

CV of Nicole Khan:

1. Academic Qualification

- (1) Boston University, Earth Science and Mathematics, BA, 2009
- (2) University of Pennsylvania, Earth and Environmental Science, PhD, 2014

2. Positions Held (Chronological Order)

- (1) 2017 – 2019: Research Fellow, Asian School of the Environment, Nanyang Technological University, Singapore
- (2) 2015 – 2017: Research Geologist, St Petersburg Marine and Coastal Science Center, United States Geological Survey, USA
- (3) 2014 – 2015: Postdoctoral Associate, Department of Marine and Coastal Sciences, Rutgers University, USA.

3. Research Areas Related to Ocean Science, Technology and/or Policy

The overarching theme of my research is the use of sedimentary, microfossil and geochemical indicators to produce and synthesize records of present and past storms, floods and sea levels, and their extent of geological and ecological impacts. These records provide means to assess future risk, reveal the spatial and temporal variability of coastal inundation and decipher the relationship of these events to global climatic changes. I am an international leader in bringing together regional sea-level databases spanning 20,000 years ago to present create a unified global database to answer questions about mechanisms driving local to global sea-level changes.

5. Five Key Publications over the Past 5 Years (*Corresponding author)

- (1) ***Khan, N.S.**, Horton, B.P., Engelhart, S., Rovere, A., Vacchi, M., Ashe, E.L., Törnqvist, T.E., Dutton, A., Hijma, M.P. and Shennan, I., 2019. Inception of a global atlas of sea levels since the Last Glacial Maximum. *Quaternary Science Reviews*, 220, pp.359-371.
- (2) ***Khan, N.S.**, Vane, C.H., Engelhart, S.E., Kendrick, C. and Horton, B.P., 2019. The application of $\delta^{13}\text{C}$, TOC and C/N geochemistry of mangrove sediments to reconstruct Holocene paleoenvironments and relative sea levels, Puerto Rico. *Marine Geology*, 415, p.105963.
- (3) ***Khan, N.S.**, Ashe, E., Horton, B.P., Engelhart, S., Peltier, W.R., Kopp, R.E., Dutton, A., Brocard, G., Scatena, F.N., 2017, Drivers of Holocene sea-level change in the Caribbean. *Quaternary Science Reviews*, 155, 13-36.
- (4) Ashe, E.A., Cahill, N., Hay, C., **Khan, N.S.**, Kemp, A.C., Engelhart, S.E., Horton, B.P., Parnell, Kopp, R.E., 2019, Statistical modeling of rates and trends in sea level. *Quaternary Science Reviews*, 204, pp.58-77.
- (5) Horton, B.P., Kopp, R.E., Garner, A.J., Hay, C.C., **Khan, N.S.**, Roy, K. and Shaw, T.A., 2018. Mapping sea-level change in time, space, and probability. *Annual Review of Environment and Resources*, 43, pp.481-521.