



ENQ3213000 – Engenharia e Tecnologia de Corantes

Ciência da cor (Conceitos básicos; Sistema CIE; Instrumento de medição de cor). Tipos de corantes (naturais e sintéticos). Aplicações industriais: Corantes para a indústria têxtil; Corantes e pigmentos para a indústria cosmética; Corante para a indústria médica; Corantes para alimentos. Remoção de corantes de efluentes: Processos Físicos, Processos Químicos, Processos Biológicos, Processos Avançados.

Bibliografia:

Steven K. Shevell. The Science of Color. Elsevier: 2003.

Ming Ronnier Luo. Encyclopedia of Color Science and Technology. Springer New York: 2016.

M. Clark. Handbook of textile and industrial dyeing. Volume 2: Applications of dyes. Woodhead Publishing Limited, Cambridge, 2011.

Klaus Hunger. Industrial Dyes. Chemistry, Properties, Applications. WILEY-VCH. Darmstadt. 2003.

N. N. Mahapatra. Textile dyes. Woodhead Publishing India PVT LTD. New Delhi. 2016.

Carmen Socaciu. Food Colorants Chemical and Functional Properties. CRC Press. 2007.

Mathew Attokaran. Second edition. Natural Food Flavors and Colorants. Wiley. West Sussex, 2017.

Thomas Bechtold and Rita Mussak. Handbook of Natural Colorants. John Wiley & Sons, Ltd. 2009.

Gurdeep r. Chatwal. Synthetic dyes. Himalaya Publishing House. 2009.

Arnold R Lang. Dyes and pigments: new research. Nova Science Publishers, Inc. New York. 2009.

Padma Shree Vankar. Natural Dyes for Textiles: Sources, Chemistry and Applications. Elsevier. 2017.

Ram Lakhan Singh, Pradeep Kumar Singh and Rajat Pratap Singh. Recent Advances in Decolorization and Degradation of Dyes in Textile Effluent by Biological Approaches. 2019.



Himanshu Patel e R.T. Vashi. Characterization And Treatment Of Textile Wastewater. Elsevier 2015.

LEI Nº 13.123, DE 20 DE MAIO DE 2015.

A. Gürses et al.. Dyes and Pigments: Their Structure and Properties. Springer. 2016