



Weidong Chen obtained his B.S. degree in Radio-Physics from the SUN YAT-SEN University (Guangzhou, China), his M.S. and PhD degrees from University of Sciences & Technologies of Lille (USTL, France). He is full Professor at University of the Littoral Opal Coast (ULCO) in France. He was adjunct faculty of Rice University (USA) in 2001 and invited professor of Anhui Institute of Optics and Fine Mechanics (Chinese Academy of Sciences, China) in 2007.

His current research interests include : (1) Developments of photonic instruments for applied spectroscopy; (2) Optical sensing and metrology of atmospheric species : trace gases (concentration, isotope ratios, vertical concentration profile) and aerosols (optical properties, mass concentration); (3) Optical parametric laser source generation by frequency conversion.

Prof. Chen has authored/co-authored more than 200 peer-reviewed articles in scientific journals and books, over 350 presentations at scientific conferences and seminars including more than 100 invited talks (USA, ETH Zurich, France, China, Italy, Belgium, Hungary, Russia, Sweden, Ireland, UK, Spain, Greece, Serbia, Germany, the Netherlands, Singapore, Japan, Austria, Switzerland, Morocco, Hong Kong, Portugal, India, etc).

He has been rewarded for the developments of a [THz Fourier transform spectrometer](#) (The Science and Technology Progress Award (2nd) of Guangdong Province, China) and the development of an [infrared laser spectrometer based on difference-frequency generation](#) (nomination for the 1999 Sir Harold Thompson Memorial Award, USA).

His group at ULCO has been working on the development of photonic instruments from the UV to the mid-IR for optical metrology of key atmospheric species (trace gases, aerosols) with support from [European INTERREG](#) and French national programs such as [ANR](#), [ACI](#), [CNRS-GDRI](#), [PIA-SEAM](#), [CNRS-LEFE](#), as well as from the [LABEX CaPPA](#) and regional HdF [CPER](#) programs.

TEACHING, RESEARCH AND SYNERGISTIC ACTIVITIES

EU-ERASMUS TEACHING MISSION at University College Cork ([Ireland](#)), Bari University ([Italy](#)), Radboud University ([Netherlands](#)), University of Szeged ([Hungary](#)), Clausthal University of Technology ([Germany](#)), Universidad Carlos III de Madrid ([Spain](#)), etc.

VISITING SCIENTIST at PICO VELETA Radio Telescope Station, Institut de Radio Astronomie Millimétrique ([Spain](#)), University of Science and Technology of China ([China](#)), Rice University ([USA](#)), Anhui Institute of Optics and Fine Mechanics ([China](#)), University College Cork ([Ireland](#)), ETH ZURICH ([Switzerland](#)), Bari University ([Italy](#)), Radboud University ([Netherlands](#)), University of Szeged ([Hungary](#)), Clausthal University of Technology ([Germany](#)), Shanxi University ([China](#)), Universidad Carlos III de Madrid ([Spain](#)), etc.

SUPERVISOR / ADVISOR of 17 [PhD](#) and 23 [post-doc](#) as well as 4 [ATER](#) (“teaching-research assistant”).

DISSERTATION COMMITTEE MEMBER of 9 [HDR](#) (State PhD) and 48 [PhD](#) defenses in France (École polytechnique, CNAM Paris, Univ. Paris XI, UPMC, Univ. de Reims, Univ. Montpellier, Univ. Grenoble, ULCO), as well as in Sweden, Ireland, Italy, Belgium, India, Hong Kong and mainland China).

CO-EDITOR for [Applied Optics](#) (OSA) feature issue « Laser Applications to Chemical, Security and Environmental Analysis » (2016, 2018); [Sensors](#) (MDPI) special issue « Optical Sensing and Imaging : from UV to THz Range » (2018); [Atmospheric Measurement Techniques](#) special issue « Advances in cavity-based techniques for measurements of atmospheric aerosol and trace gases » (2018); [Elsevier](#) monograph entitled « Advances in spectroscopic monitoring of the atmosphere » (published in 2021).

ORGANIZATION OF INTERNATIONAL CONFERENCES : (1) **CONVENER** of [EGU](#) AS session on « Advanced Spectroscopic Measurement Techniques for Atmospheric Science » (since 2015) of the European

Geosciences Union; (2) **CO-CHAIR** of **OSA** topic meeting on « Laser Applications to Chemical, Security and Environmental Analysis » (2016, 2018); (3) **CO-ORGANIZER** of **PIERS** Focus Session on « Advanced Photonic Technologies for Spectroscopic Sensing of the Atmosphere » (since 2016) of the International Photonics and Electromagnetics Research Symposium.

EVALUATION of scientific research proposals for **USA** (DoE), **Poland** (NSC), **Hong Kong** (RGC), **Austria** (ASF), **Israel** (UGC-ISF), **Indo-French** (CEFIPRA), **Singapore** (AME-IRG), **Ireland** (SFI-FFP), **France** (ANR, ANSES, CNRS/INSU, CNRS/LEFE, CNRS/DEFI, ADEME, ANRT/CIFRE, etc.).

INTERNATIONAL EXPERT for evaluation of the Center of Excellence in Regional Atmospheric Environment of **Chinese Academy of Sciences** (2017) and **STEERING COMMITTEE MEMBER** for the **European H2020 PASSEPARTOUT** project (2021-2025)

SCIENTIFIC REFEREE of more than 20 international journals, such as Nat. Commun., Appl. Phys. Lett., Opt. Lett., Opt. Express, Rev. Sci. Instrum., J. Selected Topics in Quantum Electronics, Environ. Sci. & Technol., Analyst, Atmo. Environ., IEEE Trans. on Geosci. and Remote Sensing, Talanta, Anal. Chem., Atm. Meas. Tech., J. Quant. Spectrosc. & Rad. Transfer, etc.

COUNCIL MEMBER OF ULCO : council for university education and student life (2005-2008, 2016-2020), scientific council (2008-2016), academic advice (2011-2020).