



บทความทางวิชาการ หนังสือ และผลงานอื่น เผยแพร่โดยราชบัณฑิตและภาคีสมาชิก สำนักวิทยาศาสตร์  
ระหว่างเดือนกันยายนถึงตุลาคม ๒๕๖๘ ดังนี้

#### บทความทางวิชาการ

๑. Kobayashi S, Watanabe K, Kuraya E, Touyama A, Liao C-C, **Panha S**, et al. Volatile compounds of mammal-pollinated *Mucuna macrocarpa* (Fabaceae) based on distribution area in Japan, Taiwan and Thailand. *Plant Species Biol.* 2025;1–7. doi:10.1111/1442-1984.70021
๒. Phokaewwarangkul O, Markaki I, Moes HR, Petrovic I, Schrag A, **Bhidayasiri R**. Vital nutrition: enhancing health in advanced Parkinson’s disease with device-aided therapies. *Neural Transm (Vienna)*. 2025; doi:10.1007/s00702-025-02935-x
๓. Xayyavong O , Aiduang W , Jatuwong K, **Lumyong S**. Utilization of giant mimosa stalk to produce effective stick spawn for reducing inoculum costs in economic mushroom farming systems. *Agriculture*. 2025;15:1584. doi:10.3390/agriculture15151584
๔. Kankanamalage HPA, Tibpromma S, Garumuni DNM, Mudiyansele SCDD, Yang JYDD, **Lumyong S**, et al. Emerging fungal pathogens warfare, fungi-like organisms, and the world’s major crops: Lessons from the past and solutions for the future. *Curr Microbiol.* 2025; 82:440. doi:10.1007/s00284-025-04406-8
๕. Wongsanittayarak J , Kanpiengjai A, Leangnim N, Soyprasert S, Unban K, **Lumyong S**, et al. In vitro fermentation characteristics of purified short-chain inulin and inulin neoseris oligosaccharides produced from red onions. *Foods*. 2025;14:2804. doi:10.3390/foods 14162804
๖. Thewjitcharoen Y, Nakasatien S, **Kulkantrakorn K**, Himathongkam T. Ketosis-prone diabetes as a presentation of new-onset diabetes in a patient with spinal muscular atrophy type III. *JCEM Case Reports*. 2025;3(9):art.no.luaf163. doi:10.1210/jcemcr/luaf163
๗. Kaorop W, Maneechote C, Pratchayasakul W, Kumfu S, Arunsak B, ..., **Chattipakorn N**. Spermidine exerts cardiometabolic protection in estrogen-deprived rats via mitigating cardiac mitochondrial dysfunction and apoptosis. *Toxicol Appl Pharmacol.* 2025;501:117399. doi:10.1016/j.taap.2025.117399
๘. Boonchooduang N, Louthrenoo O, Likhitweerawong N, Kunasol C, Nawara W, ..., **Chattipakorn N**, et al. Gut microbiota-derived short-chain fatty acids and sleep disturbances in pediatric attention-deficit/hyperactivity disorder: Insights into neurobiological links and treatment implications. *Pediatr Neurol.* 2025;172:8-14. doi:10.1016/j.pediatrneurol.2025.07.017
๙. Sa-Nguanmoo P, Pratanaphon S, Parameyong A, Chawawisuttikool J, Shinlapawittayatorn K, ..., **Chattipakorn N**, et al. Inspiratory muscle training improves heart rate



variability and respiratory muscle strength in obese young adults. PLoS One. 2025;20(8):e0329623. doi:10.1371/journal.pone.0329623

๑๐. Phimphilai M, Phrommintikul A, Wongcharoen W, Hengjeerajarus N, Karndumri K, ..., **Chattipakorn N**, et al. FGF21 is a novel biomarker to predict fragility fractures in patients with type 2 diabetes mellitus. Sci Rep. 2025;15(1):29848. doi:10.1038/s41598-025-15104-7

๑๑. Cheng H, Sripetchwandee J, Pratchayasakul W, **Chattipakorn N**, Chattipakorn SC. Potential benefits of vitamin D on brain pathologies and cognitive function in metabolic syndrome: evidence from *in vivo* and clinical studies. Nutr Neurosci. 2025;1-18. doi:10.1080/1028415X.2025.2544615

๑๒. Sirimaharaj N, Thiankhaw K, **Chattipakorn N**, Chattipakorn SC. Unveiling the protective roles of melatonin on glial cells in the battle against Alzheimer's disease-insights from *in vivo* and *in vitro* studies. Mol Neurobiol. 2025;62(8):10414-26. doi:10.1007/s12035-025-04904-7

๑๓. Gebremariam TT, Longchin P, Thoumrungroj A, Sutthiphong T, Chaemchuen S, **Hun-som M**. Solar-light-driven hydrogen production via noble-metal-free CdS/MoSe<sub>2</sub>/UiO-66-NH<sub>2</sub> heterostructure photocatalyst. Mater Today Energy. 2025;53:102021. doi:10.1016/j.mtener.2025.102021

๑๔. Kraisittipanit R, **Tancho A**, Watpathomsub S, Tuanudom R, Panraksa P, Prathum N, et al. Earthworms and cellulase activity in agricultural soils of Nakhon Pathom, Thailand. J Earth Environ Sci. 2025;7(6):439–50. doi:10.30564/jees.v7i6.10027

๑๕. Kraisittipanit R, Meechai T, **Tancho A**, Panraksa P, Khiewkamrop P, Prathum N, et al. Studying, analyzing, and interpreting the gut microbiome of the earthworm *M. peguana* (Rosa, 1890) using next-generation sequencing. J Earth Environ Sci. 2025;7(7):185–97. doi:10.30564/jees.v7i7.10021

๑๖. R Kraisittipanit, **A Tancho**, P Somniam, K Inthanon and S Rotarayanoot. Sequence-related amplified polymorphism (SRAP) molecular marker: DNA fingerprinting studying on economic and agricultural earthworms in North of Thailand. Thai J. Agric. Sci. 2022;53(4):192–200.

๑๗. Wongfaed N, Anukhroa P, Sittijunda S, Imai T, **Reungsang A**. Dual-matrix immobilization of cellulolytic consortium KKU-MC1 for enhancing biohydrogen production from Napier grass and oil palm frond. J Environ Manage. 2025;393:126994. doi:10.1016/j.jenvman.2025.126994

๑๘. Poosisom S, Wongfaed N, Jumpa T, Chiangjong W, Xia A, **Reungsang A**, et al. The influence of mixture proportions of polypropylene, polyvinyl chloride, and polyester microplastics on methane production: Integrative analysis of microbial diversity, enzymatic and metabolic profiles. Process Saf Environ Prot. 2025;202:107752. doi:10.1016/j.psep.2025.107752



๑๙. Kurniawan E, Jariyaboon R, **Reungsang A**, Chucheeep T, Kongjan P. Optimization of hydro-thermal carbonization parameters of sugarcane residues for enhanced hydrochar fuel properties with ammonium adsorption assessment. *Chem Eng Sci.* 2025;320: 122576. doi:10.1016/j.ces.2025.122576

๒๐. อลิศรา เรืองแสง, คณาธิป พรหมนวล. กระบวนการผลิตก๊าซชีวภาพ [อนุสิทธิบัตร]. เลขที่ ๒๕๘๘๑. กรุงเทพฯ: กรมทรัพย์สินทางปัญญา, กระทรวงพาณิชย์; ๒๕๖๕.

๒๑. Zaetang Y, Thongrit P, Phoo-Ngernkham T, Tippayasam C, Phungsai P, ... **Chindapasirt P**. High calcium fly ash-auto glass powder alkali-activated pastes. *Int J Sustain Eng.*2025;18(1). doi:10.1080/19397038.2025.2466475

๒๒. Siriwattanakarn A, Wongsa A, Eua-Anant N, Sata V, Sukontasukkul P, **Chindapasirt P**. Utilization of mill Scale Waste as Natural Fine Aggregate Replacement in Mortar: Evaluation of Physical, Mechanical, durability, and post-fire properties. *Recycling.* 2025;10(1):20. doi:10.3390/recycling10010020

๒๓. Rukzon S, Rungruang S, Chaisakulkiet U, Posi P, **Chindapasirt P**. Strength, pore and corrosion characteristics of ceramic insulator powder-silica fume based ternary blended mortar. *Cleaner Mater.* 2024;15:100284. doi:10.1016/j.clema.2024.100284

๒๔. Thammasang S, Pimsawat N, Kasemsiri P, Knijnenburg JTN, Theerakulpisut S, ..., **Chindapasirt P**. Surface modification of lignin-based activated carbon for enhanced hydrophobicity in oil-in-water emulsion separation, self-cleaning and antibacterial applications. *Surfaces and Interfaces.* 2025;60:106044. doi:10.1016/j.surfin.2025.106044

๒๕. Harisaeng K, Chaikool P, Mutoh Y, **Chindapasirt P**, Laonapakul T. Fabrication and characterization of tetra-calcium phosphate from natural wastes of eggshell and cockle shell. *Results in Mater.* 2025;100670–0. doi:10.1016/j.rinma.2025.100670

๒๖. Kaewpikul D, Pangdaeng S, Wongsa A, Ekprasert J, Sata V, **Chindapasirt P**. Polyvinyl chloride (PVC) waste in pressed geopolymers concrete: Analyzing properties and feasibility application considerations. *Constr Build Mater.* 2025;468:140372. doi:10.1016/j.conbuildmat.2025.140372

๒๗. Yoosuk P, Suksiripattanapong C, Thumrongvut J, Suebsuk J, **Horpibulsuk S, Chindapasirt P**. Pullout resistance of fiberglass-reinforced plastic reinforcement embedded in cohesionless soils. *Transp Infrastruct Geotech.* 2025;12(71). doi:10.1007/s40515-024-00531-2

๒๘. Sivaramakrishnan R, Kanwal S, **Incharoensakdi A**, Nirmal N, Srimongkol P. Exploring the nutraceutical and functional food potential of microalgae: Implications for health and sustainability. *J Agric Food Res.* 2025; 22: 102148; doi:10.1016/j.jafr.2025.102148



๒๙. Baik JS, Sung YH, Wu RM, Lu CS, **Bhidayasiri R**. Optimized use of safinamide as an add-on therapy in Asian patients with Parkinson's disease: a narrative review and expert opinion. *Ther Adv Neurol Disord*. 2025;17:18:17562864251329099. doi:10.1177/17562864251329099
๓๐. De Leon APR, **Bhidayasiri R**, Phokaewwarangkul O. Optimizing device-aided therapies in advanced Parkinson's disease: A case series on continuous subcutaneous apomorphine infusion in challenging scenarios. *J Mov Disord*. 2025;18(3):285-8. doi:10.14802/jmd.25045
๓๑. Lawanwadeekul S, **Chindapasirt P**, Sustainable construction materials from leveraging water hyacinth and wastepaper for superior sound absorption and thermal insulation, *J Build Eng*. 2025;03:112147
๓๒. Khansamrit K, Hanjitsuwan S, Intarabut D, Phiangphimai C, Sahamitmongkol R, Phoo-ngernkham T, Damrongwiriyanupap N, Petcherdchoo A, **Chindapasirt P**, Evaluation of post-installed adhesive anchors in concrete using hybrid alkali-activated binders. *Constr Build Mater*. 2025; 471:14067
๓๓. Suwan T, Fan M, Wong HS, Jitsangiam P, Hansapinyo C, **Chindapasirt P**, Influence of ammonia-contaminated fly ash from selective catalytic reduction process on the properties of Portland-fly ash blended cement and geopolymer composites. *Case Stud Constr Mater*. 2025; 22:e04563
๓๔. Sainimnuan S, Chimprasit A, **Hannongbua S**, Saparpakorn P. Role of interaction mode of phenanthrene derivatives as selective PDE5 inhibitors using molecular dynamics simulations and quantum chemical calculations. *Mol Divers*. 2025;29(2):1683-1696. doi:10.1007/s11030-024-10944-3
๓๕. Asamo S, Suvandee W, Wongkanya R, Dechtrirat D, Chattham N, Singh DP, **Hannongbua S**, Prajongtat P. Bifunctional molecular bridges for enhanced efficiency and stability in simplified carbon-based perovskite solar cells: A combined experimental and theoretical study. *ACS Appl Energy Mater*. 2025;8:10647–57. doi:10.1021/acsaem.5c01544
๓๖. Seetin S, Saparpakorn P, Saeyang T, Jantra T, Vanichtanankul J, Vitsupakorn D, Kamchonwongpaisan S, **Hannongbua S**. Repurposing FDA-approved anticancer drugs offers a strategy to target mutant-type malaria by inhibiting parasite DHFR without affecting human DHFR. *Helvetica Chimica Acta*. 2025;108(9).e00019. doi:10.1002/hlca.202500019
๓๗. Tanaka M, Thoumrungraj A, Sutthiphong T, Longchin P, **Hunsom M**. Engineered TiO<sub>2</sub> polymorphs with superior photocatalytic activity for silver recovery from industrial cyanide-based plating effluent. *Colloids Surf. A: Physicochem Eng Asp*. 2025;727:138420.
๓๘. Ahebwa A, Sukkanon C, Hii J, Ngoen-Klan R, Uraiwan A, Manguin S, **Chareonviriyaphap T**. Prevalence and determinants of zoonotic malaria in the Greater Mekong Subregion (GMS)



and Malaysia: systematic review and meta-analysis. Mala J. 2025;24(1):218, doi:10.1186/s12936-025-05464-w

๓๙. Chen I, Sarah M, Daniel M, Aidi L, Johnson S, ..., **Chareonviriyaphap T**, et al. Volatile pyrethroid spatial repellents for preventing mosquito bites: a systematic review and meta-analysis. eBioMedicine. 2025;119:105891. doi:10.1016/j.ebiom.2025.105891

๔๐. Nobleza J, Ahebwa A, Saeung M., Kerdsawang J, **Chareonviriyaphap T**. 2025. Determination discriminating concentrations of transfluthrin and permethrin using the WHO Bottle Assay against *Aedes aebopictus* in Thailand. J Am Mosq Control Assoc. 2025;41(3):160–162. doi:10.2987/25-7228

๔๑. Lhaosudto S, Sathantriphop S, Kongmee M, Ngoen-Klan R, **Chareonviriyaphap T**. Comparative behavioral responses of *B-Caryophyllene* against *Anopheles* mosquito species potential vector of malaria in Thailand. J Am Mosq Control Assoc. 2025;41(3):156–9. doi:10.2987/25-7219

๔๒. Niyomdech H, Duvall G, Lertlumnaphakul W, Manguin S, **Chareonviriyaphap T**. Distribution of flies of medical importance in Thailand: a dataset. Gigabyte 2025;1-16. doi:10.46471

๔๓. Nobleza J, Hii J, Ngoen-Klan R, Nararak J, Lertlumnaphakul W, Saeung M, **Chareonviriyaphap T**. Sampling efficacy of moving-sweepnet collection relative to humanlanding catch for *Aedes albopictus* (Diptera: Culicidae) in a rubber plantation. J Med Entomol. 2025;10.1093/jme/tjaf108

๔๔. **สัญญา สุขพนิชนันท์**. (๒๕๖๘). ลิมโฟมา : เราเรียนรู้อะไรบ้าง (Lymphoma: What have we learnt?). จุลสารสำนักวิทยาศาสตร์ ราชบัณฑิตยสภา ๔(๓), ๕-๑๐.

๔๕. **สัญญา สุขพนิชนันท์**. (๒๕๖๘). เกร็ดการบัญญัติศัพท์วิทยาศาสตร์ในยุคแรกเริ่ม (Anecdotes on coinage of scientific terminology in the early days). จุลสารสำนักวิทยาศาสตร์ ราชบัณฑิตยสภา ๔(๓), ๒๗-๓๓.

๔๖. Vaseenon S, Apajjai N, Pratchayasakul W, **Chattipakorn N**, Chattipakorn SC. D-galactose-induced aging and obese conditions contribute to aging and pathologies in dental pulp of male wistar rats. Exp Gerontol. 2025;211:112907. doi:10.1016/j.exger.2025.112907

๔๗. Yaklai K, Kunasol C, Suparan K, Apajjai N, Chitapanarux T, Pattanakuhar S, ..., **Chattipakorn N**, et al. Electroacupuncture alleviates symptoms and identifies a potential microbial biomarker in patients with constipation-predominant irritable bowel syndrome. World J Gastrointest Pharmacol Ther. 2025;16(3):109046. doi:10.4292/wjgpt.v16.i3.109046

๔๘. **Chindaprasirt P**, Hanjitsuwan S, Damrongwiriyanupap N, Li L-y, Phoo-ngernkham T. Fly ash based alkali-activated repair material for concrete exposed to aggressive environment, in Eco-efficient Repair and Rehabilitation of Concrete Infrastructures, 2<sup>nd</sup> Edition, Editors: Fernando Pacheco-Torgal, Robert E. Melchers, Xianming Shi, Andres Saez Perez, 2024; 251-269.



๔๙. Nuithitikul K, Jitsangiam P, Pachana PK, Arbwaree M, Rattanasak U, ..., **Chindaprasirt P**. Sustainable CO<sub>2</sub> utilization and calcium carbonate recovery from calcium carbide wastewater. *iScience*. 2025;28(4):112239. doi:10.1016/j.isci.2025.112239

๕๐. Loetpiya A, Chaikool P, Mutoh Y, **Chindaprasirt P**, Laonapakul T. Variations in acoustic emission characteristics across different deformation stages of various materials. *Eng Appl Sci Res*. 2025;25:221-8. doi:10.14456/easr.2025.19

๕๑. **Chindaprasirt P**, Rukzon S, Chuphonsat A, Chaisakulkiet U, Posi P. Enhancing the performance of mortar with two pozzolanic materials: Silica fume and basalt powder. *Cleaner Waste Systems*. 2025;11:100319. doi:10.1016/j.clwas.2025.100319

๕๒. Poonsombudloet N, **Sukpanichnant S**, Ngamdarnrongkiat P. CD20 expression in plasma cell neoplasm and B-cell non-hodgkin lymphoma with plasmacytic differentiation: insights into aberrant markers. *J Hematol Transfus Med*. 2025;35(4):289-300. doi:10.69898/jhtm.35.2025.279130

#### บทในหนังสือ

๑. Saleem S, Pimanmas A, **Chindaprasirt P**, Retrofitting of concrete structures with biomaterials, in *Eco-efficient Repair and Rehabilitation of Concrete Infrastructures*, 2nd Edition, Editors: Fernando Pacheco-Torgal, Robert E. Melchers, Xianming Shi, Andres Saez Perez, 2024, pp. 299-321.

๒. **Hannongbua S** and Saparpakorn P. 2025. Rational Structure-Based Drug Design. In: Ranganathan, S., Cannataro, M., Khan, A. M. (ed.) *Encyclopedia of Bioinformatics and Computational Biology*, 2nd Edition, vol. 3, pp. 655–668. US: Elsevier. doi:10.1016/B978-0-323-95502-7.00208-6

๓. ปรียวัตร งามดำรงเกียรติ, ดวงธรรม เอนกภูริธันง, และสัญญา สุขพนิชันนท์. (๒๕๖๘). การวินิจฉัยลิมโฟมาด้วยพยาธิวิทยาทันสมัย (Diagnosis of Lymphoma by Pathology Update). ใน : คณะอนุกรรมการฝ่ายจัดทำหนังสือเวชศาสตร์ทันสมัย ๒๕๖๘. เวชศาสตร์ทันสมัย ๒๕๖๘. กรุงเทพฯ : สำนักพิมพ์ศิริราช, คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล หน้า 153-180.