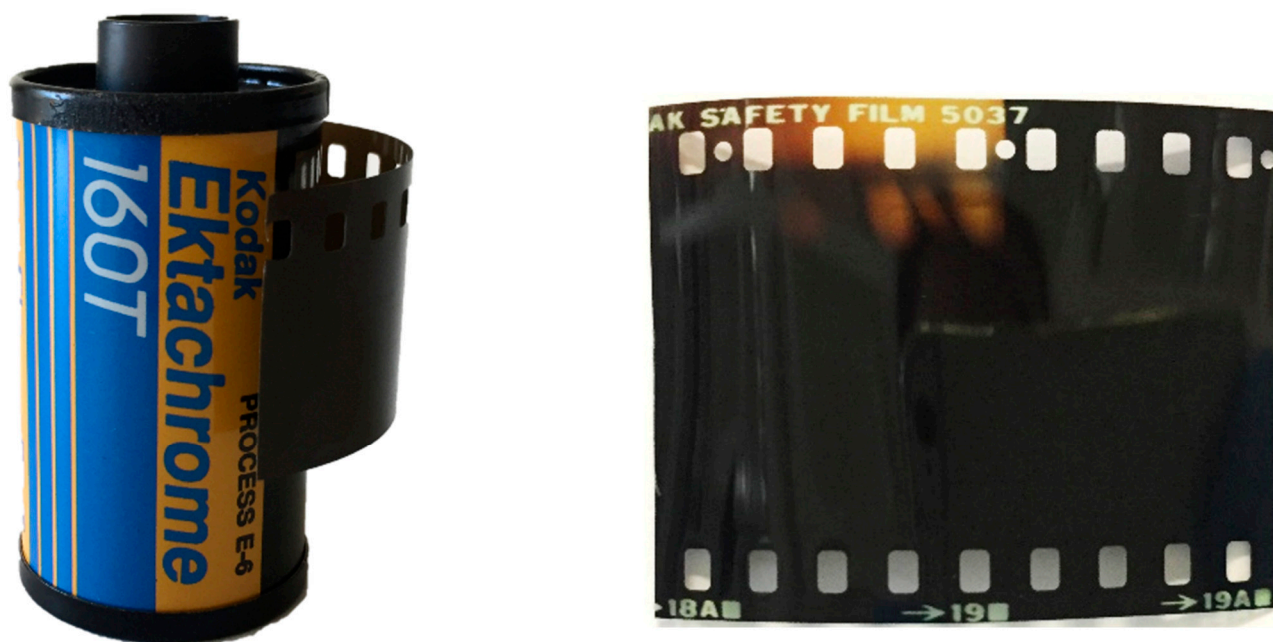


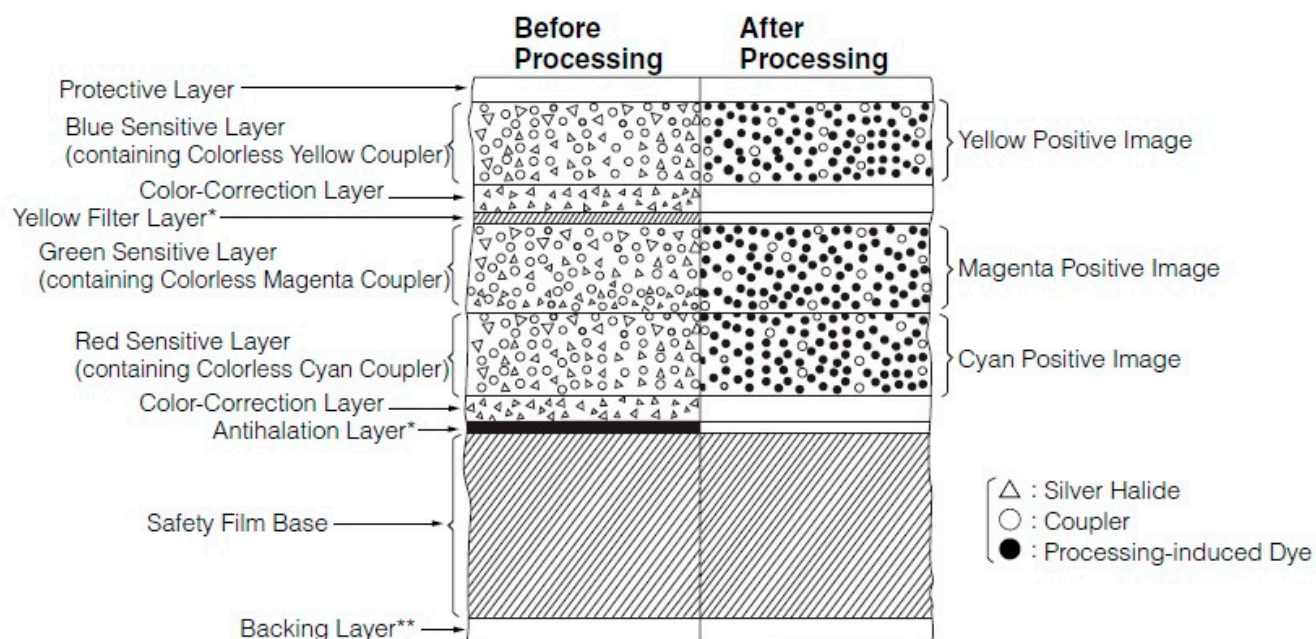
## Supplementary Material



**Figure S1.** Ektachrome 160T Professional (EPT) found in Ângelo de Sousa's archive: unprocessed roll (left), and sample/film tip used for the investigation carried out within this study (right).



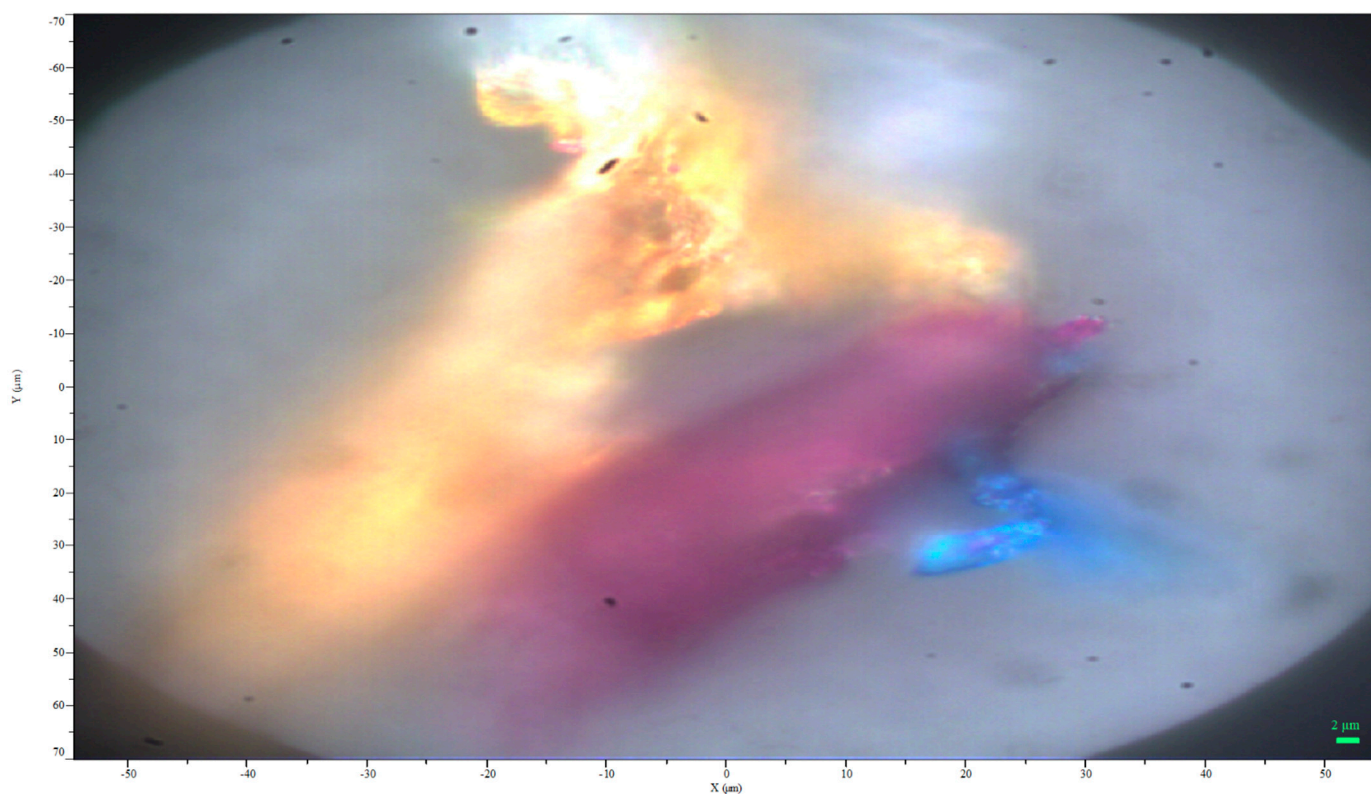
**Figure S2.** Fujichrome Provia 400X Professional (RXP) found in Ângelo de Sousa's archive: unprocessed roll (left), and commercial box where the expiration date is visible (right).



\* These layers become colorless and transparent after processing.

\*\* 135-size film does not have a backing layer.

**Figure S3.** Schematic cross-section of Fujichrome Provia 400X Professional (RXP) (data sheet from the manufacturer).



**Figure S4.** Microscopy image of a micro-sample collected from Ektachrome 160T Professional (EPT) for analysis with Raman spectroscopy, where yellow, magenta and cyan layers are discernible.

**Table S1.** Absorbance maximum ( $\lambda_{\max}$ ) and retention times ( $R_t$ ) of dyes extracted from Ektachrome 160T Professional (EPT) and Fujichrome Provia 400X Professional (RXP).

	Cyan		Magenta		Yellow	
	$\lambda_{\max}$ (nm)	$R_t$ (min)	$\lambda_{\max}$ (nm)	$R_t$ (min)	$\lambda_{\max}$ (nm)	$R_t$ (min)
<b>EPT</b>	663	31.83	551	31.23	442	31.98
<b>RXP</b>	651	33.32	546	33.45	451	33.93
			551	37.04		