

1. Full name and date

- Laeticia Petit
- Year of Birth: [REDACTED]
- Nationality: French
- ORCID: 0000-0002-1673-8996
- Website: <https://research.tuni.fi/photonic-glasses/>

2. Education and degrees awarded

- October 2002: **Ph.D.** in Solid-State Chemistry and Materials Science Engineering, Institute of Condensed Matter Chemistry of Bordeaux, University of Bordeaux I, France,
- June 1999: **M.S** in Materials Science, University of Bordeaux I, France.,
- June 1996: **B.S** in Materials Science, Univ. of Paris VI, France.

3. Current position

- August 2020–now: **Head of the International BSc program in Science and Engineering**, Tampere University (TAU)
- Jan 2021- now: **Professor**, Photonics Laboratory, Tampere University
- Jan. 2016- now: **Adjunct Professor**, Faculty of Biomedical Sciences and Engineering, Tampere University
- Nov. 2013- now: **Docent**, Inorganic Chemistry Laboratory, Åbo Akademi University

4. Previous work experience

- July 2018-Jan 2021: **Associate Professor**, Photonics Laboratory, Tampere University
- Aug. 2016-June 2018: **Assistant Professor**, Laboratory of Photonics, TUT, (Finland)
- Nov. 2012 – Jul. 2016: **Manager of Glass Research** at nLIGHT Corp., Lohja (Finland)
- Jan. 2009 – Nov. 2012: **Senior Glass Scientist** at nLIGHT Corporation, Lohja (Finland)
- Nov 2005 – Dec 2009: **Research Assistant Professor** at Clemson University, SC (USA)
- Nov. 2002 – Nov. 2005: **Postdoctoral Research Fellow** at College of Optics and Photonics, CREOL & FPCE, University of Central Florida, FL (USA)

5. Personal research funding and grants

29. Magnus Ehrnrooth foundation, “Analysis of Chinese glazes/ceramics for the development of photonic glasses”, L. Petit, 1 year, 2021, 15 000€
28. Pirkanmaa Regional Fund, “When archaeology meets contemporary glass art and advanced photonics”, L. Petit, 3 years, 130 000€
27. Magnus Ehrnrooth foundation, “Travel grant”, [REDACTED], L. Petit, 1 400€
26. Tampere University, TAU Joint Call for Proposals, Brunel University London | Tampere University, “Fabrication and macro/nano scale characterization of new advanced particles containing glasses”, L. Petit, [REDACTED], 1 year, 13 000€
25. Academy of Finland, “In-vivo imaging device based on biophotonic implants”, [REDACTED], L. Petit, [REDACTED] 3 years, 672 535€
24. Agence Nationale de la Recherche (ANR), Programme “Montage de reseaux scientifiques europeens ou internationaux”, [REDACTED], L. Petit [REDACTED], [REDACTED] 1 year, 30,000€
23. Ceramic and Glass Industry Foundation, Creation of an awareness workshop on glasses and glassblowing techniques, L. Petit, \$ 4,225
22. Embassy of France, Seed grant to initiate and strengthen bilateral cooperation in science, innovation and higher education in fields of excellence, [REDACTED] and L. Petit 1,000€
21. Tampere University of Technology Foundation, Seed funding for internationalization, L. Petit, 6 months, 7,500€
20. Magnus Ehrnrooth foundation, “Travel for 1 month to South Africa to develop a collaboration on Spark Plasma Sintering (SPS)”, L. Petit, 1 year, 3 700€
19. Nord Design, “Glasses with new color”, L. Petit, 3 months, 3 500€
18. Academy of Finland, Mobility from Finland to Germany, “Particles-containing silicate and phosphate glasses (CERAM)”, L. Petit and [REDACTED], 2 years, 14 000€
17. Tampere University of Technology Foundation, TUT on World Tour program, “Travel grant for Rajannya Sen to perform some experiments for 2 months at Bordeaux University (France)”, L. Petit, 2 months, 5 720€
16. Academy of Finland, “Advanced active glass-ceramics into optical fibers (ATLANTIS)”, L. Petit, 4 years, 619 193€
15. Magnus Ehrnrooth foundation. “Novel Active Glasses and Glass-Ceramics”, L. Petit, One year, 15,000€
14. Tekes, “Optimization of laser fibers with direct nanoparticle deposition (OPTILAF)”, nLIGHT: [REDACTED], L. Petit, 18 months, 703 000€
13. Tekes, “Nanoparticle doping for light amplifying glasses (NANOFLAG)”, nLIGHT, 3 years, 1 550 500€
12. Air Force Office of Scientific Research, DURIP instrumentation grant, “Instrumentation for the structural characterization Of novel optical fiber materials for Mid-infrared (MIR) applications », [REDACTED], L. Petit, 1 year, \$140,013
11. Kennametal, “ Kennametal mold materials characterization”, L. Petit, [REDACTED], 6 months, \$25,463
10. SCUREF- Savannah River National Laboratory, “Glass structure and properties analysis”, [REDACTED], L. Petit, 5 months, \$20,377
9. Air Force Research Laboratory, Materials Lab, “Educational Support of Clemson SMSE students for Strategic AFRL focal areas”, [REDACTED], L. Petit, 1 year, \$25,000
8. Kennametal, “Kennametal mold materials characterization”, L. Petit [REDACTED], 3 months, \$21,967

7. RaytheonTI systems, “Highly Nonlinear Glasses for MIR Fiber Application”, ██████████, L. Petit, 1 year, \$63,965
6. Edmund Optics, “Manufacturing of Aspheric Optics”, ██████████, L. Petit, ██████████, 1 year, \$337,803
5. Air Force Research Laboratory, Materials Lab, “Educational Support of Clemson SMSE students for Strategic AFRL focal areas”, ██████████, L. Petit, 6 months, \$25,000
4. National Science Foundation, “International REU in Optics, Lasers and Optical Materials” ██████████, L. Petit, 3 years, \$412,709
3. Edmund Optics, “Manufacturing of Aspheric Optics”, ██████████, L. Petit, ██████████, 1 year, \$362,764
2. Department of Energy, “Novel material and manufacturing technology development for a high sensitivity, target-specific planar optical-microsensor-array for remote sensing of chemical species”, ██████████, L. Petit and ██████████, 3 years, \$800,873
1. Lockheed Martin Corporation, “Next Generation Chalcogenide Glass Applications” ██████████, L. Petit, 6 months, \$43,497

6. Leadership and supervision experience: Since 2002, supervision of a total of 7 Post-Doctoral Researchers, 10 PhD, 14 Masters (MSc) and 14 Bachelor (BSc) students. Currently supervising 2 postdocs, 3 PhD, 1 MSc and 4 BSc students.

7. Teaching experience

University of the Witwatersrand (South Africa): Ceramics Course, 4h lectures, Aug. 2018

Tampere University (Finland): FYS-6656: Photonic Materials and LTT-21106: Bachelor's Thesis Seminar in Science and Engineering since 2020, FYS-1366 Nanophysics, 2018; FYS-6606 Photonics, 2h on Introduction to optical glasses and 2h on optical fiber, since 2016; ELT 62306 Research Project in Biomedical Engineering, (Sept - Nov. 2016); ELT-73106, Introduction to Glass Science and on Optical glasses for biomedical application, since 2016; Public test lecture for appointment as Adjunct Professor, Dec. 9th 2015

Åbo Akademi University (Finland): Special topic “Glasses for Photonics”, (2013 to 2016); Public test lecture for appointment as Docent at Åbo Akademi University, 2nd of Sept 2013.

Clemson University (SC, USA): CME 490/690 Special topics: Relaxation Processes in Glasses and Polymers, 2006, CME 490/690 Special topics: Optical Properties of Materials Laboratory, 2006, CME 413 Noncrystalline Material, 2005, 2007 and 2008

University of Central Florida (FL, USA): CHM 3410 Physical Chemistry I (Thermodynamics), 2003

8. Experience of organising scientific meetings

Dec. 2017: Co-Chair of 7th International Workshop on photoluminescence in rare earths: photonic materials and devices (PRE'17), Rome (Italy), 30 November - 2 December 2017

9. Patents, inventions, awards and honours

- **2 patents:** “Tapered Core Fiber Manufacturing Methods”, Joonas Koponen, Laetitia Petit, Petteri Väinänen, US Patent, nLIGHT Corp & “Glassy Surface Smoothing Layer for Integrated Waveguide”, Juejun Hu, Nathan A Carlie, Laetitia C Petit, Anuradha M Agarwal, Kathleen A Richardson, Lionel C Kimerling, US Patent, 20110311180, Clemson University & Massachusetts Institute Of Technology

- **8 awards:** “Outstanding Poster Award,” SPIE OPTIFAB meeting, presented by the American Precision Optics Manufacturers Association (APOMA), “Louis Stokes - South Carolina Alliance for Minority Participation (SCAMP), MRS student poster contest at Clemson University (2009), Outstanding Student Poster, 1st prize,” Spring Meeting of the Glass and Optical Materials Division (GOMD), “1st Prize, Science as Art competition,” Clemson University and MRS student poster contest at Clemson University(2008), “Second Prize, Outstanding Paper,” UCF Showcase for Undergraduate Research Excellence (SURE) (2005), “First Prize, Outstanding Paper,” UCF Showcase for Undergraduate Research Excellence (SURE) (2004)

- **156 papers** in major international journals (H-index of 27)

10. Other key scientific or academic merits

Grant assessment panel member for the US National Science Foundation (since Sep. 2006), National Science Center, Poland (since Dec. 2014), TUT's graduate school (since Aug. 2016), French Agence Nationale de la Recherche (ANR) (since 2017), DFG (since 2017), Czech Science Foundation (since 2019), Swiss National Science Foundation (since 2021)

Reviewer of more than 30 journals

11. Memberships and positions of trust in scientific societies

Since Oct. 2016: **Review Editor** in Glass Science, Frontiers in Materials

Since 2019: **Associate Editor** for Optical Materials

Since 2013: **Member of the Technical Committee 20** (TC20, glasses for optoelectronics and photonics applications) in the International Commission on Glass (ICG) & American Ceramic Society

Oct. 2018-2021: **Member of the Darshana and Arun Varshneya Frontiers of Glass Lectures Award Committee** of the American Ceramic Society

Aug. 2016-Dec. 2018: **Member of the Management Committee** of *COST Action MP1401* “Advanced fibre laser and coherent source as tools for society, manufacturing and lifescience”

Oct. 2014-Oct. 2017: **Member of the Corporate Technical Achievement Award Committee** of the American Ceramic Society