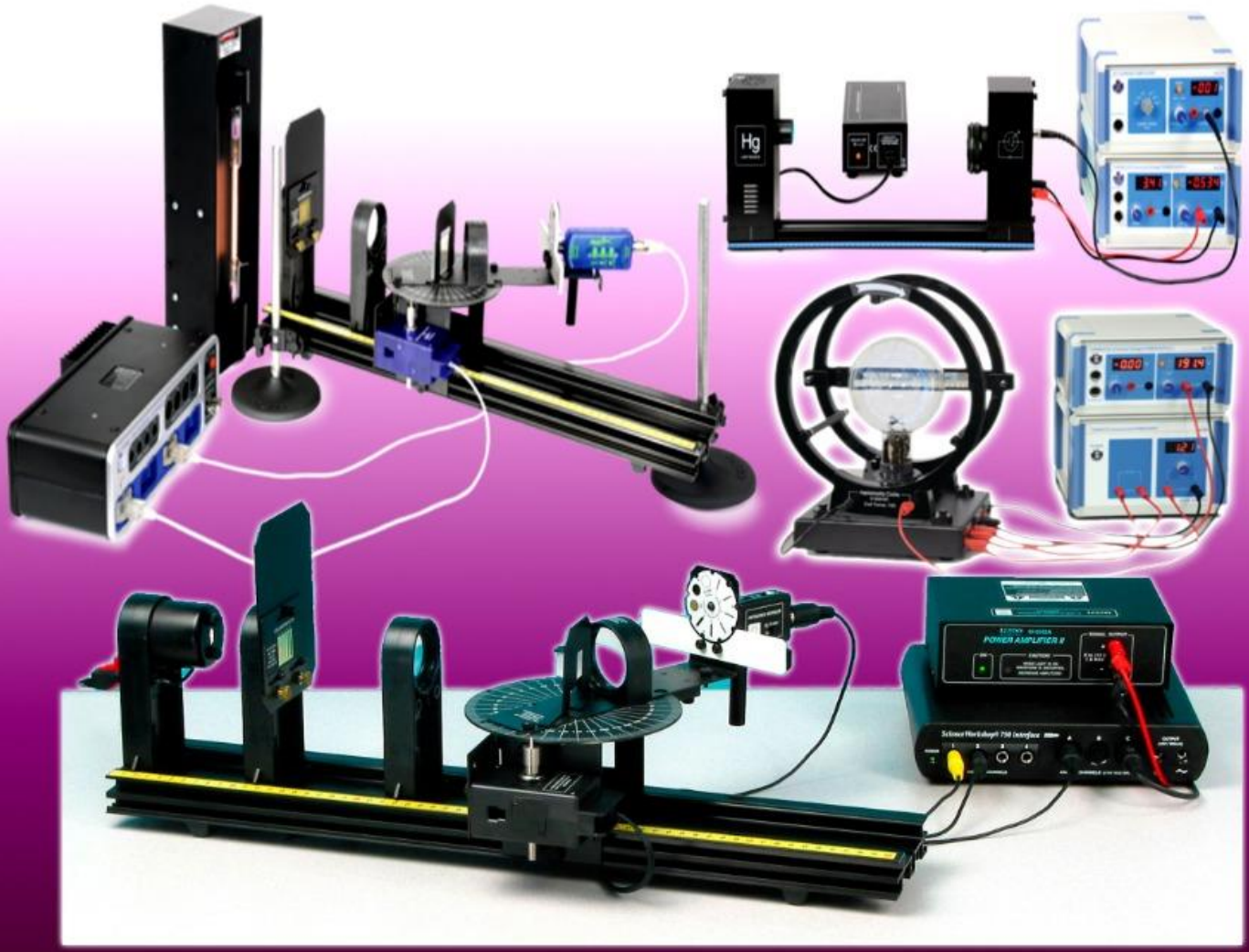
Katalog

MODERN PHYSICS LABORATORY



UNESA

PHYSICS DEPARTMENT
FMNS UNIVERSITAS NEGERI SURABAYA

JURUSAN FISIKA FMIPA UNIVERSITAS NEGERI SURABAYA

KATALOG PERALATAN EKSPERIMEN LABORATORIUM FISIKA MODERN

1. PHOTOELECTRIS EFFECT APPARATUS *AP-8209*

No	Equipment	Code
1	Optical Filters, Apertures, Caps, and Screws	
2	Mercury Light Source Enclosure	AP-8208
3	Base	
4	Photodiode Enclosure	AP-8207
5	Power Supply	
6	Photoelectric Effect Apparatus	
7	Filters: 365 nm, 405 nm, 436 nm, 546 nm, 577 nm	
8	Apertures: 2 mm diameter, 4 mm diameter, 8 diameter	
9	Caps: Photodiode, Mercury Lamp	

Eksperiments Topics

1) Experiment 1 : Measuring and Calculating Planck's Constant
2) Experiment 2 : Current-Voltage: Constant Frequency
3) Experiment 3 : Current-Voltage: Constant Intensity

Figure 1: Optical Filters Figure 2: Mercury Light Source Figure 3: Base

Figure 4: Photodiode Enclosure Figure 5: Power Supply

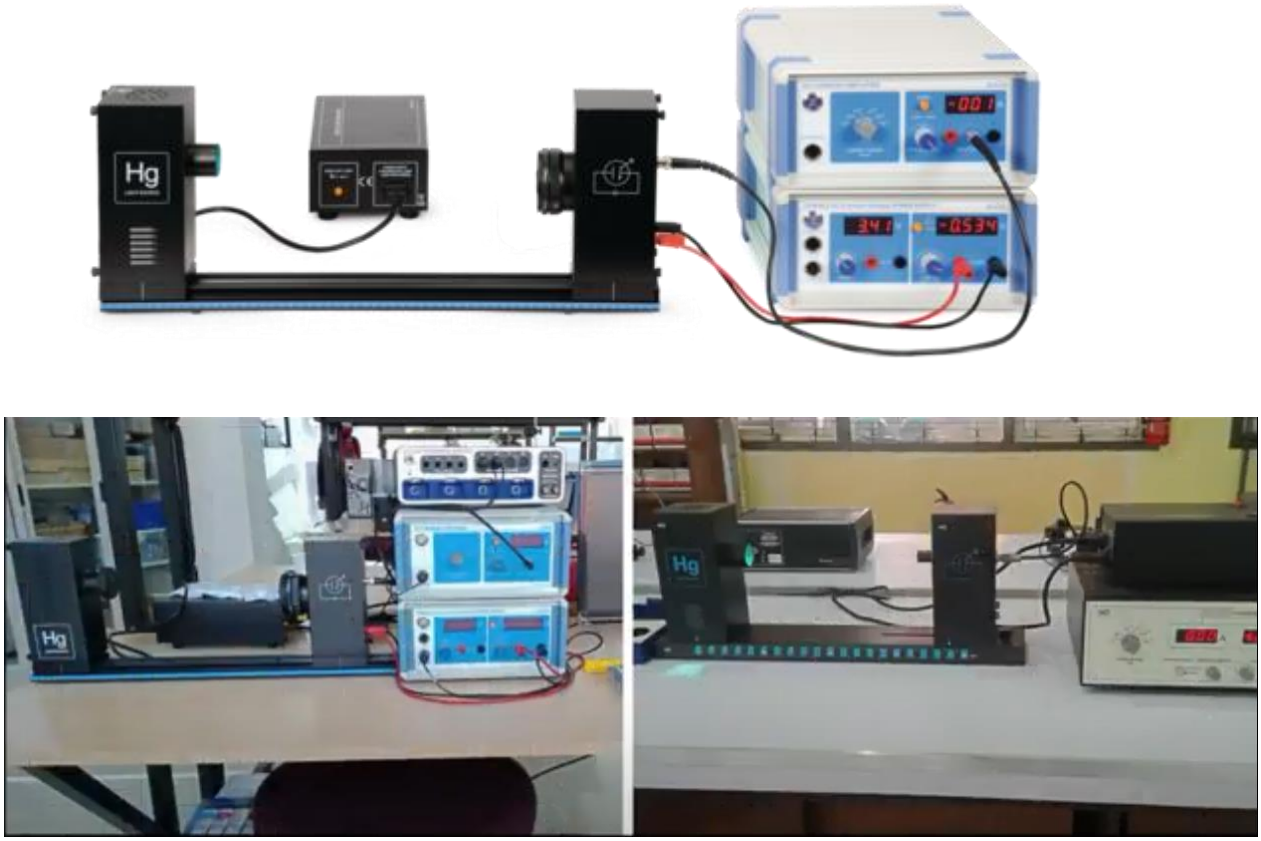


Figure 6: Equipment Setting

2. MILIKAN OIL DROP *AP-821*

No	Equipment	Code
1	Milikan Oil Drop Apparatus	AP-8210A
2	AC Adapter, 100 – 240 VAC to 12 VDC. 1/0 A	540-092
3	Atomizer	699-093
4	Non-Volatile Mineral oil	
5	Power Supply, High Voltage	SF-9585
6	Large Rod Stand	ME-8735
7	Steel Rod, 45 cm	ME-8736
8	Banana Plug Patch Cords	SE-9750
9	Digital Stopwatch	ME-1234

Experimen Topics:

Computing charge

Figure 1: Apparatus

Figure 2: High Voltage

Figure 3: Large Rod

Figure 4 : Support Rod Stand

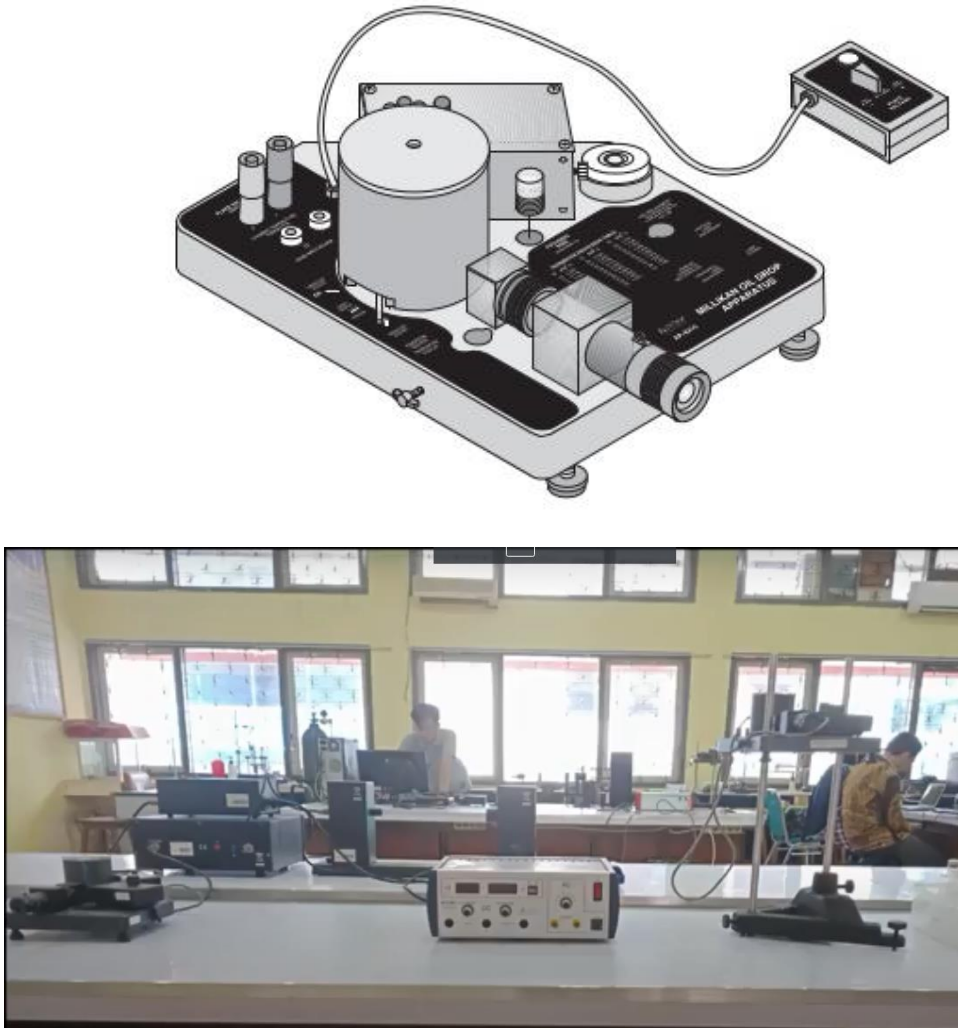


Figure 5: Equipment Setting

3. ATOMIC SPECTRA *EX-9921*

No	Equipment	Code
1	Spectrophotometer System	OS-8539
2	Small Round Base (set of 2)	ME-8974A
3	25 cm Threaded Rod	ME-8988
4	Low Pressure Sodium Light Source	OS-9287A
5	Mercury Vapor Light Source	OS-9286
6	Spectral Tube Power Supply and Mount	SE-9460
7	Hydrogen Spectral Tube	SE-9461
8	Helium Spectral Tube	SE-9462
9	ScienceWorkshop 750 Interface	Cl-7650
10	Data Studio	Cl-6870

Experiment Topics :

1. Helium Spectrum
2. Hydrogen Spectrum
3. Mercury Spectrum
4. Mercury Doublet

Figure 1:Collimating Slits

Figure 2: Collimating Lens

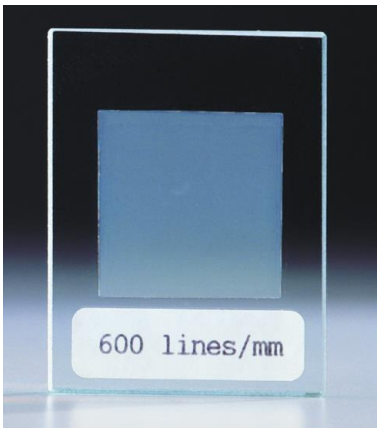


Figure 3: Grating

Figure 4: Focusing Lens

Figure 5: Light Sensor Mask

Figure 6: Light Sensor

Figure 7: Rotary Motion

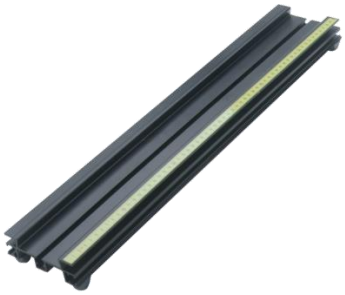
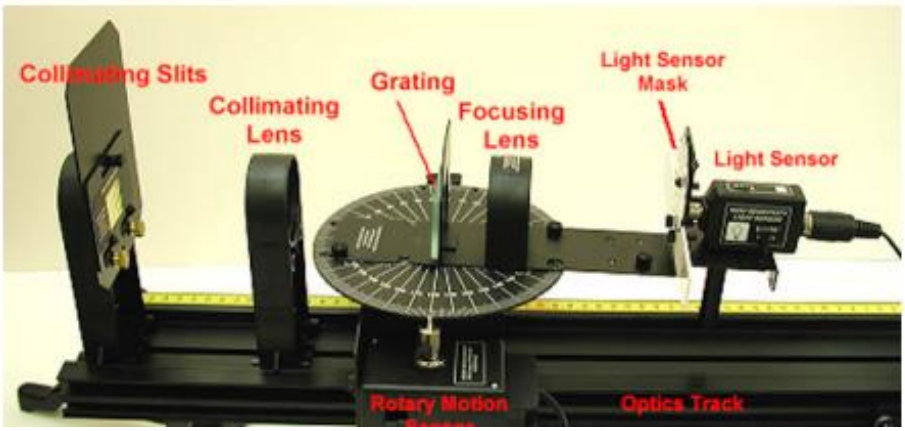


Figure 8: Optics Track

Figure 9: Interface



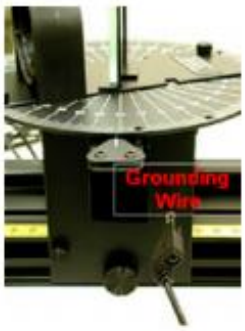


Figure 10: Equipment Setting

4. BLACKBODY RADIATON

No	Equipment	Code
1	Spectrophotometer System	OS-8539
2	Small Round Base (set of 2)	ME-8974A
3	25 cm Threaded Rod	ME-8988
4	Spectral Tube Power Supply and Mount	SE-9460
5	ScienceWorkshop 750 Interface	Cl-7650
6	Data Studio	Cl-6870

Experiment Topics :

1. Black Body Spectrum

Figure 1:Collimating Slits

Figure 2: Collimating Lens

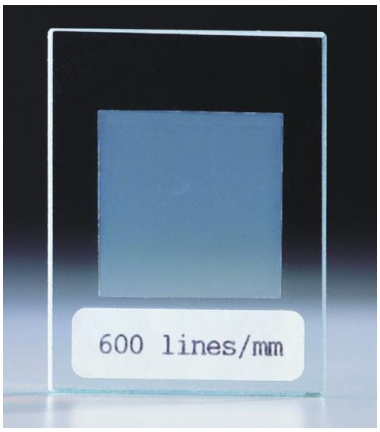


Figure 3: Grating

Figure 4: Focusing Lens

Figure 5: Light Sensor Mask

Figure 6: Light Sensor

Figure 7: Rotary Motion

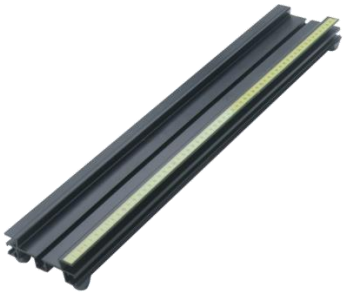


Figure 8: Optics Track

Figure 9: Interface

Figure 10: Equipment Setting

5. CATHODE RAY

No	Equipment	Code
1	Cathode Ray	
2	High Voltage 50 VDC	
3	High Voltage 500 VAC	

Experiment Topics:

Value of e/m

Figure 1: Cathode Ray

Figure 2: High Voltage

Figure 3: Low VOltage

Figure 4 : Experiments Setting in Laboratory