Atul N. Parikh

(a) Professional Preparation

University of Bombay (UDCT)	Chemical Eng.	B.Chem. Eng.	1987
Penn State University	Materials Science	Ph.D.	1994
Los Alamos National Laboratory	Bioscience Division	Post-Doctoral	1996-1998

(b) Appointments

2011-	Professor, Biomedical Engineering, University of California, Davis (UC Davis)
2011-	Professor, Materials Science & Engineering, UC Davis
2007- 2011	Professor, Applied Science, UC Davis
2001 – 2007	Associate Professor, Applied Science, UC Davis (Tenure, 2001)
1999 – 2001	Technical Staff Member, Bioscience, Los Alamos National Laboratory

(c) Publications

Five most closely related products:

2018 "Permeability and line tension dependent response of polyunsaturated membranes to osmotic stresses," Shiva Emami*, Wan-Chih Su*, Sowmya Purushothaman, Viviane N. Ngassam, and Atul N. Parikh, **Biophysical Journal** 115, 1942-1955, 2018 **[e-banner]**

2016 "Mixing Water, Transducing Energy, Shaping Membranes: Autonomously Self-regulating Giant Vesicles," James Ho C. S., Padmini Rangamani, Bo Liedberg, Atul N. Parikh, **Langmuir**, 32, 2151–2163, 2016 [**Cover**] [**Invited Feature Article]**

2018 "Pulsatile Gating of Giant Vesicles Containing Macromolecular Crowding Agents induced by Colligative Non-ideality," Wan-Chih Su*, Doug L. Gettel*, Morgan Chabanon*, Padmini Rangamani, Atul N. Parikh, **Journal of the American Chemical Society** 140, 2, 691-699, 2018

2014 "Oscillatory phase separation in giant lipid vesicles induced by transmembrane osmotic differentials," Kamila Oglecka, Padmini Rangamani, Bo Liedberg, Rachel S Kraut, Atul N Parikh, **eLife** 3, e03695 [**eCover**]

2014 "Reconstituting ring-rafts in bud-mimicking topography of model membranes," Yong-Sang Ryu, In-Ho Lee, Jeng-Hun Suh, Seung Chul Park, Soojung Oh, Luke R. Jordan, Nathan J. Wittenberg, Sang-Hyun Oh, Noo Li Jeon, Byoungho Lee, Atul N. Parikh & Sin-Doo Lee, **Nature Communications** 5, 4507-4510

Five other significant publications:

2015 "Medium Matters: Order through fluctuations? Atul N. Parikh, **Biophysical Journal** 108, 2751-2753 (2015) [**New and Notable Commentary**]

2019 "Minimal Reconstitution of Membranous Web Induced by a Vesicle- Peptide Sol-Gel Transition," James Ho C. S., Christoph Steininger, Shu Hui Hiew, Min Chul Kim, Erik Reimhult, Ali Miserez, NamJoon Cho, Atul N. Parikh, and Bo Liedberg, **Biomacromolecules** 20, 1709-1718 (2019).

2016 "Cholesterol-enriched microdomain formation induced by viral-encoded, membrane active amphipathic peptide," Joshua M. Hanson*, Douglas L. Gettel*, Seyed R. Tabaei, Joshua Jackman, Min Chul Kim, Darryl Y. Sasaki, Jay T. Groves, Bo Liedberg, Nam-Joon Cho, Atul N. Parikh, **Biophysical Journal** 110, 176-187 (2016) [**Eurekalert AAAS Highlight**]

2011 "Long-range inter-layer alignment of intra-layer domains in stacked lipid bilayers," L. Tayebi, Y. Ma, D. Vashaee, G. Chen, S. K. Sinha, A. N. Parikh, **Nature Materials**, 11, 1074–1080 [**Front Cover**] [**News & Views**]

2019 "Bio-inspired Far From Equilibrium Materials," Mohan Srinivasarao, Germano Iannacchione, and Atul N. Parikh, **MRS Bulletin**, 44, 91-95 2019. [**Guest Editorial**]

(d) Synergistic Activities

Other Roles	**(a) Expert**, Biomaterials Program, Division of Materials Research, National Science Foundation, 2018 (April 08-Oct. 07); **(b) Visiting Professor**, Linköping University, Sweden (2011-2012) and Nanyang Technological University, Singapore (2013-2018)
Scientific Dissemination:	(**a**) **Guest Editor**, MRS Bulletin, Feb. 2019 and Editorial Board, Biointerphases (2012-2018) (**b**) **Visiting Lecturer** (Oct. 2018, Dec. 2017), Sorbonne Universite, Campus Pierre et Marie Curie, Paris, France **(c) Speaker,** Engineering the Evolution, Global Innovation Summit, FAST, Yerevan, Armenia, Oct. 29-31 (**d) Continuing Symposium co-chair**, Membrane Structure, Assembly, and Mechanics Symposium, ACS Division of Surface & Colloids (2008-2018); (**e**) **Vice-Chair and Chair**, Gordon Research Conference on Biointerfaces, Les Diablerets, Switzerland, 2016 (Chair), Il Ciocco, Italy 2014 (Vice-Chair); (**f) Co-Chair**, Telluride Workshop in complexity in membranes, July 2018
Professional Advocacy:	**(a) Fellow**, American Institute of Medical & Biological Engineering (AIMBE), Inducted, 2017 **(b) Mentor**, Intercontinental Academia, Univ. Based Institutes for Advanced Studies, Singapore (2018), Birmingham, UK (2019).
Reviewer:	(**a) Proposals**: *USA*: NSF, NIH, DOE and AFOSR Young Investigator Programs, DOD and DOE SBIR; *Singapore*: Agency for Science, Technology, & Research; *Switzerland*: Swiss National Science Foundation; *Israel*, Israel Science Foundation; *Germany*, Deutsche Forschungsgemeinschaft; *UK*, BBSRC; *Portugal*, Fundação para a Ciência e a Tecnologia; *The Netherlands*, The Netherlands Organisation for Scientific Research (NWO); *Austria:* The Austrian Science Fund; *France*: Foundation for Frontiers in Chemistry. (**b) Theses:** Singapore: NTU; India, IISC; Sweden: Chalmers; Australia, Sydney and La Trobe; Austria: BOKU. (**c) Centers and Grand Challenges:** LANL, LBNL, Sandia (NanoCRISPR). (**d**) **Tenures and Promotions:** USA: New Mexico, CUNY, Virginia, Wayne State, LBNL, LLNL, Emory, IIT, UC Merced, UC Santa Barbara; Sweden: Linköing and Chalmers; Singapore: NTU; UK, Bristol; Canada, McGill (**e) Papers**: Acc. Chem. Research, ACS Nano, ACS Chemical Biology, Adv. Coll. Interf. Sci., Adv. Mater., Anal. Chem., Angew. Chimie, Biointerphases, Biophys. J, Biomat., Chemphyschem, Chem. Comm., Chem. Mater., J. Amer. Chem. Soc., J. Mol. Biol., J. Phys. Chem., Langmuir, Lab on a Chip, Nanoletters, Nature, Nature Nanotechnology, Nature Methods, Nature Materials, PNAS, Small, Soft Matter