

GRC Facilities

Executive manager / Tetsuo Irifune

GRC Facilities			
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I. High-pressure apparatuses			[Person in charge]
(1)	Multi-anvil high-pressure apparatus	Orange-1000	Yu Nishihara, Toru Shinmei
(2)	Multi-anvil high-pressure apparatus	Orange-3000	Tomohiro Ohuchi, Steeve Gréaux, Toru Shinmei
(3)	D-DIA type high-pressure deformation apparatus	Madonna I	Tomohiro Ohuchi, Yu Nishihara, Toru Shinmei
(4)	D-DIA type high-pressure apparatus with sintered diamond anvils	Madonna II	Toru Shinmei, Tomohiro Ohuchi
(5)	Diamond anvil cell	DAC	Takeshi Sakai
(6)	Fiber laser heating system for DAC	Fiber laser	Takeshi Sakai
(7)	CO ₂ laser heating system for DAC	CO ₂ laser	Takeshi Sakai
(8)	High-pressure elastic wave velocity measurement system	Ultrasonic	TDS5104 Steeve Gréaux
II. Analytical instruments			
(9)	Field-emission electron probe micro analyzer	FE-EPMA	JXA-iHP200F Hideharu Kuwahara, Tomohiro Ohuchi
(10a)	Field-emission scanning electron microscope (with EDS)	FE-SEM-EDS	JSM-IT500HR Tomohiro Ohuchi, Hideharu Kuwahara
(10b)	Field-emission scanning electron microscope (with EBSD)	FE-SEM-EBSD	JSM-IT500HR Tomohiro Ohuchi, Hideharu Kuwahara
(11)	Thermionic-emission scanning electron microscope (with EDS)	SEM-EDS	JSM-6510LV Tomohiro Ohuchi, Hideharu Kuwahara
(12)	Analytical transmission electron microscope (Field-emission, with EDS)	FE-TEM	JEM-2100F Sayako Inoue, Tomohiro Ohuchi
(13)	Transmission electron microscope	TEM	JEM-2010 Sayako Inoue, Tomohiro Ohuchi
(14)	Focused ion beam system (1)	Dual Beam FIB (1)	Scios Takeshi Sakai, Sayako Inoue
(15)	Focused ion beam system (2)	Dual Beam FIB (2)	Scios2 Sayako Inoue, Takeshi Sakai
(16)	Micro-focus X-ray diffractometer	Micro-focus XRD	RAPIDII-V/DW Takeshi Sakai, Toru Shinmei, Hideharu Kuwahara
(17)	Multipurpose X-ray diffraction system	Powder XRD	UltimaIV/DD Toru Shinmei, Hideharu Kuwahara
(18)	Raman spectrometer (1) (Jasco)	Micro-Raman Spectroscopy	NRS-5100gr Takeshi Sakai, Hideharu Kuwahara, Toru Shinmei
(19)	Raman spectrometer (2) (Photon Design)	Micro-Raman Spectroscopy	RSM 800 Takeshi Sakai, Toru Shinmei
(20)	Micro-Raman (NIR) Spectroscopy	Micro-Raman (NIR) Spectroscopy	NRS-4500 Takeshi Sakai, Hideharu Kuwahara, Toru Shinmei
(21)	Fourier transform infrared spectrometer	FT-IR	IRT-5200EUO Yu Nishihara, Toru Shinmei
(22)	UV-Vis-NIR spectrophotometer	UV-Vis-NIR	V-670 Toru Shinmei
(23)	Laser microscope	Laser microscope	OPTELCIS HYBRID L3 Toru Shinmei
(24)	Ion Slicer	Ion Slicer	EM-09100 IS Sayako Inoue, Tomohiro Ohuchi
(25)	Ar ion milling system	PIPS	Model 691 Sayako Inoue, Tomohiro Ohuchi
	Au/Pt/C coater	Coater	Neoc-STB/JFC-1600/JEC-560 Tomohiro Ohuchi, Hideharu Kuwahara
III. Others			
(26)	Ultrasonic processing machine		UM-150CS Yu Nishihara, Tomohiro Ohuchi
(27)	Auto processing machine I		MDX-540 Toru Shinmei, Steeve Gréaux
	Auto processing machine II		MDX-40a Yu Nishihara, Toru Shinmei, Steeve Gréaux
(28)	Atmosphere control furnace I	Bigger furnace	ATCM50-100/1700 Yu Nishihara Toru Shinmei
(29)	Atmosphere control furnace II	Smaller furnace	TS-4B06 Yu Nishihara, Toru Shinmei
(30)	Micro Vickers hardness meter		HMV-G21DT Toru Shinmei
	Large plane polishing machine		GS-BMHF Toru Shinmei, Steeve Gréaux, Hideharu Kuwahara
	Precision drilling machine		JIG-3M-1 Yu Nishihara, Toru Shinmei, Tomohiro Ohuchi
	Contour machine		V-33 Yu Nishihara, Toru Shinmei
	Auto polisher		EcoMet3000 Yu Nishihara, Toru Shinmei
	Fiber laser processing system I	for DAC	FL-LM 01 Takeshi Sakai, Toru Shinmei
	Fiber laser processing system II	for MA	ML-7111A Yu Nishihara, Toru Shinmei
	Diamond polisher		MCBS-320 Tetsuo Irifune, Toru Shinmei
	Numerically Controlled tapping device	NC	MTV-T310; KIRA, PCV-30 Toru Shinmei
	CCD microscope (KEYENCE)		VHX-2000 Toru Shinmei
	Digital microscope (Laica)		DVM6 Toru Shinmei
	High-temperature electric furnace		SPM65-17 Steeve Gréaux
IV. Simulation codes			
(31)	Simulation code for physical properties of minerals		Taku Tsuchiya, Haruhiko Dekura
(32)	Numerical fluid simulation code		Masanori Kameyama
V. Spring-8			
(33)	Guide grock for the deformation experiment (Spring-8 BL04B1)		Yu Nishihara, Tomohiro Ohuchi
(34)	In-situ X-ray and elastic wave velocity measurement system (Spring-8 BL04B1)		Steeve Gréaux
	High speed camera (Spring-8 BL04B1)		FASTCAM Mini AX100 Steeve Gréaux
VI. "HIME-DIA", Nano-Polycrystalline Diamond (NPD)			
	Nano-Polycrystalline Diamond (synthesis and cut)	NPD	Tetsuo Irifune, Toru Shinmei