Centro de Investigación, Tecnología e Innovación
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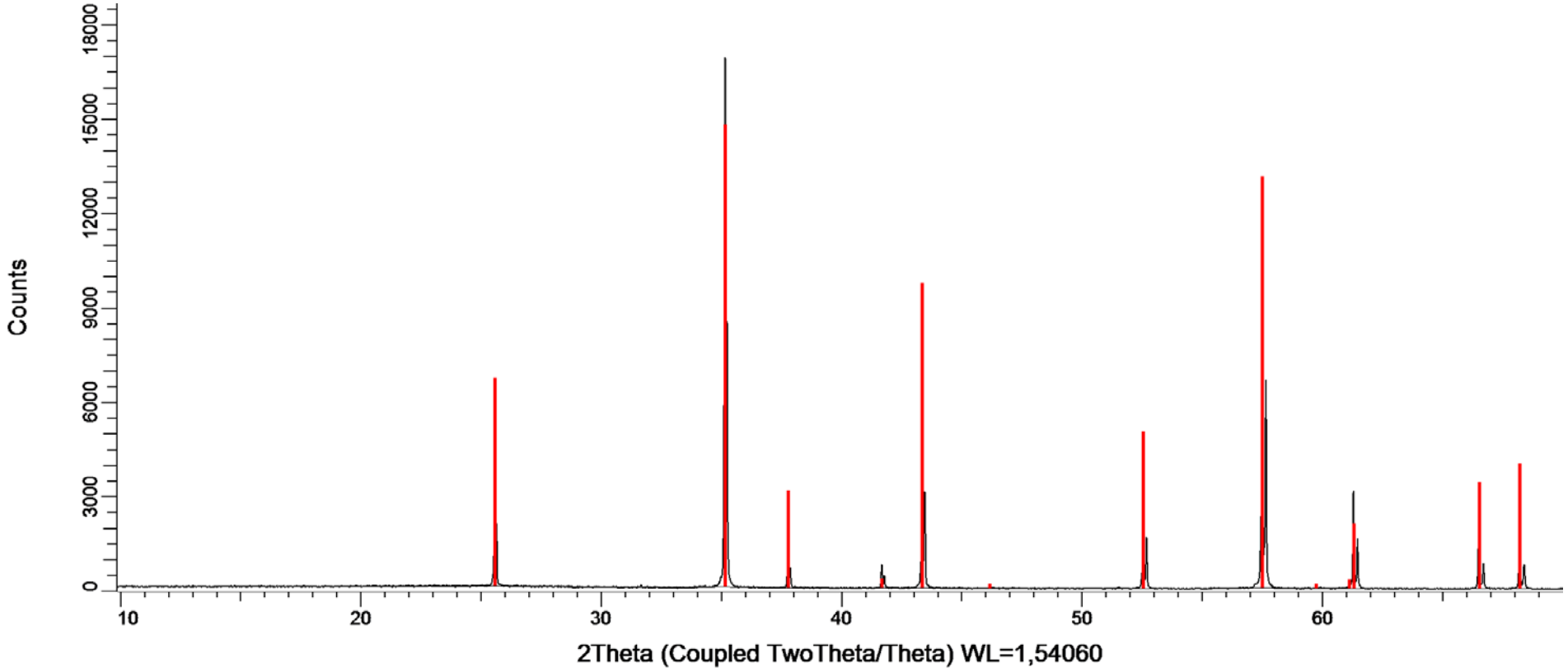
PATRÓN DE CORINDÓN 08-09-14



CORINDON 14-03-14. Barrido tipo Θ-Θ. Rango: 3 a 70 °2Θ. Paso: 0,015. Tiempo por paso: 0,1 seg. Detector: Lynxeye.

Patrón de Corindón. Trigonal – a 4.7588770 - c 12.992877 – R-3c (167) – Z 6 – V 254.81

08 de septiembre de 2014

CITIUS, Tfno. 954559747 - 954559746, Fax. 954559753
Apdo. 1152, 41080 Sevilla, Spain

Corindon D8I-90 08-09-14

R-Values

Rexp : 7.01	Rwp : 10.67	Rp : 8.56	GOF : 1.52
Rexp`: 10.85	Rwp`: 16.52	Rp` : 17.55	DW : 1.11

Instrument

Primary radius (mm)	250
Secondary radius (mm)	250
Linear PSD 2Th angular range (°)	3.3
FDS angle (°)	0.5
Beam spill, sample length (mm)	25.4
Intensity corrected	
Full Axial Convolution	
Filament length (mm)	12
Sample length (mm)	25.4
Receiving Slit length (mm)	12
Primary Sollers (°)	2.5
Secondary Sollers (°)	2.5

hkl Phase - 1 Lebail method

Phase name	Corindon	
R-Bragg	1.844	
Spacegroup	r-3c	
Cell Volume (Å^3)	254.7585(44)	
Crystallite Size		
Cry size Lorentzian (nm)	1190(220)	
Cry size Gaussian (nm)	900(190)	
k: 1 LVol-IB (nm)	467(66)	
k: 0.89 LVol-FWHM (nm)	545(82)	
Strain		
Strain L	0.0002(34)	
Strain G	0.008(15)	
e0	0.0020(37)	
Lattice parameters		**SRM 1976a Certificate**
a (Å)	4.758497(29)	**4.758877(113)**
c (Å)	12.991475(86)	**12.992877(164)**

h	k	l	m	d	Th2	I
0	1	2	6	3.47978	25.57830	10.3
1	0	4	6	2.55086	35.15260	87.3
1	1	0	6	2.37925	37.78056	7.62
0	0	6	2	2.16525	41.67950	5.87
1	1	3	12	2.08525	43.35768	51
2	0	2	6	1.96405	46.18286	0.562
0	2	4	6	1.73989	52.55609	43.8
1	1	6	12	1.60138	57.50411	229
2	1	1	12	1.54651	59.74723	1.92
1	2	2	12	1.51465	61.13666	2.31
0	1	8	6	1.51086	61.30656	63.3
2	1	4	12	1.40443	66.52509	46.4
0	3	0	6	1.37366	68.21721	44.9
1	2	5	12	1.33593	70.42342	1.22