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Sytle Antao

Associate Professor

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Earth Sciences 532

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Website:

<http://ucalgary.ca/antao/>

Currently Teaching

Not currently teaching any courses.

[view past courses](#)

Selected Publications

Zaman, M., Schubert, M., and **Antao, S.M.** (2012): Elevated radionuclide concentrations in heavy mineral-rich beach sands in the Cox's Bazar region, Bangladesh, and related possible radiological effects. *Isotopes in Environmental & Health Studies*, 48, 512-525.

Antao, S.M. (2012): Structural trends for celestite (SrSO_4), anglesite (PbSO_4), and barite (BaSO_4): confirmation of expected variations within the SO_4 groups. *American Mineralogist*, 97, 661-665.

Antao, S.M. (2012): The crystal structure of a biogenic aragonite from the nacre of an ammonite shell. *Royal Society of Chemistry (RSC) Advances*, 2, 526-530.

Skinner, L.B., Benmore, C.J., **Antao, S.M.**, et al. (2012): Structural changes in vitreous GeSe_4 under pressure. *Journal of Physical Chemistry, C* 116, 2212-2217.

Students



[Mashur Zaman](#)

2011 to Present



[Allison Klincker](#)

2011 to Present



[Stephanie Round](#)

2011 to Present



[Diana Sanchez Roa](#)

2012 to Present

Awards

- Calendar
- Library
- Science Workshop
- APEGA
- CFES
- CIM
- CSEG
- CSPG
- CGU
- GAC
- MAC
- MEG
- PDAC

Antao, S.M. (2011): Crystal-structure analysis of four mineral samples of anhydrite, CaSO_4 , using synchrotron high-resolution powder X-ray diffraction data. *Powder Diffraction*, **26**, 326-330.

Antao, S.M. et al. (2010): Temperature dependence of the structural parameters in the transformation of aragonite to calcite, as determined from *in situ* synchrotron powder X-ray diffraction data. *Canadian Mineralogist*, **48**, 1225-1236.

Ehm, L., Michel, F.M., **Antao, S.M., et al.** (2009): Structural changes in nanocrystalline mackinawite (FeS) at high pressure. *Journal of Applied Crystallography*, **42**, 15-21.

Antao, S.M. et al. (2009): In situ study of the $R\text{-}3c \rightarrow R\text{-}3m$ orientational disorder in calcite, CaCO_3 . *Physics and Chemistry of Minerals*, **36**, 159-169.

Antao, S.M. et al. (2008): State-of-the-art high-resolution powder X-ray diffraction (HRPXRD) illustrated with Rietveld structure refinement of quartz, sodalite, tremolite, and meionite. *Canadian Mineralogist*, **46**, 1501-1509.

Antao, S.M. et al. (2008): The $R\text{-}3c \rightarrow R\text{-}3m$ transition in nitratine, NaNO_3 , and implications for calcite, CaCO_3 . *Physics and Chemistry of minerals*, **35**, 545-557.

Wang, J., Toby, B.H., Lee, P.L., Ribaud, L., **Antao, S.M. et al.** (2008): A dedicated powder diffraction beamline at the advanced photon source: commissioning and early operational results. *Review of Scientific Instruments*, **79**, 085105.

Lee, P.L., Shu, D., Ramanathan, M., Preissner, C., Wang, J., Beno, M.A., Von Dreele, R.B., Ribaud, L., Kurtz, C., **Antao, S.M. et al.** (2008): A twelve-analyzer detector system for high-resolution powder diffraction. *Journal of Synchrotron Radiation*, **15**, 427-432.

Moyer, Jr. R. O., **Antao, S.M. et al.** (2008): Neutron Powder Diffraction and Solid State Deuterium NMR Studies of Ca_2RuD_6 and the stability of transition metal hexahydride salts. *Journal of Alloys and Compounds*, **460**, 138-141.

Antao, S.M. et al. (2008): Network rigidity in GeSe_2 glass at high pressure. *Physical Review Letters*, **100**, 115501.

