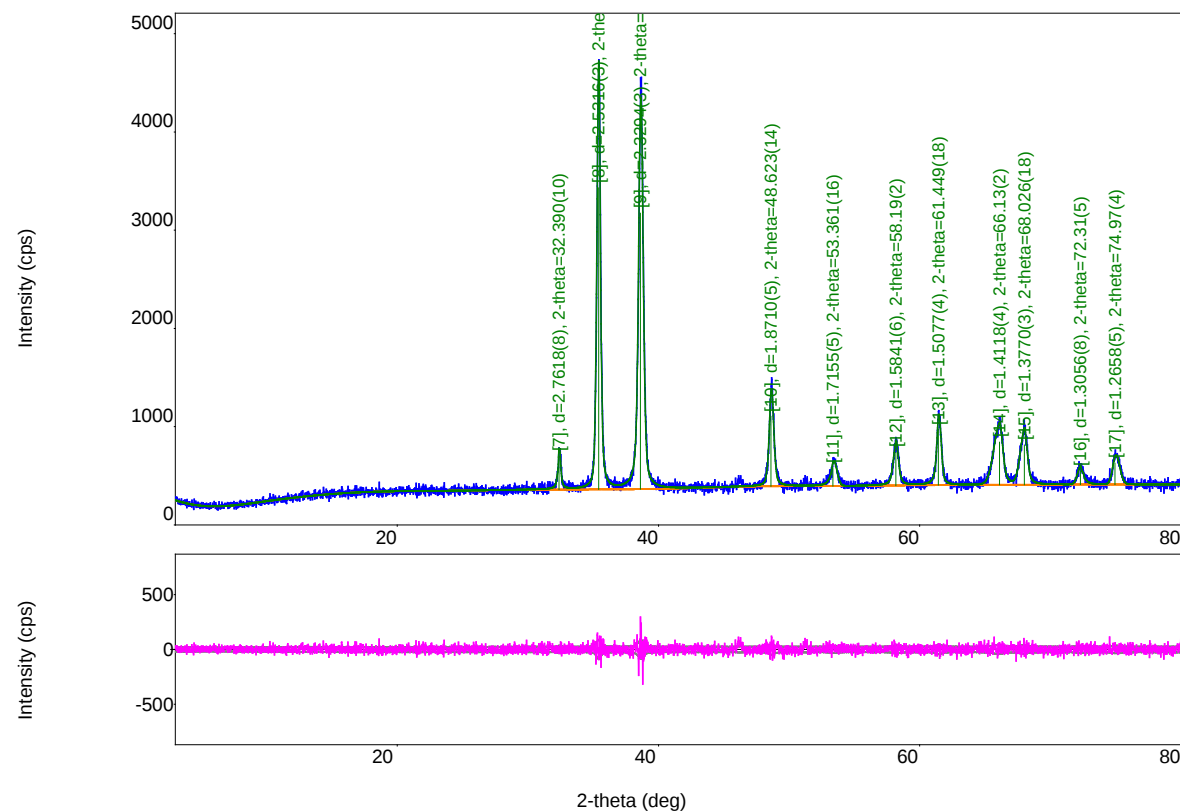


# Analysis Results

## General Information

|               |                     |                  |                     |
|---------------|---------------------|------------------|---------------------|
| Analysis date | 2013/05/02 09:56:21 | Measurement date | 2013/04/30 15:59:34 |
| Sample name   | TEST SAMPLE         | Operator         | Computerlab         |
| File name     | RP32.raw            |                  |                     |
| Comment       |                     |                  |                     |

## Measurement profile



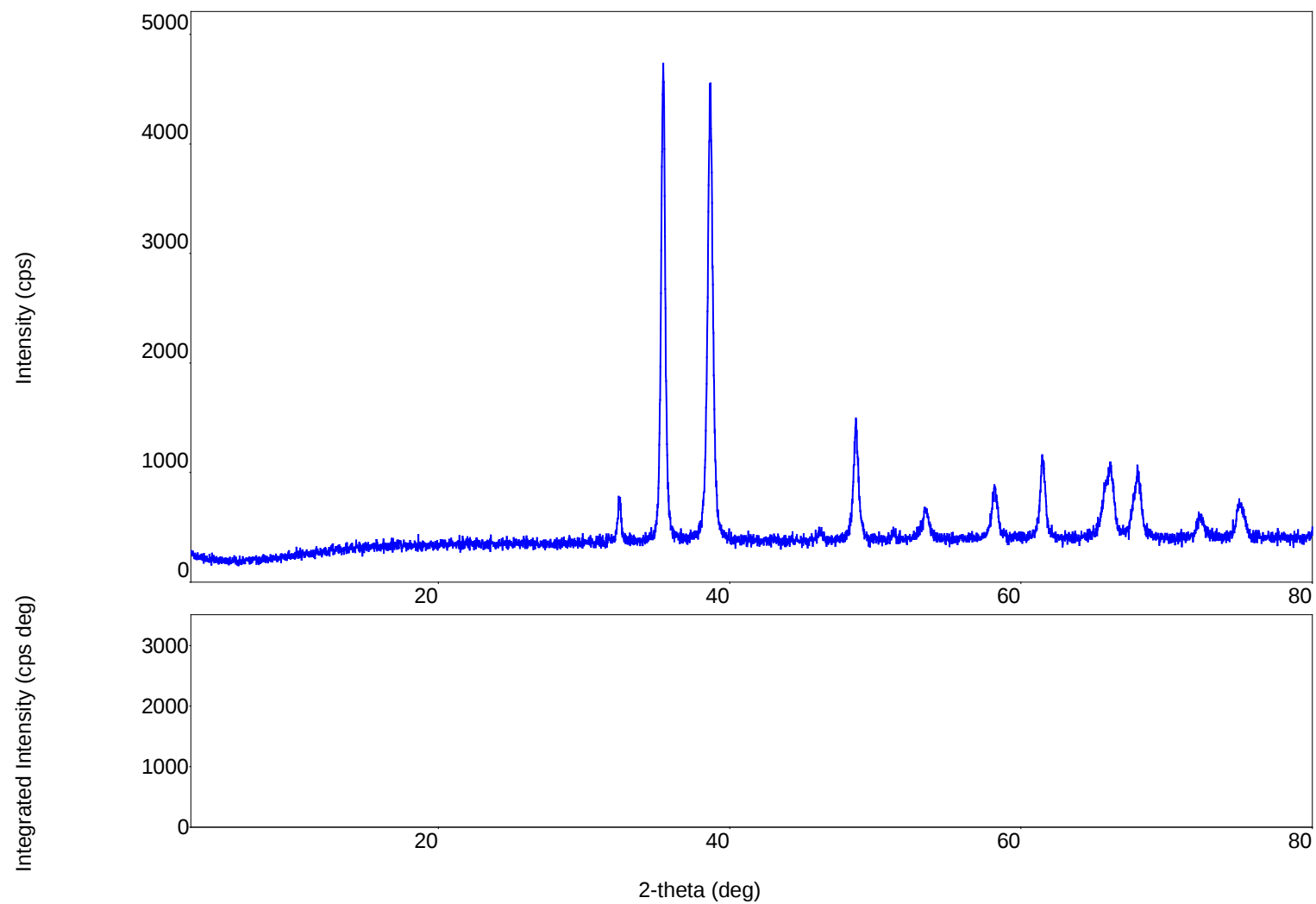


## Measurement conditions

|                       |                       |                            |                       |
|-----------------------|-----------------------|----------------------------|-----------------------|
| X-Ray                 | 40 kV , 40 mA         | Scan speed / Duration time | 2.0000 deg./min.      |
| Goniometer            |                       | Step width                 | 0.0200 deg.           |
| Attachment            | -                     | Scan axis                  | 2theta/theta          |
| Filter                |                       | Scan range                 | 3.0000 - 80.0000 deg. |
| CBO selection slit    | -                     | Incident slit              | 2/3deg.               |
| Diffrected beam mono. | Fixed Monochro.(U4)   | Length limiting slit       | -                     |
| Detector              | Scintillation counter | Receiving slit #1          | 2/3deg.               |
| Scan mode             | CONTINUOUS            | Receiving slit #2          | 0.3mm                 |

## Qualitative analysis results

| Phase name | Formula | Figure of merit | Phase reg. detail | DB card number |
|------------|---------|-----------------|-------------------|----------------|
| Phase name | Formula | Space group     | Phase reg. detail | DB card number |



## Peak list

| No. | 2-theta(deg) | d(ang.)   | Height(cps) | FWHM(deg) | Int. I(cps deg) | Int. W(deg) | Asym. factor |
|-----|--------------|-----------|-------------|-----------|-----------------|-------------|--------------|
| 7   | 32.390(10)   | 2.7618(8) | 337(24)     | 0.173(18) | 98(4)           | 0.29(3)     | 0.57(17)     |
| 8   | 35.428(4)    | 2.5316(3) | 3069(72)    | 0.297(3)  | 1152(8)         | 0.375(11)   | 1.42(9)      |
| 9   | 38.619(6)    | 2.3294(3) | 2808(68)    | 0.375(4)  | 1383(9)         | 0.492(15)   | 0.87(5)      |
| 10  | 48.623(14)   | 1.8710(5) | 711(34)     | 0.375(11) | 336(7)          | 0.47(3)     | 1.00(15)     |
| 11  | 53.361(16)   | 1.7155(5) | 183(17)     | 0.46(3)   | 111(5)          | 0.61(8)     | 0.56(10)     |
| 12  | 58.19(2)     | 1.5841(6) | 336(24)     | 0.38(2)   | 179(5)          | 0.53(5)     | 1.8(5)       |
| 13  | 61.449(18)   | 1.5077(4) | 563(31)     | 0.330(16) | 255(5)          | 0.45(3)     | 1.1(3)       |
| 14  | 66.13(2)     | 1.4118(4) | 433(27)     | 0.759(19) | 391(6)          | 0.90(7)     | 2.7(4)       |
| 15  | 68.026(18)   | 1.3770(3) | 403(26)     | 0.559(18) | 270(6)          | 0.67(6)     | 2.3(4)       |
| 16  | 72.31(5)     | 1.3056(8) | 139(15)     | 0.43(7)   | 80(6)           | 0.57(11)    | 2.1(12)      |
| 17  | 74.97(4)     | 1.2658(5) | 217(19)     | 0.59(3)   | 136(7)          | 0.63(8)     | 0.80(19)     |

## Parameters used for WPPF

### Profile parameters

| Common parameter | Background | Data          | RP32                     |
|------------------|------------|---------------|--------------------------|
|                  |            | Function name | B-spline                 |
|                  |            | param0        | 252.53806364253236       |
|                  |            | param1        | 143.1678718401005        |
|                  |            | param2        | 258.23041179372325       |
|                  |            | param3        | 348.63335945435705       |
|                  |            | param4        | 344.14197177486074       |
|                  |            | param5        | 362.12459658089512       |
|                  |            | param6        | 359.69225423757069       |
|                  |            | param7        | 367.63057474544723       |
|                  |            | param8        | 398.16395406468894       |
|                  |            | param9        | 393.80002613880686       |
|                  |            |               | 406.92237145795076       |
|                  |            |               | 409.26997105462772       |
|                  |            |               | 413.35249996191635       |
|                  |            |               | 412.59335039639222       |
|                  |            | node0         | 3                        |
|                  |            | node1         | 10.119999999999999       |
|                  |            | node2         | 17.239999999999998       |
|                  |            | node3         | 24.379999999999999       |
|                  |            | node4         | 30.059999999999999       |
|                  |            | node5         | 35.740000000000002       |
|                  |            | node6         | 41.420000000000002       |
|                  |            | node7         | 47.159999999999997       |
|                  |            |               | 53.560000000000002       |
|                  |            |               | 59.979999999999997       |
|                  |            |               | 68.560000000000002       |
|                  |            |               | 80                       |
| Common parameter | Peak shift | Function name | Shift axial displacement |
|                  |            | param0        | 0                        |
|                  |            | param1        | 0                        |
|                  |            | param2        | 0                        |



## Structure parameters

| Data set name | Phase Name | Element | x | y | z | Occupancy | Temperature factor |
|---------------|------------|---------|---|---|---|-----------|--------------------|
|---------------|------------|---------|---|---|---|-----------|--------------------|

| Data set name | Rwp | Rp | Re | S | Chi^2 | Maximum shift/e.s.d. |
|---------------|-----|----|----|---|-------|----------------------|
| RP31          | 0   | 0  | 0  | 0 | 0     | 0                    |
| RP32          | 0   | 0  | 0  | 0 | 0     | 0                    |

## Lattice constants

### Angular correction

### Analysis results

| Data set name | a(A) | b(A) | c(A) | alpha(deg) | beta(deg) | gamma(deg) |        |
|---------------|------|------|------|------------|-----------|------------|--------|
| Phase name    | a(A) | b(A) | c(A) | alpha(deg) | beta(deg) | gamma(deg) | V(A^3) |

LCGraph.emf

## Crystallinity

| Data set name          | Crystallinity(%) |
|------------------------|------------------|
| CrystallinityGraph.emf |                  |

## Crystallite size and lattice strain

### Williamson-Hall method

| Data set name |                     | Crystallite size(A) |           | Strain(%)         |  |
|---------------|---------------------|---------------------|-----------|-------------------|--|
| Phase name    | Crystallite size(A) | Size distribution   | Strain(%) | Distribution type |  |
| CSSGraph.emf  |                     |                     |           |                   |  |

## Quantitative analysis results (RIR)

RIRGraph.emf

## Quantitative analysis results (WPPF)

## Quantitative analysis results (standard addition method)

### Calibration data

QuantityCalibration.emf

## Quantitative analysis results (External Standard method)

### Calibration data

QuantityCalibration.emf

## Quantitative analysis results (internal standard method)

### Calibration Data

QuantityCalibration.emf

## Stress

Stress constants

Analytical conditions

Analysis results

StressGraph.emf