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

# Comments on the *Continuous Assessment Activities* – Group 09

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) Avoid apostrophes in scientific writing - say 'the population of the world' rather than 'the world's population'.

   (d) Don't mix author/date and number referencing styles.

   (e) How is a solar power station (presumably subject to night and day even in orbit), able to produce a "round the clock" source of energy?

   (f) Include equations in the main text, rather than in an appendix.

   (g) A diagram comparing the different cycles would be useful.

   (h) There are no figures in the report.

   (i) Take care with subscripts, particularly on specifc heats.

   (j) The population of Earth isn't growing EXPONENTIALLY.

   (k) The relevance section repeats material discussed previously.

   (l) It's not clear what all the variables in the equations in the appendix represent. Most of these equations should be included in the main text.

   (m) Journal articles don't need URL in bibliography - the journal name, volume number and page numbers are required however.

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

   (o) 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) Good speaker change over.

(c) Neat and nice looking slides.

(d) Font on figures too small.

(e) Equations are quite small.

(f) All figures must have a caption.

(g) Delivery lacked authority.

(h) Speak at a pace that will allow a general audience to follow.

(i) Body font too small.

(j) Graphics used appropriately to illustrate technical concepts to a general audience.

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

(l) Be more careful when typing equations. (Particularly subscripts).