

THERMODYNAMICS, HUMANITIES, AND ART

Alec Groysman

Technion (Israel Institute of Technology), Haifa, Israel

ABSTRACT

What is the relationship between thermodynamics and humanities, and art? There is mutual influence between these “cultures”. What is the meeting point in them? We speak about interdisciplinary and humanitarian thinking, enrichment, “beautifying” and “philosophizing” of thermodynamics. The aim of this work is to show how humanitarian aspects, in particular art, music, poetry, philosophy and humor can help in learning and understanding of thermodynamics.

The way to reach this aim is a demonstration the young generation of educators, scientists, engineers and students that the application of humanitarian aspects in teaching, learning, education and our very existence may be more interesting, fascinating, creative, productive, exciting, attractive, and as a result beautiful and “rich”. The examples of the use of different arts (music, painting, poetry etc.), history, philosophy and humor in the curricula and teaching of thermodynamics are shown. Special attention is given to thermodynamics of love. Students and young scientists/engineers who learn the subject of thermodynamics with the use of humanitarian aspects including philosophy and humor manifest more creativity, inspiration, passion, and satisfaction in their job and life, and as a result, are happier.

Keywords: thermodynamics, humanities, art, education