

## **Horng-Huey Ko**

### **Personal Profile**

Name/Position title: Horng-Huey Ko (柯宏慧) / Professor

Nationality: Taiwan



### **Affiliation and Contact Information**

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### **Education**

1995-2000, Ph. D., School of Pharmacy, Kaohsiung Medical University, Taiwan.

1990-1994, B. S., School of Pharmacy, Kaohsiung Medical College, Taiwan.

### **Employment and Experience**

Aug. 2021-present, Professor/Director of the School of Pharmacy

Feb. 2014-Jul. 2021, Professor, Department of Fragrance and Cosmetic Science, Kaohsiung Medical University, Kaohsiung, Taiwan.

Aug. 2015-Jul. 2018, Director of the Department of Fragrance and Cosmetic Science

Sep. 2009-Jan. 2014, Associate Professor, Department of Fragrance and Cosmetic Science, Kaohsiung Medical University, Kaohsiung, Taiwan.

Aug. 2003-Aug. 2009, Assistant Professor, Department of Fragrance and Cosmetic Science, Kaohsiung Medical University, Kaohsiung, Taiwan.

Aug. 2002-Jul. 2003, Assistant Professor, Department of Cosmetic Science, Chung Hwa University of Medicinal Technology, Tainan, Taiwan.

Feb. 2002-Jul. 2002, Assistant Professor, Department of Chemical Engineering, Yung Ta Institute of Technology and Commerce, Ping Tung, Taiwan.

Aug. 2001-Jan. 2002, Assistant Professor, Shu-Zen College of Medicine and Management, Kaohsiung, Taiwan.

Sep. 2000-Jun. 2001, Postdoctoral Fellow, School of Pharmacy, Kaohsiung Medical University, Taiwan.

### **Teaching Courses**

Organic Chemistry

Chemistry of Fragrance

Dermatopharmacology

Regulations Related to Cosmetics

### **Awards & Honors**

2016 Outstanding Award of Patent Approval of Kaohsiung Medical University, Kaohsiung, Taiwan.

2017-2018 Outstanding Research Award of Kaohsiung Medical University

2017-2018 Excellent Industry-University Cooperation Award of Kaohsiung Medical University, Kaohsiung, Taiwan.

2017-2019 Excellent Award of Patent Approval of Kaohsiung Medical University, Kaohsiung, Taiwan.

### **Research Interests**

My research interests include natural products chemistry, medicinal chemistry, functional cosmetic and food, and cosmetic science. For many years, Dr. Ko has been engaging in research using bio-assay guided methods to investigate Formosan plants or Chinese herbal medicines aimed at developing bioactive constituents. This has led to the discovery of several bioactive natural products as photochemopreventive agents, which could be served as anti-melanogenesis, anti-inflammatory, or anti-photoaging candidate and be used as cosmetic active ingredients.

### **Selected Publications** (2017~present)

1. H. H. Ko, Y. T. Chang, Y. H. Kuo, C. H. Lin, Y. F. Chen\*, *Oenothera laciniata* Hill extracts exhibits antioxidant effects and attenuates melanogenesis in B16-F10 cells via downregulating CREB/MITF/tyrosinase and upregulating p-ERK and p-JNK. *Plants*, **2021**, *10*, 727. (Plant Sciences, I.F.: 3.935 Rank: 47/235, 20.0%)
2. H. H. Chang, H. H. Ko, T. M. Lu, J. Y. Lin, D. C. Chang, T. W. Chu, C. F. Hung\*, Inhibition of UVA damage on human skin dermis fibroblasts by the isoflavonoid intermediate deoxybenzoin-3A. *Chem. Res. Toxicol.*, **2021**, *34*, 1133-1139. (Toxicology, I.F.: 3.739, Rank: 28/97, 28.87%)
3. Y. Chang, C. F. Hung, H. H. Ko, S. J. Wang\*, Albanin A, derived from the root bark of *Morus alba* L., depresses glutamate release in the rat cerebrocortical nerve terminals via Ca<sup>2+</sup>/calmodulin/adenylate cyclase 1 suppression. *J. Med. Food*, **2021**, *24*, 209-217. (Food Science & Technology, I.F.: 2.786, Rank: 69/144, 47.92%)
4. C. H. Lin, H. J. Chou, C. C. Chang, I. S. Chen, H. S. Chang, T. L. Cheng, Y. H. Kuo\*, H. H. Ko\*, Chemical constituent of  $\beta$ -glucuronidase inhibitors from the root of *Neolitsea acuminatissima*. *Molecules*, **2020**, *25*, 5170. (Chemistry, Multidisciplinary, I.F.: 4.411, Rank: 63/179, 20.11%)
5. T. S. Chang \*, H. H. Ko, T. Y. Wang, C. H. Lee, J. Y. Wu \*, Biotransformation of ganoderic acid A to 3-O-acetyl ganoderic acid A by soil-isolated *Streptomyces* sp. *Fermentation*, **2018**, *4*, 101. (Biotechnology & Applied Microbiology, I.F.: 3.975, Rank: 56/159, 35.22%)
6. K. T. Peng, Y. C. Chiang, H. H. Ko, P. L. Chi, C. L. Tsai, M. I. Ko, M. H. Lee, L. F. Hsu\*, and C. W. Lee\*, Mechanism of lakoochin A inducing apoptosis of A375.S2 melanoma cells through mitochondrial ROS and MAPKs pathway. *Int. J. Mol. Sci.*, **2018**, *19*, 2649. (Biochemistry & Molecular Biology, I.F.: 5.923, Rank: 67/297, 22.65%)
7. J. R. Weng\*, L. Y. Bai<sup>a</sup>, H. H. Ko<sup>a</sup>, Y. T. Tsai, Cyclocommunol induces apoptosis in human oral squamous cell carcinoma partially through a Mcl-1-dependent mechanism. *Phytomedicine*, **2018**, *39*, 25-32. (<sup>a</sup> equal contribution) (Integrative & Complementary Medicine, I.F.: 5.340, Rank: 3/29, 10.34%)

8. C. I Chang, C. C. Chen, C. Y. Chao, H. H. Ko, H. S. Chang, S. Y. Wang, J. J. Chen, C. C. Chen, Y. H. Kuo\*, Two New Abietane-type diterpenes from the bark of *Cryptomeria japonica*. *Nat. Prod. Commun.*, **2017**, 12, 1553-1555. ([Food Science & Technology](#), I.F.: 0.986, Rank: 126/144, 87.5%)
9. C. H. Lin, H. L. Chu, W. S. Hwang, M. C. Wang\*, and H. H. Ko\*, Synthesis and optical properties of Mg-Al layered double hydroxides precursor powders. *AIP Advances*, **2017**, 7, 125005. ([Physics, Applied](#), I.F.: 1.548, Rank: 122/160, 76.25%)
10. C. I Chang, S. Y. Wang, M. D. Wu, M. J. Cheng<sup>a</sup>, H. H. Ko, H. S. Chang, J. J. Chen<sup>a</sup>, C. C. Chen<sup>a</sup>, Y. H. Kuo<sup>a,\*</sup> Two new sesquiterpenoids from the bark of *Cryptomeria japonica*. *Phytochemistry Letters*, **2017**, 22, 56-60. (<sup>a</sup> equal contribution) ([Plant Sciences](#), I.F.: 1.679, Rank: 139/235, 59.15%)
11. C. W. Lee, F. L. Yen, H. H. Ko, S. Y. Li, Y. C. Chiang, M. H. Lee, M. H. Tsai, L. F. Hsu, Cudraflavone C induces apoptosis of A375.S2 melanoma cells through mitochondrial ROS production and MAPK activation. *Int. J Mol. Sci.*, **2017**, 18, E1508. ([Biochemistry & Molecular Biology](#), I.F.: 5.923, Rank: 67/297, 22.65%)
12. B. Huang, H. L. Chu, M. C. Wang\*, C. L. Wang, W. S. Hwang, C. Liu, H. H. Ko, X. Zhao\*, Crystallization kinetics evaluated by the modified formula and optical properties of CdO and ZnO in 0.5ZnO-0.5CdO thin films. *J. Alloys Compd.*, **2017**, 702, 509-519. ([Metallurgy & Metallurgical Engineering](#), I.F.: 5.316, Rank: 6/80, 9.49%)
13. C. L. Wang, T. H. Lan, C. W. Tzeng, C. C. Chang, T. C. Lin, H. H. Ko\*, W. S. Hwang, H. H. Huang, F. L. Yen\*, and M. C. Wang\*, Densification and biocompatibility of sintering 3.0 mol% yttria- tetragonal ZrO<sub>2</sub> polycrystal ceramics with x wt% Fe<sub>2</sub>O<sub>3</sub> and 5.0 wt% mica powders additive. *Ceram. Int.*, **2017**, 43, 1809-1818. ([Materials Science, Ceramics](#), I.F.: 4.527, Rank: 3/29, 10.34%)