

APPENDIX 1

SOM: Raman and FTIR ATR analyses of the Csátalja-1 sample with EPMA-based composition (column 1), band positions and FWHM values (columns 4 and 8), and optical microscope descriptions of the areas measured (column 10)

0		1	2	3-5			6	7-9			10
Measuring area				Raman				FTIR ATR			Optical microscopy
zone	measuring point	EMPA oxide composition and mineral endmember	Reference Raman bands of unshocked minerals (cm <sup>-1</sup> ) (px: Huang et al. 2000, ol: Kuebler et al. 2006, fp: Freeman et al. 2008) and shock induced shift (cm <sup>-1</sup> )	Raman band	FWHM (cm <sup>-1</sup> )	identified mineral	Reference IR bands of unshocked minerals (px, fp:Lafauntee et al. 2015, ol: Lane et al. 2010) and shock induced shift (cm <sup>-1</sup> )	IR band (cm <sup>-1</sup> )	IR FWHM values (cm <sup>-1</sup> ) of v1 (px, ol), v2(ol) vibration	identified mineral	appearance, relation of minerals to each other
E6/1	kondrum_magn1_3			662 (mag)	683 mag (90)	magnetite		655, 815, 1363, 1511, 3224	60, 15, 104, 78	magnetite	xenomorphic amoeboid shaped magnetite around the chondrules (S3)
D2	rgt_1 IR3	Na2O 0,86% MgO 17,72% SiO2 51,97% CaO 21,17% Cr2O3 0,97% FeOx 7,30% Wo41En48Fs11	En46Fs9Wo44 1007 (+4) 323 (+1) 352 (-3) 387 (+4) 662 (+4)	1011 (px), 666 (px), 391(px), 355 (px), 324 (px) ; 510 (fp), 477 (fp)	1011 px (12), 507 fp (14)	diopside, anorthoclase/oligoclase	RRUFF diopside (R040009-1) 632 (+6), 858 (+14), 917(+5),	638, 725, <b>872, 922, 1002</b>	33 (872 px), 53 (922 fp)	anorthite, <b>enstatite</b>	mixed mineral melt in olivine matrix EMPA: px lath nuclei in feldspar melt (S6)
D2	ol15 moz IR4	MgO 40,81% SiO2 29,99% FeOx 29,20% Fo71	Fo70= 819 (+2), 850 (+2)	852 (ol), 821 (ol)	852 (15), 819 (17) ol	forsterite	Fo70: 997 (+5) 969 (+2) sh 864 (-2) 833 (0)	833, 862, 936sh, 971, 1002sh	18 (833 ol), 18 (862 ol)	forsterite	olivine with strong moaic structure as host mineral of the fp-px melt assemblage "rgt1", fracturing - filled by 1) mineral melt, 2) clasts+mineral melt, 3) iron oxides (S5)
D3	rgt2-3	Na2O 1,43% MgO 16,80% Al2O3 4,01% SiO2 52,64% CaO 16,84% TiO2 0,00% Cr2O3 0,54% MnO 0,00% FeOx 7,73% Wo36En50Fs13	En46Fs9Wo44 1007 (+5) 323 (+1) 387 (+4) , 662 (+4)	1012 (px), 666 (px), 391 (px), 324 (px); 852 (ol), 821 (ol); 510 (fp)	1012 px (13) 851 ol (12), 820 ol (11) ol, 508 fp (16)	diopside,forsterite, (anorthoclase/oligoclase)	RRUFF augite (R061086-1) 633 (+1), 670 (0), 862 (-6), 963 (-15), 1064 (-10)	634, 670, 723, 856, 900, 948, 983, 1008, 1054	37 (856 di)	anorthite, anorthoclase, diopside	shock annealed clast with resorbed rim, subgrained structure , large amount of mineral melt (S6)
D3	rgt2-4	Na2O 0,99% MgO 20,11% Al2O3 1,04% SiO2 51,44% CaO 16,65% Cr2O3 0,44% FeOx 9,32% Wo32En54Fs14	En46Fs9Wo44 1007 (+4) 387 (+4) , 662 (+4)	1011 (px), 666 (px), 391 (px), 324 (px); 852 (ol), 821 (ol); 510 (fp), 477 (fp)	1011 (13)px , 852 (14), 820 (22) ol, 512 (18) fp	diopside, forsterite, anorthoclase/oligoclase	RRUFF augite (R061086-1) 633 (+3), 862 (+3), 963 (+16), 1064 (-13)	636, 725, <b>865, 889, 979, 1051</b>	66 (865 aug)	anorthite, anorthoclase, diopside	
D3	px3 a	MgO 28,45 Al2O3 1,78 SiO2 54,94 CaO 4,23 Cr2O3 0,56 MnO 0,58 FeOx 9,45 Wo8En77Fs14	En.72Fs.26Wo.03 335 (+4), 394 (+1), - 436 515 533 545 - 657, 670 (-5), 1003 (+10)	1013 (px), 682 (px), 665 (px), 395 (px), 339 (px)	1012 (30) px	enstatite	RRUFF enstatite (R050644-1) 645 (-9), 725 (-2), 856 (-6), 920 (-3), 1007 (-3), 1060 (-16),	636, 723, 850, 917, 1004 1034sh	41 (850 di), 70 (920)	diopszid, anorthite	radial chondrule fragment with goethite-filled fractures and inclusions S5-S4
D3	px3 b és c	MgO 18,71 Al2O3 1,64 SiO2 54,4 CaO 20,86 Cr2O3 0,85 MnO 0,58 FeOx 3,54 Wo42En52Fs6	En46Fs9Wo44 1007 (+5) 323 (+1) 387 (+4) , 662 (+4)	1012 (px), 666 (px), 391 (px), 324 (px)	1012 px (16)	diopside/ augite	RRUFF diopside (R040009-1) 632 (+4), , 858 (-6), 917 (-2), 1067 (-15)	636, 723, 852, 919, 1004, 1052sh	35 (850 di) 60 (920)	diopszid, anorthite	