

Nov. 1, 2022

## Curriculum Vitae

Name: Kazuo Tanaka  
Birth Date: Apr. 4, 1951  
Birth Place: Kagawa, Japan  
Nationality: Japan  
Current Position: Senior Scientist at ELI-NP and  
Specially Appointed Professor at Institute of Laser Engineering,  
Osaka University



### 【Current Affiliation】

1. ELI-NP: Extreme Light Infrastructure-Nuclear Physics  
Horia Hulubei National Institute of Physics and Nuclear Engineering  
30 Reactorului Str., PO Box MG6, Magurele-Bucharest, Romania 077125  
Tel: +44-755-090-173  
E-mail: [kazuo.tanaka@eli-np.ro](mailto:kazuo.tanaka@eli-np.ro)
2. ILE: Institute of Laser Engineering, Osaka University  
Yamada-oka 2-6, Suita, Osaka 565-0871 Japan  
Tel: +81-66879 8733  
E-mail: [kazuo.a.tanaka.ile@osaka-u.ac.jp](mailto:kazuo.a.tanaka.ile@osaka-u.ac.jp)

### 【Educational Record】

1974: Osaka University, Bachelor Eng. In Electrical Eng.  
1976: Osaka University, Master Eng. In Electrical Eng.  
1979: University of Rochester, Master in Plasma Science  
1982: University of Rochester, PhD in Plasma Science

### 【Job Record】

1982-: Research Associate at Laboratory for Laser Energetics, University of Rochester, N.Y. U.S.A.  
1984-: Assistant Professor, Osaka University, Osaka Japan  
1991-: Associate Professor, Osaka University  
1995-1997: Visiting Professor, Yokohama National University, Japan  
2001-2016: Professor, Osaka University  
2009: Visiting Professor, National Institute of Fusion Science, Japan  
2011-2015: Director of Center for Nonlinear Science and Engineering, Osaka University  
2011-2016: Director of Science and Engineering Library, Osaka University  
2012-2013: Program Officer of Research Center for Science Systems, Japan Society for the Promotion of Science.  
2016-2022: Scientific Director, ELI-NP, Bucharest Romania  
2016-: Specially Appointed Professor of Osaka University, Osaka Japan  
2016-: Professor Emeritus of Osaka University, Osaka Japan  
2022-: Physicist of ELI-NP Romania  
2022-: Appointed Professor at ILE, Osaka University Japan

Fields: Nuclear Photonics, Relativistic Laser Plasma Nonlinear Interaction, Laser Fusion, Plasma Physics, and High Energy Density Physics

### 【Fellow & Award】

1. International Rotary Club Fellowship (1978)
2. APS (American Physical Society) Fellow, U.S.A. (2003)  
Citation "For outstanding experimental contributions to high energy density plasma physics in the areas of laser-plasma interactions, equation of state, cryogenic implosions, and fast ignition."
3. Award of Ministry of Education and Culture Japan (2005)  
Jan. 22, 2018  
Citation "For original first proof of fast ignition heating scheme."
4. APS Dawson Award, U.S.A.(2006)  
Citation "For developing the Fast Ignition inertial fusion concept and for demonstrating key aspects of it in a series of experiments that have catalyzed the world-wide effort on the concept."
5. Daiwa Award, U.K. (2007)  
Citation "For international outstanding research on fast ignition."
6. Progress Award, Laser Society of Japan(2011)  
Citation "For Advanced ultra intense laser PW laser system development."

### 【Activity Report】

- Board Member of IFSA: Inertial Fusion Science and Applications (International Conference)(2001-)
- Board Member of Japanese Society of Plasma Science and Nuclear Fusion Research(2004-2008)
- Board Member of Institute of Laser Technology(2000-)
- Program Chair of Japanese Society of Plasma Science and Nuclear Fusion Research(2004-2006)
- Editor in Chief at Japanese Society of Plasma Science and Nuclear Fusion Research(2006-2008)
- Editor of Plasma Physics and Controlled Fusion (2006-)
- Board Member of Asian Intense Laser Network (2006-)
- Board Member of International Committee on Ultrahigh Intensity Lasers(2007-)
- Board Member of Plasma Physics and Controlled Fusion Journal at the Institute of Physics, U.K. (2006-)
- Deputy Chair Japanese Physics Society, Division of Plasma Physics (2007-2008)
- Chair Japan Physical Society, Division of Plasma Physics (2008-2009)
- Board Member of Institute of Laser Engineering (2005-2009)
- Board Member of Institute of Laser Technology (2005-2018)
- Board Member of Laser Society of Japan (2009-2018)
- Representative delegate of Japan Physical Society (2011-2013)
- AAPPS-DPP IOC (International Organizing Committee) member (2019-)  
<https://nps.org.np/wp-content/uploads/2021/05/Preliminary-announcement-v3.pdf>
- ICUIL (International Committee on Ultra-high intensity laser member (2018-)  
<https://www.icuil.org/about-icuil/committee.html>

### Chairs in conferences and societies

- 1) International Fusion Sciences and Applications (IFSA) 1999  
Topical Program co-chair, Bordeaux France  
Japan- U.S. Fast Ignition workshop 1999  
San Diego, U.S.A.
- 2) International Fusion Sciences and Applications (IFSA) 2001  
Topical Program co-chair, Kyoto Japan
- 3) International Fusion Sciences and Applications (IFSA) 2003

- Organizing co-chair, Montrey U.S.A.
- 4) Fast Ignition Workshop 2004.  
Co-Chair, Kyoto Japan
  - 5) International Fusion Sciences and Applications (IFSA) 2005  
Organizing co-chair, Biarritz France  
Jan. 22, 2018
  - 6) Japan- U.S. Fast Ignition workshop 2006  
Co-chair, Philadelphia U.S.A.
  - 7) Japan- U.S. Fast Ignition workshop 2007  
Co-chair Shiga Japan
  - 8) International Fusion Sciences and Applications (IFSA) 2007  
Organizing Co-chair, Kobe Japan
  - 9) International Fusion Sciences and Applications (IFSA) 2009  
Co-chairs, San Francisco U.S.A. (Co-chairs :Dr Edward Moses, LLNL,USa  
and Dr Christine Labaune, LULI France)
  - 10) International Fusion Sciences and Applications (IFSA) 2011  
Co-chairs, Bordeaux France
  - 11) Co-chair of Japan-US fast ignition workshops (1999-2009) with Dr R  
Stephens (GA, USA).
  - 12) Co-chair of Laser Fusion Reactor workshop at TOFE conference, Las  
Vegas, Oct. 2010 with Prof A. Hassanein, Purdue Univ. USA.
  - 11) PLASMA CONFERENCE 2011, Vice Program Chair & organizing  
member, Kanazawa, Japan, Nov. 22-25,2011.
  - 12) Chair of Japan Plasma Science Federation (2011-2013)
  - 13) Chair of ASHULA (JSPS Asian Core Research and Education Program)  
Grand Seminar/Symposium 2016 (Jan. 5-7, 2016, Osaka U.).
  - 14) Chair of ELISS2017 (ELI Summer School, Aug. 27-Sept.1, 2017, Cheil  
Gradestei, Romania)
  - 15) Chair of ELI-NP International Symposium: Inaugural 10 PW Laser and Users Symposium  
– Extreme Light Infrastructure: Moving into Uncharted Territories, Npv. 20, 2020.

#### Research Projects

1. ELI-NP Project (2016-2022): Extreme Light Infrastructure Nuclear Physics Phase II, a  
project financed by the Romanian government and the European Union through the  
European Regional Development Fund and the Competitiveness Operational  
Programme (No. 1007.07.2016, COP, ID 1334) (2016-2021)
2. S level research fund in MEXT  
“Study of Fast Ignition using Super-penetration Laser Focusing” (2015-2019)  
\$1.5 M
3. MEXT project fund  
”Exploration of New Extreme Matter using both XFEL and Power Lasers”  
(2012-2017) \$15 M
4. A level research funds in MEXT (2008-2010, 2010-2013) \$0.5M x2
5. Two B level research funds in MEXT \$0.3M
6. Experimental Activities
7. Leaders in numerous experimental campaigns conducted at GEKKO XII and  
PW laser facilities at Osaka University since 1985.
8. Principle Investigator on the experimental campaigns at the OMEGA laser  
system at the University of Rochester, N.Y., U.S.A. for fast ignition core  
formation studies with GA, UR collaboration since 1995.
9. Principle Investigator on the experimental campaigns at Rutherford Appleton  
Laboratory (UK) PW laser system with RAL collaboration since 2005.
10. Coordinator on the collaboration research with GA, UCSD, Univ of Michigan  
(U.S.A.), Shanghai Institute of Optics and Fine Mechanics, Science and

Technical University of China, Shanghai Jiatong University (China), CEA, LULI (France), University of Oxford, Rutherford Appleton Laboratory (U.K.), Madrid Technical University (Spain), Nagoya Univ., National Institute of Fusion Science, University of Electro-communications, JAEA and Ritsumeikan University.  
Jan. 22, 2018

#### Other Services

2002-2008 Key Person: Japan-China core to core university program in high energy density science (Inertial Fusion Energy)

2007-2009 Director: Japan-India two country joint project under JSPS (Japan Society of Promotion for Science)

2011-2016 Director: Asia Core University Program "ASHULA" under JSPS.