

CURRICULUM VITAE STUART JOHN PIKETH

1. **Full name** : Stuart John Piketh
2. **Date of birth** : 16 July 1970
3. **Marital status** : Married with 2 children

4. **Qualifications:**

Doctor of Philosophy (Witwatersrand)(2000): Thesis: Transport of aerosols and trace gases over southern Africa

5. **Appointments and other**

- Director – School of Geo and Spatial Science, North-West University, Potchefstroom, May 2015-present
- Professor, School of Geo and Spatial Science, North-West University, Potchefstroom, 2012-present (co-Chair-EPPEI)

Scientific committees and Awards

- Scientific Steering Committee - International Global Atmospheric Chemistry (IGAC) Project (2005-2007).
- Scientific Steering Committee – international Commission of Atmospheric Chemistry and Global Pollution (iCACGP) (2016- present) (Deputy Chair – Africa).
- President - National Association for Clean Air (NACA) (2017-2020).
- NRF Rating (2018) – B2 (National Academic peer rating system (B2 - All or the overriding majority of reviewers are firmly convinced that the applicant enjoys considerable international recognition for the high quality and impact of his/her recent research outputs).
- Member of the Academy of Science of South Africa (2015)

Publication and Academic information

- ORCID: 0000-0002-2804-879X
- Scopus Author ID: 7003899504
- Scopus h-index: 25 (20 May 2021) (1333 Citations since 2015)
- Researchgate h-index: 31 (30 ex Self citation) (20 May 2021)
- Google Scholar h-index: 31 (20 May 2021)

External funding

- Received external funding from various sources since 1995 as PI and Co-PI
 - Local - Eskom (1995-present); SASOL (2015-present), National Research Foundation (Current project – PLATO); Water Research Commission; NOVA Institute in collaboration with Eskom, SASOL, Anglo Platinum, Northam Platinum (2015-present); Anglo Ashanti (2018-present); Department of Forestry, Fisheries and the Environment (DFFE previously DEA) – Public/Private partnership (Eskom, SASOL, ArcelorMittal, Omnia, NATREF, Anglo and NWU)
 - International - World Bank; European partners (LISA)

6. Recent Peer reviewed journal articles or book chapters (Total – 109)

- 1) LeBlanc, S. E., Redemann, J., Flynn, C., Pistone, K., Kacenelenbogen, M., Segal-Rosenheimer, M., Shinozuka, Y., Dunagan, S., Dahlgren, R. P., Meyer, K., Podolske, J., Howell, S. G., Freitag, S., Small-Griswold, J., Holben, B., Diamond, M., Wood, R., Formenti, P., Piketh, S., Maggs-Kölling, G., Gerber, M. and Namwoonde, A., 2020: Above-cloud aerosol optical depth from airborne observations in the southeast Atlantic, *Atmos. Chem. Phys.*, 20, 1565–1590, <https://doi.org/10.5194/acp-20-1565-2020>.
- 2) Bègue, N., Shikwambana, L., Bencherif, H., Pallotta, J., Sivakumar, V., Wolfram, E., Mbatha, N., Orte, F., Du Preez, D.J., Ranaivombola, M., Piketh, S., and Formenti, P., 2020: Statistical analysis of the long-range transport of the 2015 Calbuco, *Ann. Geophys.*, 38, 395–420, <https://doi.org/10.5194/angeo-38-395-2020>.
- 3) McGill, M.J., Swap, R.J., Yorks, J.E., Selmer, P.A., Piketh, S.J., 2020: Observation and quantification of aerosol outflow from southern Africa using spaceborne lidar. *South African Journal of Science*, 116(3/4), Art. #6398, 6 pages. <https://doi.org/10.17159/sajs.2020/6398>.
- 4) Muyemeki, L., Burger, R., and Piketh, S.J., 2020: Evaluating the potential of remote sensing imagery in mapping ground-level fine particulate matter (PM_{2.5}) for the Vaal Triangle Priority Area, *Clean Air Journal*, 30 (1), 1-7, <https://doi.org/10.17159/caj/2020/30/1.8066>
- 5) Sumbane-Prinsloo, L., Bunt, J., Matjie, R., Piketh, S., Neomagus, H., Waanders, F., 2020: The effect of particle size on the pollution reduction potential of a South African coal-derived low-smoke fuel, *Energy Geoscience*, 1, 165-173, <https://doi.org/10.1016/j.engeos.2020.06.006>.
- 6) Klopper, D., Formenti, P., Namwoonde, P., Cazaunau, M., Chevaillier, S., Feron, A., Gaimoz, C., Hease, P., Lahmidi, F., Mirande-Bret, C., Triquet, S., Zeng, Z., and Piketh, S.J., 2020: Chemical composition and source apportionment of atmospheric aerosols on the Namibian Coast, *Atmos. Chem. Phys.*, 20, 15811–15833, 2020.
- 7) Xulu, N.A., Piketh, S.J., Feig, G.T., Lack, D.A. and Garland, R.M. (2020). Characterizing Light-absorbing Aerosols in a Low-income Settlement in South Africa, *Aerosol Air Qual. Res.*, <https://doi.org/10.4209/aaqr.2019.09.0443>.
- 8) Redemann, J., Wood, R., Zuidema, P., Doherty, S.J., Luna, B., LeBlanc, S.E., Diamond, M.S., Shinozuka, Y., Chang, I.Y., Ueyama, R., Pfister, L., Ryoo, J., Dobracki, A.N., da Silva, A.M., Longo, K.M., Kacenelenbogen, M.S., Flynn, C.J., Pistone, K., Knox, K.M., Piketh, S.J., Haywood, J.M., Formenti, P., Mallet, M., Stier, P., Ackerman, A.S., Bauer, S., Fridlind, A.M., Carmichael, G.R., Saide, P.E., Ferrada, G.A., Howell, S.G., Freitag, S., Cairns, B., Holben, B.N., Knobelspiesse, K.D., Tanelli, S., L'Ecuyer, T.S., Dzambo, A.M., Sy, O.O., McFarquhar, G.M., Poellot, M.R., Gupta, S., O'Brien, J.R., Nenes, A., Kacarab, M., Wong, J.P.S., Small-Griswold, J.D., Thornhill, K.L., Noone, D., Podolske, J.R., Schmidt, K.S., Pilewskie, P., Chen, H., Cochrane, S.P., Sedlacek, A.J., Lang, T.J., Stith, E., Segal-Rozenhaimer, M., Ferrare, R.A., Burton, S.P., Hostetler, C.A., Diner, D.J., Platnick, S.E., Myers, J.S., Meyer, K.G., Spangenberg, D.A. Maring, H., and Gao, L., 2020: An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intERactionS) project: aerosol-cloud-radiation interactions in the Southeast Atlantic basin, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2020-449>.
- 9) Matandirotya, N.R., Cilliers, P., Burger, R.P., Pauw, C. and Piketh S.J., 2020: Risks of indoor overheating in Low-Cost Dwellings on the South African Lowveld, in Filho, W.L., et al. (eds.), *African Handbook of Climate Change Adaptation*, https://doi.org/10.1007/978-3-030-42091-8_123-1.
- 10) Muyemeki, L., Burger, R.P., Piketh, S.J., Language, B., Beukes, J.P. and P.G. van Zyl, 2021: Source apportionment of ambient PM_{10-2.5} and PM_{2.5} for the Vaal

- Triangle, South Africa, *South African Journal of Science* , 117 (5/6), <https://doi.org/10.17159/sajs.2021/8617>
- 11) Mathee, A., Moyes, J., Mkhencele, T., Kleynhans, J., Language, B., Piketh, S., Moroe, E., Wafawanaka, F., Martinson, N., McMorrow, M., Tempia, S., Kahn, K., Cohen, C., 2021: Housing Quality in a Rural and an Urban Settlement in South Africa, *Int. J. Environ. Res. Public Health* 2021, 18, 2240. <https://doi.org/10.3390/ijerph18052240>.
 - 12) Weston, M., Temimi, M., Fonseca, R.M., Nelli, N.R., Francis, D., Piketh, S., 2021: A rule-based method for diagnosing radiation fog in an arid region from NWP forecasts, *Journal of Hydrology*, 597, <https://doi.org/10.1016/j.jhydrol.2021.126189>.
 - 13) Nkosi, N.C., Burger, R.P., Matandirotya, N.R., Pauw, C., Piketh, S.J., 2021: Solid fuel use in electrified low-income residential areas in South Africa: The case of KwaDela, Mpumalanga. *Journal of Energy in Southern Africa*, 32 (1), 58-67, <http://dx.doi.org/10.17159/2413-3051/2021/v32i1a8086.W>.
 - 14) Weston, M Temimi, R Burger, S Piketh, 2021. A Fog Climatology at Abu Dhabi International Airport, *Journal of Applied Meteorology and Climatology*, 60 (2), 223-236, <http://dx.doi.org/10.17159/2413-3051/2021/v32i1a8086>.
 - 15) Moletsane, SD, Adesina, JA, Lindeque, FA, Language, B, Nkosi, NC, Burger, RP, Mkhatswa, G and SJ Piketh, 2021. Intra-urban variability of PM 2.5 in a dense, low-income settlement on the South African Highveld, *Clean Air Journal* (Accepted for publication)
 - 16) Cohen, C., Kleynhans, J., Moyes, J., McMorrow, M.L., Treurnicht, F.K., Hellferscee, O., Mathunjwa, A., von Gottberg, A., Wolter, N., Martinson, N.A., Kahn, K., Lebina, L., Mothlaoleng, K., Wafawanaka, F., Gómez-Olivé, F.X., Mkhencele, T., Mathee, A., Piketh, S., Language, B., Tempia, S., on behalf of the PHIRST group, 2021: Asymptomatic transmission and high community burden of seasonal influenza in an urban and a rural community in South Africa, 2017–18 (PHIRST): a population cohort study, *Lancet Global Health*, LANGLH-D-20-03609.

Supervision of higher degree students

Graduated Postgraduate Students

Total graduated MSc's – 53

Total graduated PhD's - 13