Editorial

Norman Neumann

Professor and Program Director, Environmental Health Sciences, School of Public Health, University of Alberta, Edmonton, Alberta, Canada

As the new editor-in-chief for the *Journal of Environmental Engineering and Science (JEES)*, it is with great pleasure and pride that I write my inaugural editorial to the distinguished readers of this fine journal. It is a daunting task to follow in the steps of the former senior editors of this journal, and my own personal mentors, Drs. Donald Mavinic and Dan Smith – two environmental emissaries who set the course and laid the vision for creating this foundational journal. I know it is their passion and desire that *JEES* achieve the international reputation it deserves, regaining its prominence as one of the premier journals in the fields of environmental engineering and environmental sciences. This was their goal, and it is mine. With the excellence of our editorial board, the dedicated backing of our publisher (ICE Publishing) and the great researchers contributing to this journal, this is easily achievable.

Suffice it to say, my appointment as the new editor-in-chief may require both an introduction and explanation for our esteemed readers. Alas, I must confess...I am not an engineer! So for those of you who are still reading this editorial, let me reassure you that I consider myself to be an environmental health scientist, and so perhaps partially fulfill the requirements as an editor of this fine journal. Nevertheless, I am a prodigious proponent of the collaborative spirit between environmental engineers and environmental scientists. It comes as no surprise to our venerated readers that the greatest public health achievements and advances in our society have come from partnerships made between environmental engineers, environmental scientists and public health researchers. It is these collaborations that led to the development of drinking water and sanitation systems in modern societies, representing the two greatest achievements in the history of mankind for the control of infectious diseases. To reiterate the importance of this development in our society, consider natural disasters where emergency measures are invoked. Safe drinking water and sanitation represent the two most critical and immediate needs for control of waterborne disease outbreaks (e.g. cholera, typhoid fever, amoebic dysentery, etc.) during a natural disaster.

Herein lies my personal philosophy regarding the fundamental importance of the collective work we do. As environmental engineers and scientists, we work to create safe water, safe air, safe food, safe energy and safe environments. We ensure the provision of all basic human necessities in society, a concept outlined in Maslow's hierarchy of needs (i.e. referred to by Maslow as physiological needs (Maslow, 1943)). It is only through the provision of these basic human necessities that the higher orders of civilised society can be achieved: safety, self-actualisation, social affiliation/relationships, health care systems, robust economies and even stable political systems. This traditional 'bottoms-up' view of our hierarchy of human needs succinctly illustrates the point that environmental engineering and science represent the core pillars of public health in modern society. Likewise, from a 'top-down' perspective, we understand that the greatest rewards for society rest in the scientific advancements made by environmental engineers and scientists. Creating stronger foundations simply means that we can carry more societal weight (i.e. progress). However, there is a caution to all of us in the corollary statement of this former sentence – when, and if, the societal weight becomes too heavy (e.g. widespread environmental pollution of air, water etc.) and basic human needs are not met, then society can collapse. This is thought-provoking and sobering. It is a concept that I teach to all students in public health, environmental engineering and environmental sciences. It should remind us of our societal obligations as academic scholars and professionals in environmental engineering and science and imbue us with a sense of urgency, diligence and innovation to improve the basic foundations for which our society is built upon and in which our future progress rests.

This is my vision for *JEES*.

REFERENCE

Maslow AH (1943) A theory of human motivation. *Psychological Review* 50: 370.