- In week 41 we will focus on MCB (ring perception). If time allows, we will then focus on Petri Nets, including applications of how to use them and why they are relevant for Chemistry.

- Mandatory Reading besides the slides (see also Weekly Notes from week 40):
  - Franziska Berger, Christoph Flamm, Petra M. Gleiss, Josef Leydold, Peter F. Stadler: *Counterexamples in Chemical Ring Perception*. Journal of Chemical Information and Modeling 44(2): 323-331 (2004)
- Recommended reading if you are more interested:
  - Downs, G.M., Gillet, V.J., Holliday, J.D., Lynch, M.F.: *Theoretical aspects of ring perception and development of the extended set of smallest rings concept.* Journal of Chemical Information and Computer Sciences, 187-206 (1989)
  - de Pina, J. Applications of Shortest Path Methods, PhD Thesis, 1995
  - J. D. Horton. A polynomial-time algorithm to find the shortest cycle basis of a graph. SIAM J. Comput., 16:359-366, 1987
  - Hanser T, Jauffret P, Kaufmann G, (1996), *A New Algorithm for Exhaustive Ring Perception in a Molecular Graph.* J Chem Inf Comput Sci, 36(6):1146-1152. DOI:10.1021/ci960322f