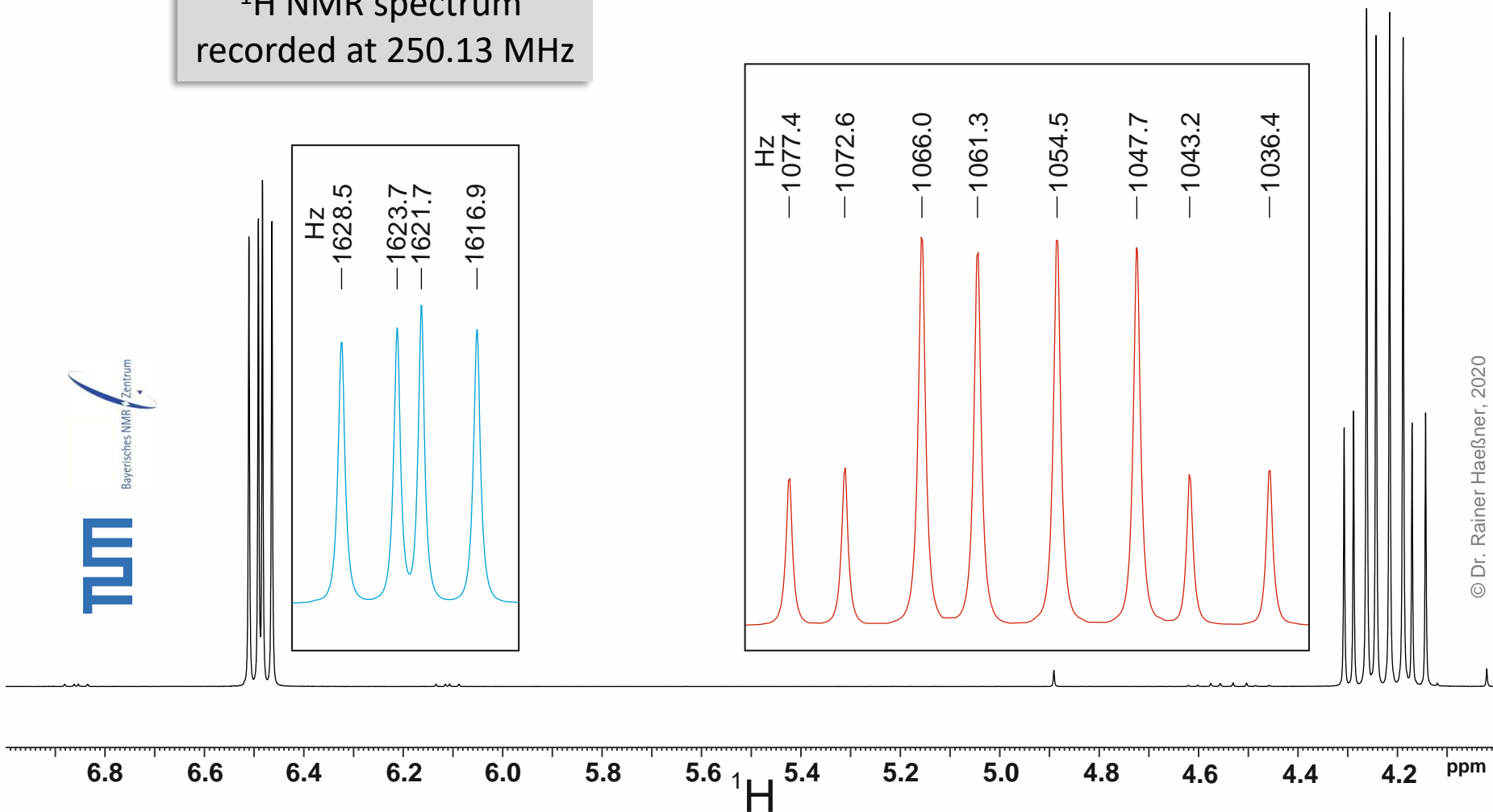


Problem of the Month: April 2020

^1H NMR spectrum
recorded at 250.13 MHz



Problem of the Month:

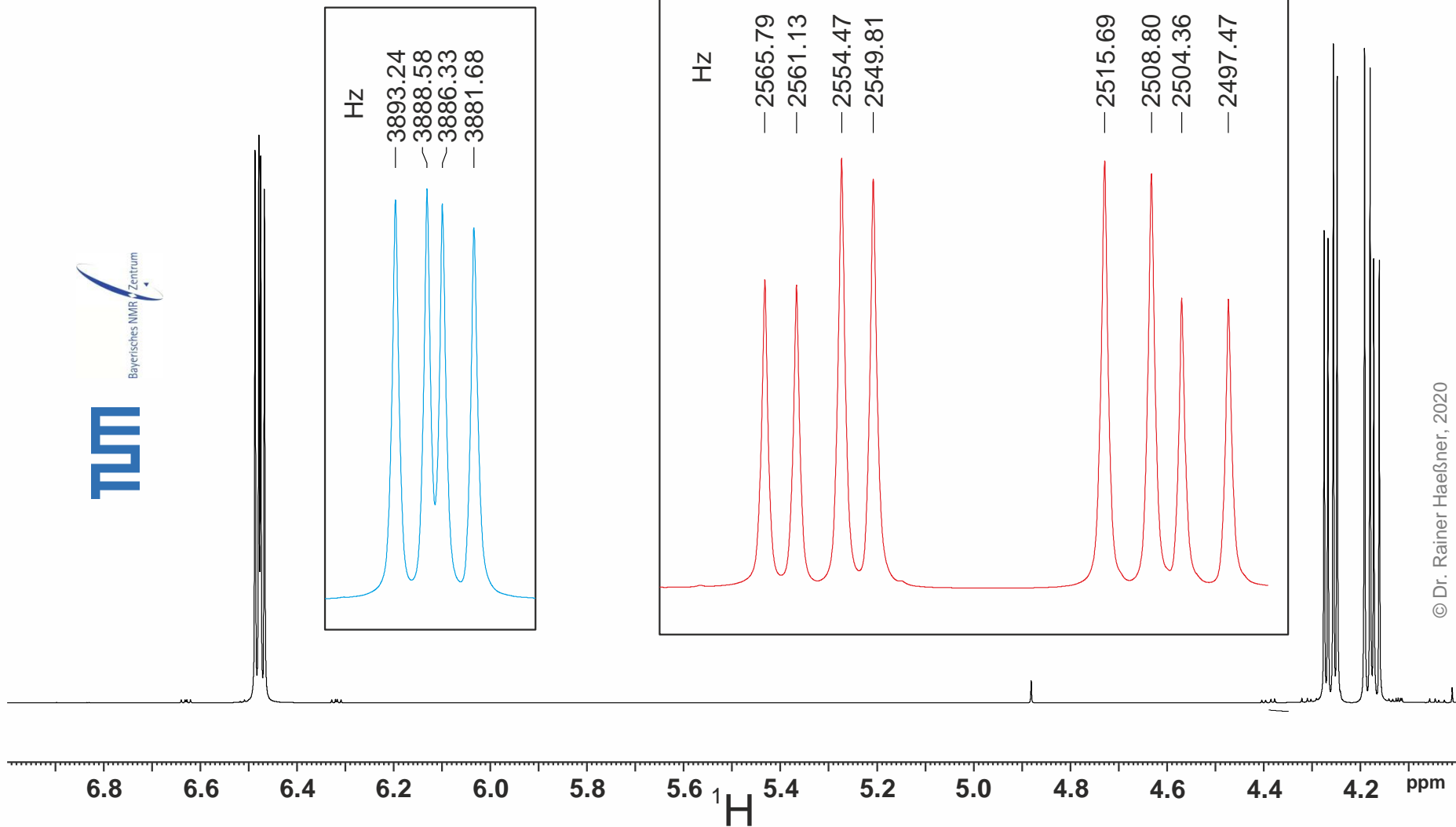
April 2020

Strategy

- (1) This example is certainly not tremendous difficult. But what is the reason for the extended coupling pattern inside the tiny molecule?
- (2) On the next page, a spectrum of the same compound is depicted, measured using a different magnetic field. Carefully compare all coupling constants at both frequencies!
- (3) Also, you might calculate the degree of unsaturation (DBE) from the molecular formula: There are two bromine atoms and one chlorine.

April 2020

^1H NMR spectrum
recorded at 600.14 MHz



Problem of the Month:

April 2020

$^{13}\text{C}\{^1\text{H}\}$ decoupled
NMR spectrum (125 MHz)

H,C HSQC @ 600/150 MHz

