the wear damage, corrosion damage and fatigue damage as well as synergetic effect of these degradation phenomena.

Specific objectives of the project are:

- Acquiring necessary experience and expertise in the field of tribology and tribocorrosion.
- Fundamental understanding of fatigue assisted tribocorrosion.
- Understanding the effect of different variables (temperature, electrolyte, potential, loads, multi-phase microstructure, grain size, passive film thickness, synergy etc.) on multi-degradation phenomena.
- Proposing a model describes fatigue, wear and corrosion both solely and their synergy.

**Formal requirements:**

Three weeks after start of the thesis work, an A3 sheet illustrating the work is to be handed in. A template for this presentation is available on the IPM's web site under the menu "Masteroppgave" (http://www.ntnu.no/ipm/masteroppgave). This sheet should be updated one week before the master's thesis is submitted.

Risk assessment of experimental activities shall always be performed. Experimental work defined in the problem description shall be planed and risk assessed up-front and within 3 weeks after receiving the problem text. Any specific experimental activities which are not properly covered by the general risk assessment shall be particularly assessed before performing the experimental work. Risk assessments should be signed by the supervisor and copies shall be included in the appendix of the thesis.

The thesis should include the signed problem text, and be written as a research report with summary both in English and Norwegian, conclusion, literature references, table of contents, etc. During preparation of the text, the candidate should make efforts to create a well arranged and well written report. To ease the evaluation of the thesis, it is important to cross-reference text, tables and figures. For evaluation of the work a thorough discussion of results is appreciated.

The thesis shall be submitted electronically via DAIM, NTNU's system for Digital Archiving and Submission of Master's theses.

Co-supervisor of this work is: PhD candidate Amin Zavieh.

Torgeir Welo
Head of Division

Nuria Espallargas
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