	8	1	1200	20	Pt
		5	30	med	8	1+4	1355	60	Pt

TABLE 8 Continued

Flm #	pH	Flow	C.D.	E.T.	Fstp	Fr/s	Fr.	Time	Subst.
11	4.6	65	20	med	8	1	900	15	Pt
		65	30	med	8	1+4	1125	45	Pt
		65	10	med	8	1+4	1500	70	Pt
12	4.6	65	10	med	8	1+4	1220	51	Pt
		65	30	lrg	4	1	1025	45	Pt
		65	100	lrg	4	1+4	800	20	Pt
		65	10	lrg	4	1+4	900	30	Pt
13	4.6	65	10	med	8	1+4	900	30	Pt
		65	30	lrg	4	1+4	900	30	Pt
		65	100	lrg	4	1	600	10	Pt
		65	30	med	8	1+4	725	25	Zn
		65	30	med	8	1	600	10	Cu
14	4.6	25	30	med	8	1+4	900	30	Pt
		25	30	med	8	1+4	900	30	Pt
		25	10	med	8	1+4	1125	45	Pt
		filmed titles							
15	4.6	25	10	med	8	1+4	1125	45	Pt
		25	100	med	8	1	660	11	Pt
		25	100	sm	11	1	600	10	Pt
		5	100	sm	11	1	600	10	Pt
16	4.6	65	10	med	5.6	1+4	1800	90	Pt
		5	30	med	5.6	1+4	900	30	Pt
		5	100	sm	8	1	600	10	Pt
		5	100	med	4	1	600	10	Pt
17	1.9	65	100	sm	5.6	1	600	10	Pt
		25	100	sm	8	1	600	10	Pt
		5	100	sm	8	1	600	10	Pt
		.5	100	sm	8	1	600	10	Pt
		65	30	sm	8	1+4	900	30	Pt
		5	30	sm	8	1+4	900	30	Zn
18	1.9	25	30	sm	8	1+4	900	30	Pt
		25	30	sm	11	1+4	900	30	Pt
		5	30	sm	8	1+4	900	30	Pt
		filmed titles							
19.	1.9	5	30	sm	8	1+4	900	30	Pt
		25	100	sm	8	1	600	10	Pt
		65	30	sm	8	1+4	900	30	Pt
		65	100	sm	8	1	600	10	Pt
		65	100	sm	8	1	600	10	Pt



TABLE 8 Continued

Flm #	pH	Flow	C.D.	E.T.	Fstp	Fr/s	Fr.	Time	Subst.
20	1.9	5	100	sm	11	1	600	10	Pt
		25	30	sm	8	1+4	900	30	Pt
		65	10	sm	8	1+4	1125	45	
		25	30	sm	8	1+4	900	30	Zn
21	filmed titles								

TABLE 9

Photographs from LBL Report #15338 by D. Rajhenbah, J. Faltemier, and C. W. Tobias

Figure	Photo No.	Explanation
1a	XBL-823-8428	Rotating disk electrode diagram
1b	CBB-823-2852	Rotating disk electrode photo
2a	XBL-823-8426	RDE Cell diagram
2b	CBB-823-2854	RDE Cell photo
3a	XBL-823-8427	Electrical circuit diagram
3b	CBB-823-2850	Experimental apparatus
4	XBL-831-1052	Limiting current plateaus, 0.05 M $\text{ZnCl}_2$ , 10 mV/sec
5	XBL-831-1048	Levich plot ( $i$ vs. $\Omega^{1/2}$ )
6	XBB-823-1924	SEM, Zinc deposits, 200 rpm
7	XBB-823-1925	SEM, Zinc deposits, 400 rpm
8	XBB-823-1926	SEM, Zinc deposits, 800 rpm
9	XBB-823-1927	SEM, Zinc deposits, 1200 rpm
10	XBB-823-1928	SEM, Zinc deposits, 1600 rpm
11	XBB-823-1929	SEM, Zinc deposits, 2000 rpm
12	XBL-831-15	Limiting current plateaus, 0.05 M $\text{ZnCl}_2$ , 200 mV/sec
13	XBL-831-1050	Levich plot ( $i$ vs. $\Omega^{1/2}$ )
14	XBL-831-16	Limiting current plateaus, 0.10 $\text{ZnCl}_2$ , 200 mV/sec
15	XBL-831-1051	Limiting current plateaus, 0.50 M $\text{ZnCl}_2$ , 200 mV/sec
16	XBL-831-1041	Limiting current plateaus, 0.05 M $\text{ZnSO}_4$ , 200 mV/sec
17	XBL-831-1047	Levich plot ( $i$ vs. $\Omega^{1/2}$ )
18	XBL-831-1039	Limiting current plateaus, 0.10 M $\text{ZnSO}_4$ , 200 mV/sec

TABLE 10  
Photographs from LBL Report #16485 (J. Faltemier Ph. D. Thesis)

Figure	Photograph Number	Explanation
1.1	XBL-834-9320A	US and World Zinc Consumption and Production Rates
1.2	XBL-834-9319	Zn/Cl <sub>2</sub> Battery Flow Diagram
2.1	CHEM 3121	Striated Copper Deposit
2.2	MU 31511	"Roll Cell" Cellular Flow Pattern
2.3	XBB-7410-6952	Copper Deposition in Wakes
2.4	XBB-7410-6951	Wake Formation Downstream of Obstructions
3.1	CBB-833-2341	RDE Electrolysis Cell and Zinc Anode
3.2	CBB-823-2854	RDE Electrolysis Cell
3.3	XBL-835-9572	Schematic Diagram of Flow Cell System
3.4	CBB-780-15940	Small Channel Flowcell
3.5	CBB-780-15938	Small Channel Flowcell System
3.6	CBB-833-2343	Large Flowcell Cathode Assembly
3.7	CBB-833-2351	Large Flowcell System
3.8	CBB-820-10761	In situ Flowcell System
3.9	CBB-833-2347	Top View-In situ Flowcell
3.10	CBB-820-10747	Close View-In situ Flowcell
3.11	CBB-820-10749	RDE Cathodes
3.12	CBB-820-10755	Small Flowcell and In situ Flowcell Electrodes
3.13	CBB-820-10751	Large Flowcell Electrodes
3.14	CBB-820-10753	Bolex 16 mm Camera
3.15	XBL-835-9573	Electrical Circuit Diagrams
4.1	XBB-835-4459	Striated Zinc Deposit (GOULD, Inc. Photograph)
4.2	XBB-784-11239A	Typical Striated Deposits
4.3	XBL-837-10748	Striation Length vs. Time/Flowrate
4.4	XBB-784-11693A	Effect of Flow at 30 mA/cm <sup>2</sup> , Small Cell
4.5	XBB-784-11240A	Effect of Flow at 30 mA/cm <sup>2</sup> , RDE
4.6	XBB-784-11723A	Effect of Flow at 100 mA/cm <sup>2</sup> , Small Cell
4.7	XBL-837-10749	Approx. Number of Striations Across Small Cell
4.8	XBB-784-11726A	Effect of Current Density at Re 5300
4.9	XBB-784-11195A	Effect of Current Density at 1600 rpm
4.10	XBL-831-7674	Current vs. Time Profile in Pulsed Deposition
4.11	XBB-835-4531	Variable Current Deposition, Zinc Deposit
4.12	XBB-837-6196	Striated Zinc Deposit, Small Cell
4.13	XBB-835-4530	Laue X-ray Diffraction Pattern of Zinc
4.14	XBB-838-7160	Striated Zinc Deposit, Single Crystal Zinc Substrate
4.15	XBB-831-373	Effect of Fluorosubstituted Surfactant
4.16	XBB-831-379	Zinc Deposits, Large Cell
4.17	XBB-831-378	Enlarged View of Figure 4.16, Leading Edge
4.18	XBL-831-15	Limiting Current Plateaus
4.19	XBL-831-16	Limiting Current Plateaus
4.20	XBB-838-6779	Zinc Deposits from In situ Cell
4.21	XBL-838-11146	Distribution Diagram of ZnCl <sub>2</sub> System
4.22	XBL-838-11145	Distribution Diagram of ZnBr <sub>2</sub> System

TABLE 10 Continued

Figure	Photograph Number	Explanation
4.23	XBB-831-242	Effect of C.D. on Initial Protrusions
4.24	XBB-831-371	Zinc Deposit in Wake Formation around Protrusions
4.25	XBB-831-372	Spiral, Elongated Protrusions in Zinc RDE Deposit
4.26	XBB-831-376	Striated Zinc Deposit, RDE, 1 M ZnSO <sub>4</sub>
4.27	XBB-831-377	Striated Zinc Deposit, RDE, 1 M ZnCl <sub>2</sub>
4.28	XBB-837-6188A	Stereo Pair of Zinc Deposit
4.29	XBB-837-6190A	Stereo Pair of Zinc Deposit

TABLE 11  
Explanation of Abbreviations and Legends

Abbrev.	Explanation
Code	Author abbreviation J = Jaksic F = Faltemier K = Kommenic
Soln	Solution 0.1Cl = 0.1 M $ZnCl_2$ 0.1Cl+A = 0.1 M $ZnCl_2$ + 1 M LiCl 0.1Cl+B = 0.1 M $ZnCl_2$ + 1 M $Na_2SO_4$ 1Cl = 1 M $ZnCl_2$ 1Cl+C = 1 M $ZnCl_2$ + 2 M LiCl 1Cl+ZC = 1 M $ZnCl_2$ + 0.10 wt. % Zonyl FSC 1Cl+ZB = 1 M $ZnCl_2$ + 0.10 wt. % Zonyl FSB 1Cl+D = 1 M $ZnCl_2$ + 1 M $NaClO_4$ 1Cl+E = 1 M $ZnCl_2$ + 5 M $NaClO_4$ 1Cl+F = 1 M $ZnCl_2$ + 5 M LiCl 1Cl+G = 1 M $ZnCl_2$ + 4 M Glycerol 4Cl = 4 M $ZnCl_2$ 1Br = 1 M $ZnBr_2$ 1S = 1 M $ZnSO_4$
RDE	Rotating Disk Electrode
LC	Large Channel Flowcell
SmC	Small Channel Flowcell
InC	In situ Flowcell
T	Temperature ( $^{\circ}C$ )
C.D.	Current density ( $mA/cm^2$ )
I	Current (Amps)
Time	Total deposition time (minutes)
Subst	Substrate
Cath	Cathode (substrate) Pt = platinum Pt-QE = off-centered disk - 1/4 diameter Pt-HE = off-centered disk - 1/2 diameter Pt-FE = off-centered disk - 1 diameter Zn = polycrystalline zinc Zn-SC = single crystal zinc C = carbon Cu = copper
rpm	Revolutions per minute
Flow	Flowrate  <u>in Table 2 and Table 6</u> <u>1 M <math>ZnCl_2</math></u> Flow 90 = 1550 ml/min Flow 80 = 1400 ml/min Flow 75 = 1300 ml/min

TABLE 11  
Explanation of Abbreviations and Legends (con't)

Abbrev.	Explanation
	Flow 50 = 800 ml/min
	Flow 20 = 250 ml/min
	Flow 10 = 100 ml/min
	<u>4 M ZnCl<sub>2</sub></u>
	Flow 100 = 1600 ml/min
	Flow 20 = 220 ml/min
	<u>in Table 7</u>
	Flow xx = xx ml/min
	<u>in Table 8</u>
	Flow 65 = 4100 ml/min
	Flow 25 = 1500 ml/min
	Flow 5 = 700 ml/min
Photo #	LBL photograph number
*	Continuation from experiment above
Loc	Photo location on electrode
l.e.	Leading edge
mid.	Middle of electrode
r.e.	Rear edge
Flm #	Film #
E.T.	Extension tube size
Fstp	F-stop
Fr/s	Frames per second
	fr/s 1 = 1 frame per second was used
	fr/s 1+4 = a combination of 1 fr/sec and 1 fr/4 sec was used
	fr/s 1+12 = a combination of 1 fr/sec and 1 fr/12 sec was used
Fr	Total number of frames

## FIGURE CAPTIONS

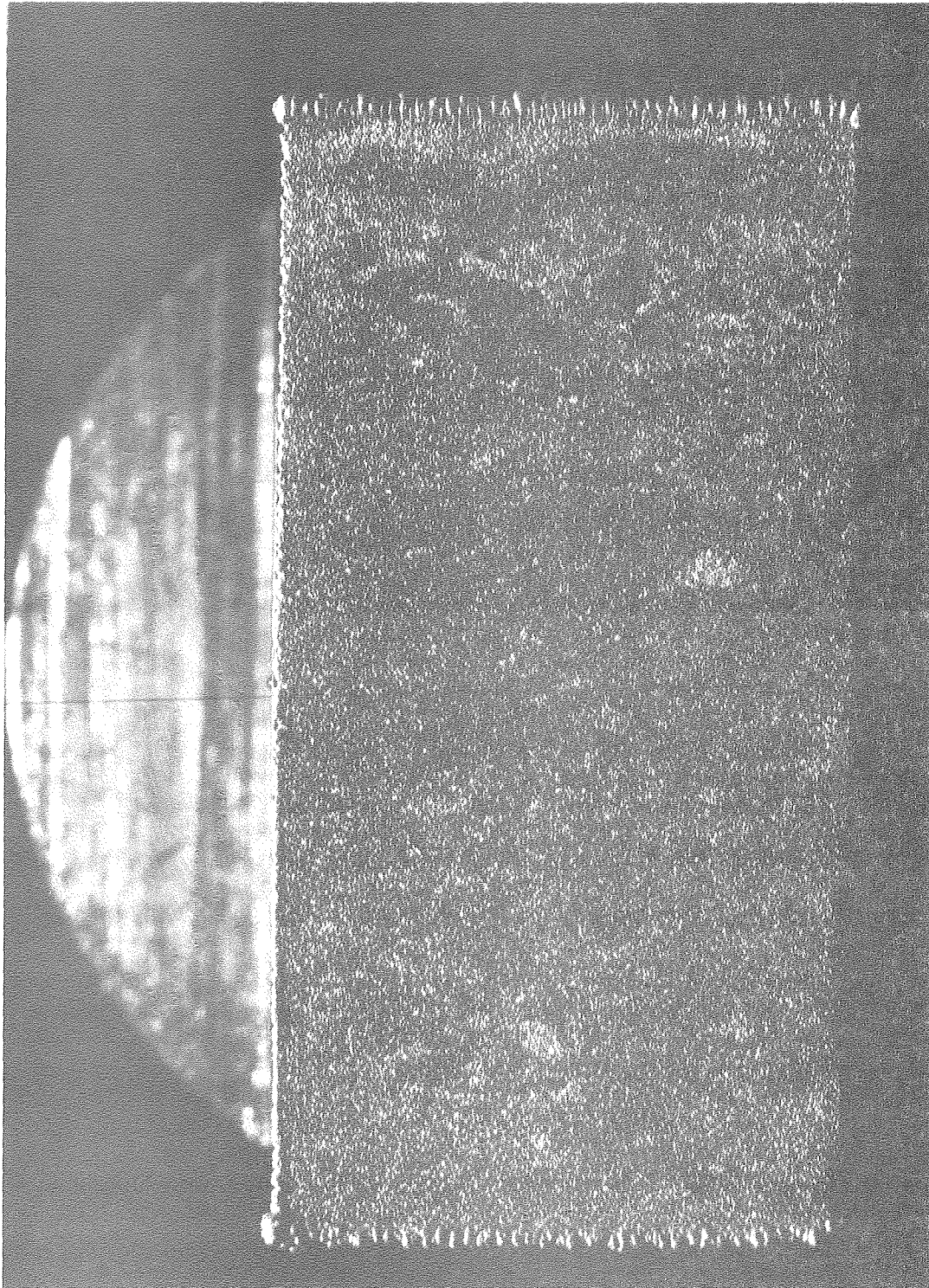
- Fig. 1. Zinc deposit in small flowcell, 1 M  $\text{ZnCl}_2$ , pH 2.4, 30  $\text{mA/cm}^2$ , 45 minutes, Re 5300. [M. Jaksic with J. Faltemier, Expt. #P-88] XBB 784-11692
- Fig. 2. Zinc deposit in small flowcell, 1 M  $\text{ZnCl}_2$ , pH 2.4, 100  $\text{mA/cm}^2$ , 15 minutes, Re 5300. [M. Jaksic with J. Faltemier, Expt. # P-119] XBB 784-11723
- Fig. 3. Spiral patterns obtained from (a) purified solution, 30  $\text{mA/cm}^2$  x 105 min., 800 rpm, Pt anode and (b) lead containing solution ( $4.8 \times 10^{-5}$  M) 30  $\text{mA/cm}^2$  x 30 min., 800 rpm, Pt anode. [T. Tsuda, LBL Report # 13057] XBB 817-5960A
- Fig. 4. Influence of the purity of electrolytes on spiral formation. (A) After preliminary purification, (B) after standard purification ("purified A.R. grade"), (C) Ultrapure solution. 30  $\text{mA/cm}^2$  x 10 min., 800 rpm. [T. Tsuda, LBL Report # 13057] XBB 817-6760A
- Fig. 5. Zinc deposit in wake formation around protrusions. [J. Faltemier, LBL Report # 16485] XBB 831-371
- Fig. 6. [J. Faltemier, LBL Report # 16485]. XBB 831-377



XBB 784-11692

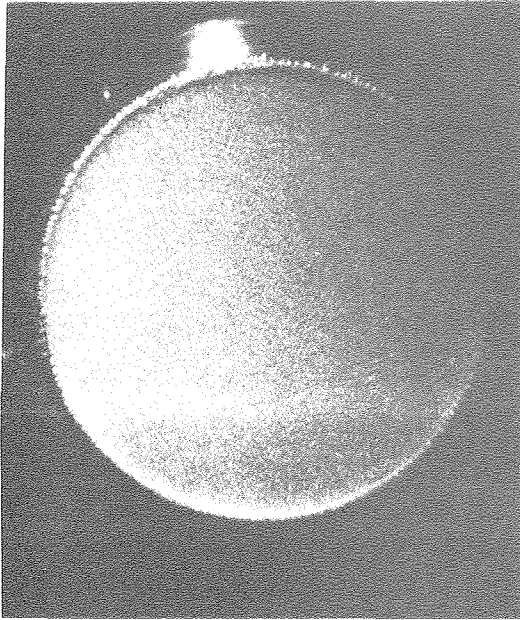
Fig. 1



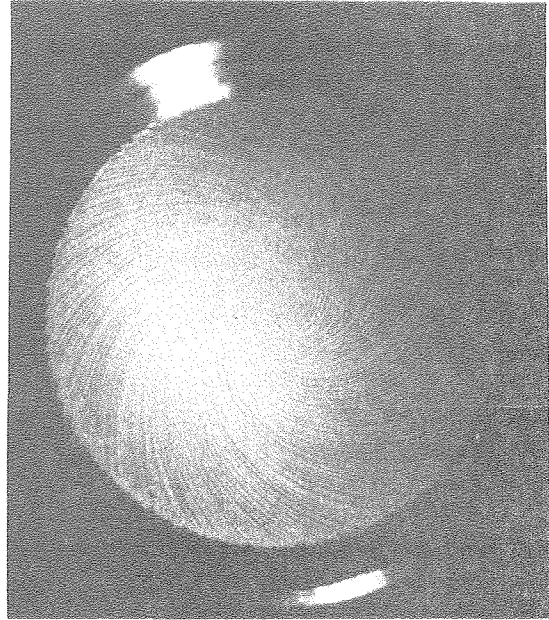


XBB 784-11723

Fig. 2



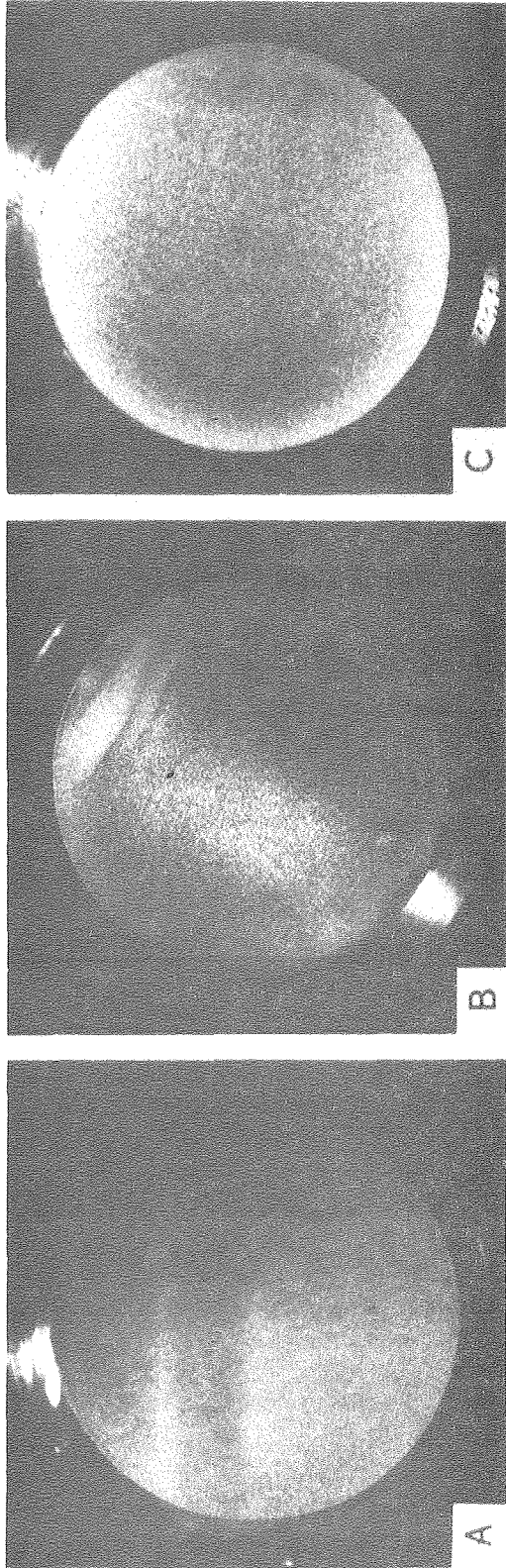
( a )



( b )

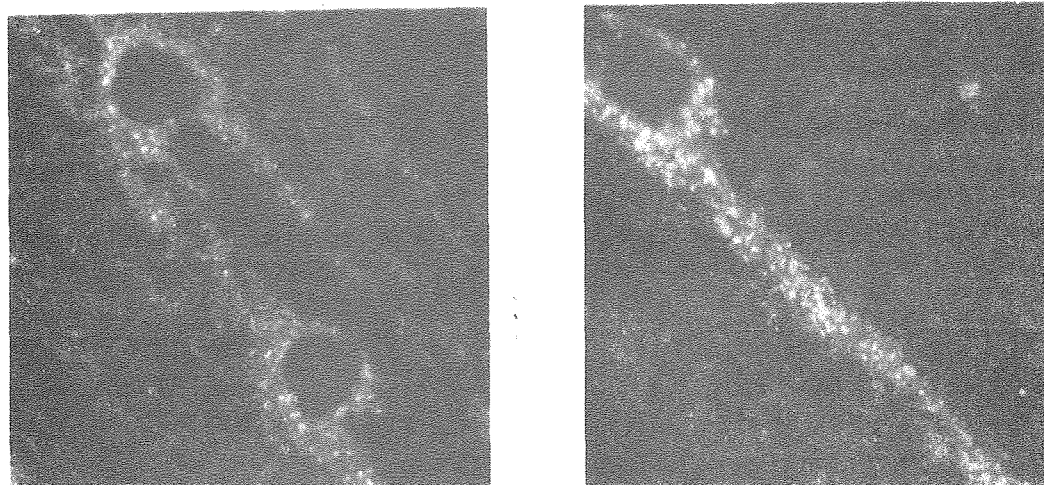
XBB 817-5960A

Fig. 3



XBB 817-6760 A

Fig. 4



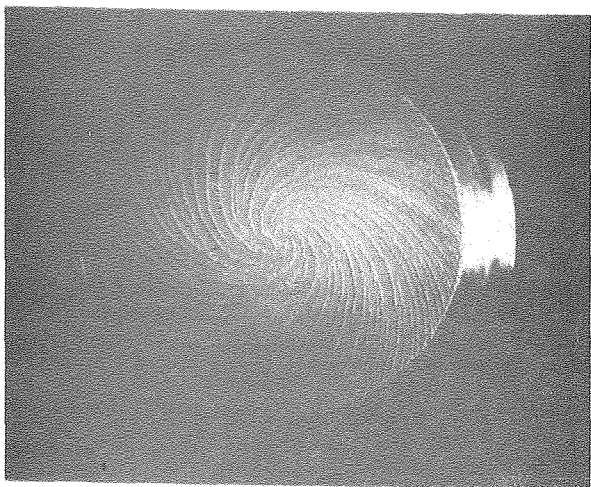
XBB 831-371



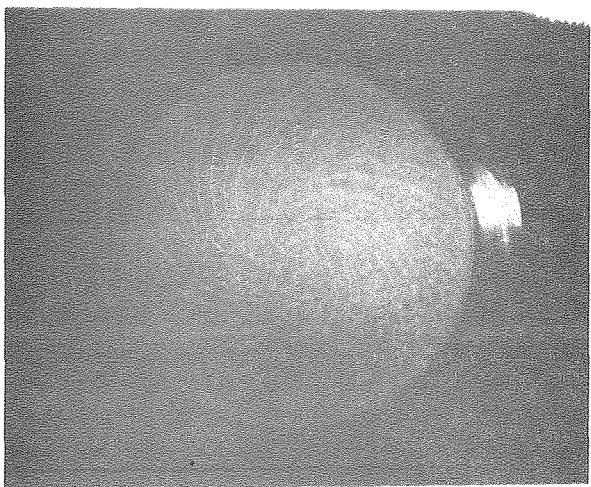
25 MICRON

1 M  $ZNSO_4$ , PH. 4.6, 400 RPM  
5 MA/CM<sup>2</sup> X 25 MIN

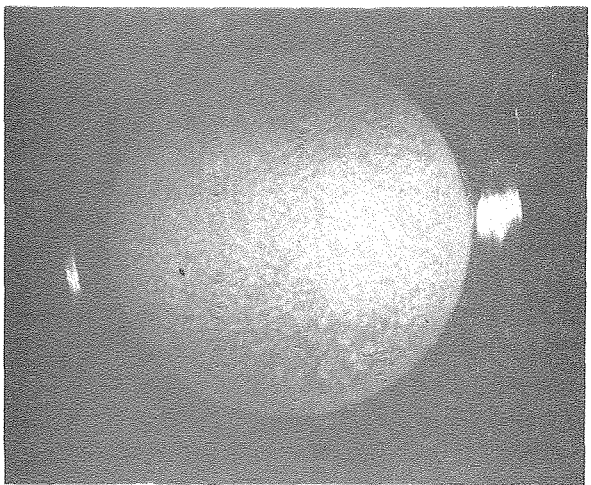
Fig. 5



30 MIN



10 MIN



5 MIN

1 M  $ZnCl_2$ , PH 2.4, 800 RPM, 30 MA/ $cm^2$

XBB 831-0377

Fig. 6





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