EG3521 – Engineering Thermodynamics (Continuous Assessment) **April, 2015**

Comments on the *Continuous Assessment Activities* – Group 16

1. Report:

   (a) The main aim of *Abstracts* is to briefly describe the work undertaken by the author. In general *Abstracts* are divided in 4 parts: (i) motivation, (ii) main objectives, (iii) summary of the main procedures / techniques / technologies (optional) and (iv) main findings.

   (b) The main *Introduction* section usually has the same (but more in-depth and descriptive) four parts of the *Abstract* and a brief summary of the remaining of the work. In addition, it is always expected a few clear statements -re main background (thus recent innovations related to the main topic), initial literature review and, most of all, technological / scientific gaps in the current understanding. Also, it is expected a summary of the remaining sections at the end of the *Introduction*.

   (c) It's not made clear who the authors of the original paper actually are.

   (d) I would have written down the simplest equations in the paper (1), (2) and (3) rather than diving in at (4), (5) and (6).

   (e) I appreciate the equations here are complicated, but you should at least try to state the physical conservation law that underpins the initial equations, and what all the variables mean.

   (f) The discussion of numerical solutions techniques is good.

   (g) References in the text should all have the date published, i.e. Groves *et al.* (1972) not Groves *at el.* This particular refence doesn't appear in the bibliography and it should.

   (h) The number of references in the bibliography is limited.

   (i) A good attempt at a difficult paper.

   (j) Avoid using *colloquial (informal / personal)* writing.

   (k) Regardless of the chosen citation style (e.g., ACS, AIP, AMS, IEEE, AIAA, etc) any reference **must** contain the following fields:

      i. For journal papers: Authors, Paper Tittle, Journal Name, Volume, Pages, Year of publication;

      ii. For books: Authors, Book Tittle, Publisher, Year or Edition;

      iii. For book chapters: Authors, Chapter Tittle, Book Tittle, Editors, Publisher, Year or Edition;

      iv. For conference papers: Authors, Paper Tittle, Conference Tittle, Place (Country and/or City) where the conference was held, Year of the conference;

      v. For reports, private communications and Lecture Notes: Authors, Tittle, Place issued (Country and/or City and Institution where the document was originated), Year;

vi. For PhD Thesis and MSc Dissertations: Author, Tittle, Institution (University and Department/School), Year.

Thus, for example:

[1] P.L. Houtekamer and L. Mitchell, 'Data Assimilation Using an Ensemble Kalman Filter Technique', *Monthly Weather Review*, 126:796-811, 1998.

[2] K. Pruess, 'Numerical Modelling of Gas Migration at a Proposed Repository for Low and Intermediate Level Nuclear Wastes', Technical Report LBL-25413, Lawrence Berkeley Laboratory, Berkeley (USA), 1990.

[3] K. Aziz, A. Settari, *Fundamentals of Reservoir Simulation*, Elsevier Applied Science Publishers, New York (USA), 1986.

[4] R.B. Lowrie, 'Compact higher-Order Numerical Methods for Hyperbolic Conservation Laws', PhD Thesis, Department of Aerospace Engineering and Scientific Computing, University of Michigan (USA), 1996.

2. Oral Presentation:

(a) Do NOT read from notes and/or screen. Look at and interact with your audience.

(b) No Graphics used to illustrate thermodynamic or numerical concepts to a general audience.

(c) Do not put something in slides that you are not going to explain or something that you are not sure of.

(d) Good time keeping.

(e) Hard paper but creditable effort.

(f) Be more enthusiastic, try to burst with enthusiasm, if you are not, your audience will not be enthusiastic to listen to you.