Storage Environment and Its Effect on Alteration and Damage of Acetate Films

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Abstract

Photographic materials have been produced with a variety of chemicals and substrates since their advent. In the early years from 1890 through 1930s nitrate (or nitrocellulose) base was used for cinematographic, photographic and microfilm substrates and we probably all heard stories of them being prone to spontaneous combustion. In the 1930s and certainly from the 1950s in New Zealand most of the film substrates were manufactured using a cellulose acetate base, which with homage to its predecessor was often known as "Safety Film". Scientific tests spearheaded by Kodak suggested this film would have a life expectancy of up to 100 years if stored correctly, and in truth this was accurate.

This paper presents a study of characterization of damage to acetate films. This group of films is from the collection of Vart Studio, an Armenian owner, located in the downtown of Cairo, Egypt, and it dates back to the 1930s of the last century. These films have been documented. Surface damage was identified by using a digital microscope of 1000x and 350x. These films have been digitized. UV photography was used to identify the Signs on the surface. These films have been kept in special envelopes to keep them from changing due to weather factors.

Biography:-

Mhamed Elmaymony is one of the most important photographers and collectors in Egypt. He is one of the founders of the Darkroom Foundation. He is interested in the various ancient photographic methods, methods of preservation and the factors that affect them.

Rasha Shaheen is a Senior Photograph Conservator at the Egyptian Museum. She is responsible for conserving Archives in Cairo's Museums. She finished a Master's degree in Conservation of heritage paper and photographs from Catania University in Italy. Nowadays, She enrolled in Ph.D. at Fayoum University in using

Nano Silver to treat with Black and White Gelatin Silver prints. She published many manuscripts in conservation and preservation in different materials (Photograph Prints, Textile, Moulds, Metals), but She is interested in conserving Archives (including paper, photographs, maps). She conserved many albums back to the 1800s, and 1900s), like an album back to Khedive Ismail Pasha, an Album back to the opening ceremony of the Coptic Museum, an album of Anwar Al-Sadat President of Egypt back to the 1950s. She participated in many conferences, symposiums, and meetings interested in conserving paper and photographs. She has many grants to enhance my study and career. I'm a member of AIC, IIC, and ICOM.