

ARTURO CHAVEZ-PIRSON

Focused on research and development of single frequency fiber lasers, high power fiber lasers and amplifiers, mid-IR transport fibers, and mid-IR supercontinuum light sources for applications in optical sensing, laser ranging, metrology, optical telecommunications, industrial machining, biomedical imaging, and related areas. Excellent track record with Small Business Innovative Research (SBIR) projects and U.S. Government-sponsored R&D programs (DoD, NASA, NSF, DARPA, IARPA) to advance innovative fiber laser and fiber amplifier technology. Currently, also serving as Chief Technology Officer at NP Photonics with over 25 years of experience, including R&D leadership, product engineering, transfer to manufacturing, market development, customer relations, and senior management.

PROFESSIONAL EXPERIENCE

NP Photonics Inc.

Chief Technology Officer
Director of Technology Development

Tucson, Arizona
May 2007 to present
December 2000 to May 2007

CMLT Inc.

Chief Technology Officer

Tucson, Arizona
July 2020 to present

College of Optical Sciences, University of Arizona

Research Professor
Adjunct Research Professor

Tucson, Arizona
January 2014 to June 2020
December 2000 to December 2013

Nippon Telegraph and Telephone Corporation

NTT Basic Research Laboratories
Senior Research Scientist Physical Science Division

Atsugi, Japan
August 1989 to December 2000

Imperial College of Science, Technology, and Medicine

Invited Research Fellow

London, United Kingdom
August 1999 to November 1999

Japan Research Development Corporation

Invited Staff Member

Tokyo, Japan
November 1994 to March 1995

EDUCATION

University of Arizona

Ph.D. in Optical Sciences
May 1989

Tucson, Arizona

University of Arizona

Master of Science in Optical Sciences

Tucson, Arizona
May 1986

Massachusetts Institute of Technology

Bachelor of Science in Physics with concentration in Economics

Cambridge, Massachusetts
May 1983

PUBLICATIONS and PATENTS

- Author or Co-author on over 50 articles published in internationally recognized academic journals
- Recipient of 11 United States Patents in area of fiber-based lasers and amplifiers
- Presenter of numerous (> 75) Invited and Contributed talks at national and international conferences.

CITATION INDEX

<http://scholar.google.com/citations?user=i8euhIIAAAAJ>

Citations: 2751; h-index: 27 (June 2020)

PROFESSIONAL SOCIETY MEMBERSHIP AND SYNERGISTIC ACTIVITIES

- International Society of Optical Engineering (SPIE)
- Optical Society of America (OSA)
- Institute of Electrical and Electronic Engineers (IEEE)
- American Physical Society (APS)
- Regional Chair (Southern Arizona) for MIT Educational Council

PATENTS

- Side-Pumped Multi-Port Optical Amplifier and Method of Manufacture Using Fiber Drawing Technologies, 6,778,319 8/17/2004
- Method of Fusion Splicing Silica Fiber with Low-Temperature Multi-Component Glass Fiber, 6,705,771 3/16/2004
- Multi-Mode Erbium Micro Fiber Amplifier (EMFA), 6,738,186 5/18/2004
- Reflective Erbium-Doped Amplifier, 6,700,697 3/2/2004
- Method of Angle Fusion Splicing Silica Fiber with Low-Temperature Non-Silica Fiber 6,866,429 3/15/2005
- Method of Fusion Splicing Thermally Dissimilar Glass Fibers, 6,921,216 7/26/2005
- 1- μ M Phosphate-Glass Fiber Amplified Spontaneous Emission (ASE) Source 7,423,803 9/9/2008
- An Ophthalmic Optical Coherence Tomography (OCT) test station using a 1 μ m Fiber ASE source, 7,688,500 3/30/2010
- Multi-Core Optical Fiber Image Amplifier and Method of Drawing, 7,289,707 10/30/2007
- IR Supercontinuum Source Using Low-Loss Heavy Metal Oxide Glasses; Patent Number: US20140204456A1 (2013)
- IR heavy metal oxide glasses - Patent number: US8995802B2 (2013)
- Low-loss UV to mid IR optical tellurium oxide glass and fiber for linear, non-linear and active devices - Patent number: US8805133B1 (2013)