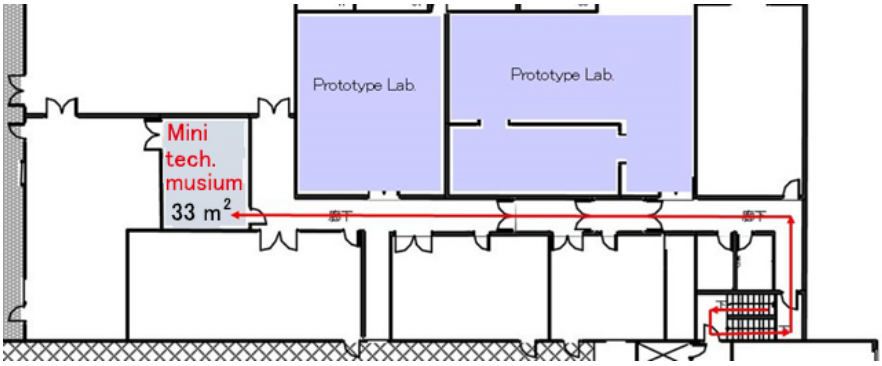
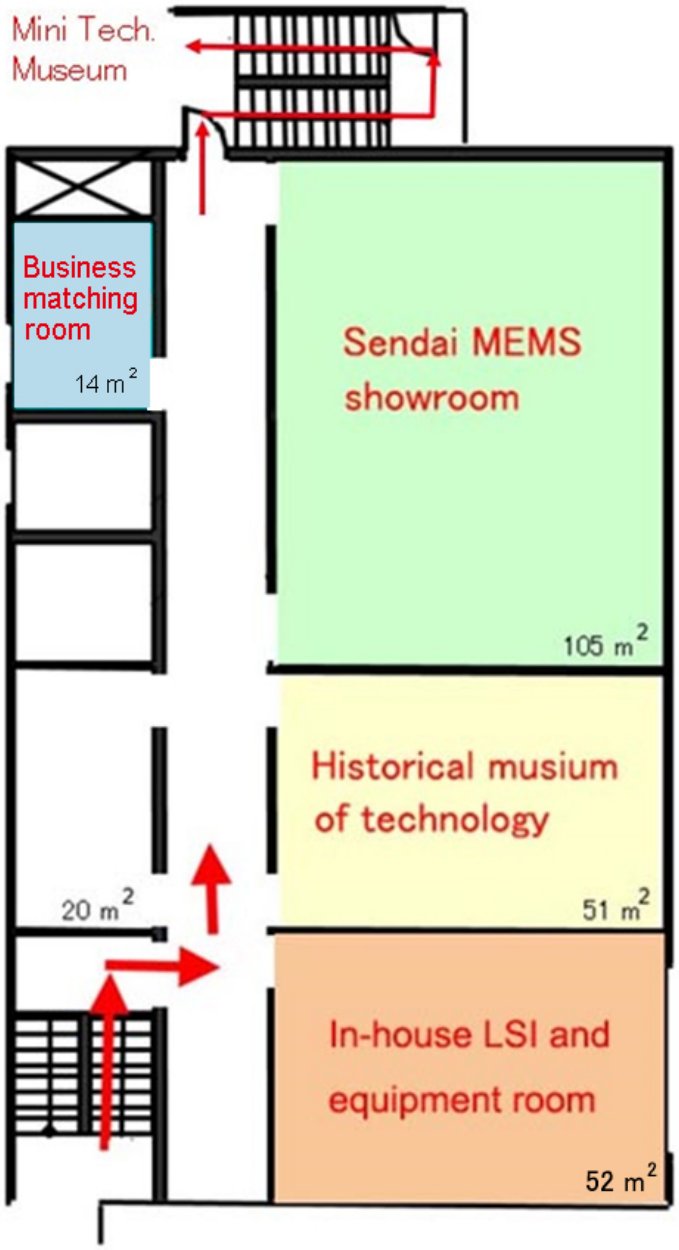
Exhibition rooms in Jun-ichi Nishizawa Memorial Research Center



Sendai MEMS showroom



2nd floor

Historical museum of technology

In-house LSI and equipment room

Business matching room

Mini tech. museum

1　展示室（Exhibition room）

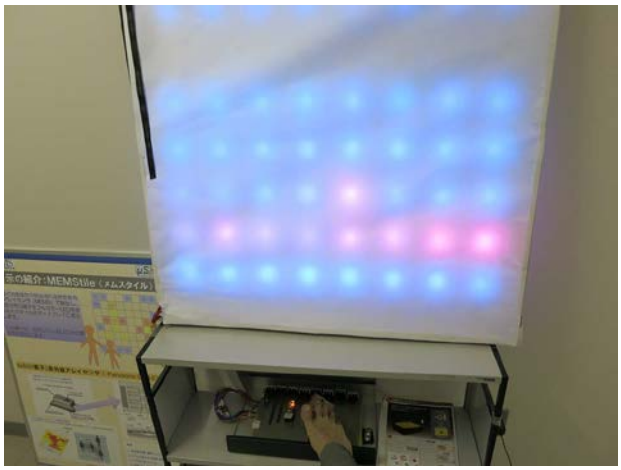
日本語		英語（English）	
1 西澤潤一記念研究センター内の展示室紹介(表紙)		21 Exhibition rooms in Jun-ichi Nishizawa Memorial Research Center (cover)	
2 仙台 MEMS ショールーム　ポスター 0-25	7 カード A1-A14	22 Sendai MEMS showroom　Poster 0-25	27 Card A1-A14
	8 カード B1-B14		28 Card B1-B14
	9 カード C1-C14		29 Card C1-C14
	10 カード D1-D14		30 Card D1-D14
	11 カード E1-E14		31 Card E1-E14
	12 カード F1-F14		32 Card F1-F14
	13 カード G1-G4		33 Card G1-G4
	14 カード H1-H7		34 Card H1-H7
	15 カード I1-I2		35 Card I1-I12
3 近代技術史博物館　ポスター 0-25	16 カード J1-J17	23 Historical Museum of Technology Poster 0-25	36 Card J1-J17
4 自作集積回路・装置室 ポスター 0-18	17 カード K1	24 In-house IC and equipment room Poster 0-18	37 Card K1
5 ビジネスマッチング室　ポスター 0-7	18 カード L1	25 Business matching room　Poster 0-7	38 Card L1
6 ミニテックミュジアム　ポスター 0-14	19 カード M1	26 Mini tech Museum　Poster 0-14	39 Card M1
廊下	20 カード N1-N4	Corridor	40 Card N1-N4

廊下展示写真（Photo of exhibition in corridor）

以前の計測器と試作品（Old equipment and prototype）

半導体研究振興会や西澤先生の書籍および MEMS 学会資料（Books by Semiconducror Research Institute and Prof. Nishizawa, and proceedings on MEMS）

MEMS 学会資料（Proceedings on MEMS）



電子レンジ用赤外線センサアレイ（Infrared sensor array for microwave oven）

List of cards (samples are shown in red frame)

A1 Infrared sensor, imager
A2 Infrared sensor
A3 2 axis galvano optical scanner
A4 DMD (Digital Micromirror Device)
A5 Digital cinema DMD
A6 Optical encoder
A7 Piezoelectric, thermal inkjet printer head
A8 Electrostatic inkjet printer head
A9 MEMS resonator
A10 MEMS resonator (disk, Lamb etc.)
A11 FBAR (Film Bulk Acoustic Resonator)
A12 SAW device on LSI
A13 Tunable SAW filter using variable capacitor
A14 SAW passive wireless sensor

B1 Piezoresistive pressure sensor
B2 Integrated capacitive pressure sensor
B3 Resonant pressure sensor
B4 Capacitive vacuum sensor
B5 Capacitive vacuum sensor products
B6 MEMS microphone
B7 MEMS microphone wafer
B8 MEMS microphone for humid environment
B9 Capacitive accelerometer for automobile
B10 Wafer of accelerometer by surface micromachining
B11 Various accelerometers
B12 Integrated capacitive accelerometer
B13 3-axis accelerometer
B14 Electrostatically levitated rotational gyroscope

C1 Electromagnetically driven resonating gyroscope
C2 Silicon ring gyroscope
C3 Piezoelectric gyroscope
C4 Electrostatically driven capacitive sensing gyroscope
C5 Yaw rate, acceleration sensor
C6 Accelerometer and gyroscope for automobile and smartphone
C7 Patterning
C8 Etching (Deep RIE, XeF_2 Etching, etc)
C9 Deposition
C10 Probe for scanning probe microscope (SPM)
C11 Near-field optical probe and bow-tie antenna
C12 Highly sensitive sensors using thin resonator
C13 Multi-probe data storage
C14 Electron source

D1 Electrode for biopotential recording
D2 Semiconductor ion sensor (ISFET)
D3 Catheter pH, CO_2 sensor
D4 Intermittent sampling continuous blood gas monitor
D5 Application of ISFET to dentistry, oceanography and fish cultivation
D6 Micro ISFET and integrated micro probe
D7 Gas sensors
D8 Disposable chemical analysis chip
D9 Bio LSI and tactile sensor network
D10 Catheter blood pressure sensor
D11 Active catheter
D12 Multi-link motion mechanism using shape memory alloy
D13 Imaging for minimal invasive medicine
D14 Implantable stimulator

E1 LIGA process
E2 Laser processes and stealth dicing
E3 Anodic bonding
E4 Anodically bondable LTCC with electrical feedthrough
E5 Bonding materials
E6 Shared CMOS LSI wafer
E7 Laser-erased wafer process
E8 Massive parallel electron beam write
E9 Micro pump, micro valve and chemical analysis system for liquid
E10 Micro mixer and particle analysis
E11 Flow sensor and mass-flow controller for gas
E12 Bakable micro valve and anticorrosive mass-flow controller
E13 Sensing in harsh environment
E14 Silicon carbide (SiC) mold for glass press-molding

F1 Small size gas turbine engine dynamo
F2 Si micro-turbine and thermoelectric generator
F3 SiC and PZT by lost-mold process, Si_3N_4 by reaction sintering
F4 Micro fuel cell
F5 Micro fuel reformer
F6 Digital micro thruster (solid rocket engine array)
F7 Electrostatic micro motor, actuator
F8 Distributed electrostatic micro actuator
F9 Piezoelectric micro stage
F10 Lateral motion piezoelectric microactuator
F11 Tactile display and tactile imager
F12 Micro refrigeration system
F13 Thermal MEMS switch
F14 Electrostatic and piezoelectric MEMS switch

G1 Wavelength swept pulsed quantum cascade laser
G2 Optical melt pressure & temperature sensor
G3 Capacitive high sensitive differential pressure sensor "MANOSTAR"
G4 10^{th} anniversary of SEMI MEMS seminar

H1 Tohoku Univ. and Belgium IME
H2 Poly-SiGe for MEMS sensor applications
H3 MEMS gyroscope on CMOSIC using poly-SiGe
H4 SiGe micro-mirror array on CMOS IC
H5 CMORE SiGeMEMS mluti project wafer
H6 Holographic displays
H7 MEMS for energy harvester & electronic noise

I1 Piezoelectric and electrostatic optical scanners
I2 Immunological analyzer of Helicobacter pylori's urease

J1 Telegraph using electric wire in bottom of ocean
J2 CPU board for super computer
J3 Microwave radar using anode split magnetron
J4 Shimada laboratory in which high power anode split magnetron was developed before the end of war (Z project)
J5 Crystal detector and point contact transistor
J6 Transitions of power devices used in Shinkansen
J7 Massive parallel electron beam write
J8 Electromagnetically levitated lamp
J9 Model railway of magnetically levitated linear liner
J10 Linear Chuo Shinkansen using superconductivity and its model railway
J11 Linear subway (Linear metro) travelling on wheels
J12 Micro car
J13 Disassembly of FOMA (3G) smartphone
J14 Continuous arterial pressure waveform with Tonometry
J15 Topics related to collected books
J16 Micro flying robot (μ FR)
J17 Planimeter (area meter) and proportional compass

K1 Books, photograph and 0ther materials about Prof. Jun-ichi Nishizawa

L1 Hermetic seal bonding at low temperature with sub-micron Au particles

M1 Five-storied pagoda made of glass

N1 Infrared array sensor (Panasonic Corp.)
N2 3D LSI (Honda research Institute Japan, Co Ltd)
N3 Remote control switch using energy harvester (EnOcean GmpH)
N4 Membrane switch array for electrophoresis display and oscillometric blood pressure monitor (E-paper, Tokyo Sanyo Electric Co. Ltd, Kazuo Senda)