

Curriculum Vitae: Dr. Russell D. Sampson
Eastern Connecticut State University, Willimantic, CT 06226

PROFESSIONAL PREPARATION

Bachelor of Science (1981), University of Alberta, Math/Physics Major
Master of Science (1994) Geography (Specialization in Meteorology), University of Alberta
Interdisciplinary PhD (2001) Department of Earth and Atmospheric Sciences *and* Department of Civil and Environmental Engineering, University of Alberta

RECENT APPOINTMENTS

- **Tenured Full Professor of Physical Sciences and Planetarium Co-Director**, Eastern Connecticut State University (Teaching astronomy and meteorology, conducting research and developing and presenting planetarium programs), August 2001 to present.
- **Meteorologist**, Meteorological Services of Canada (development of instructional resources for meteorology training manuals plus assistance in the development of an arctic stratus cloud forecasting protocol) April 2001 to July 2001.
- **Science Education Director**, Edmonton Space Sciences Centre (providing children's and adult science education programming, management of a public observatory and teaching planetarium, the supervision of a team of science interpreters and museum guides, and media/public science spokesperson) 1984 to 1990.

RECENT PEER REVIEWED PUBLICATIONS

- Sampson, R. D., (2018), **Sky brightness and color measurements during the 21 August 2017 total solar eclipse: comment**, Applied Optics, 57 (22) 6559-6560.
- Depratti, R., Dancik, G., Lucci, F., and Sampson, R. D. (2017), **Development of an introductory big data programming and concepts course**, Journal of Computing Sciences in College, 32 (6), 175-182.
- Sampson, R. D., (2013), **Measuring the Relationship between Stellar Scintillation and Altitude: A Simple Discovery-based Observational Exercise used in College Level Non-major Astronomy Classes**, Astronomy Education Review, 12 (1)
- Stadnyk, R. L., Jurczak, S. C., Johnson, V., Augustine, H., and Sampson, R. D. (2013), **Effects of the Physical and Social Environment on Resident-Family Member Activities in Assisted Living Facilities for Persons with Dementia** Seniors Housing & Care Journal, 21, 1, 36-52 (winner of the SH&CJ 2013 *Paper of Merit* award)
- Sampson, R. D., Lozowski, E. P., and Fathi-Nejad, A., (2008), **Variability in low altitude astronomical refraction as a function of altitude**, Applied Optics 47, H91-H94
- Sampson, R. D., (2007), **Modeling Meteor Clusters**, Journal of the Royal Astronomical Society of Canada, 101, 57-58
- Sampson, R. D. (2007), **Estimating the Solar Apex using Stellar Radial Velocities – a Spreadsheet and Graphical Exercise for College Level Astronomy Classes**, Astronomy Education Review, 6, 226-234
- Sampson, R. D., Lozowski, E. P. and Machel, H., (2005), **Variability in low altitude astronomical refraction (LAAR) from different geographic locations – progress towards a global map of the variability in LAAR**, Applied Optics, 44, 5652
- Sampson, R. D., Peterson, A. E. and Lozowski, E. P., (2004), **The photogrammetric calibration of a consumer grade telescopic lens for 0.1 arcminute astronomical refraction measurements**, Geomatica, 58, 297. (Winner of the 2004 MDA award for best paper in Geomatica)
- Hill, L, Lozowski, E. and Sampson, R. D., (2004), **Experiments on ice spikes and a simple growth model**, Journal of Glaciology, 50, 375
- Sampson, R. D., Lozowski, E. P. and Peterson, A. E. and Hube, D. P., (2003), **Variability in astronomical refraction of the rising and setting sun**, Publications of the Astronomical Society of the Pacific, 115, 1256-1261.
- Sampson, R. D., Lozowski, E. P. and Peterson, A. E., (2003), **Comparison of modeled and observed astronomical refraction of the setting sun**, Applied Optics, 42, 342.
- Sampson, R. D., Peterson, A. E. and Lozowski, E. P., (2002), **The photogrammetric calibration of a consumer grade flatbed scanner**, Geomatica, 56, 120.

ACTIVITIES

Recent Grants and Funding

- **NASA Informal Education Grant (2019):** Public outreach event on May 10, 2019 to celebrate the 50th anniversary of Apollo 11.
- **CSU-AAUP 2017 and 2018 Travel Grants:** Research into the total solar eclipse of Aug. 21, 2017 and student research into planetarium exhibit design.
- Sub-grant of a Canadian **NSERC** (Natural Sciences and Engineering Research **Council**) grant (2001 to 2008, Dr. E. P. Lozowski principle applicant) for continued research into astronomical refraction at high zenith angles.
- Day, J. & Tannahill, C. (2011). *Science Matters: Building Content and Literacy Knowledge – Year Three*. With Koirala, H., Liu, X., and Richards, S., Drzewiecki, P., Hyatt, J.A., Koning, R.E., Loxsom, F., Sampson, R., & Szczys, P. Funded by the State of Connecticut Department of Higher Education Teacher Quality Grant Program. Funded: \$115,367.
- **CSU-AAUP 2008 Travel Grant** for the presentation of new Astronomy Outreach and Public Presentation Minor at the 2008 Middle Atlantic Planetarium Society Meeting.
- **2007 Connecticut Space Grant (NASA)** – Curriculum development Grant for production of planetarium show on NASA activity in Connecticut.
- **CSU-AAUP 2006 Research Grant** for continued collaborative work with Earth and Atmospheric Science Dept., University of Alberta.
- **CSU-AAUP 2006 Faculty Development Grant** – for the development of undergraduate astronomy laboratory exercises.
- **CSU-AAUP 2005 Travel Grant** for the presentation of new research into astronomy education at the 2006 Middle Atlantic Planetarium Society Meeting.
- **WE Heraeus Foundation Travel Grant 2004** (Germany) to present an invited paper at the 8th Congress on Meteorological Optics, Bad Honnef, Germany.
- **CSU-AAUP 2004 Research Grant** for continued collaborative work (with Earth and Atmospheric Science Dept., University of Alberta) into the comparison of astronomical refraction in subarctic continental and a maritime tropical climate.
- **CSU-AAUP 2003 Travel Grant** for collaborative research into astronomical refraction in a maritime tropical climate and presentation of refraction research at the Caribbean Institute of Meteorology and Hydrology (Barbados)
- **CSU-AAUP 2002 Research Grant** for research into photogrammetry and astronomical refraction at the Department of Civil and Environmental Engineering and the Earth and Atmospheric Sciences Department, University of Alberta.
- **University of Alberta, visiting scientist grants:** (summer 2002, intersession 2002 – 2003, summer 2003, intersession 2003 – 2004) for continued collaborative research into refraction, photogrammetry and ice physics.

Service within ECSU Physical Sciences Department

- Co-director of the Wickware Planetarium, (2001 to present)
- Coordinator of Public programming at the Wickware Planetarium, (2001 to present)
- Chair of the Departmental Evaluation Committee, (2012 to 2015)
- Department liaison for Advisement Center (2001 to present)
- Library Builder (2014 to present)

University-Wide Committees and Service

- Senate representative for Department of Physical Sciences (2017 to present)
- Invited consultant and member of the Arts and Lecture Series (2014)
- ECSU Sabbatical Leave Committee (2013 to 2015)
- COFE II Committee on Academic Quality (2013)
- ECSU Foundation Scholarship committee (2005 to 2012)

Service to the Community and to the Profession

- Manuscript referee (peer reviewer) for Optical Society of America.
- Member of the Mid Atlantic Planetarium Society's
- Full member of the Sigma Xi Scientific Researcher Society.
- Member of the International Astronomical Union
- Member of the Royal Astronomical Society of Canada