

1138-05-31            **Bjarne Toft\*** ([btoft@imada.sdu.dk](mailto:btoft@imada.sdu.dk)), Mathematics and Computer Science, University of Southern Denmark, DK-5230 Odense M, Denmark. *Edge-coloring of graphs - A brief survey*.

In 1977 Stanley Fiorini and Robin Wilson published a book *Edge-colorings of graphs* (Pitman Research Notes in Mathematics 16) containing the first comprehensive exposition of edge-coloring theory. The book is stimulating and useful, including a complete bibliography of more than 200 works related to edge-coloring up to 1977. In 2012 a second book devoted to edge-coloring appeared (Stiebitz et al., *Graph Edge Coloring*, Wiley 2012), where Tashkinov trees are treated in detail. There is also a more recent interesting survey by Jessica McDonald in (*Topics in Chromatic Graph Theory*, ed. L.W. Beineke and R.J. Wilson, Cambridge Univ. Press 2015).

Starting from the Fiorini-Wilson book the further development, leading to the Stiebitz et al. book, will be highlighted, in particular the (somewhat neglected) work of Ram Prakash Gupta and the very important results and conjectures of Paul Seymour. The conjecture of Mark Goldberg (also called the Goldberg-Seymour Conjecture) (1970s) is still the most important unsolved problem in the area. Other famous problems are the Berge-Fulkerson Conjecture (late 1970s) and the List-Chromatic- Index Conjecture (1980s). (Received January 18, 2018)