

The thesis deals with diffraction and other optical phenomena that can be encountered. The diploma thesis includes a theoretical introduction to the teaching of diffraction phenomena in high schools. There are mentioned aids that will suitably complement the classes thematically focused on diffraction. The first activity mentioned in the thesis uses the album of doc. Komrska with diffraction patterns. The second activity includes an interview with a young scientist Tereza Košutová, who uses diffraction in her research. The following activities cover a wider range of optical phenomena. The third activity includes a set of 34 photographs of optical phenomena from years 2016–2023. The fourth activity is a mathematical exercise deepening high school mathematical skills and argumentation. The last activity is a project that is designed with an emphasis on an individual approach.