Table 1. Linear fit plots to determine the activation energy values using the C-R method.

β (°C/min)	n	Slope	Intercept	R^2	p-value	E (kJ/mol)	$Ln(k_0)$ (s^{-1})
5	0.1	-2049.34	-10.38	0.9204	5.82E-04	17.04	-5.24
	0.2	-2138.94	-10.20	0.9265	5.67E-04	17.78	-5.02
	0.3	-2232.67	-10.01	0.9314	5.54E-04	18.56	-4.78
	0.4	-2330.70	-9.81	0.9353	5.45E-04	19.38	-4.54
	0.5	-2433.20	-9.60	0.938	5.38E-04	20.23	-4.29
	0.6	-2540.30	-9.38	0.9396	5.34E-04	21.12	-4.03
	0.7	-2652.13	-9.16	0.9401	5.33E-04	22.05	-3.76
	0.8	-2768.80	-8.92	0.9395	5.34E-04	23.02	-3.48
	0.9	-2890.37	-8.68	0.9379	5.38E-04	24.03	-3.20
	1	-3016.91	-8.43	0.9352	5.45E-04	25.08	-2.90
	1.1	-3148.41	-8.17	0.9316	5.54E-04	26.18	-2.60
	1.2	-3284.87	-7.89	0.9271	5.65E-04	27.31	-2.28
	1.3	-3426.24	-7.61	0.9219	5.78E-04	28.49	-1.96
	1.4	-3572.45	-7.32	0.916	5.94E-04	29.70	-1.63
	1.5	-3723.39	-7.02	0.9095	6.12E-04	30.96	-1.29
	1.6	-3878.93	-6.72	0.9026	6.31E-04	32.25	-0.94
	1.7	-4038.94	-6.40	0.8952	6.53E-04	33.58	-0.58
	1.8	-4203.24	-6.08	0.8877	6.76E-04	34.95	-0.22
	1.9	-4371.68	-5.74	0.8799	7.00E-04	36.35	0.16
	2	-4544.07	-5.40	0.8721	7.26E-04	37.78	0.53
	2.1	-4720.23	-5.06	0.8642	7.53E-04	39.24	0.92
	2.2	-4899.97	-4.70	0.8564	7.81E-04	40.74	1.31
	2.3	-5083.11	-4.34	0.8487	8.10E-04	42.26	1.71
	2.4	-5269.47	-3.98	0.8411	8.40E-04	43.81	2.11
	2.5	-5458.88	-3.61	0.8337	8.70E-04	45.39	2.52
	2.6	-5651.18	-3.23	0.8265	9.00E-04	46.98	2.93
	2.7	-5846.19	-2.84	0.8195	9.30E-04	48.61	3.34
	2.8	-6043.78	-2.46	0.8128	9.61E-04	50.25	3.77
	2.9	-6243.80	-2.06	0.8063	9.91E-04	51.91	4.19
	3	-6446.10	-1.67	0.8001	1.02E-03	53.59	4.62
	3.1	-6650.57	-1.27	0.7941	1.05E-03	55.29	5.05
	3.2	-6857.09	-0.86	0.7884	1.08E-03	57.01	5.49
	3.3	-7065.54	-0.45	0.7829	1.11E-03	58.74	5.93
	3.4	-7275.82	-0.04	0.7777	1.14E-03	60.49	6.37
	3.5	-7487.82	0.38	0.7727	1.17E-03	62.25	6.81
	3.6	-7701.47	0.80	0.768	1.20E-03	64.03	7.26
	3.7	-7916.67	1.22	0.7634	1.22E-03	65.82	7.71
	3.8	-8133.34	1.64	0.7591	1.25E-03	67.62	8.16
	3.9	-8351.40	2.07	0.755	1.28E-03	69.43	8.62
	4	-8570.80	2.50	0.7511	1.30E-03	71.26	9.07

β (°C/min)	n	Slope	Intercept	R^2	p-value	E (kJ/mol)	$Ln(k_0)$ (s^{-1})
15	0.1	-3221.03	-8.90	0.8527	7.95E-04	26.78	-2.20
	0.2	-3357.11	-8.65	0.8646	7.52E-04	27.91	-1.92
	0.3	-3499.81	-8.39	0.8758	7.14E-04	29.10	-1.62
	0.4	-3649.42	-8.12	0.8863	6.80E-04	30.34	-1.31
	0.5	-3806.20	-7.84	0.8958	6.51E-04	31.65	-0.98
	0.6	-3970.40	-7.55	0.9045	6.26E-04	33.01	-0.65
	0.7	-4142.23	-7.24	0.9122	6.04E-04	34.44	-0.30
	0.8	-4321.87	-6.92	0.919	5.86E-04	35.93	0.06
	0.9	-4509.42	-6.59	0.9247	5.71E-04	37.49	0.44
	1	-4704.99	-6.24	0.9294	5.59E-04	39.12	0.83
	1.1	-4908.59	-5.88	0.933	5.50E-04	40.81	1.23
	1.2	-5120.19	-5.51	0.9357	5.44E-04	42.57	1.65
	1.3	-5339.72	-5.12	0.9373	5.40E-04	44.39	2.08
	1.4	-5567.05	-4.72	0.9381	5.38E-04	46.28	2.52
	1.5	-5802.00	-4.31	0.938	5.38E-04	48.24	2.97
	1.6	-6044.38	-3.88	0.9371	5.40E-04	50.25	3.44
	1.7	-6293.93	-3.44	0.9355	5.44E-04	52.33	3.92
	1.8	-6550.39	-2.99	0.9332	5.50E-04	54.46	4.41
	1.9	-6813.47	-2.53	0.9305	5.56E-04	56.65	4.91
	2	-7082.87	-2.06	0.9273	5.64E-04	58.89	5.42
	2.1	-7358.29	-1.58	0.9237	5.74E-04	61.18	5.94
	2.2	-7639.41	-1.09	0.9198	5.84E-04	63.51	6.47
	2.3	-7925.94	-0.59	0.9158	5.94E-04	65.90	7.01
	2.4	-8217.58	-0.08	0.9115	6.06E-04	68.32	7.55
	2.5	-8514.04	0.44	0.9072	6.18E-04	70.79	8.11
	2.6	-8815.05	0.97	0.9028	6.31E-04	73.29	8.67
	2.7	-9120.34	1.50	0.8984	6.43E-04	75.83	9.24
	2.8	-9429.66	2.04	0.894	6.56E-04	78.40	9.81
	2.9	-9742.78	2.59	0.8896	6.70E-04	81.00	10.39
	3	-10059.48	3.14	0.8853	6.83E-04	83.63	10.97
	3.1	-10379.54	3.70	0.8811	6.96E-04	86.30	11.56
	3.2	-10702.78	4.27	0.877	7.10E-04	88.98	12.16
	3.3	-11029.02	4.84	0.8731	7.23E-04	91.70	12.76
	3.4	-11358.08	5.41	0.8692	7.36E-04	94.43	13.36
	3.5	-11689.80	5.99	0.8654	7.49E-04	97.19	13.97
	3.6	-12024.04	6.57	0.8618	7.62E-04	99.97	14.58
	3.7	-12360.66	7.16	0.8583	7.74E-04	102.77	15.20
	3.8	-12699.54	7.75	0.8549	7.87E-04	105.58	15.82
	3.9	-13040.55	8.35	0.8516	7.99E-04	108.42	16.44
	4	-13383.58	8.95	0.8485	8.11E-04	111.27	17.06

β (°C/min)	n	Slope	Intercept	R^2	p-value	E (kJ/mol)	$Ln(k_0)$ (s^{-1})
20	0.1	-2540.19	-9.92	0.846	8.20E-04	21.12	-3.18
	0.2	-2655.31	-9.71	0.8604	7.67E-04	22.08	-2.92
	0.3	-2776.07	-9.48	0.874	7.20E-04	23.08	-2.65
	0.4	-2902.72	-9.25	0.8867	6.79E-04	24.13	-2.37
	0.5	-3035.49	-9.00	0.8983	6.44E-04	25.24	-2.08
	0.6	-3174.60	-8.75	0.9088	6.14E-04	26.39	-1.78
	0.7	-3320.21	-8.48	0.9182	5.88E-04	27.60	-1.47
	0.8	-3472.48	-8.20	0.9264	5.67E-04	28.87	-1.15
	0.9	-3631.52	-7.91	0.9334	5.49E-04	30.19	-0.81
	1	-3797.39	-7.61	0.9393	5.35E-04	31.57	-0.46
	1.1	-3970.12	-7.29	0.9439	5.24E-04	33.01	-0.10
	1.2	-4149.69	-6.97	0.9473	5.16E-04	34.50	0.27
	1.3	-4336.03	-6.63	0.9497	5.11E-04	36.05	0.65
	1.4	-4529.02	-6.28	0.9509	5.08E-04	37.65	1.04
	1.5	-4728.53	-5.92	0.9512	5.07E-04	39.31	1.44
	1.6	-4934.36	-5.55	0.9506	5.09E-04	41.02	1.86
	1.7	-5146.32	-5.17	0.9492	5.12E-04	42.79	2.28
	1.8	-5364.16	-4.77	0.9471	5.17E-04	44.60	2.72
	1.9	-5587.65	-4.37	0.9444	5.23E-04	46.46	3.16
	2	-5816.52	-3.96	0.9412	5.30E-04	48.36	3.61
	2.1	-6050.50	-3.54	0.9376	5.39E-04	50.30	4.07
	2.2	-6289.35	-3.11	0.9337	5.48E-04	52.29	4.54
	2.3	-6532.79	-2.67	0.9296	5.59E-04	54.31	5.01
	2.4	-6780.58	-2.23	0.9252	5.70E-04	56.37	5.49
	2.5	-7032.46	-1.78	0.9208	5.81E-04	58.47	5.98
	2.6	-7288.20	-1.32	0.9163	5.93E-04	60.59	6.48
	2.7	-7547.58	-0.86	0.9117	6.05E-04	62.75	6.98
	2.8	-7810.37	-0.39	0.9072	6.18E-04	64.94	7.48
	2.9	-8076.39	0.09	0.9027	6.31E-04	67.15	7.99
	3	-8345.44	0.57	0.8983	6.44E-04	69.38	8.50
	3.1	-8617.34	1.06	0.894	6.56E-04	71.65	9.02
	3.2	-8891.93	1.55	0.8898	6.69E-04	73.93	9.55
	3.3	-9169.06	2.05	0.8857	6.82E-04	76.23	10.07
	3.4	-9448.57	2.55	0.8817	6.95E-04	78.56	10.60
	3.5	-9730.34	3.05	0.8778	7.07E-04	80.90	11.14
	3.6	-10014.24	3.56	0.8741	7.19E-04	83.26	11.67
	3.7	-10300.15	4.07	0.8705	7.32E-04	85.64	12.21
	3.8	-10587.97	4.59	0.867	7.43E-04	88.03	12.76
	3.9	-10877.59	5.11	0.8637	7.55E-04	90.44	13.30
	4	-11168.92	5.63	0.8604	7.67E-04	92.86	13.85