

**Bret N. Flanders**  
**Statement of Candidacy for Faculty Senate President**

I am a physics professor who has taught and done research at K-State for the past 18 years. Although I serve on FSCOT and the CCOP of A&S, many of you may not know me well. In what follows, I aim to convince you to give me serious consideration for Faculty Senate President.

Before delving into the issues that have motivated me to run for this position, here is some background on me. I was an undergraduate at large public university in California in the early 1990s. Like K-State, that school was a Research-1 university that educated ~20,000 students per year. Acting on the saying that if you don't ask, the answer's always no, one day I knocked on the laboratory-door of a professor whom I found inspirational in class (but did not really know) and asked if I could join his research group. Well, he said no. But he also said that one of his colleagues might have a spot for me. I worked for that colleague for the next two-and-a-half years, and it changed my life. I learned about making quantitative measurements and data-analysis; I wrote small parts of research papers; I broke equipment; I fixed equipment. Sometimes his graduate students and research staff helped me with difficult course-work. The biggest take-aways, though, were that I figured out how to grow into a position and solve problems for a larger group.

K-State offers similar applied learning experiences, many times over, every year. It is one of our primary strengths. I want K-State to conserve its ability to do so, but I see threats to this strength. A stable tenure system is fundamental to K-State's ability to offer this kind of education in the sciences, arts and humanities, business, and technical fields. Scholarship—the kind that spurred my research-interests in the first place—requires many components that the tenure system enables: the attraction and retention of strong faculty, risk-taking and the academic freedom to study long-term problems, and the ability to create a wide range of academic programs. But tenure plays other roles within the university. In providing a level of protection not afforded those without tenure, it is an important tool for advocacy by the senate, allowing the body to represent the insights, commitment, and expertise of professional staff and faculty throughout the university, all of whom are dedicated to our shared educational mission. I want the Senate to retain this capability—for the good of staff, faculty and students across the university. An instructor-supported curriculum is also fundamental to K-State's ability to continue offering great educations to our students. I think there is a constructive balance to strike between future-facing protocols that normalize our curricula and enforced changes that weaken our ability to teach and support students. Underlying both of these issues—and most of the others that the Senate considers—is the degree to which the University Handbook authoritatively states the current university policies, drawing on the vigorous practice of shared governance.

Issues that are important to staff and faculty, the administration, and the Board of Regents, not to mention the evolving pressures of the budget and enrollment, are complex and if elected, I expect to spend a substantial amount of time preparing for and participating in those discussions. But my basic conviction is that I want K-State to continue to be a place where students go for the sort of transformative education and experiences that I've describe above. I want to take on this role because the faculty and staff here at K-State—and ultimately our students—are facing a number of issues that I care deeply about. I hope that you consider casting your vote my way. Over the next few years, I want to work with you all in navigating their resolution.

**Bret N. Flanders**  
Professor, Department of Physics  
Kansas State University  
Phone: (785)-532-1614 Email: [bflande@ksu.edu](mailto:bflande@ksu.edu)

**Degrees**

University of California, San Diego	B. S.	1993	Chemistry/Chemical Physics
University of Chicago	Ph.D.	1999	Physical Chemistry
University of Kansas	Postdoc	1999-2002	Chemistry/Biophysics

**Professional Positions**

2018-present	Professor	Physics	Kansas State University
2008-2018	Associate Professor	Physics	Kansas State University
2008	Associate Professor	Physics	Oklahoma State University
2002-2008	Assistant Professor	Physics	Oklahoma State University

**Awards & Honors**

2000	National Research Service Award	National Institutes of Health
2023	Faculty Mini-Sabbatical Award	Livermore National Lab
2024	Professorial Performance Award	Kansas State University

**Teaching Experience at K-State**

Biological Physics (775)	2009, 2012, 2014
Descriptive Physics (115)	2010-2022*, 2026
Thermodynamics and Statistical Mechanics (664)	2014-2025*
Physical Measurements and Instrumentation (636)	2026
Journal Club (806)	2014-2017

\*Sabbatical 2017 and 2023

I have also directed/co-directed our department's Research Experiences for Undergraduates program since 2018. Over 30% of our department's domestic graduate students are past participants of our REU program. Additionally, over the 15 years that I have taught Descriptive Physics, a one-semester general physics course for architecture students, I developed and implemented several new modules that strengthened its applied learning aspects and ultimately its popularity with the students. Two highlights are studio activities on *Waves and the Physics of Recorded Music* and *Elastic Moduli and the Strength of Materials*.

**Recent University and College Service at K-State**

College of A&S Committee on Planning	2020-2026
Faculty Senate	2024-present
Faculty Senate Committee on Technology	2024-present
President's Committee on Intercollegiate Athletics	2022-2025
KSBN First-year book selection committee	2011-13

### **Recent Publications (55 total)**

My research in soft condensed matter physics is focused on the interfacial dynamics that occur during crystal growth in the solution phase. Recent projects include the controlled growth of nanocrystalline films, growth rate amplification by stochastic and optical fields, and electric field effects on the freezing and thawing of meat. Some representative publications are listed below.

Looper JT, Hene SR, Lee SD, Zhou Z, Flanders BN, O'Quinn TG, Zumbaugh MD, Chao MD. A novel approach to improve the quality of beef Longissimus lumborum frozen under electromagnetic-assisted freezing. *Meat Science*, **232** 109992 (2026). PubMed PMID: 41192404.

Xu X, Zhou J, Nakotte T, Flanders B, Orme C. Single-step, conformal, and efficient assembly of ligand-exchanged quantum dots for optoelectronic devices via electric field. *Nanoscale*, **17** 8533-8543 (2025). DOI: 10.1039/D4NR04620J

Corrette, G. E., Jeneske, H. J., Rimmer, L. A., Koulicoff, L., Hene, S., Zumbaugh, M. D., O'Quinn, T. G., Eilert, S., Flanders, B. & Chao, M. D., Effect of Electrostatic Field Assisted Thawing on the Quality of Previously Frozen Beef Striploins, *Meat and Muscle Biology* **8** (1): 17199, 1-16 (2024). doi: <https://doi.org/10.22175/mmb.17199>

K.R. Panta, C.A. Orme, B.N. Flanders, Quantitatively Controlled Electrophoretic Deposition of Nanocrystal Films from Non-Aqueous Suspensions, *Journal of Colloid and Interface Science* **636** 363-377 (2023), <https://doi.org/10.1016/j.jcis.2023.01.004>

ER Jones, WC Huang, G Basnet, BN Flanders, and H Batelaan, "Laser-induced electron emission from Au nanowires: A probe for orthogonal polarizations," *Applied Physics Letters*, **112** 263104 (2018). <http://dx.doi.org/10.1063/1.5031440>

S Alotaibi, J Samba, S Pokharel, Y Lan, K Uradu, A Afolabi, I Unlu, G Basnet, K Aslan, BN Flanders, A Lisfi & B Ozturk, Individually grown cobalt nanowires as magnetic force microscopy probes, *Applied Physics Letters* **112** 092401 (2018). <http://dx.doi.org/10.1063/1.4997310>

G Basnet, KR Panta, PS Thapa, and BN Flanders, "Controlled Electrochemical Growth of Ultra-long Gold Nanoribbons," *Applied Physics Letters* **110** 073106 (2017). <http://dx.doi.org/10.1063/1.4976027>

S Thourson, J Morris, KR Panta, BN Flanders, and CK Payne, Conducting Polymer Nanowires for Biological Applications, *J. Phys. D*, **50** 174003 (2017).

Directed Electrochemical Nanowire Assembly: Precise Nanostructure Assembly via Dendritic Solidification. *Mod. Phys. Lett. B* **26** (1), 1130001 (2012).

Stochastic Heating at an Electrochemical Interface, US National Stage Application No.: 18/729,592 PCT/US2023/060745, National Stage Entry Date: July 17, 2024.