Christine Fernandez-Maloigne (CIE Commission Internationale de l'Éclairage), Science and technology of colour in film history

This presentation explains how, before becoming an art and an industry, cinema was born from the convergence of different technologies, especially those related to the study of colour rendering. From the Lumière brothers to Jean-Pierre Jeunet, passing through Jacques Tati, in France, we illustrate how the colour has allowed artists to give a particular signature to their works, signature today facilitated by the use of digital tools. These tools allow, to start, the post-production, with easy changing on shadows and light. Thus, gradually, the tools developed by scientists for the synthesis and processing of digital images and videos, have entered the world of cinema, by special effects, the animation and also for the restoration of films. But we also discuss about the great revolution of cinema today: the "all digital", which allows filmmakers to go further in their relations with the public.