

Contents class Wintersemester 2019/20 (Modern Applications of NMR Spectroscopy)

### Heteronuclei in NMR spectroscopy.

Class 9 – Jan. 29<sup>th</sup>

Applications in bioinorganic chemistry and biochemistry, digression into Xe-129 NMR

(8) X nuclei in bioinorganic chemistry and biochemistry

References:

- Armitage, *Biochem. Cell Biol.* **1998**, 76, 223; Vogel, *Biochem. Cell Biol.* **1998**, 76, 210 (biological NMR for nuclei of  $I = \frac{1}{2}$  and  $I > \frac{1}{2}$ )
- Armitage, *Magn. Reson. Chem.* **1993**, 31, S96 (Cd-113 2D in proteins)
- Pierson, *Magn. Reson. Imaging* **2004**, 22, 123 (Li-7 qNMR)
- Butler, *J. Am. Chem. Soc.* **1997**, 109, 1864 (V-51 transferrin study)

(8) Applications: digression into sensing and imaging: Xe-129 NMR

References:

- Jameson, *J. Phys. Chem.* **1970**, 53, 2310; Stengle, *J. Phys. Chem.* **1981**, 85, 3772; Springuel-Huet, *Magn. Reson. Chem.* **1999**, 37, 1 (Xe-129 and c.s. determining factors in gas, solution and porous solids)