

Greetings From the Editor in Chief

I am currently the Twenty-First Century Endowed Chair in Nano- and Bio-Technology and Medicine, and Distinguished Professor of Electrical Engineering and Distinguished Professor of Biomedical Engineering (College of Engineering) and Neurosurgery (College of Medicine) at University of Arkansas, and Professor of Neurosurgery at Penn State Hershey Medical Center. I joined the University of Arkansas in January 2005 after serving on the faculty of Cornell University, Ohio State University, and Pennsylvania State University for the past 32 years. I am the Director of the NSF Center of Excellence for Nano-, Bio-, and Info-Tech Sensors and Systems and the Director of the High Density Electronics Center. I am a fellow of ASME, SPIE, Institute of Physics, and Acoustical Society of America. I have been awarded honorary doctorate degrees in Nano-, Bio-Technologies and Medicine and have many visiting professorship appointments in leading schools overseas. I have extensive experience as Editor-in-Chief of *Smart Materials and Structures* (published by the Institute of Physics, London) for the past 16 years.

It is a humbling thing to be given an opportunity to take up the post of Editor-in-Chief in the field of Nanotechnology in Engineering and Medicine with so many talented researchers and physicians. I would like to say a heartfelt thanks to the members of the Editorial Board and ASME Journal Committee Chair and Members, and ASME Publishing Editors for their confidence in me.

The advances of nanotechnology are benefiting various engineering fields, such as manufacturing, transportation, communication, energy, food, and environment control. Harnessing nanomaterials and nanostructures is already proven to be a great success in many new products useful for automobiles, solar cells, lightweight composites, smart textiles, flexible sensors and sensor ar-

rays, displays, wireless communication devices, etc. Besides, as most of the human cells, virus, antibodies, and proteins have dimensions in the nanometer range, nanotechnology has been utilized for healthcare. Nanotechnology offers numerous promising possibilities to significantly improve medical diagnosis and therapy, leading to an affordable higher quality of life for everyone. In recent years, more and more efforts are being made to explore the engineering and medical applications of nanotechnology, and a main trend in these research activities is converging nanotechnology with biotechnology and information technology.

I am sure the *Journal of Nanotechnology in Engineering and Medicine* (JNEM) will provide a forum to those worldwide who wish to understand currently how nanotechnology is impacting engineering and medicine and what the potentials are for its future in various fields of science and engineering and the clinical arena including cardiology, neurology and neurosurgery, oncology, diabetes and metabolism disorders. In addition, JNEM will serve as a window through which progresses from collaborative works among clinicians, engineers, and scientists on developing new nanomedical technologies will be understood and accepted better by the general public. It will also provide the directions of research, development and technological evolution for emerging fields in nanotechnology, such as organic nanoelectronic sensors for monitoring and control of various human diseases and disorders. I aim to ensure that JNEM grows in quality to best serve our diverse community of researchers and healthcare professionals and doctors and I need your valuable help in achieving this goal.

Vijay K. Varadan