

Chi-Fu Yen

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Education	Ph.D, Electrical Engineering Iowa State University, USA Advisor: Dr. Sanjeevi Sivasankar	08/10 - Present
	Master, Electro-Optical Engineering National Taipei University of Technology, Taiwan Thesis: To Construct a Laser Capture Microdissection System in Nano-Scale by Using Near-Field Fiber Probe Advisor: Dr. Chien-Ming Chen	09/03 - 06/05
	Bachelor, Electronic Engineering Yuan Ze University, Taiwan	09/99 - 06/03

Research Experience

- 1. Research assistant** in Dr. Sanjeevi Sivasankar's laboratory
Department of Physics and Astronomy
Iowa State University, USA
08/10 - Present
- 2. Research assistant** in Dr. Wei-hau Chang's laboratory
Institute of Chemistry
Academia Sinica, Taiwan
10/05 - 07/10

Patents

- "Fluorescence axial localization with nanometer accuracy and precision"
Sanjeevi Sivasankar, Hui Li and **Chi-Fu Yen**
U.S. Provisional Patent 61/796641 (2012)

Certificate

- Certified LabVIEW Associate Developer (CLAD)
National Instruments, United States, 2013
- Operation training course of Transmission Electron Microscope JEM-1400
JEOL LTD., Tokyo, Japan, 2008

Awards

- 2014 Education Travel Award
Biophysical Society, United States

Procedural Expertise

- **Single-molecule techniques:**

Wide-field, Confocal, and Total Internal Reflection Fluorescence Microscopy
Single-Pair Fluorescence Resonance Energy Transfer Experiments
Atomic Force Microscopy - Force Spectroscopy

- **Biological experiments:**

Cell passage, Protein purification and Virus tracking

- **Transmission Electron Microscopy:**

Native stain and Cryo-sample preparation, TEM operation

- **Computer Programing:**

MATLAB, LabVIEW and IDL

Publications

[1] “Fluorescence axial localization with nanometer accuracy and precision”

Hui Li, **Chi-Fu Yen**, Sanjeevi Sivasankar*

Nano Letters 2012, 12(7): 3731–3735.

Impact factor: **13.198**

(Hui Li and **Chi-Fu Yen** contributed equally to this work)

[2] “Fis-protein induces rod-like DNA bending”

Chi-Cheng Fu, Ching-Fong Lin, Quan-Ze Gao, Wei-Zen Yang, Tsong-Shin Lim, Li-Ling Yang, **Chi-Fu Yen**, Wei-Hau Chang, Hanna S. Yuan, Sheh-Yi Sheu, Dah-Yen Yang and Wunshain Fann*

Chemical Physics Letters 2010, 500: 318–322.

Impact factor: **2.28**

[3] “Zernike Phase Plate Facilitates Single Particle Analysis of Cryo-EM Images of Unstained Asymmetric Protein Complexes”

Wei-Hau Chang*, Michael T-K Chiu, Chin-Yu Chen, **Chi-Fu Yen**, Yen-Cheng Lin, Yi-Ping Weng, Ji-Chau Chang, Yi-Min Wu, Holland Cheng, Jianhua Fu and I-Ping Tu

Structure 2010, 18: 17-27.

Impact factor: **6.337**

[4] “A Single Molecule FRET Study of Formation of RNA Polymerase II Elongation Complex on Passivated Surface”

Yen-Chen Lin, Bo-Lin Lin, Tommy Setiawan, Chia-Chi Chang, **Chi-Fu Yen** and Wei-Hau Chang*,

Journal of the Chinese Chemical Society 2010, 57:514-521.

Impact factor: **0.631**

[5] “Mapping RNA Exit on RNA Polymerase II by FRET Analysis”

Chin-Yu Chen, Chia-Chi Chang, **Chi-Fu Yen**, Michael T.-K. Chiu, and Wei-Hau Chang*,

Proceedings of the National Academy of Sciences 2009, 106:127-132.

Impact factor: **9.432**

(Chin-Yu Chen, Chia-Chi Chang and **Chi-Fu Yen** contributed equally to this work)

[6] “The positional capture experiments of the LCM using near field fiber probe”

Chi-Fu Yen, Jen-Ai Lee, Chien-Ming Chen*

Proceedings of SPIE 2005, 5852:844-848

Impact factor: **0.885**

Conference papers and posters

[1] "Single Molecule Characterization of the Role of Divalent Ions in Prion Protein Aggregation"

Chi-Fu Yen and Sanjeevi Sivasankar*

Biophysical Society 58th Annual Meeting, 15-19 February 2014, San Francisco, CA, USA

[2] "Fluorescence axial localization with nanometer accuracy and precision"

Chi-Fu Yen, Hui Li, Sanjeevi Sivasankar*

2nd Midwest Single Molecule Workshop, 26-27 July 2012, Ann Arbor, MI, USA

[3] "Simultaneous single molecular fluorescence with AFM force spectroscopy"

Hui Li, Chi-Fu Yen, Sanjeevi Sivasankar*

Annual March Meeting of the American Physical Society, 21-25 March 2011, Dallas, TX, USA

[4] "Simultaneous AFM force spectroscopy and FRET measurements on single biological molecules"

Hui Li, Chi-Fu Yen, Sanjeevi Sivasankar*

Biophysical Society 55th Annual Meeting, 5-9 March 2011, Baltimore, MD, USA

[5] "Toward the structure and function of transcription complex of RNA polymerase II with TFIIIF at single molecular level by FRET"

Chin-Yu Chen, Tommy Setiawan, Chi-Fu Yen, Bo-Lin Lin, Hung-Ta Chen, Wei-Hau Chang*,

Biophysical Society 53rd Annual Meeting, 28 Feb- 4 March 2009, Boston, MA, USA

[6] "Toward direct observation of the actions of yeast RNA polymerase II"

Chia-Chi Chang, Chin-Yu Chen, Chi-Fu Yen, Tsung-Kai Chiu, Wei-hau Chang*,

Biophysical Society 51st Annual Meeting, 3-7 March 2007, Baltimore, MD, USA

[7] "Single molecule study of DNA kink structure induced by the protein Sac7d"

Chin-Yu Chen, Chi-Fu Yen, Tsung-Kai Chiu, Andrew H.-J. Wang, Wei-hau Chang*,

Biophysical Society 51st Annual Meeting, 3-7 March 2007, Baltimore, MD, USA

[8] "The Automatic Column-switching system for HPLC"

Chi-Fu Yen, Jen-Ai Lee, Chien-Ming Chen*,

The 125th Annual International Japanese Pharmaceutical Conference, 29-31 March 2005, Bigsite, Tokyo, Japan

[9] "The positional capture experiments of the LCM using near field fiber probe"

Chi-Fu Yen, Jen-Ai Lee, Chien-Ming Chen*,

ICEM2004, 29 November- 1 December 2004, SPIE, Singapore

[10] "New Construct of Laser Capture Microdissection(LCM) Using Near-Field Optical Tips"

Chi-Fu Yen, Jen-Ai Lee, Chien-Ming Chen*,

The 10th International Microoptics Conference (MOC'4), 1-3 September 2004, Friedrich-Schiller-University, Jena, Germany