อัตชีวประวัติ



รศ. ดร. วิษณุ เพชรภา

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ตำแหน่งทางวิชาการ: รองศาสตราจารย์ ระดับ 9

สถานที่ทำงาน: วิทยาลัยนาโนเทคโนโลยีพระจอมเกล้าลาดกระบัง

สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

ถนนฉลองกรุง แขวงลำปลาทิว เขตลาดกระบัง กรุงเทพฯ 10520

โทรศัพท์ 023298000 ต่อ 3117

การศึกษา:

<u>คุณวุฒิ</u>	<u>ปี พ.ศ. ที่จบ</u>	<u>ชื่อสถานศึกษาและประเทศ</u>
วท. บ. (ฟิสิกส์ เกียรตินิยม)	2535	มหาวิทยาลัยเชียงใหม่ ประเทศไทย
M.Sc. (Physics)	2540	University of Central Florida, USA
ปร.ด. (ฟิสิกส์ประยุกต์)	2550	สถาบันเทคโนโลยีพระจอมเกล้า
		เจ้าคุณทหารลาดกระบัง

ประวัติการรับราชการ

ได้รับแต่งตั้งให้ดำรงตำแหน่งอาจารย์ เมื่อวันที่ 19 พฤษภาคม พ.ศ. 2536

ได้รับแต่งตั้งให้ดำรงตำแหน่งผู้ช่วยศาสตราจารย์ เมื่อวันที่ 24 เมษายน พ.ศ. 2545 ได้รับแต่งตั้งให้ดำรงตำแหน่งรองศาสตราจารย์ เมื่อวันที่ 31 สิงหาคม พ.ศ. 2548

ประสบการณ์การทำงาน

● พ.ศ. 2536-52	อาจารย์ประจำ ภาควิชาฟิสิกส์ประยุกต์ คณะวิทยาศาสตร์ สถาบันเทคโนโลยีพระ
	จอมเกล้าเจ้าคุณทหารลาดกระบัง
● พ.ศ. 2542-44	อาจารย์พิเศษ ภาควิชาฟิสิกส์ คณะวิทยาศาสตร์ มหาวิทยาลัยอุบลราชธานี
● พ.ศ. 2544-48	กรรมการคณะวิทยาศาสตร์ สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

W.M.	. 2546	อาจารย์พิเศษ หลักสูตรปริญญาโท-เอก สาขาวิชาฟิสิกส์ คณะวิทยาศาสตร์ มหาวิทยาลัยมหิดล
● พ.ศ.	. 2546 มหาวิทยาลัย	อาจารย์พิเศษ หลักสูตรปริญญาโท-เอก สาขาวิชาฟิสิกส์ คณะวิทยาศาสตร์
	0441.1041.0	์ ศิลปากร
• พ.ศ.	. 2548-50	กรรมการสภาคณาจารย์ สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง
พ.ศ.เจ้า	. 2552	รักษาการ รองคณบดีฝ่ายวิชาการ คณะวิทยาศาสตร์ สถาบันเทคโนโลยีพระจอมเกล้า
		คุณทหารลาดกระบัง
พ.ศ	. 2552	รักษาการผู้อำนวยการสำนักบริหารงานทั่วไป คณะวิทยาศาสตร์
		สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง
พ.ศ	. 2552	รักษาการผู้อำนวยการศูนย์เครื่องมือวิทยาศาสตร์ คณะวิทยาศาสตร์
		สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง
พ.ศ.	. 2552-ปัจจุบัน	อาจารย์ประจำวิทยาลัยนาโนเทคโนโลยีพระจอมเกล้าลาดกระบัง สถาบันเทคโนโลยีพร จอมเกล้าเจ้าคุณทหารลาดกระบัง
พ.ศ	. 2552-ปัจจุบัน	หัวหน้าห้องปฏิบัติการวัสดุนาโนคอมโพสิต วิทยาลัยนาโนเทคโนโลยีพระจอมเกล้า ลาดกระบังสถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง
พ.ศ	. 2555-ปัจจุบัน	ผู้ทรงคุณวุฒิประจำกรรมการสภาวิชาการ สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหาร ลาดกระบัง
พ.ศ	. 2556-ปัจจุบัน	ผู้ทรงคุณวุฒิประจำกรรมการคณะวิทยาศาสตร์ มหาวิทยาลัยราชภัฏราชนครินทร์
	. 2557-ปัจจุบัน	ผู้ทรงคุณวุฒิประจำกรรมการคณะบริหารธุรกิจ มหาวิทยาลัยราชมงคลตะวันออก วิทยา เขตจักรพงษ์ภูวนารถ
2 4 f	า.พ. 2558-ปัจจุบั	้น รองคณบดี วิทยาลัยนาโนเทคโนโลยีพระจอมเกล้าลาดกระบัง สถาบันเทคโนโลยี พระจอมเกล้าเจ้าคุณทหารลาดกระบัง

	พ.ศ. 2531-35 เทคโนโลยี	รบทุนเครงการพฒนาและสงเสรมผูมความสามารถพเคษทางวทยาศาสตรและ
		(พสวท) ของ สสวท ในระดับปริญญาตรี สาขาฟิสิกส์ คณะวิทยาศาสตร์ มหาวิทยาลัยเชียงใหม่
•	พ.ศ. 2532	เหรียญผลการเรียนดีเด่น คณะวิทยาศาสตร์ มหาวิทยาลัยเชียงใหม่
•	พ.ศ. 2536-40	รับทุนกระทรวงวิทยาศาสตร์และเทคโนโลยี ในระดับปริญญาโท เพื่อศึกษาต่อใน

ต่างประเทศ สาขาฟิสิกส์ Faculty of Art and Science, University of Central Florida, United State of America

• พ.ศ. 2557

รางวัล "ครูผู้สอนดีเด่น" ของสถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

ประสบการณ์การทำงานด้านอื่นๆ

- กรรมการโครงการความร่วมมือเพื่อพัฒนาการเรียนการสอนและการจัดการศึกษาวิชา คณิตศาสตร์
 วิทยาศาสตร์ และเทคโนโลยีระดับโรงเรียน ระหว่างสถาบันส่งเสริมการสอนวิทยาศาสตร์และเทคโนโลยี
 (สสวท.) กับคณะวิทยาศาสตร์ สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง
- กรรมการค่ายวิทยาศาสตร์ภาคฤดูร้อนสำหรับนักเรียนในโครงการ พสวท.
- หัวหน้าห้องปฏิบัติการ Scanning Electron Microscope
- คณะอนุกรรมการประกันคุณภาพการศึกษาของคณะวิทยาศาสตร์ สจล.
- คณะกรรมการกลางโอลิมปิกวิชาการ ในการแข่งขันฟิสิกส์โอลิมปิก และดาราศาสตร์โอลิมปิก มูลนิธิส่งเสริม โอลิมปิกวิชาการและพัฒนามาตรฐานวิทยาศาสตร์ศึกษา ในพระอุปถัมภ์สมเด็จพระเจ้าพี่นางเธอ เจ้าฟ้า กัลยาณิวัฒนา กรมหลวงนราธิวาสราชนครินทร์ (สอวน.)
- ผู้ทรงคุณวุฒิประเมินโครงการวิจัยของสำนักงานกองทุนสนับสนุนการวิจัย
- ผู้ทรงคุณวุฒิประเมินโครงการวิจัยของสถาบันวิจัยแสงซินโครตรอน (องค์การมหาชน)
- ผู้ทรงคุณวุฒิที่ปรึกษางานวิจัย กรมวิทยาศาสตร์และเทคโนโลยีกลาโหม
- ผู้ทรงคุณวุฒิการปรับปรุงหลักสูตร ของมหาวิทยาลัยแม่ฟ้าหลวง มหาวิทยาลัยราชภัฏนครราชสีมา
- กองบรรณาธิการวารสารวิทยาศาสตร์ มหาวิทยาลัยราชภัฏพิบูลสงคราม
- ผู้ประเมินบทความวิชาการ วารสารระดับชาติและระดับนานาชาติกว่า 20 วารสาร
- หัวหน้าบรรณาธิการรับเชิญ (Guest Editor) วารสาร Advanced Materials Research, Switzerland
- คณะกรรมการการจัดประชุมวิชาการระดับชาติและระดับนานาชาติ อาทิ Siam Physics Congress 2012, International Conference on Engineering, Applied Science and Technology 2013 เป็นต้น
- วิทยากรรับเชิญ (Invited Speaker) ในงานประชุมทางวิชาการระดับชาติและระดับนานาชาติ อาทิ Siam Physics Congress 2013, International Workshop on Field Emitter and Semiconductor Materials and Devices เป็นต้น

หัวข้อวิจัยและพัฒนา

ปี ชื่องานวิจัย	รายละเอียด	ผู้ให้ทุน
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2557-2558	การสังเคราะห์และการศึกษาโครงสร้าง อย่างละเอียดของวัสดุประกอบออกไซด์ เชิงซ้อน M-Zn-O โครงสร้างสปิเนล (M=Sn, Al)	หัวหน้าโครงการ	สำนักงานคณะกรรมการ วิจัยแห่งชาติ
2556-2557	การสังเคราะห์ผงนาโนนำไฟฟ้า M- doped SnO ₂ (M=In, Sb, F) ด้วยวิธี พื้นฐานทางโซล-เจล เพื่อประยุกต์ใช้ใน งานด้านออปโตอิเล็กทรอนิกส์	หัวหน้าโครงการ	สถาบันเทคโนโลยีพระ จอมเกล้าเจ้าคุณทหาร ลาดกระบัง
2555-2556	การสังเคราะห์สารประกอบหลายหน้าที่ของ ZnO-CuO ระดับนาโนด้วยวิธี ตกตะกอนร่วม	หัวหน้าโครงการ	สำนักงานคณะกรรมการ วิจัยแห่งชาติ
2554-2555	การสังเคราะห์เส้นใยนาโนคอมโพสิต N-doped TiO ₂ /CuO ที่มีประสิทธิภาพ การเร่งปฏิกิริยาด้วยแสงที่เพิ่มขึ้นภายใต้ แสงที่มองเห็นเพื่อประยุกต์ใช้งานด้าน สิ่งแวดล้อม	หัวหน้าโครงการ	สำนักงานคณะกรรมการ วิจัยแห่งชาติ
2554-2556	การสังเคราะห์สารประกอบออกไซด์ เชิงซ้อนที่มีอนุภาคระดับนาโนเมตรด้วย กระบวนการใช้คลื่นเสียง	ผู้ร่วมวิจัยใน โครงการ	สถาบันเทคโนโลยีพระ จอมเกล้าเจ้าคุณทหาร ลาดกระบัง (สจล)
2553	เซ็นเซอร์จากวัสดุผสมไฮบริดนาโนสำหรับ ตรวจสารพิษโลหะหนักในสิ่งแวดล้อม	ผู้ร่วมวิจัยใน โครงการ	ศูนย์ความเป็นเลิศทาง ฟิสิกส์
การพัฒนาวัสดุคอมโพสิตของโลหะ 2552 ออกไซด์กับวัสดุโครงสร้างนาโนเพื่อใช้ใน งานด้านอิเล็กทรอนิกส์		หัวหน้าโครงการ	ศูนย์ความเป็นเลิศทาง ฟิสิกส์
2549-2551	การพัฒนาระบบการปลูกฟิล์มบางนำ 49-2551 ไฟฟ้าโปร่งใสและระบบวัดทางแสงเพื่อ พิสูจน์เอกลักษณ์สมบัติฟิล์มบาง		สำนักวิจัยนาโน เทคโนโลยีลาดกระบัง
2548-2549	การพัฒนาระบบต้นแบบลอจิกเกททาง		สจล.

สาขาวิชาการที่มีความชำนาญพิเศษ

Optics, Laser, Quantum Device, Nanotechnology, Nanocomposite, Optical Thin Films and Materials, Optical Characterization, Metal Oxides, Nanomaterial, Nanocomposite and Synthesis

งานแต่ง เรียบเรียง แปลหนังสือ หรือเขียนบทความทางวิชาการ

- 1. วิษณุ เพชรภา, **กลศาสตร์**, 2544
- 2. วิษณุ เพชรภา, เลเซอร์และการประยุกต์, 2547

ผลงานวิจัย

ผลงานวิจัยที่ตีพิมพ์ในวารสารระดับนานาชาติ (2010-2019)

2010

- 1. C. Saributr, W. Mekprasart, P. Thanomngam, and **W. Pecharapa**, "Investigation of Structural properties of CuPc/TiO₂ Nanocomposites", *Advanced Materials Research*, 93-94 (2010), pp. 687-690.
- 2. W. Mekprasart, W. Jareonboon, W. Pecharapa, "TiO₂/CuPc Hybrid Nanocomposites Prepared by Low-Energy Ball Milling for Dye-Sensitized Solar Cell Application", Material *Science and Engineering: B*, 172 (2010), pp. 231-236. (IF: 1.786)

2011

- 3. K. Chongsri, S. Boonruang and W. Pecharapa, "N-doped MgZnO alloy thin film prepared by sol-gel method " *Material Letters*, 65 (2011), pp.1842-1845. (IF: 1.94)
- 4. Prayut Potirak, Chokchai Kahattha and **Wisanu Pecharapa**, "Microwave-Assisted Synthesis and Characterization of Carbon Nanotube/Zinc Oxide composites", *Journal of Nanoscience and Nanotechnology*, Vol.11,No. 9, (2011) pp. 11195-11199, (IF: 1.352)
- 5. Wanichaya Mekprasart, Russameeruk Noonuruk, Wirat Jareanboon and **Wisanu Pecharapa** "Quasi Solid-State Dye-Sensitized Solar Cells based on n-TiO₂/p-NiO Core-Shell Nanocomposites", *Journal of Nanoscience and Nanotechnology*, Vol.11, No. 7, (2011) pp. 6483-6489 (IF: 1.352)
- 6. K. Paipitak, T. Pornpra, P. Mongkontalang, W. Techitdheera and **W. Pecharapa,** "Characterization of PVA-Chitosan Nanofibers Prepared by Electrospinning", *Procedia Engineering*, 8 (2011), pp. 101-105.
- 7. R. Noonuruk, N. Wongpisutpaisan, P. Mukdacharoenchai, W. Techitdheera and W. Pecharapa, "Ozone-induced Optical Density Change of NiO Thin Films and Their Applicability as Neutral Optical Density Filter", *Procedia Engineering*, 8 (2011), pp. 212-216.

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- 9. W. Mekprasart and **W. Pecharapa**, "Synthesis and Characterization of Nitrogen-doped TiO₂ and its Photocatalytic Activity Enhancement under Visible Light", *Energy Procedia*, 9, (2011), pp. 509-514.
- 10. B. Jandai, P. Woointranont, S. Chaiyasith, **W. Pecharapa**, "NiO/MWCNTs coated F-doped Tin Oxide Working Electrode for Hydrogen Peroxide Detection", *Energy Procedia*, 9, (2011), pp. 575-580.
- 11. K. Paipitak, C. Kahattha, W. Techitdheera, S. Porntheeraphat, W. Pecharapa, "Characterization of Sol-gel Derived Ti-doped Tungsten Oxide Electrochromic Thin Films", *Energy Procedia*, 9, (2011), pp. 446-451.
- 12. N. Wongpisutpaisan, P. Charoonsuk, N. Vittayakorn, W. Pecharapa, "Sonochemical Synthesis and Characterization of Copper Oxide Nanoparticles", *Energy Procedia*, 9, (2011), pp. 404-409.

- 13. R. Noonuruk, W. Techitdheera, **W. Pecharapa**, "Characterization and ozone-induced coloration of Zn_xNi_{1-x}O thin films prepared by sol-gel method", *Thin Solid Films*, 520, (2012), pp. 2769-2775, (IF: 1.909; 2010)
- 14. W. Mekprasart, N. Vittayakorn and W. Pecharapa, "Ball-milled CuPc/TiO2 hybrid nanocomposite and its photocatalytic degradation of aqueous Rhodamine B", *Materials Research Bulletin*, 47, Issue 11, (2012), pp. 3114-3119 (IF: 2.105; 2011)
- 15. P. Mukdacharoenchai, W. Mekprasart, J. Sritharathikhun and **W. Pecharapa**, "Effect of TiO₂ compact layer on optical absorption and fluorescence performance of R6G/PMMA composite light-guided films", *Advanced Materials Research*, 528 (2012) pp. 245-248.
- 16. K. Paipitak, J. Rattanarak, D. Pakdeeyingyong, W. Techitdheera, S. Porntheeraphat and W. Pecharapa, "Enhanced electrochromic performance of sol-gel derived WO₃ thin films assisted by electrospun PVA nanofibers", *Advanced Materials Research*, 528 (2012) pp. 249-253.

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17. C. Bangbai, K. Chongsri, W. Pecharapa, and W. Techidheera, "Effect of Al and N Doping on Structural and Optical Properties of Sol-gel Derived ZnO Thin Films", *Sains Malaysiana*, 42, No.2 (2013) pp. 239-246. (IF: 0.268; 2011)

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