

## Resume: TOSHIKI TAJIMA

### PERSONAL:

Birthdate: January 18, 1948;  
Office phone: 1-949-824-4253

### OCCUPATION:

Norman Rostoker Chair Professorship, University of California at Irvine, Irvine, CA 92697  
Deputy Director, International Center for Zetta- Exawatt Science and Technology, Ecole Polytechnique, Route de Saclay, F-91128 Palaiseau, France  
Guest Professor, Ludwig Maximilian University, D-85748 Garching, Germany  
Guest Professor, KEK High Energy Accelerator Laboratory, Tsukuba, Japan  
Chief Science Officer, Tri Alpha Energy, POBox 7010, Rancho Santa Margarita, CA 92688

### FIELDS OF EXPERTISE:

High Field Science, Plasma Physics, Advanced Accelerator Physics

### EDUCATION:

University of Tokyo, Tokyo, Japan  
B.S. in Physics 1971  
M.S. in Physics 1973  
University of California, Irvine  
Ph.D. in Physics 1975

### CAREER:

UNIVERSITY OF CALIFORNIA, LOS ANGELES  
Assistant and Associate Research Physicist, 1976-1980

THE UNIVERSITY OF TEXAS AT AUSTIN: 1980-2001  
Assistant, Associate, Full Professor of Physics, and  
The Jane and Roland Blumberg Professor in Physics, 1980-2001  
(also, Professor of Computational and Applied Math)

Lawrence Livermore National Laboratory, University of California: 1998-2001  
Special Assistant to the Associate Director

Stanford Linear Accelerator Center, Stanford University: 2000-2002  
Special Project

Japan Atomic Energy Research Institute (later, Japan Atomic Energy Agency):  
2002-2008  
Director General: Kansai Photon Science Institute, and  
Deputy Director General: Quantum Beam Science Directorate  
also Director : Photo Medical Research Center (2007-2008)

KEK High Energy Accelerator Laboratory, Tsukuba: 2008-

Specially Appointed Professorship; Guest Professor

Japan Atomic Energy Agency: 2008-2012  
Specially Appointed Researcher; Guest Researcher

Ludwig Maximilian University: 2008-2011  
Chair Professor, Munich Advanced Centre Fellow

MEMBER: SSC Laboratory, 1989-1993  
Lawrence Berkeley Laboratory, University of California, Berkeley,  
(Affiliated) 1995-2000  
Department of Applied Science, University of California at Davis, 1999-2000

HONORS: (primary)  
Fellow, American Physical Society (for laser acceleration)  
Farrington Daniels Award (2005) (for laser driven particle therapy)  
Suwa Prize (2006) (laser acceleration)  
Nishina Memorial Prize (2006) (laser acceleration)  
The Blaise Pascal Chair awarded (2009) (high field science)  
Einstein Professorship of Chinese Academy of Science (2013) (high field science)  
(others)  
Fellow, Japan Society for the Promotion of Science  
Member, National Research Council (Commission H) of the National Academy of Science (global magnetospheric dynamics)  
Robert W. Hamilton Award (1997, University Cooperative Society) (plasma astrophysics)  
JAERI Excellence Prize (1999) (high field science simulation)  
Fellow, JAEA (2008) (photo-medical research)  
JAEA President's Award (2008) (relativistic mirror)  
Achievement Prize, Laser Society of Japan (2012) (laser engineering)

DISTINGUISHED LECTURES (recent selected ones only)  
Galileo Galilei Colloquium (University of Pisa, Jan. 2009)  
Plenary Lecture of SPIE ((Prague, April, 2009)  
Magistral Lecture (Ultraintense Laser Interaction Science), May, 2009)  
30<sup>th</sup> Anniversary Lecture of Laser Acceleration, Abdus Salam International Centre for Theoretical Physics (Trieste, Aug., 2009)  
440<sup>th</sup> Heraeus Seminar (Frauenwoerth, Sept., 2009)  
History and Future of Laser Technology on 50<sup>th</sup> Anniversary of Laser Invention (AAAS, San Diego, Feb., 2010)  
CERN Accelerator Lecture( CERN, June, 2010)  
Physics in Intense Fields Lecture (KEK, Nov., 2010)  
Blaise Pascal Lectures (Ecole Polytechnique, Oct. 2009-Dec.2010)  
Laser 50<sup>th</sup> anniversary Lecture (Paris, June, 2010)  
Laser Physics 2012 Plenary Lecture (Calgary, July, 2012)

IZEST Lecture (Strathclyde, Nov., 2012)  
 ASEPS Plenary Lecture (Chiba, July, 2013)  
 Einstein Lectures (Shanghai, Sept., 2013)

MEMBERSHIPS: Physical Society of Japan  
 Beta Alpha Phi  
 American Physical Society  
 American Geophysical Union  
 American Astronomical Society  
 Laser Society of Japan

COMMITTEE SERVICE (some of):

Chairman, International Conference on Laser 1983 (San Francisco)  
 Management Committee, Joint Institute for Fusion Theory (1984-1998)  
 International Conference on Supercomputing co-organizer (1985)  
 Steering Committee, Texas High Energy Physics Committee (1989-1993)  
 Fellowship Committee, American Physical Society (1999,2001)  
 Science and Technology Council, Laser Directorate, Lawrence Livermore  
 National Laboratory (1999)  
 Executive Committee, American Physical Society, Plasma Astrophysics (1999-  
 2001)  
 Laser Society of Japan, Steering Member and Director of 2005 Organizers  
 International 'Laser Physics 2005', Co-Chair  
 Trilateral Committee for Intense Lasers (Japan-China-Korea), Co-Chair (2005-  
 2008)  
 Chair, Beam Physics Division, Physical Society of Japan (2004-2008)  
 Chair, Beam Physics Council of Japan (2004-2008)  
 International Committee for Ultra Intense Lasers, Co-Chair (2006-2008);  
 Chairman (2008-)  
 Deputy Chair, Accelerator Society of Japan (2008-2010)  
 Max Born Institute, Scientific Advisory Board (2006-)  
 Extreme Light Infrastructure, Scientific Advisory Committee, Chairman (2008-  
 2011)  
 International Linear Collider Global Design Effort, Accelerator Advisory Panel  
 (2009-)  
 Institute Lumiere Extreme, Scientific Advisory Board (2010-)  
 Extreme Light Infrastructure-Nuclear Pillar, International Advisory Board  
 (2011-)

GRADUATE  
 STUDENTS

THE UNIVERSITY OF TEXAS AT AUSTIN

26 Ph.D. students (R. Sydora, J. Geary, E. Zaidmann, M. LeBrun, T.  
 Kurki-Suonio, G. Bust, A. McAllister, S. Cable, R. Kinney, J. Koga, J.  
 Cobb, B. Chen, D. Barnett, D. Fisher, G. Tarhenton, G. Furnish, D. Wolf,  
 W. Nystrom, J. Daniel, M. Ottinger, B. Rau, W. Chou, X. Chen, C. Lai,  
 K. Noguchi, S. Cheshkov) and 8 MSc students(T. Fujinami, C. Haswell,

K. Lee, Z. Lin, U. Dittmann, R. Jones, F. Breitling, F. Raischel)  
supervised.

Ludwig Maximilian University

5 PhD students co-supervised (dissertation committee) (S.

Rykovanov, K. Schmid, M. Fuchs, A. Henig, A. Buck)

University of California at Irvine

1 MS student (P. C. Yeh)

TEACHING:

The University of Texas at Austin, Department of Physics,

Graduate and Undergraduate Courses

University of California at Davis, Department of Applied Science,

Graduate Courses

Ludwig Maximilian University of Munich, Faculty of Physics,

Graduate Courses

University of California at Irvine,

Graduate Courses