



## 2022 IFMBE Election: Candidate's Profile



### Subrata Saha, Ph.D

*Position nominated for:*  
Administrative Council  
member

#### *Affiliated Society*

*Position in Society:*  
American Institute for  
Medical and Biological  
Engineering, Co-Chair,  
International Committee

#### *Primary Job:*

School of Dentistry  
University of Washington,  
Seattle, WA, USA

Distinguished Adjunct  
Professor, Saveetha Institute  
of Medical and Technical  
Sciences, Chennai, India

### Professional Achievement

- Significant contributions in the fields of Biomechanics and Biomaterials, particularly characterizing the mechanical behavior of bone and bone cement. He also evaluated the load carrying capacities of orthopedic and dental implants. He also investigated the failure behavior and mechanisms of total joint replacements.
- Conference Chair and organizer of many national and international biomedical engineering conferences including the Fourth New England Bioengineering Conference in 1976, Founded the Southern Biomedical Engineering Conference series in 1982 and organized the 1<sup>st</sup>, 5<sup>th</sup>, 18<sup>th</sup>, and 22<sup>nd</sup> of this series, Founded the Internal Conference on Ethical Issues in Biomedical Engineering in 1997 and organized all ten conferences in this series.
- Editor-in-Chief of the Journal of Long-Term Effects of Medical Implants. Founder and Editor-in-Chief of Ethics in Biology, Engineering, and Medicine: An International Journal.
- Published over 150 papers in peer reviewed journals, 47 book chapters and edited volumes, 398 papers in conference proceedings, 184 abstracts, and 30 other publications. He has received several patents including: 1) Automated bone cement mixing system (Patent # US 8,057,090B1 issued on Nov. 15, 2011), 2) Method and apparatus for facilitating the non-invasive, non-contacting study of piezoelectric members (Patent # 4,235,243 issued on Nov. 25, 1980), and three other provisional patents.

### Societal Contribution

- Distinguished Lecturer, IEEE Society on Social Implications of Technology (2016-2018)
- President, Society of Physical Regulation in Biology and Medicine (2004)
- President, Sigma Xi Chapter, University of Washington
- Chair, Steering Committee, Southern Biomedical Engineering Conference (1982-Present)

### Honours and Awards

- Fellow, Sigma Xi, the Scientific Research Honors Society (2020)
- Fellow, New York Academy of Medicine (2014)
- Fellow, American Institute for Medical and Biological Engineering (1996)
- Fellow, American Society of Mechanical Engineers (1986)
- Life Senior Member, The Institute of Electrical and Electronics Engineers (1987)
- Dr. C. P. Sharma Award (2001)
- C. William Hall Research Award in Biomedical Engineering (1987)
- Orthopedic Implant Award (2002)
- Distinguished Alumnus Award, Bengal Engineering and Science University, India (2013)