

Georges ZISSIS

Actual position: Full Professor

University Toulouse 3 - Paul Sabatier

Faculty of Sciences and Engineering, Electrical & Electronic Engineering Dept.

Laboratory of Plasma and Conversion of Energy (LAPLACE), UMR 5213 CNRS-INPT-UPS



Vice-Rector Université Toulouse III - Paul Sabatier for European and International Projects (2020-24)

Chairman of IEEE Smart Cities Technical Community (2020-...)

Initiator of IEEE FDC Smart Lighting project (2021-...)

President of IEEE Industrial Application Society (2019-20)

Studies and diplomas	University Career
2001: Habilitation n° 567, Univ. Toulouse 3	2005-... : Full professor, Univ. Toulouse 3.
1990: PhD, n° 669, Univ. Toulouse 3	1992- 2005: Associated professor, Univ. Toulouse 3.
1987: Master, Univ. Toulouse 3, Speciality: Physics of ionized gases and Plasmas (valedictorian of the class)	1990-1992: Lecturer, Univ. Toulouse 3 1987-1990: Teaching assistant, Univ. Toulouse 3.
1986: Diploma in Physics, Univ. de Crete, Greece (valedictorian of the faculty of science).	1984-1986: Teaching assistant, University of Crete (Greece)

Awards

- Alfred Monnier Prize, French Illuminating Engineering Society, 2022
- Gold Trophy, Deauville Green Award festival, 2018
- Novela Award of City of Toulouse, 2012
- 1st Award of the Innovative Ideal Challenge of Toulouse Metropolis, 2011
- International A.R.T.S. Award (Art-Research-Technology-Science), 2010
- Augustin Fresnel Medal of the French Illuminating Engineering Society, 2009
- Energy Globe Award for France, 2009
- 1st award of centenary challenge of I'IEC (International Electrotechnical Commission), 2006
- Senior member IEEE (2005)

Domain of interest

Physics of electrical discharges used as light sources; system and metrology issues for solid-state lighting systems; normalization and quality issues for light sources; impact of lighting to energy, environment, quality of life, health and security; interaction between light source and associated power supply; illumination and lighting. Power electronics and Energy.

Scientific animation

2011-2021 Director of Research Federation "Housing and Inhabitant - a Sustainable Development Target" (n° FED-4146). Task force thirty to forty researchers (FTE) from nine Toulouse-area laboratories (LAAS, LAPLACE, IRIT, PHASE, IMFT, LGC, ICA, EMAC, CERTOP)

Director of the research group "Light and Matter" of LAPLACE. This research group is currently composed of seven permanents (1 professor, 5 associated professors and 1 PhD- research engineer), 3 contractual postdocs and in average 6 PhD students

2007-11 Deputy Director of LAPLACE laboratory (UMR 5213 CNRS-UPS-INPT) and supervisor for 19 technical and administrative staff. The Laplace is a joint research unit between the Univ. Toulouse 3, National Polytechnic Institute and CNRS. The LAPLACE represents a force of 320 people (120 researchers and teacher-researchers, 110 PhD students, 60 administrative and technical staff and 30 contract or invited researchers)

- 2004-07 *Responsible for the research operation n°7 "High Intensity Light Sources" Centre Plasma Physics and Applications of Toulouse (UMR 5002 CNRS-UPS). The research team was composed of 1 professor, 3 lecturers and, on average, 4 PhD students.*
- 2011-19 *Elected member (Professor) of the national Council of Universities for the Electrical engineering, electronics, photonics and systems section*
- 2001-05 *Elected member (Assoc. Prof.) of the national Council of Universities for the Electrical engineering, electronics, photonics and systems section*
- 2011 *President of the AERES evaluation committee for LAEPT laboratory (Univ. Clermont Ferrand 2)*
- 2005 *Elected member (Assoc. Prof.) of the Scientific Council of Toulouse 3 University*
- 2001-06 *Chairman and founder of the European Network COST n° 529 "Efficient Lighting for the 21st Century." This network brought together 80 institutions (academic, industrial and government) from 20 European countries. <http://www.efficient-lighting.org/>*
- 2012-15 *Chairman of Manufacturing Systems Development and Applications Department (MSDAD), IEEE Industrial Applications Society (IAS). IEEE-IAS society representing more than 40,000 active members worldwide, the MSDAD department is divided into three technical committees (IACC, ILDC, EPC). <http://ias.ieee.org/ias-roster/ias-departments-and-committees.html>*
- 2002-08 *Successively Secretary (2002-04), Vice-Chairman (2004-06) and Chairman (2006-08) of the Technical Committee ILDC (Industrial Lighting and Displays Committee). It is a technical committee of the IEEE Industrial Applications Society MSDAD department; it has a hundred of active members*

Research Evaluation Activities

- 2019-... *Member of the National Committee (COMEVAL) evaluating all research personnels and laboratories of the French Ministry of Ecological Transition and Circular Economy (MTES)*
- 2015-19 *President of the 63e section (Power Electronics, Electronics, Optoelectronics and Systems) of the French National Council of Universities*
- 2008-09 *Chief Expert, mandated for the implementation of the program "Energy Efficient Lighting" of the Russian Federation within the framework United Nations Development Programme UN-DP/GEF*
- 2009-10 *Member of the Working Group "Health Effects of Artificial Light" the Scientific Committee on Emerging and Newly Identified Health Risks European Commission (DG-SANCO)*
- 2009-10 *Member of the Working Group "LED" of the French Agency for the Sanitary Safety of Work Environment (ANSES)*
- 2008 *Member of European Normalisation Committee (CEN) Technical Board Ad Hoc Group F "Innovation" (Brussels)*
- *Member of the evaluation panel (Natural Sciences) of the HFRI the Hellenic Foundation for Research and Innovation (2018-...)*
 - *Member of the evaluation committee for the program "Building on Transient Plasmas" of STW-Technology Foundation, the Netherlands (2009)*
 - *Expert for PSCP program of BPI - the French National Investment Bank (2014)*
 - *Expert on the behalf of ANR-the French National Agency of Research*
 - *Reporter for ANR program Habisol (2008, 2009); Reporter for CNRS PIE "Energie" program (2008)*
- 2012-16 *French representative on the Management Committee of the European Network COST n°ES1204 "Lost of the Night Network"*
- 2006-10 *French representative on the Management Committee of the European Network COST n°540 "Photocatalytic technologies and novel nanosurfaces materials – critical issues"*
- 2006-09 *President of the Regional (Midi-Pyrénées) Branch of the French Illuminating Engineering Society*
- 2003-05 *President of Electrical Engineering division of club EEA*
- 2007-... *Treasurer and board member of club EEA*
- 1997-00 *Member du Professional Group S3 "Discharges and Electron Physics" Board, IEE (UK)*

2006-... *Founding Member and Scientific Secretary de FAST-LS (Foundation for the Advance of Science and Technology of Light Sources), UK*

- *Editor in Chief of the Springer Journal of Solid-State Lighting (2013-17)*
- *Member of Editorial Board for IEEE/OSA Journal of Display Technology (2006-16); Member du International Editorial Board du Journal of Illuminating Engineering Institute of Japan (since 2004); Member of International Editorial Board for Journal Ingineria Illuminatului (since 2007); Associated editor IEEE Transactions Industrial Applications Society, (till 2009)*

Major Educational Activities

- *Creation of the Professional Bachelor Degree “Lighting and Urban Electrical Grids” in Toulouse University (40 selected students/year) - 2006*
- *Creation of the Professional Bachelor Degree “Energy Efficiency Manager for Smart Building” in Toulouse University (30 selected students/year) - 2013*
- *Advisor for 35 finalized PhD and 6 on-going*
- *Publication of 10 papers in relation with education activities*
- *Distinguished Lecturer for IEEE Systems Council (2022-...)*
- *Member of the Governance Board of the European Alliance “UNIVRSEH” aiming to create new Transnational European University in the domain of Spatial Engineering (2020-...)*

Research and Training Institutional-Project Coordination (not including industry related projects)

- *Chairman of International Energy Agency 4E-Solid State Lighting Annex and representative of French Government in 4E Executive Committee (2019-23)*
- *Coordinator of the EU-SUDOE Tr@nNet project, global budget 1,7 M€, duration 2,5 years (2020-23)*
- *Coordinator of the EU-SUDOE Tr@nsEner project, global budget 1,3 M€, duration 3 years (2017-20)*
- *Coordinator of project Erasmus Mundus NESSIE (Strand II), global budget 1 M€, duration 4 years (2012-16)*
- *French Coordinator for the program International Energy Agency Annex 4E – SSL, 9 countries, duration 4 years (2010-14)*
- *Coordinator for the European project EnERLIIn (6th FP, programme EIEA/EACI Save): 14 partners, 14 countries, global budget 2 M€ (EU contribution 0.95 M€), duration 3 years (2005-08)*
- *Coordinator for the European project NumeLiTe (5th FP, program DG-TREN Energie, Combined action - Research and Demonstration: 11 partners, 6 pays, global budget 6,5 M€ (EU contribution 2.8 M€), duration 3 years (2001-04)*
- *Coordinator for NATO Linkage Grant “UVWater”, Univ. Toronto (Canada), Trojan UV Inc. (Canada), IHET (Tomsk-Russia), IPEIM (Tunisia), Budget 50 k€, duration 2 years (2003-05)*
- *Coordinator of INTAS « HFWater » project, Univ. of Latvia (Riga-Latvia), Univ. St Petersburg (Russia), ITAM (Novosibirsk-Russia), Univ. Tomsk (Russia), Lumex Ltd (St Petersburg-Russia), budget 130 k€, duration 3 years (2003-06)*
- *Coordinator for “QuAlimEP” project, funded by ADEME and 20 Regional Energy Agencies, Budget 200 k€ duration 2 years (2008-10)*

Scientific Publication activity (see: orcid.org/0000-0002-7582-5686)

Since 1984 (Impact factor from Scopus: **H=25**, more than 2930 citations given by Google Scholar):

- 7 books and 31 Chapters in books
- 12 Patents
- 176 papers in referenced journals and 43 papers in national journals
- 107 Invited Conferences internationals and national events and 25 Tutorials/webinars
- 358 Communications in international conferences and 72 in National scientific events