

Resume of Prof. Wei-Ping Zhong

Guangdong Polytechnic of Industry and Commerce
Guangzhou, Guangdong Province, China
Born on November 29, 1965, China

Email: zhongwp6@126.com
Mobile phone: (+86)18929981699

1. Education

2005.9.1—2008.6.30 Doctoral degree in Optics, Huazhong University of Science and Technology, China;
1985.9.1—1988.6.30 Master's degree in Theoretical Physics, Wuhan university, China;
1981.9.1—1985.6.30, Bachelor in Radio Physics, Wuhan university, China.

2. Positions Held

2026.1.1—present Professor, Guangdong Polytechnic of Industry and Commerce, Guangzhou, China;
2004.9.1—2025.12 Professor, Shunde Polytechnic University, Shunde, China;
1988.7.1—2004.8.30 Professor of Engineering, Guangdong Huizhou Telecommunications Bureau, Huizhou, China.

3. Visiting Positions

2007.6.1—2017.2.1 Texas A&M University at Qatar, Qatar (12 times, each time for 1 month);
2018.5.1—2018.8.30 Southern University of Science and Technology, Shenzhen, China;
2020.4.1—2021.6.8 Wuhan university, Wuhan, China;
2023.8.1—2023.9.30 Sun Yat-sen University, Guangzhou, China;
2024.9.1—2025.10.30 South China University of Technology, Guangzhou, China.

4. Honors, Awards, Fellowships

1987.10.10 Outstanding Master's degree candidate of Wuhan University;
1996.10.26 Guangdong Province Natural Science Excellent Paper Award: "Interaction between optical solitons in birefringent fibers";
1997.5.16 Third Prize for Scientific and Technological Progress in Guangdong Province: "Study on the transmission characteristics of optical solitons in optical fibers";
1999.6.25 First Prize for Science and Technology Progress in Huizhou: "Research on several issues in optical communication systems";
2000.6.10 Third Prize for Scientific and Technological Progress in Guangdong Province: "Research on the application and development strategy of optical access network in Huizhou telecom network";
2008.6.30 Outstanding Doctoral Dissertation Award of Huazhong University of Science and Technology: "Research on the transmission characteristics and self similarity of spatial solitons";
2009.10.10 Shunde Excellent Teacher;
2010.9.1 Foshan Excellent Teacher;
2011.7.18 Excellent Award for Excellent Courses in Guangdong Province Universities: "Maintenance technology for communication terminal equipment";
2012.10.10 Shunde Excellent Teacher;
2012.10.30 One Hundred and Ten Outstanding Exemplary Individual Awards of Guangdong Province;
2014.3.10 Research Team Award, Qatar National Research Fund: "Light bullets, fractional waves,

nonlocal solutions, and surface waves for all optical information transmission in photonic crystals, optical lattices, dispersion managed systems, and distributed fibers”;

2014.11.10 Third Prize for Scientific and Technological Progress in Shunde: “Research on novel spatial optical solitary clusters and their all optical control”;

2023.9.1 Shunde Excellent Teacher Golden Lion Award.

5. Research Projects

- ★ 2023.1.1—2026.12.31 PI, Key Project 62275176 “Research on the manipulation of femtosecond solitons and rogue waves described by PT-symmetric modified nonlocal nonlinear Schrödinger equation,” China Natural Science Foundation;
- ★ 2018.1.1—2021.12.31 PI, Project 61775150 “Research on the manipulation of optical rogue waves in nonlinear media,” China Natural Science Foundation;
- ★ 2013.1.1—2016.12.31 PI, Project 61275001 “Research on local vector spatiotemporal optical solitary clusters and their control techniques,” China Natural Science Foundation;
- ★ 2023.1.1—2025.12.31 PI, Project 2022A1515010084 “Study on the dynamical behavior of high-dimensional nonlocal nonlinear Schrödinger equation,” Guangdong Provincial Natural Science Foundation, China;
- ★ 2020.1.1—2022.12.31 PI, Project 2019A1515010749 “Research on non-diffraction Helmholtz beam transmission and control in artificial metamaterials,” Guangdong Provincial Natural Science Foundation, China;
- ★ 2017.1.1—2019.12.31 PI, Project 2017A030313346 “Research on the transmission and control of optical monster waves in nonlinear media,” Guangdong Provincial Natural Science Foundation, China;
- ★ 2014.1.1—2016.12.31 PI, Project 2014A030313799 “Research on the manipulation of vector optical solitons in nonlinear media,” Guangdong Provincial Natural Science Foundation, China;
- ★ 2010.1.1—2013.12.31 PI, Key Project 10152830001000000 “Research on novel spatial optical solitary clusters and their all optical control,” Guangdong Provincial Natural Science Foundation, China;
- ★ 2010.1.1—2013.12.31 Co-PI, NPRP 09-462-1-074 “Light bullets, fractional vortices, nonlocal solitons and surface waves for all-optical information transmission in photonic crystals, optical lattices, dispersion-managed systems and distributed fibers,” QNRF Qatar.

6. Funding

More than \$600,000 since 2010.

7. Publication

One book and 115 papers in peer-reviewed journals, with more than 5000 citations, h-index: 38 (according to Google Scholar).

8. Research interests

- ★ Nonlinear Photonics: Photonic Crystals, Surface Waves;
- ★ Nonlinear Optics: Generation of Rogue Waves, Fractional Wave Equations;
- ★ Physical Optics: Self-accelerating Beams, Fourier Optics;

- ★ Nonlinear Quantum Optics: Wave Mixing, Spatial Solitons, Light Bullets;
- ★ Mathematical Physics: Exact solutions of Evolution PDEs: NLS, GL, GP, Manakov, etc;
- ★ Nonlinear Dynamics: Instabilities and Chaos, Transverse Patterns, Defects, Amplitude Equations, Transition to Turbulence. Optical and Plasma Instabilities;
- ★ Solid State Physics: Photorefractive Materials, effects and devices. Graphene, Band Structure of Solids and Photonic Crystals, Laser-Crystal Interactions;
- ★ Computational physics: Computational Optics and Fluid Dynamics, Artificial Intelligence, PDE algorithms, Spectral Beam Propagation Methods. Numerical Chaos, CUDA GPU Computing

9. Major research accomplishments, including those with Prof. M. Belic

- ★ Analytical solutions to two-wave and four-wave mixing in photorefractive (PR) media;
- ★ Demonstration of chaos and optical turbulence in phase conjugate resonators;
- ★ Explanation of the spiraling behavior of screening spatial solitons in PR crystals;
- ★ Clarification of local isotropic vs. nonlocal anisotropic space charge field in PR media;
- ★ Introduction of dynamical counterpropagating vector solitons and waveguides in saturable media;
- ★ Introduction of counterpropagating waveguides in optically induced photonic lattices;
- ★ Demonstration of transfer and non-conservation of angular momentum in photonic lattices;
- ★ Analytical wave and solitary solutions to various nonlinear Schrödinger, Gross-Pitaevskii and Ginzburg-Landau equations;
- ★ Dynamics and nature of rogue wave generation.

10. Professional activities

2004.9—present Member, Editorial board, Journal of Shunde Polytechnic University, China;
 1990.1—2004.8 Member, Editorial board, Guangdong Communication Technology, China;
 2005.6—2023.1 Member, Editorial board, Optical Communication Technology, China.

11. Teaching, Supervision

- ★ Taught numerous courses in communication technology at Shunde Polytechnic University, China;
- ★ These courses involve communication engineering drafting and communication engineering budgeting.
- ★ Supervised 8 master students and 3 PhD's.

12. Detailed Publication Overview

Published 115 SCI academic papers (73 as first author, 24 as corresponding author, and 18 as co-author); published 22 papers in the Phys. Rev. series of renowned journals sponsored by the American Physical Society, including 17 as first author.