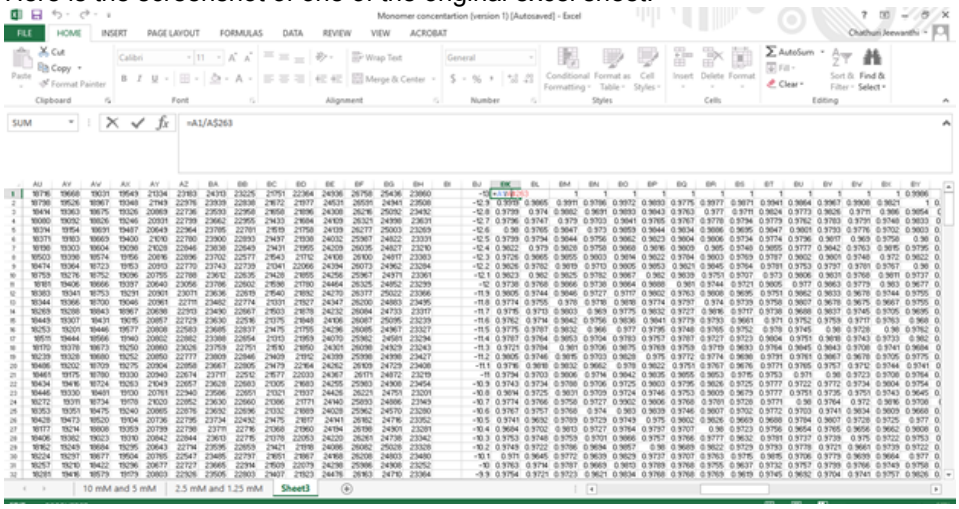
Gmail

Julio Cardenas-Rodriguez <jdatascientist@gmail.com>

Data processing steps for CEST-ML project

Chathuri Jeewanthi Kombala Nanayakkara Thambiliya <cjk037@email.arizona.edu> Fri, Apr 12, 2019 at 8:10 AM
To: Julio Cardenas-Rodriguez <jdatascientist@gmail.com>
Cc: "Pagel,Mark David" <MDPagel@mdanderson.org>, "Ma, Jacqueline" <jacqueline.cheng.ma@emory.edu>

Hi Julio,
Here are the data processing steps.
1) First I circled the ROI and got the average signal of ROI using image j.
2) Then I got the maximum value for each spectrum (Each ROI/ phantom)
3) Then each value in the spectra was divided by max value to get the water signal. (Marty told me you need the water signal as a number from 0-1. So, I didn't calculate the % water signal.)
Here is the screenshot of one of the original excel sheet.



The final Excel sheet contains water signal for all the chemical shifts.

The final version of the excel sheet contains uncentered data.
I have 5 different sheets.
Sheet 1- Polymer data
Sheet 2 - M2 monomer data (This monomer is more related to my polymer. So, I completed all the experiments for the monomer. Use this monomer data for your analysis)
Sheet 3 - M1 monomer data (Not all the experiments are completed with this monomer)
Sheet 4 - Polymer trial 2 (I repeated some of the polymer experiments- You can use these data if there is a problem with sheet 1 data)
Sheet 5 - Iopamidol data (Jacqueline (copied) did all the iopamidol experiments. She processed the data same way I did)

Let me know if you have any other questions or if there is anything to be changed.

Thanks,
Chathuri

--
Chathuri J. Kombala
Ph.D. candidate - Department of Chemistry and Biochemistry
University of Arizona
Graduate research assistant - Pagel Lab
Department of cancer systems imaging
MD Anderson Cancer Center.