1. Name: **James Hiestand**

2. Education – degree, discipline, institution, year
- Ph.D., Mechanical and Aerospace Engineering, Cornell University, 1973
- M.S., Engineering (Aerospace), Cornell University, 1966
- B.S., Aeronautical Engineering, Rensselaer Polytechnic Institute, 1965

3. Academic experience – institution, rank, title (chair, coordinator, etc. if appropriate)
- The University of Tennessee at Chattanooga, UC Foundation Professor, 2001 – Present
- The University of Tennessee at Chattanooga, Associate Professor, 1987 – 2001
- The University of Tennessee at Chattanooga, Assistant Professor, 1972 – 1973, 1986 – 1987
- The University of Tennessee at Chattanooga, Adjunct Instructor, 1975 - 1985
- Clarkson College of Technology, Instructor, 1967 - 1969

4. Non-academic experience – company or entity, title, brief description of position
- Combustion Engineering, Supervisor Development, worked on LOCA accident modeling, flow distribution in steam generators, 1973 - 1985

5. Certifications or professional registrations
- None

6. Current membership in professional organizations
- American Society of Mechanical Engineers (ASME), Chattanooga Section Past President

7. Honors and awards
- Outstanding teaching award, UTC 3 times

8. Service activities (within and outside of the institution)
- University Parliamentarian, Faculty Senate, Academic Standards Committee, College Curriculum Committee, College Scholarship Committee, UTC Tau Beta Pi Treasurer.
- MathCounts, Science Olympiad, very active in church.

9. Briefly list the most important publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation
- "Piecewise Uniform Optimal Mass of a Bar with an Attached Mass" Third author with B. Belinskiy and Matt Mathews (UTC Math. Dept.). Submitted to the *Electronic Journal of Differential Equations*, December, 2014.
- "Optimal Design of a Bar with an Attached Mass for Maximizing the Heat Transfer," Third author with B. Belinskiy (UTC Math.Dept.) and M. McCarthy (Math. Dept. Murray State University) published in the *Electronic Journal of Differential Equations*, Vol. 2012, No. 181.

- "Development of Thermal Loads and Model Refinement" Robinson Imolele's Masters project, 2013.
- "Preliminary investigation of changing concrete thermal properties on transient heat flux", Jude Oshodi, Masters project, 2012.
- "The Effects of Carbon Nanotubes on CPU Cooling," with Sashi Challa and Billy Harris. Accepted for presentation at the ASME International Mechanical Engineering Congress & Exposition, Vancouver, BC Canada, 2010. Accepted but not presented.
- "A Comparison of Hemodynamic Performance in Mechanical and Biological Heart Valve Prostheses", M. Philip Mathew, M. S. Thesis, May 2010.
- Ongoing work (1) on annual heat transfer from a building with different material properties; (2) multipass heat exchanger modeling with variable geometries.

10. Briefly list the most recent professional development activities

- Attended Heat Exchanger Workshop, Pigeon Forge, TN, 2013.
- Served as Chief Proctor for the Fundamentals of Engineering Examination, October 2013.
- Attended 3 on-line workshops on ANSYS CFX flow modeling software, 2013.