ALAN J. WOOTTON
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Personal

Birth date: June 16, 1948

Education

1969 - 1973	**PH.D.** Physics (London University) Thesis Title: The motion of a theta pinch in a perturbing magnetic field
1966 - 1969	**B.Sc.** Physics (London University), first class honors

Employment

2009 – 2017	Director, Institute for High Energy Density Science, University of Texas at Austin
2008 – 2017	Scientist (consulting), Vector Resources Inc
2006 – 2008	On assignment, scientific advisor to NNSA
2002 – 2006	Chief Scientist, Lawrence Livermore National Laboratory, Physics and Advanced Technologies Directorate
2001 – 2002	Senior Scientist, Lawrence Livermore National Laboratory, Physics and Advanced Technologies Directorate
1998 – 2001	Senior Scientist, Lawrence Livermore National Laboratory; ICF/NIF Diagnostic Leader and NIF Associate Project Manager
1993 - 1998	Director, Fusion Research Center, University of Texas at Austin
1990 - 1998	Professor, Physics Department, University of Texas at Austin
1985 - 1993	Director of TEXT and Associate Director of Experimental Research, Fusion Research Center, University of Texas at Austin
1981 - 1985	Experimental Physicist, Oak Ridge National Laboratory (Fusion Energy Division)
1977 - 1981	Senior Scientific Officer, Culham Laboratory, UKAEA, England
1974 - 1977	Research Assistant, Culham Laboratory, UKAEA, England
1972 - 1974	Research Assistant, Royal Holloway College, London University

Publications (all numbers approximate)

Refereed journal articles	150
Conference proceedings	250
Abstracts (e.g. APS)	300
Chapters in books	6
Books edited	2

Students

Ph.D.: 15. M.Sc.: 3

Honors

Fellow, APS. Citation: "For extraordinary leadership in the experimental investigation and understanding of turbulent processes in tokamaks and for guiding the development of new methods for diagnosing tokamak plasmas".

Fellow, Institute of Physics.

Work Experience Summary

During 2009, Alan accepted the part-time position of Director of the Institute for High Energy Density Science, a joint venture by the University of Texas Systems and the Sandia National Laboratories. In this position he has developed and is overseeing a successful Collaborative User Program at the Z Accelerator Facility at Sandia National Laboratories in Albuquerque. He is also a consulting scientist at Vector Resources Inc. (from 2008 to the present), working for NNSA and DOE (Fusion Energy Sciences). From August 2006 to 2008, Alan Wootton was on assignment to the National Nuclear Security Administration, Washington, DC, advising on scientific matters. From July 2002 to August 2006 he held the position of Chief Scientist in the Physics and Advanced Technologies (PAT) Directorate at Lawrence Livermore National Laboratory (LLNL). As such he served as the primary advisor to the Associate Director on strategic directions for and investments in the Directorate's science bases. He lead the PAT LDRD (Laboratory Directed Research and Development) portfolio, served as point-of-contact to the Laboratory Science and Technology Office, was responsible the post-doctoral and graduate student programs in the Directorate, worked with the PAT Divisions to align scientific activities with the PAT strategic plan, fostered inter-Directorate collaborations, encouraged national and international scientific outreach, promoted awards and recognitions for PAT, and ran the Directorate seminar series. As a member of the senior staff he oversaw the Directorate Review Committee meetings, and participated in workforce reviews, self-assessments, and Laboratory-wide strategic planning.

From January 2001 to June 2002 Alan Wootton was a Senior Scientist in the Physics and Advanced Technology (PAT) Directorate at Lawrence Livermore National Laboratory (LLNL). He coordinated the Laboratory effort on the Linac Coherent Light Source (LCLS), a next-generation light source proposed for SLAC. He was a member of the LCLS executive committee. The Laboratory's responsibilities at LCLS include: x-ray optics, x-ray diagnostics, experimental design and layout, and the lead role in the plasma physics experiments. In addition Alan Wootton was a member of Laboratory LDRD Strategic Initiative committee, the PAT strategic planning committee, and the Laboratory Distinguished Postdoctoral Fellow committee.

From July 1998 to December 2000, Alan Wootton was a Senior Scientist at LLNL, working on the National Ignition Facility (NIF) project and the National Inertial Confinement Fusion (ICF) program as an Associate Project Leader. He lead the associated national diagnostic program, in the capacity of chairman of the Joint Central Diagnostic Team, a multi-laboratory advisory group. Within LLNL he was responsible for leading and managing NIF diagnostics and related equipment. He was scientific advisor for all NIF target area systems. He was involved in NIF long-term engineering and physics plans. Diagnostics under his consideration included particle, optical, x-ray, and nuclear. He was chairman of the LLNL Distinguished Fellowship Committee; he was also involved in the Laboratory research program selection process, and Laboratory hiring and retention processes.

Prior to this he was Director of the Fusion Research Center of the University of Texas at Austin, and Professor in the Physics Department of the University of Texas at Austin. The Center was responsible for operation of the experimental USER facility TEXT, a medium size tokamak. Additional projects he was responsible for included experimental, theoretical and computational plasma studies, data-base design and construction, diagnostic development, plasma device (including reactor and next generation machine) design and optimization, development of plasma rocket exhaust models, and superconducting coil design. The objectives of the program were a) to provide a facility for outside users, b) to provide a mechanism for

undergraduate and graduate physics and engineering education, and c) to undertake a local research program. The group consisted of up to 60 full time equivalents, with annual funding from grants and contracts of approximately $5M a year. Typically 25 graduate students were involved and funded at any one time. Alan was awarded and administered grants and contracts from: DoE (multiple), UKAEA, NASA, Princeton Plasma Physics Lab., Academia Sinica, and the Texas Atomic Energy Foundation.

As a Professor he worked with both undergraduate and graduate students, and developed and taught classes in plasma physics and plasma diagnostics. He developed a M.Sc. course on the science of sensors, which became a 'video course' with other institutions. He actively participated in departmental affairs, in particular in discussing the future direction of the department.

Alan Wootton's research interests have spanned most aspects of photon–material interactions, plasma science, fusion technology, x-ray optics, science on light sources, and all diagnostics. Examples of his work are found in Selected Research Highlights, or in a detailed publication list available upon request. He is interested and involved in scientific policy and direction, serving on many panels. He has taken an active role in briefing congressional personnel at all levels. He intends to remain involved in enabling world-class research, scientific leadership and management, while retaining an active interest in education.