

國立東華大學教師個人基本資料表

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最高學歷/起迄：台灣大學化學博士 (2001.08-2005.07)

現職/起迄：生命科學系 專任副教授 (2013.08-迄今)

經歷/起迄：

國立東華大學生命科學系 專任助理教授

(2010.02-2013.07)

國立東華大學海洋生物科技研究所 合聘助理教授

(2011.08-2013.07).

國立交通大學材料科學與工程學系 兼任助理教授

(2010.02-2010.07)

國家衛生研究院-奈米醫學中心 博士後研究員

(2006.01-2010.01).

美國聖路易華盛頓大學研究

(2002、2003 暑假)

李佳洪

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專長： 1. 生醫材料 2. 奈米藥物
3. 奈米醫學 4. 生物催化



■研究 (2013.8~2016.7)

- 注意事項：**
- (一) 請詳列個人申請截止日前五年內 (此段期間曾懷孕及生產者，得延長至七年內 (2001.8~2008.7)，但須檢附相關證明文件) 發表之學術性著作，包括：期刊論文、專書及專書論文、研討會論文、技術報告及其他等，並請依各類著作之重要性自行排列先後順序。
 - (二) 各類著作請按發表時間先後順序填寫。各項著作請務必依作者姓名 (按原出版之次序，**通訊作者請加註***)、出版年、月份、題目、期刊名稱 (專書出版社)、起迄頁數之順序填寫。
 - (三) 若期刊屬於 SCI、EI、SSCI 或 A&HCI 等時，請註明。

一、期刊論文：

A、具匿名審查制度之期刊」

1. Fuh, Y. M.; Lu, M. C.; **Lee, C. H.***; Su, J. H.*, Cytotoxic Scalarane Sesterterpenoids from a Marine Sponge *Hippospongia* sp. *Nat. Prod. Commun.* **2013**, 8 (5), 571-572.
2. Sheu, J. H.; Chen, Y. H.; Chen, Y. H.; Su, Y. D.; Chang, Y. C.; Su, J. H.; Weng, C. F.; **Lee, C. H.**; Fang, L. S.; Wang, W. H.; Wen, Z. H.; Wu, Y. C.*; Sung, P. J.*, Briarane diterpenoids isolated from gorgonian corals between 2011 and 2013. *Mar. Drugs* **2014**, 12 (4), 2164-81.
3. Hsu, C. Y.; Shih, H. Y.; Chia, Y. C.; **Lee, C. H.**; Ashida, H.; Lai, Y. K.; Weng, C. F.*, Rutin potentiates insulin receptor kinase to enhance insulin-dependent glucose transporter 4 translocation. *Mol. Nutr. Food Res.* **2014**, 58 (6), 1168-76.
4. Chen, Y. R.; Chang, K. T.; Tsai, M. J.; **Lee, C. H.**; Huang, K. J.; Cheng, H.; Ho, Y. P.; Chen, J. C.; Yang, H. H.; Weng, C. F.*, *Antrodia cinnamomea* profoundly exalted the reversion of activated hepatic stellate cells by the alteration of cellular proteins. *Food Chem. Toxicol.* **2014**,

69, 150-62.

5. Liu, C. L.*; Kankala, R. K.; Yang, J. W.; Hsu, Y. C.; Lee, C. H.; Hu, Y. F., Aggregate formation in tauroursodeoxycholate solutions. *J. Taiwan Inst. Chem. Eng.* **2014**, *45* (4), 1285-1290.
6. Hung, B.-Y.; Kuthati, Y.; Kankala, R.; Kankala, S.; Deng, J. P.; Liu, C. L.; Lee, C. H.*, Utilization of Enzyme-Immobilized Mesoporous Silica Nanocontainers (IBN-4) in Prodrug-Activated Cancer Theranostics. *Nanomaterials* **2015**, *5* (4), 2169-2191.
7. Chen, Z. A.; Kuthati, Y.; Kankala, R. K.; Chang, Y. C.; Liu, C. L.; Weng, C. F.; Mou, C. Y.; Lee, C. H.*, Encapsulation of palladium porphyrin photosensitizer in layered metal oxide nanoparticles for photodynamic therapy against skin melanoma. *Sci. Tech. Adv. Mater.* **2015**, *16* (5), 054205.
8. Kankala, R. K.; Kuthati, Y.; Liu, C. L.; Mou, C. Y.; Lee, C. H.*, Killing cancer cells by delivering a nanoreactor for inhibition of catalase and catalytically enhancing intracellular levels of ROS. *RSC Adv.* **2015**, *5* (105), 86072-86081.
9. Paidakula, S.; Kankala, S.; Kankala, R. k.; Juluru, B.; Jonnalagadda, S. B.*; Lee, C. H.*; Vadde, R.*; Vasam, C. S.*, Synthesis and biological evaluation of 4 β -benzoxazolepodophyllotoxin hybrids as DNA topoisomerase-II targeting anticancer agents. *RSC Adv.* **2015**, *5* (118), 97314-97319.
10. Wei, P. R.; Kuthati, Y.; Kankala, R. K.; Lee, C. H.*, Synthesis and Characterization of Chitosan-Coated Near-Infrared (NIR) Layered Double Hydroxide-Indocyanine Green Nanocomposites for Potential Applications in Photodynamic Therapy. *Int. J. Mol. Sci.* **2015**, *16* (9), 20943-68.
11. Kankala, R. K.; Kuthati, Y.; Sie, H. W.; Shih, H. Y.; Lue, S. I.; Kankala, S.; Jeng, C. C.; Deng, J. P.; Weng, C. F.; Liu, C. L.*; Lee, C. H.*, Multi-laminated metal hydroxide nanocontainers for oral-specific delivery for bioavailability improvement and treatment of inflammatory paw edema in mice. *J. Colloid Interface Sci.* **2015**, *458*, 217-228.
12. Kuthati, Y.; Kankala, R. K.; Lin, S. X.; Weng, C. F.; Lee, C. H.*, pH-Triggered Controllable Release of Silver-Indole-3 Acetic Acid Complexes from Mesoporous Silica Nanoparticles (IBN-4) for Effectively Killing Malignant Bacteria. *Mol. Pharm.* **2015**, *12* (7), 2289-304.
13. Kankala, R. K.; Kuthati, Y.; Liu, C. L.*; Lee, C. H.*, Hierarchical coated metal hydroxide nanoconstructs as potential controlled release carriers of photosensitizer for skin melanoma. *RSC Adv.* **2015**, *5* (53), 42666-42680.
14. Kuo, Y.-M.; Kuthati, Y.; Kankala, R. K.; Wei, P. R.; Weng, C. F.; Liu, C. L.; Sung, P. J.; Mou, C. Y.; Lee, C. H.*, Layered double hydroxide nanoparticles to enhance organ-specific targeting and the anti-proliferative effect of cisplatin. *J. Mater. Chem. B* **2015**, *3* (17), 3447-3458.
15. Kuthati, Y.; Kankala, R. K.; Lee, C. H.*, Layered double hydroxide nanoparticles for biomedical applications: Current status and recent prospects. *Applied Clay Science*, **2015**, *112*, 100-116.
16. Thiagarajan, V.; Lin, S. X.; Lee, C. H.; Weng, C. F.*; A focal adhesion kinase inhibitor 16-hydroxy-cleroda-3,13-dien-16,15-olide incorporated into enteric-coated nanoparticles for controlled anti-glioma drug delivery. *Colloids Surf. B Biointerfaces* **2016**, *141*, 120-31.
17. Huang, P. K.; Lin, S. X.; Tsai, M. J.; Leong, M. K.; Lin, S. R.; Kankala, R. K.; Lee, C. H.*; Weng, C. F.*, Encapsulation of 16-Hydroxycleroda-3,13-Diene-16,15-Olide in Mesoporous Silica Nanoparticles as a Natural Dipeptidyl Peptidase-4 Inhibitor Potentiated Hypoglycemia in Diabetic Mice. *Nanomaterials* **2017**, *7* (5).
18. Kankala, R. K.; Liu, C. G.; Chen, A. Z.; Wang, S. B.; Xu, P. Y.; Mende, L. K.; Liu, C. L.; Lee, C. H.; Hu, Y. F., Overcoming Multidrug Resistance through the Synergistic Effects of Hierarchical pH-Sensitive, ROS-Generating Nanoreactors. *Acs Biomaterials Science & Engineering* **2017**, *3* (10), 2431-2442.
19. Kankala, R. K.; Tsai, P. Y.; Kuthati, Y.; Wei, P. R.; Liu, C. L.; Lee, C. H.*, Overcoming multidrug resistance through co-delivery of ROS-generating nano-machinery in cancer therapeutics. *Journal of Materials Chemistry B* **2017**, *5* (7), 1507-1517.
20. Kankala, R. K.; Zhang, Y. S.; Wang, S. B.; Lee, C. H.; Chen, A. Z., Supercritical Fluid

Technology: An Emphasis on Drug Delivery and Related Biomedical Applications. *Advanced Healthcare Materials* **2017**, 6 (16).

21. Kuthati, Y.; Kankala, R. K.; Busa, P.; Lin, S. X.; Deng, J. P.; Mou, C. Y.; Lee, C. H.*, Phototherapeutic spectrum expansion through synergistic effect of mesoporous silica trio-nanohybrids against antibiotic-resistant gram-negative bacterium. *Journal of Photochemistry and Photobiology B-Biology* **2017**, 169, 124-133.
22. Lin, Y. S.; Su, K. C.; Kankala, R. K.; Lee, C. H.; Liu, C. L.; Hu, Y. F., A Model Prediction for Chenodeoxycholate Aggregate Formation. *Journal of Pharmaceutical Sciences* **2017**, 106 (5), 1391-1395.
23. Kanubaddi, K. R.; Yang, S. H.; Wu, L. W.; Lee, C. H.; Weng, C. F., Nanoparticle-conjugated nutraceuticals exert prospectively palliative of amyloid aggregation. *International Journal of Nanomedicine* **2018**, 13, 8473-8485.
24. Chen, Y. S.; Chiu, Y. H.; Li, Y. S.; Lin, E. Y.; Hsieh, D. K.; Lee, C. H.; Huang, M. H.; Chuang, H. M.; Lin, S. Z.; Harn, H. J.; Chiou, T. W., Integration of PEG 400 into a self-nanoemulsifying drug delivery system improves drug loading capacity and nasal mucosa permeability and prolongs the survival of rats with malignant brain tumors. *International Journal of Nanomedicine* **2019**, 14, 3601-3613.

二、研討會論文：

1. Lin, S. X.; Kankala, R. K.; Lee, C. H. A facile approach for synthesizing hydrogen peroxide enclosed mesoporous silica nanoparticles with prolonged antibacterial activity. Collaborations in Chemistry-Annul meeting-2015, Hualien. December 4-6, 2015.
2. Kankala, R. K.; Tsai, P. Y.; Liu, C. L.; Lee, C. H. Copper grafted metal hydroxide nanoreactors to overcome multi-drug resistance for cancer therapeutics. Collaborations in Chemistry-Annul meeting-2015, Hualien. December 4-6, 2015.
3. Kuthati, Y.; Kankala, R. K.; Lin, S. X.; Lee, C. H. Copper substituted Mesoporous silica nanoparticles decorated with Curcumin and well-dispersed Silver nanoparticles as a three component, highly efficient photobacterial agent. Collaborations in Chemistry-Annul meeting-2015, Hualien. December 4-6, 2015.
4. Kankala, R. K.; Chang, R. T.; Wei, P. R.; Liu, C. L.; Cheng, C. L.; Huang, K. J.; Lee, C. H. Targeted antiviral-therapy for dengue virus-infected cells by highly efficient anti-prM antibody conjugated photosensitizer encumbered mesoporous silica nanoreservoirs. International Conference on Nanotechnology in Medicine (NANOMED)-2015, Manchester, UK. November 23-25, 2015.
5. Hung, B. Y.; Kuthati, Y. R.; Kankala, K.; Liu, C. L.; Weng, C. F.; Lee, C. H. Immobilization of enzymes in IBN-4 nanoparticles to catalyze the activation of anticancer prodrug. International Conference on Nanospace Materials-2015, Taipei. June 22-24, 2015.
6. Chen, Z. A.; Kuthati, Y. R.; Kankala, K.; Liu, C. L.; Weng, C. F.; Mou, C. Y.; Lee, C. H. Encapsulation of palladium-porphyrin photosensitizer in the layered double hydroxide nanoparticles for in vivo photodynamic therapy against skin melanoma theragnosis. International Conference on Nanospace Materials-2015, Taipei. June 22-24, 2015.
7. Kuthati, Y. R.; Kankala, K.; Lin, S. X.; Lee, C. H. IBN-4 nanoparticles as efficient carriers for photodynamic therapy against cells and bacteria. 2nd IBN International symposium on Nano medicine and Nanoassays-2014, Singapore. December 8-9, 2014.
8. Kankala, R. K.; Kuthati, Y.; Chen, Z. A.; Liu, C. L.; Lee, C. H. Hierarchical liposome coated layered double hydroxide nanovehicles as potential controlled release systems for transdermal delivery of photosensitizer. The 3rd International Conference on Advanced Materials, Energy, and Environments (ICMEE'14), Honolulu, Hawaii, USA. July 1-3, 2014.
9. Kankala, R. K.; Kuthati, Y.; Chen, Z. A.; Liu, C. L.; Lee, C. H. Controlled drug release from

liposome coated layered double hydroxide nanovehicles for the transdermal delivery of photosensitizer. 2nd USA International Conference on surfaces, coatings and Nanostructured Materials (NANOSMAT-USA), Rice University, Houston, Texas (USA). May 19-22. 2014.

10. Kuthati, Y. R.; Kankala, K.; Lin, S. X.; Weng, C. F.; Lee, C. H. pH-Triggered controllable release of silver-indole-3 acetic acid complexes from mesoporous silica nanoparticles (IBN-4) for effectively killing malignant bacteria. 3rd NANOTODAY Conference, Singapore. December 08-11, 2013.

四、技術報告：

1. 國家衛生研究院電子報 第 267 期 2008-09-04. 奈米科技於活體智慧型靶向傳遞系統之設計與臨床醫療之應用研究。
2. 國家衛生研究院電子報 第 281 期 2008-12-12. 多功能性中孔洞奈米矽球用於體內追蹤與光動力治療之研究現況。

五、其他著作或專利：

1. 藥物傳遞系統：李佳洪、羅履維、牟中原、楊重熙。
中華民國(台灣)發明專利第 201016235 號
2. 固相金奈米顆粒之合成：李佳洪、廖威能、程士勳、林峰賢、陳仁焜、楊重熙、羅履維、胡宇光
中華民國(台灣)發明專利第 201213234 號
3. Title of Invention: Solid Phase Gold Nanoparticle Synthesis. Lee, C. H.; Liao, W. N.; Cheng, S. H.; Chen, J. K.; Yang, C. S.; Lo, L. W.; Hwu, Y. K.; Lin, F. S. (US Patent number: US 8734844).
4. Title of Invention: Charged Mesoporous Silica Nanoparticle-Based Drug Delivery System for Controlled Release and Enhanced Bioavailability. Lee, C. H.; Lo, L. W.; Mou, C. Y.; Yang, C. S. (US Patent number: US 8252337).
5. 用於癌症治療之16-羥基克羅烷-3,13-二烯-15,16-內酯製劑：翁慶豐、賈宜琛、李佳洪、范拉哈諾加泰亞咖諾加 中華民國(台灣)發明專利第 201630594號
6. Title of Invention: HCD formulation for cancer treatment. Weng C.F.; Chia, Y.C.; Lee, C.H.; Varadharajan, T. (US Patent number: US20160243236A1).