**Name in Full** : Jeong-Yun Sun
**E-mail** : jysun@snu.ac.kr

**Education & Career**

**Professor** in Materials Science & Engineering (MSE) at Seoul National University (SNU) in South Korea. 2023-Current

**Associate Professor** in MSE at SNU in South Korea. 2018-2023

**Assistant Professor** in MSE at SNU in South Korea. 2014-2018

**Post-Doctoral Fellow** in School of Engineering and Applied Science at Harvard University in USA. 2012-2014

**Doctor of Philosophy** in MSE at SNU in South Korea. 2012

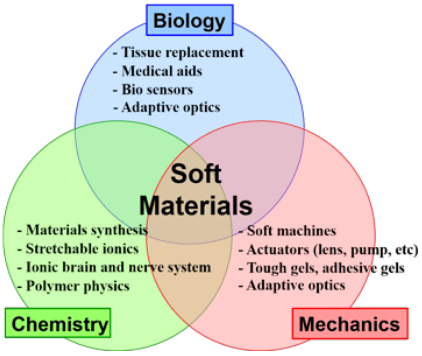
**Master of Science** in MSE at SNU in South Korea. 2007

**Bachelor of Science** in MSE at SNU in South Korea. 2005

**Biography:**

Jeong-Yun Sun is currently a professor in the Department of Materials Science and Engineering at Seoul National University (SNU), Republic of Korea. He got his B.S. (2005), M.S. (2007) and Ph.D. (2012) in Materials Science and Engineering at Seoul National University. During his Ph.D., he had stayed at Harvard University for 4 years as a visiting student. After getting Ph.D. (2012), he started to work as a postdoctoral fellow in School of Engineering and Applied Sciences at Harvard University. After his Post-Doc., he came back to SNU and worked as an assistant professor and an associate professor. His research was focused on developing soft and ionic materials. Based on the materials, he is developing many ionic devices such as sensors, actuators, energy harvesters etc. Dr. Sun has published many high impact peer-reviewed journal papers including Nature, Science, and Advanced Materials and so on. He became a member of the Young Korean Academy of Science and Technology (YKAST) in 2021. He has received honorable awards including ″S-Oil Young Scientist Fellowship Award” from S-OIL Science and Culture Foundation (2023). ″Top 100 National R&D Outstanding Achievements.” from Korean Ministry of Science and ICT (2020), ″Top 10 Nanotechnologies” from Korean Ministry of Science and ICT (2019), “Scientist in this Month” from Korean Ministry of Science (2018), “Young Scientist Award” from The Polymer Society of Korea (2017) and “Young Scientist Award” from Korean Materials Research Society (2016).

**Research Interests:**




Multi-Functional Soft Materials
- Materials for tissue replacements and medical aids.
- Solid state ionic devices for bio-medical uses.
- Bio-inspired ionic brain and nerve system.
- Soft machines (actuators and sensors).
- Stretchable Ionics.

**Selected Publications:**

1. H. Na†, Y.-W. Kang†, C. S. Park†, S. Jung†, H.-Y. Kim*, J.-Y. Sun* “Hydrogel-based strong and fast actuators by electroosmotic turgor pressure.” ***Science***, 376, 301-307 (2022).
2. S.-M. Lim, H. Yoo, M.-A. Oh, S. H. Han, H.-R. Lee, T. D. Chung, Y.-C. Joo, and J.-Y. Sun*, “Ion-to-

Ion Amplification through an Open Junction Ionic Diode." ***PNAS***, 1903900116 (2019).
3. C.-C. Kim, H.-H. Lee, K.H. Oh, J.-Y. Sun*, "Highly Stretchable, Transparent Ionic Touch Panel." ***Science***, 353, 682-687, (2016).
4. C. Keplinger*, J.-Y. Sun*, C. C. Foo, P. Rothemund, G. M. Whitesides, Z. Suo „Stretchable, Transparent Ionic Conductors." ***Science***, 341, 984-987 (2013).
5. J.-Y. Sun, X. Zhao, W. R. K. Illeperuma, K. H. Oh, D. J. Mooney, J. J. Vlassak & Z. Suo " Highly stretchable and tough hydrogels." ***Nature*** 489, 133-136 (2012).