Dr. Charles L. Matson

Dr. Charles L. Matson, a member of the Scientific and Professional Cadre of Senior Executives, is Chief Scientist, Air Force Office of Scientific Research, Arlington, Va. Dr. Matson is the principal science and technology adviser to the director in matters of formulation, planning, managing and integration of all Air Force basic research programs. The office has a staff of 200 people and an annual working budget of $400 million that support more than 5,000 worldwide basic research projects critical to the defense of the U.S. The office selects, sponsors, and manages research relevant to Air Force needs in science and technology, and is the single manager for the entire Air Force basic research program. AFOSR reports to the Air Force Research Laboratory at Wright-Patterson Air Force Base, Ohio.

Dr. Matson was born in Spokane, Washington. He joined the Air Force Weapons Laboratory (a precursor to the Air Force Research Laboratory) in 1987 as an Air Force Captain and research scientist in the Advanced Technology Imaging Branch. He has conducted research in a variety of areas including space surveillance technologies, laser propagation, biomedical imaging, high-performance computing, and image and signal processing theory. His research results have been used in a variety of applications, including guiding the development and assessment of space surveillance systems and assets, providing optical imagery in support of the Space Surveillance Network, and defining the 'art of the possible' in space surveillance. In between his Air Force military career and his Air Force civilian career, he taught and conducted research in the electrical engineering department of Seattle Pacific University.

Dr. Matson has published more than 100 journal articles and conference proceedings, and several book chapters and patents. He has given numerous invited presentations nationally and internationally. He is an active member of the Optical Society of America and SPIE, serving on various governance and award committees, and as an associate and advisory editor to the all-electronic archival journal Optics Express. He has also helped organize and run many international conferences.

Education

1982 Bachelor of Science degree in electrical engineering, University of Washington
1983 Master of Science degree in electro-optics, Air Force Institute of Technology
1986 Doctor of Philosophy degree in mathematics, Air Force Institute of Technology

Career Chronology

1. 1982 - 1991, active duty Air Force officer
2. 1987 - 1991, research scientist, Advanced Technology Imaging Branch, Air Force Weapons Laboratory, Kirtland AFB, N.M.
3. 1991 - 1993, assistant professor, Seattle Pacific University, Seattle, Wash.
4. 1993 - 1996, research scientist, Deep Space Surveillance Branch, Phillips Laboratory, Kirtland AFB, N.M.
5. 1997 - 2000, research scientist, Surveillance Technologies Branch, Air Force Research Laboratory, Kirtland AFB, N.M.

6. 2000 - 2004, research scientist, Space Surveillance Technologies Branch, Air Force Research Laboratory, Kirtland AFB, N.M.
7. 2004 - 2008, research scientist, Analysis Branch, Optics Division, Air Force Research Laboratory, Kirtland AFB, N.M.
8. 2008 - 2013, Senior Scientist for Optical Beam Control, Air Force Research Laboratory, Kirtland AFB, N.M.
9. 2013 - present, Chief Scientist, Air Force Office of Scientific Research, Arlington, Va.

Awards and Honors
1990 Air Force Systems Command Outstanding Research and Development Award
1991 Air Force Weapons Laboratory Giller Award
1996 IEEE Senior Member
2000 Fellow, Optical Society of America

Professional Memberships and Associations
Optical Society of America
SPIE
Tau Beta Pi

(Current as of March 2013)