

# Pierre-Olivier CHAPUIS

Centre for Energy and Thermal Sciences of Lyon (CETHIL)  
(French) National Centre for Scientific Research (CNRS) – National Institute for Applied Sciences (INSA),  
Lyon – University Claude-Bernard Lyon 1 (UCBL)

CETHIL- INSA Lyon  
Bâtiment Sadi-Carnot – 9, rue de la physique  
Campus La Doua-LyonTech  
69621 Villeurbanne cedex, France

Phone (office): +33 4 72 43 63 85  
E-mail: [olivier.chapuis@insa-lyon.fr](mailto:olivier.chapuis@insa-lyon.fr)  
Webpage: <http://polivier.chapuis.free.fr>

**Main interests: nanoscale thermal management and energy conversion/harvesting  
metrology, simulation; materials and devices**

## **CARREER** (main positions)

**Since 12/2011**

**CNRS permanent research scientist at CETHIL -  
Theme 'Micro and Nanoscale Heat Transfer' (MiNT)**

Head of MiNT (5 permanent scientists, >15 members in total) since Jan. 2021  
2013-2020: Resp. for Info.&Com.@CETHIL. Since 2016: Member of CETHIL board

2008-2011  
01-07/2008  
2004-2007

Post-doctoral fellow – Catalan Institute of Nanotechnology (ICN2), Barcelona  
Post-doctoral fellow – Ecole Centrale Paris & Paris Institute for NanoSciences  
PhD student and Teaching Assistant, EM2C Lab., Ecole Centrale Paris  
(now CentraleSupelec)

## **Current teaching duties**

**Since 2012**

**Adjunct Professor at Institut d'Optique (IOGS, Rhône-Alpes)**

→ Lecturing on Energy and Heat Transfer

Mentor for students at INSA Lyon, Dpt of Energy Engineering & Environment

## **DIPLOMA**

**2021**

**Habilitation** – INSA Lyon

**2007**

**PhD thesis** – Ecole Centrale Paris (now CentraleSupelec)

**2004**

**MSc (DEA) in Energy: Physics of Transport Phenomena** - Ecole Centrale Paris  
**Engineer**, Major in Applied Physics - Ecole Centrale Paris

## **SCIENTIFIC OUTPUTS**

**ISI Web of Knowledge:** >70 references, incl. PRL, Nano Lett., Small, SolMat, etc. [polivier.chapuis.free.fr](http://polivier.chapuis.free.fr)  
Links to [ORCID](#), [Publons](#) (previously ResearcherID) and [CV.archives-ouvertes](#) publication databases.

**>50 invitations in conferences** (ICPPP, MRS, E-MRS, IEEE Nano, CECAM, Euro. Conf. Thermoelec., PIERS, CNano, META,...), **scientific schools** (Les Houches, Bad Honnef, Erice, Sitges, ...) and **seminars** (industry-related: IBM Zürich, COMSOL,...; Academia: KITP UCSB, Univ. Barcelona, Univ. Jyväskylä, McGill Univ.,...; research org.: VTT,...).

## **Current scientific projects:**

**OPTAGON** - An optical approach to next-generation refrigeration, EU H2020 FET, 2021-2025, local PI

**TPX-Power** - Waste heat recovery through near-field thermophotonics, EU H2020 FET 2021-24, local PI

**CASTEX** - Cavitation under extreme heat transfer, ANR Condensed Matter, 2022-2025, local PI

**Participant to the following projects:** **STORE**, ANR Instrumentation, 2022-2025; **EF(F)ICACE**, ANR Nano, 2021-2025; **TREE**, CNRS équipe-projet, 2021-... ; and few others.

## **SERVICE TO COMMUNITY** (main tasks)

**Organisation of conferences:** Co-chair of occurrences of the two main nanoscale heat transfer conferences: **USA** (biennial): *MRS Spring Meeting–Symposium Nanoscale Heat Transfer, Phoenix 2017* (~200 particip.). **Europe** (triennial): *Eurotherm 103 – Nano & Microscale Heat Transfer IV, Lyon 2014* (>100 particip.). **Main organizer** of session 'Nanomaterial thermal transport properties & nanothermodynamics', *E-MRS Fall Meeting, Warsaw 2019* (~50 particip.) and of 'Phonon School 2017: Wave Phenomena and Thermal Transport', *Oléron Island 2017* (60 particip.). **Co-chair** of other events (recently: 'IR & thermal radiation control', *MRS Fall 2023, Boston*)

**Regular scientific committees:** THERMINIC (since 2011, except 2020); Eurotherm Nano & Microscale Heat Transfer (2014-2020); NanoRad (2017-...); Thermophotovoltaics (2021-...)

**Editorial board member:** Nanoscale and Microscale Thermophysical Engineering (Taylor&Francis). Lead editor for an APL Special Topic issue in 2022-2023 and for an MRS Advances collection in 2017.

**Reviewing activities:** asked to serve as a referee for manuscripts for > 60 journals, including Rev. Mod. Phys., PRL, Nano Lett., ACS Nano, Nat. Nano.\*, Nat. Com., etc. **Funding Agencies:** France (ANR, CNRS, etc.), Germany (DFG), USA (DOE), Belgium (FWO), Israel (ISF), Serbia (SSF); ERC (EU). **PhD thesis committees** in France, Spain, Finland, Japan.

\*Declined