

# **FRIL Research Group**

## **Journal/Thesis/Dissertation Expectations**

### **Eric Loth, July 2021**

Graduate students in FRIL (Fluids Research and Innovation Lab) are expected to organize their theses/dissertations around a set of several chapters based on manuscripts in **high impact** journals (defined on page 2). This has several key benefits:

- maximizes the impact of your research contributions
- strengthens your resume for the rest of your career
- simplifies writing of your thesis/dissertation
- allows you to finish your degree ASAP

The expectation in terms of the **number** of high-impact journal papers is listed as follows for MS and PhD students in FRIL.

#### **FRIL MS Students:**

Generally, FRIL MS theses will have 2-3 journal-quality chapters and the following status for journal manuscripts with you as the lead author before you deposit your thesis: *at least 2 manuscripts submitted for publication.*

#### **FRIL PhD Students:**

Generally, FRIL PhD dissertations will have 4-6 journal-quality chapters and the following status for journal manuscripts with you as the lead author before you deposit your dissertation: *at least 2 articles accepted for publication, at least one other submitted for publication, and at least one other in preparation for publication.*

#### **Timeline:**

Each chapter can take substantial time and revision and a journal paper can take as much as one year from submission to publication acceptance. Therefore, outline your thesis or dissertation within one year of your expected graduation, and revisit this outline every month or so.

Note that I only review chapter at a time, until it is finished. And I generally need two weeks to review each complete version you send me (for which figures and tables have already been approved). Most chapters take 2-4 revisions.

#### **Responsibility:**

- It is your responsibility to conduct the research, as well as to plan and execute the writing in a timely fashion so that the manuscript and all needed revisions are approved by Loth before submission to the university.
- It is Loth's responsibility is to support you throughout the process via guidance, reviewing and edits in a timely fashion as well as to always support your growth as a researcher.
- Senior graduate students should also help junior graduate students 😊.

#### **High Impact Journals:**

High impact journals (e.g., as indicated by high impact factor in the specific field of research or by key publications) are very competitive. Most manuscripts submitted by graduate students to high-impact journals are rejected, so don't feel bad about a rejection. While FRIL student manuscripts do well and are accepted more than 50% of the time, the FRIL acceptance is not 100% (so you need plan accordingly).

To be accepted into the top high impact journals, a manuscript requires solid research with a substantial demonstration that the work is:

- novel (represents a significant new contribution)
- fundamental (can be broadly useful)
- accurate (method and results)
- important to the field (and thus to society)
- clearly and concisely explained (so it is readable and useful)

Therefore, there is a high expectation for all authors in terms of the completeness of the research and the quality of the manuscript before it should be submitted.

Note that many journals are NOT high impact. In fact, there are some online journals who will accept your paper readily and generally publish without review (and typical charge you for publishing). These are journals with low or even zero impact factor and publishing in them can actually hurt your reputation. Be very wary of such "predatory" journals.