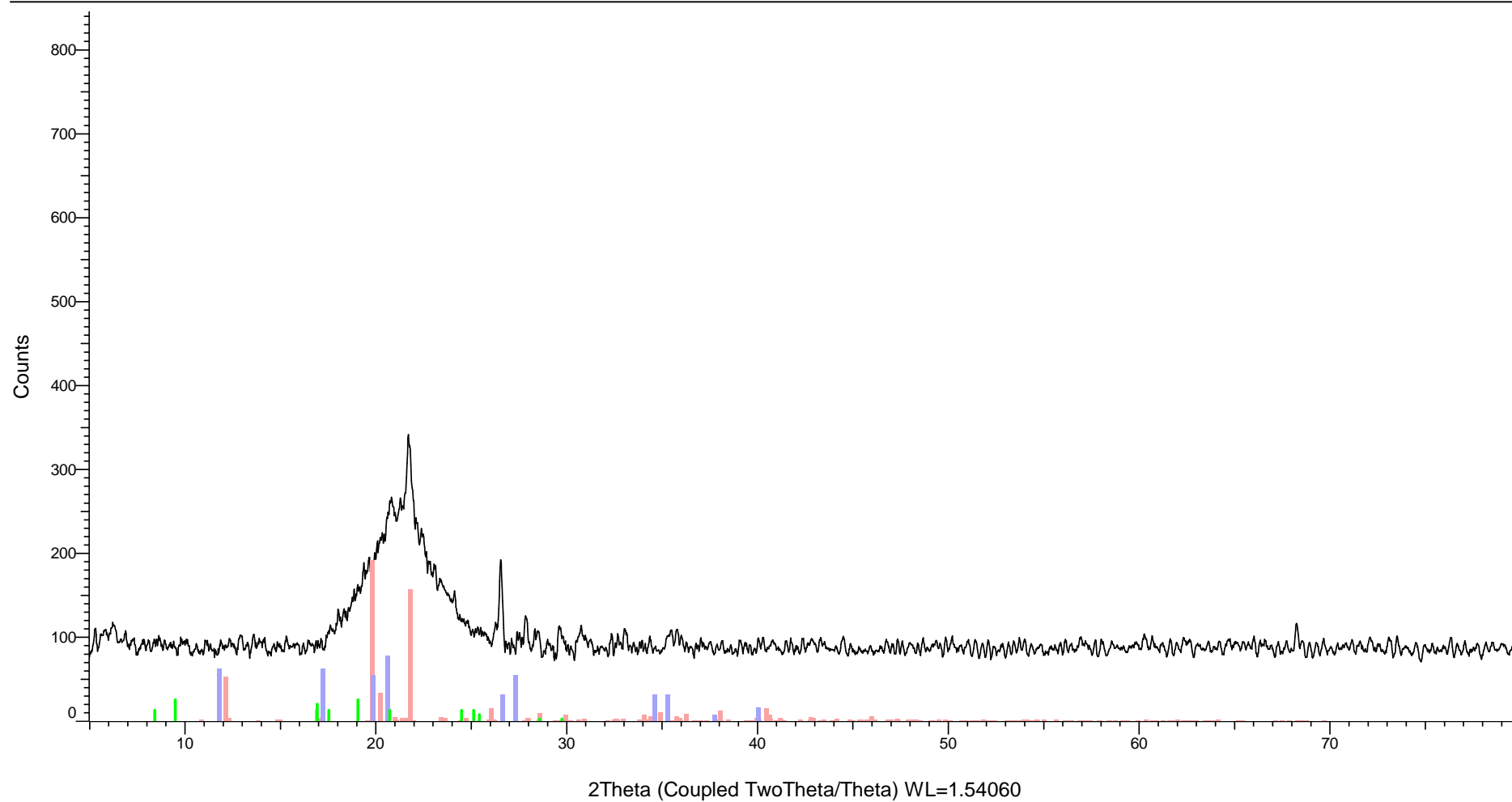


Rice Husk (Coupled TwoTheta/Theta)



Pattern: PDF 00-063-1436 Radiation: 1.54060 Quality: Rietveld

Formula (C6 H10 O5)n														
Name Cellulose II														
Name (mineral)														
Name (common)														
Lattice: Monoclinic														
S.G.: P21 (4)														
Mol. weight = 162.14														
Volume [CD] = 683.53														
Dx =														
Dm =														
I/Icor = 1.340														
a = 8.07700														
b = 9.14400														
c = 10.38700														
a/b = 0.88331														
c/b = 1.13594														
alpha =														
beta =														
gamma = 117.00														
Z = 4														
Additional Patterns: See PDF 00-056-1717														
Color: White														
Sample Preparation: 45 g Cellulose acetate (Eastman Kodak), 180 g deionized water and 180 g 29.8% aqueous ammonia were stirred at an ambient temperature for 45 hours, heated to 323 K in 1.5 hours and held for 3 hours. The slurry was cooled to 308 K, filtered, washed with 40% V/V acetic acid/water, glacial acetic acid and methanol. The solid was dried at 313 K														
Pressure of Datacollection: 101.3 kPa														
Temperature of Data Collection: Pattern taken at 300 K														
Primary Reference														
Publication: Private Communication														
Authors: Kaduk, J., Poly Crystallography Inc., Naperville, IL, USA; Blanton, T., Eastman Kodak Company, Rochester, NY, USA.														
Radiation: CuKα1														
Wavelength: 1.54060														
SS/FOM: 999.9 (0.0007,30)														
Filter: F														
d-spacing:														

d	2θ	I fix	h	k	l	d	2θ	I fix	h	k	l	d	2θ	I fix	h	k	l	d	2θ	I fix	h	k	l
2.3605 ₁	38.092	5	-3	1	2	1.9987 ₆	45.336	12	0	4	1	1.7817 ₀	51.232	3	2	3	1	1.6348 ₉	56.220	5	-3	1	5
2.3372 ₆	38.486	7	3	0	1	1.9974 ₉	45.366	10	-1	1	5	1.7730 ₂	51.501	5	-3	5	0	1.6294 ₇	56.423	2	0	5	0
2.2830 ₁	39.438	4	-1	3	3	1.9958 ₂	45.406	9	1	0	5	1.7726 ₉	51.512	4	4	0	1	1.6280 ₂	56.478	4	-3	4	4
2.2705 ₆	39.663	6	1	2	3	1.9864 ₈	45.632	2	-3	3	3	1.7724 ₇	51.519	4	-3	3	4	1.6170 ₇	56.895	2	-2	5	3
2.2681 ₅	39.707	3	-2	4	0	1.9819 ₀	45.743	8	-4	2	1	1.7712 ₆	51.556	5	3	1	3	1.6145 ₃	56.993	3	3	1	4
2.2535 ₅	39.975	20	-1	2	4	1.9735 ₅	45.948	2	-1	3	4	1.7619 ₉	51.848	11	3	0	4	1.6095 ₁	57.187	3	-5	3	0
2.2463 ₄	40.109	11	1	1	4	1.9717 ₆	45.992	27	3	0	3	1.7555 ₆	52.052	5	0	4	3	1.6029 ₉	57.441	5	2	3	3
2.2285 ₃	40.443	80	1	3	0	1.9654 ₉	46.147	7	1	2	4	1.7477 ₄	52.302	5	-3	5	1	1.6026 ₁	57.456	5	0	4	4
2.2176 ₉	40.650	42	-2	3	3	1.9386 ₉	46.823	8	-3	4	2	1.7441 ₀	52.420	2	-4	2	3	1.5910 ₄	57.913	3	-2	1	6
2.2159 ₃	40.684	14	-2	4	1	1.9317 ₉	47.000	9	-4	3	1	1.7245 ₅	53.060	3	3	2	1	1.5906 ₄	57.929	4	4	1	1
2.1995 ₁	41.001	3	2	1	3	1.9308 ₉	47.023	6	-2	3	4	1.7168 ₀	53.319	4	-4	4	2	1.5781 ₂	58.433	2	-3	5	3
2.1975 ₈	41.038	5	-3	3	2	1.9197 ₄	47.313	7	-4	1	1	1.7096 ₆	53.559	3	-4	3	3	1.5773 ₅	58.464	5	-1	5	3
2.1943 ₈	41.101	4	-1	4	1	1.9188 ₆	47.336	14	2	1	4	1.7092 ₆	53.572	5	1	2	5	1.5703 ₃	58.751	2	3	0	5
2.1896 ₃	41.194	13	0	2	4	1.9160 ₄	47.410	2	3	1	2	1.7082 ₃	53.607	3	-2	4	4	1.5699 ₅	58.767	4	1	4	3
2.1888 ₈	41.209	22	2	2	1	1.8972 ₆	47.908	11	-2	4	3	1.7079 ₁	53.618	2	2	3	2	1.5609 ₉	59.138	3	3	2	3
2.1840 ₄	41.304	7	-2	1	4	1.8962 ₀	47.937	5	0	4	2	1.7012 ₉	53.844	2	-4	1	3	1.5547 ₃	59.400	4	0	5	2
2.1789 ₄	41.406	3	1	3	1	1.8886 ₉	48.140	10	-1	2	5	1.6999 ₇	53.889	5	4	0	2	1.5423 ₅	59.925	2	-5	1	0
2.1368 ₁	42.261	9	0	3	3	1.8844 ₄	48.255	5	1	1	5	1.6983 ₀	53.946	8	-1	4	4	1.5319 ₁	60.376	7	-2	4	5
2.1135 ₃	42.749	7	-2	2	4	1.8836 ₈	48.276	2	-1	4	3	1.6957 ₄	54.034	3	2	2	4	1.5256 ₂	60.651	3	-5	1	1
2.1102 ₉	42.818	24	-3	2	3	1.8817 ₉	48.327	11	-4	2	2	1.6932 ₉	54.119	8	0	1	6	1.5228 ₉	60.771	4	2	2	5
2.1056 ₀	42.918	3	2	0	4	1.8768 ₀	48.464	5	0	3	4	1.6911 ₁	54.194	5	1	3	4	1.5195 ₃	60.920	3	1	3	5
2.1043 ₇	42.944	19	-3	1	3	1.8738 ₉	48.544	2	1	3	3	1.6863 ₆	54.359	2	-2	3	5	1.5121 ₀	61.251	4	-3	6	0
2.0897 ₇	43.259	4	-3	4	0	1.8547 ₀	49.079	5	-3	1	4	1.6840 ₈	54.439	2	-1	1	6	1.5038 ₅	61.623	3	2	4	0
2.0785 ₅	43.505	8	-2	4	2	1.8505 ₈	49.196	4	0	2	5	1.6783 ₂	54.641	8	2	1	5	1.5003 ₃	61.784	4	1	2	6
2.0607 ₄	43.900	6	-1	4	2	1.8387 ₄	49.534	9	-4	3	2	1.6779 ₂	54.656	8	-3	5	2	1.4963 ₂	61.968	6	-3	6	1
2.0487 ₁	44.171	14	-3	4	1	1.8283 ₄	49.835	11	-4	1	2	1.6770 ₀	54.688	4	-1	5	2	1.4951 ₉	62.020	7	-2	5	4
2.0479 ₃	44.189	3	1	3	2	1.8190 ₈	50.106	6	-4	4	0	1.6681 ₁	55.004	7	1	4	2	1.4888 ₆	62.313	4	-5	4	2
2.0189 ₉	44.857	7	-4	2	0	1.7990 ₂	50.704	4	2	0	5	1.6499 ₇	55.661	8	0	3	5	1.4883 ₃	62.337	3	2	4	1
2.0129 ₀	45.000	3	0	1	5	1.7918 ₀	50.923	3	-4	4	1	1.6376 ₆	56.116	3	-3	2	5	1.4847 ₇	62.504	4	-2	3	6

d	2θ	l fix	h	k	l
1.4840 3	62.538	2	2	3	4
1.4788 2	62.784	2	4	0	4
1.4785 2	62.798	5	-5	1	2
1.4776 0	62.841	3	3	3	1
1.4743 4	62.996	2	0	5	3
1.4642 4	63.481	3	-3	5	4
1.4632 5	63.529	3	3	1	5
1.4595 9	63.707	3	4	1	3
1.4595 1	63.711	2	-5	3	3
1.4543 6	63.963	2	0	4	5
1.4534 5	64.008	2	1	5	0
1.4518 1	64.089	3	-3	6	2
1.4505 2	64.153	7	3	2	4
1.4302 1	65.176	3	-4	6	1
1.4256 5	65.410	3	5	0	1
1.3927 4	67.157	2	-2	1	7
1.3869 9	67.473	4	5	0	2
1.3802 1	67.849	3	0	5	4
1.3726 6	68.274	2	-2	5	5
1.3680 9	68.534	2	4	1	4
1.3640 1	68.767	4	2	3	5
1.3481 1	69.695	2	-1	5	5