TDLWintel Software – Lesson 1 – Orientation and Basic Tasks

1) Data acquisition method (sweep timing, points, frequency scale, laser I and T)
2) Fields, Modes, Methods, Menus
    a. Fields: 1 = Sample, 2 = Power Norm, 3= Background, 4=Frequency Lock (3.2)
    b. Independent fields vs. Cooperative fields (<PN>, <ABG>, <FLK4>) (3.3)
    c. Modes: Display, Current Signal, Stream, Playback (3.2)
    d. Methods: Toggles on lower left. Left click to toggle, right click to configure (3.3)
3) Windows, zoom and measure: Spectrum, concentration, status report (3.4)
4) Important displays: Range, pressure, temperature (3.3)
5) Laser control: on/off, temperature and current adjustment – Two methods (3.3, 4.5)
6) Fitmarkers and fitting parameters (5.2, 5.3)
7) Useful keystrokes
    a. Timing adjustment (Ctrl-Q and Ctrl-O)
    b. Kopy konditions (Ctrl-K)
8) Laser tuning range adjustment by modulation waveform (2.3)
9) Opening and closing valves and switches – Two methods (4.5)
10) How to share data between fields (4.5)
11) Configuration Files – saving and loading
12) Saving data: File types and methods (<WD> and <ASS>) (6.2)

TDLWintel Software – Lesson 2 – Important Procedures

1) Manual Startup
   a. Start in Field 1.
   b. Activate pressure lock with <PL> if applicable
   c. Go to stream mode with peak positions fixed. The peak locations do not matter.
   d. Adjust laser temps to put peaks roughly in the "right" place
   e. Activate <PN> if applicable, then <FLK4>
   f. Activate <ABG> if applicable
   g. Activate <WD> and <AS>
2) Setup and use Automatic Startup <AS> (App. A)
3) Set-up Automatic Background <ABG> and Automatic Calibration <CAL> (8.2, 8.3)
4) Measure laser tuning rate with etalon (App. J)
5) Using Playback mode to reanalyze or re-display data (10.)
6) Taking data at 10 Hz (App. H)
7) Water dilution corrections