Birck Nanotechnology Center Equipment Rates, effective June 1, 2023.	INT	ENP	EFP
INT = Internal (Subsidized); ENP = External Non-Profit and Indiana Small Business; EFP = External For-Profit			
Rates are $ hourly unless specified otherwise in the service name.			
"C - " indicates services eligible for Scifres Equipment Cap for internal users.			
C - Deposition, ALD (4200001865)	**19**	**37**	**42**
C - Fiji200 ALD	19	37	42
C - Deposition, CVD (4200001866)	**45**	**89**	**102**
C - 2D CVD	45	89	102
C - Axic	45	89	102
C - EasyTube 3000	45	89	102
C - Epigress	45	89	102
C - Parylene CVD Furnace	45	89	102
C - Plasma-Therm Apex SLR HDPCVD	45	89	102
C - Tube 02 Nitride Dep	45	89	102
C - Tube 03 LTO Dep	45	89	102
C - Tube 06 Polysilicon	45	89	102
C - Tube 09 TEOS	45	89	102
C - Deposition, Flex Compatible PVD, Per Run (4200001862)	**161**	**308**	**354**
C - Lesker E-Beam Evaporator - Flexible Substrate Compatible (Per Run)	161	308	354
C - PVD Sputtering System - Flexible Substrate Compatible (Per Run)	161	308	354
C - Deposition, PVD and Electroplating, Per Run (4200001863)	**117**	**229**	**263**
C - CHA E-Beam Evaporator #1 (Per Run)	117	229	263
C - CHA E-Beam Evaporator #2 (Per Run)	117	229	263
C - Iko Electroplating System (Per Run)	117	229	263
C - Lesker E-Beam Evaporator (Per Run)	117	229	263
C - Leybold E-Beam Evaporator (Per Run)	117	229	263
C - PVD E-Beam Evaporator - Glancing Angle Deposition (GLAD) (Per Run)	117	229	263
C - PVD E-Beam Evaporator - Metal/Magnetic Sources (Per Run)	117	229	263
C - PVD Sputtering System - 4 Target Magnetic Sources (Per Run)	117	229	263
C - PVD Sputtering System - 6 Target Magnetic Sources (Per Run)	117	229	263
C - PVD Sputtering System - Metal/Dielectric Sources (Per Run)	117	229	263
C - PVD Sputtering System - Nitride (Per Run)	117	229	263
C - WAFAB Electroplating (Per Run)	117	229	263
C - Etching, General (4200001857)	**20**	**40**	**46**
C - Branson Asher	20	40	46
C - March Jupiter II	20	40	46
C - March Jupiter III	20	40	46
C - Xactix E1 Xenon Difluoride (XeF2) Etcher	20	40	46
C - Etching, ICP (4200001856)	**60**	**116**	**133**
C - AJA Ion Mill	60	116	133
C - Panasonic E620 ICP RIE Etcher	60	116	133
C - Plasma Therm APEX SLR	60	116	133
C - STS AOE	60	116	133
C - STS ASE 2	60	116	133

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C - Furnace, Oxidation/Annealing (4200001867)	**23**	**43**	**49**
C - Blue M Furnace	23	43	49
C - Jipelec RTA	23	43	49
C - Nitric Oxide Anneal	23	43	49
C - Nitrogen Anneal Furnace	23	43	49
C - RCA Hood	23	43	49
C - Tube 01 Clean Ox	23	43	49
C - Tube 04 Field Ox	23	43	49
C - Tube 05 Anneal	23	43	49
C - Tube 07 General Ox	23	43	49
C - Tube 08 Phos Drive	23	43	49
C - Lithography, Aligners (4200001860)	**46**	**115**	**132**
C - 557 MJB3 Aligners	46	115	132
C - Heidelberg MLA150 Maskless Aligner	46	115	132
C - MA6	46	115	132
C - MJB3_1	46	115	132
C - MJB3_2	46	115	132
C - MJB4	46	115	132
C - Nanonex NX-2000	46	115	132
C - SB6e bonder	46	115	132
C - Lithography, E-Beam, 100 kV (4200001858)	**92**	**238**	**273**
C - JEOL JBX-8100FS E-Beam Writer	92	238	273
C - Lithography, Spinners (4200001859)	**21**	**44**	**50**
C - Laurell EDC-650 Spin Processor	21	44	50
C - SCS 6808P Spinner #2	21	44	50
C - SCS G3P-8 Spinner #1	21	44	50
C - Spinner3	21	44	50
C - Spinner4	21	44	50
C - Metrology, General (4200001864)	**26**	**51**	**59**
C - Alpha-Step	26	51	59
C - Bruker GT-K	26	51	59
C - Cleanroom Ellipsometer	26	51	59
C - DI3100 BRK1265	26	51	59
C - Filmetrics F10-RT	26	51	59
C - Filmetrics F40-UV	26	51	59
C - JEOL JCM 5000 Neoscope SEM	26	51	59
C - Keyence VHX-6000 Digital Microscope	26	51	59
C - KLA-Tencor P-10 Profilometer	26	51	59
C - Leica DCM8 Confocal Microscope	26	51	59
C - Nanoman AFM	26	51	59
C - Nikon Eclipse L150 Microscope 1 (N Bay)	26	51	59
C - Nikon Eclipse L150 Microscope 2 (N Bay)	26	51	59
C - Olympus BX-60 Microscope (J Bay)	26	51	59
C - Olympus Microscope	26	51	59
C - P-7 Profilometer	26	51	59
C - Park NX20 AFM	26	51	59
C - Stress Machine	26	51	59

Characterization, LDV (4200001842)	**26**	**41**	**47**
Polytec Laser Vibrometer	26	41	47
Suss PLV50 ProbeStation	26	41	47
Characterization, Probe Station (4200001836)	**27**	**51**	**59**
Cleanroom Probe 1	27	51	59
Jandel 4-point Probe	27	51	59
MM P200L Semi-Automatic Probe Station	27	51	59
MMR Probe	27	51	59
Probe 1	27	51	59
Probe 2	27	51	59
Characterization, Spin Lab (4200001837)	**12**	**46**	**53**
MPMS	12	46	53
PPMS	12	46	53
Deposition, PLD, Per Run (4200001839)	**400**	**628**	**723**
PVD Pulsed Laser Deposition (PLD) (Per Run)	400	628	723
Lithography, E-Beam, 30 kV (4200001838)	**64**	**124**	**142**
Raith eLine E-Beam Writer	64	124	142
Metrology, Center for AFM (4200001841)	**48**	**89**	**102**
Asylum MFP 3D Bio	48	89	102
Asylum_Cypher_BRK	48	89	102
Metrology, Femtosecond and Raman (4200001840)	**31**	**49**	**56**
Coherent Legend FS	31	49	56
Horiba LabRAM HR	31	49	56
Metrology, Helium Ion Microscope (TBD)	**121**	**190**	**219**
Zeiss Orion NanoFab Helium Ion Microscope	121	190	219
Metrology, Kratos XPS (4200001844)	**40**	**66**	**75**
Kratos AXIS Ultra DLD Imaging XPS	40	66	75
Metrology, Omicron Surface Analysis (4200001845)	**19**	**37**	**42**
Omicron Surface Analysis Cluster	19	37	42
Metrology, Optics and Spectroscopy Lab (4200001843)	**32**	**53**	**61**
J.A. Woollam RC2 Spectroscopic Ellipsometer	32	53	61
Lambda 950	32	53	61
NSOM Renishaw	32	53	61
SolsticeACE-TOPAS	32	53	61
Thermo Scientific DXR3xi Raman Imaging Microscope	32	53	61
VASE Ellipsometer	32	53	61
Metrology, Panalytical XRD (4200001846)	**29**	**50**	**58**
XRD	29	50	58

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Packaging and Assembly, Advanced (4200001848)	**44**	**85**	**98**
Accretech SS20 Dicing Saw	44	85	98
DiscoDad 2	44	85	98
JFP Wire Bonder	44	85	98
LPKF Mill	44	85	98
LPKF Plater	44	85	98
LPKF Press	44	85	98
Pick and Place	44	85	98
Westbond 7476E Thermosonic Wedge Bonder - Aluminum	44	85	98
Westbond 7476E Thermosonic Wedge Bonder - Gold	44	85	98
Packaging and Assembly, Basic (4200001847)	**19**	**37**	**42**
ASAP-1 IPS Digital Sample Preparation System	19	37	42
Critical Point Dryer	19	37	42
Fuji Inkjet	19	37	42
Kruss DSA25 Drop Shape Analyzer	19	37	42
Maxwell Component: E-spin chamber/Laser	19	37	42
Maxwell Component: Novacentrix PulseForge	19	37	42
Nanoscribe Photonic Professional GT2 3D Printer	19	37	42
TA Instruments DHR3 Rheometer	19	37	42
ULS PLS6MW Laser Engraver	19	37	42
Roll-to-Roll, Process Demonstration (4200001850)	**191**	**350**	**402**
Maxwell Roll to Roll System	191	350	402
Mirwec	191	350	402
PPSI_Inkjet	191	350	402
Roll-to-Roll, Prototyping (4200001849)	**95**	**149**	**172**
LasX	95	149	172
MPS TF-100 Screen Printer	95	149	172
Nordson Quantum Q-6800 Fluid Dispensing System	95	149	172