QUALITY CONTROL FOR THE DARKROOM AND AUTOMATIC PROCESSOR

A.) DARKROOM ENVIRONMENT Daily Maintained clean, well ventilated, organized and safe **B.) SAFELIGHT TEST** Semi-annual SAFELIGHT FOG: greater than 0.05 OD Always check the DISTANCE, WATTAGE and FILTERS used WRATTEN 6B: >550 nm GBX 2: > 600 nm ACCEPTABLE: 0.04 OD C.) AUTOMATIC PROCESSOR TEMPERATURE Seveloper Old or exhauster developer Reducing departing has been experied betreased the activity or developer restrainer All solution should ' Weekly D.) REPLENISHMENT RATE **OXIDIZED DEVELOPER** Detroased the activity of Gver per, activator/buffer, preservative except for RESTRAINER Controls the activity of the developing agent CONTAMINATED SOLUTION Entire solution is ineffective Can't be replenished Should be replaced FUNCTION OF REPLENISHMENT RATE Maintain or bring back the activity of chemical on its original activity or composition E.) DEVELOPER SOLUTION pH Quarterly/Every 3 months/Weekly NORMAL pH: 10-11.5 or 9.6-10.6 ALKALINIZER: Sodium hydroxide and Sodium carbonate

Roller transport system

1965 1st rapid processing 90 sec

1987 KONICA 45 secs Special chemicals

ELECTROMAGNETIC SPECTRUM VS VISIBLE SPECTRUM

ELECTROMAGNETIC SPECTRUM

The range of frequencies over which an electromagnetic radiation can be propagated

Note: x-ray films are more sensitive in visible light than x-rays

VISIBLE SPECTRUM

The range of wavelength of the electromegnetic spectrum over which an unaided human eye can perfect ochanges at an alteration in color

SENSITIVITY Residence of x-ray film to Pavelengths of visible light

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SPECTRAL SENSITIVITY

The range of wavelength of the electromagnetic radiation that the film will respond

PEAK SENSITIVITY

The range of wavelength in which the film will exhibit its highest response

CUT-OFF SENSITIVITY The range of wavelength in which the film is no longer sensitive

TYPES OF FILM ACCORDING TO SPECTRAL SENSITIVITY

 MONOCHROMATIC FILM COLOR: Blue sensitive GRAINS: Globular SCREEN PHOSPHOR: Calcium tungstate (not specific emission) Sensitive to spectrum wavelength of photons
ORTHOCHROMATIC COLOR: Green sensitive