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PRESENT POSITION AND ADDRESS:

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EDUCATION:

PhD, Chosun University, South Korea

Award/fellowship:

Postdoctoral fellowship, Research Institute of Basic Science, Chosun University, South Korea, 2009-2011.

KOSEF fellowship, Republic of Korea, 2004-2007
Nepal bhusan-Ka -2008

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PROFESSIONAL EXPERIENCE AND ACADEMIC APPOINTMENTS:

2015-**Professor**, Central Department of Zoology, Tribhuvan University

2012-2014: **Visiting Professor**, Department of Biotechnology, Chosun University, South Korea.

2009-2015: **Associate Professor**, Central Department of Zoology, Tribhuvan University

2009-2011: **Postdoctoral fellow**, Research Institute of Basic Science, Chosun University, South Korea.

1993-2009: **Assistant Professor**, Central Department of Zoology, Tribhuvan University

Theses Supervision: (M.Sc.: More than 40; PhD:4 completed, 5 running)

BIBLIOGRAPHY:

Publications in Refereed Journals

1. Amatya, B., Sapkota, K., & Edds, D. R. (2025). Feeding Biology of the Glyptosternine Catfish Parachiloglanis hodgarti (Siluriformes: Sisoridae) in Nepal. *Journal of the Bombay Natural History Society (JBNHS)*.

2. Shrestha, S., Khatri, K., Shrestha, N., Poudel, R. C., & Sapkota, K. (2025). Diversity and Distribution of Freshwater Fishes of the Dano, Banganga, and Arung Khola Rivers of Western Nepal. *Banko Janakari*, *35*(2), 5–15. https://doi.org/10.3126/banko.v35i2.77886

3. Shrestha, S., Khatri, K., Shrestha, N., Poudel, R. C., & Sapkota, K. (2025).Ichthyofaunal diversity in the community-managed Jagadishpur Reservoir (Ramsar site) and Gajedi Lake, Lumbini Province, Nepal. Biodiversitas Journal of Biological Diversity 26 (7). https://doi.org/10.13057/biodiv/d260718

4. Shrestha, S., Khatri, K., Shrestha, N., Poudel, R. C., & Sapkota, K. (2025). Current Status of Small Indigenous Fish Species of Western Nepal. *Journal of Institute of Science and Technology*, *30*(1), 31-44.

5. Urmila Dyola, Chitra Bahadur Baniya, Pushpa Raj Acharya, Muhammad Asghar Hassan, Anjeela Pandey & Kumar Sapkota (2023) A faunistic study on the hoverflies (Diptera: Syrphidae) of Shivapuri Nagarjun National Park, Central Nepal, Oriental Insects, 57:4, 1004-1040, DOI: 10.1080/00305316.2023.2171497

6. Basaula, R., Sharma, H. P., Paudel, B. R., Kunwar, P. S., & Sapkota, K. (2023). Effects of invasive water hyacinth on fish diversity and abundance in the Lake Cluster of Pokhara Valley, Nepal. Global Ecology and Conservation, 46, e02565.

7. Basaula, R., Sharma, H. P., & Sapkota, K. (2022). The Invasion of Water Hyacinth and Its Impact on Diversity of Macro-Invertebrates in the Lake Cluster of Pokhara Valley, Nepal. *Prithvi Academic Journal*, *5*(1), 1–16. https://doi.org/10.3126/paj.v5i1.45035

8. Kunwar, P. S., Sapkota, B., Badu, S., Parajuli, K., Sinha, A. K., De Boeck, G., & Sapkota, K. (2022). Chlorpyrifos and dichlorvos in combined exposure reveals antagonistic interaction to the freshwater fish Mrigal, Cirrhinus mrigala. Ecotoxicology, 31(4), 657-666.

9. Kunwar, P. S., Sinha, A. K., De Boeck, G., & Sapkota, K. (2022). Modulations of blood biochemical parameters of golden mahseer, Tor putitora following exposures to single and mixed organophosphate. Comparative Biochemistry and Physiology Part C: Toxicology &

Pharmacology, 251, 109207.

10. Dyola, U., Baniya, C. B., Acharya, P. R., Subedi, P., Pandey, A., & Sapkota, K. (2022). Community structure of pollinating insects and its driving factors in different habitats of Shivapuri-Nagarjun National Park, Nepal. Ecology and Evolution, 12(3), e8653.

11. Dyola, U., Baniya, C. B., Acharya, P. R., Pandey, A., & Sapkota, K. (2022). Bee (Hymenoptera: Apoidea) Fauna of Shivapuri-Nagarjun National Park, Nepal. Journal of Asia-Pacific Biodiversity, 15(2), 231-240.

12. Kunwar PS, Basaula R, Sinha AK, Boeck G De, **K Sapkota**; Joint toxicity assessment reveals synergistic effect of chlorpyrifos and dichlorvos to common carp (Cyprinus carpio) ;Comparative Biochemistry and Physiology Part C, Volume 246, August 2021, 108975, 2021

13. Kunwar PS., Parajuli K, Badu S, Sapkota B, Sinha A K, Boeck G De, **Sapkota K** ,Mixed toxicity of chlorpyrifos and dichlorvos show antagonistic effects in the endangered fish species golden mahseer (*Tor putitora*). Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology;Volume 240, February 2021, 108923.

14. Basaula, R., Sharma, H. P., Belant, J. L., & **Sapkota, K.** (2021). Invasive Water Hyacinth Limits Globally Threatened Waterbird Abundance and Diversity at Lake Cluster of Pokhara Valley, Nepal. Sustainability, 13(24), 1-11.

15. Kang SR, Choi JH, Kim DW, Park SE, **Sapkota K**, Kim S, Kim SJ. A bifunctional protease from green alga *Ulva pertusa* with anticoagulant properties: partial purification and characterization. Journal of Applied Phycology 2016, Volume 28, Issue 1, pp 599–607 DOI:10.1007/s10811-015-0550-4.

16. Kim DW, Choi JH, Park SE, Kim S, **Sapkota K**, Kim SJ. Purification and characterization of a fibrinolytic enzyme from *Petasites japonicus* . International Journal of Biological Macromolecules 10/2014; 72. DOI:10.1016/j.ijbiomac.2014.09.046

17. Choi JH, **Sapkota K**, Kim S, Kim SJ. Starase: A bi-functional fibrinolytic protease from hepatic caeca of *Asterina pectinifera* displays antithrombotic potential. Biochimie 06/2014; 105C. DOI:10.1016/j.biochi.2014.06.012 .

18. Choi JH, **Sapkota K**, Kim MK, Kim S, Kim SJ. Undariase, a Direct-Acting Fibrin(ogen)olytic Enzyme from *Undaria pinnatifida*, Inhibits Thrombosis *In Vivo* and Exhibits *In Vitro* Thrombolytic Properties. Applied Biochemistry and Biotechnology 06/2014; 173(8). DOI:10.1007/s12010-014-0981-4.

19. Choi JH, Kim DW, Park SE, Choi BS, **Sapkota K**, Kim S, Kim SJ. Novel thrombolytic protease from edible and medicinal plant *Aster yomena* (Kitam.) Honda with anticoagulant activity: Purification and partial characterization. J Biosci Bioeng. 2014 . pii: S1389-1723(14)00103-0. doi: 10.1016/j.jbiosc.2014.03.004

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21. Park SE, **Sapkota K**, Choi JH, Kim MK, Kim YH, Kim KM, Kim KJ, Oh HN, Kim SJ, Kim S. Rutin from *Dendropanax morbifera* Leveille Protects Human Dopaminergic Cells Against Rotenone Induced Cell Injury Through Inhibiting JNK and p38 MAPK Signaling. Neurochem Res. 2014 Apr;39(4):707-18. doi: 10.1007/s11064-014-1259-5.

22. Choi BS, Kim H, Lee HJ, **Sapkota K**, Park SE, Kim S, Kim SJ. Celastrol from 'Thunder God Vine' Protects SH-SY5Y Cells Through the Preservation of Mitochondrial Function and Inhibition of p38 MAPK in a Rotenone Model of Parkinson's Disease. Neurochem Res. 2014 Jan;39(1):84-96. doi: 10.1007/s11064-013-1193-y.

23. Choi BS, **Sapkota K**, Choi JH, Shin CH, Kim S, Kim SJ.. Herinase: a novel bi-functional fibrinolytic protease from the monkey head mushroom, *Hericium erinaceum*. Appl Biochem Biotechnol. 2013 Jun;170(3):609-22. doi: 10.1007/s12010-013-0206-2.

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characterization of a novel, highly potent fibrinolytic enzyme from *Paecilomyces tenuipes*. *Process Biochemistry* vol. 46 issue 8 August, 2011. p. 1545-1553.

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characterization of a fibrinolytic protease from a culture supernatant of *Flammulina velutipes* mycelia, *Bioscience, Biotechnology, and Biochemistry*, 71:2214-22. 2007.

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44. Jae-Sung Kim, **Kumar Sapkota**, Se-Eun Park, Bong-Suk Choi, Seung Kim, Nguyen Tie Hiep, Chun-Sung Kim, Han-Seok Choi, Mying-Kon Kim, Hong-Sung Chun, Yeal Park and Sung-Jun Kim, A fibrinolytic enzyme from a medicinal mushroom, *Cordyceps militaris, Journal of Microbiology*, 44: 622-631, 2006.

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47. Seung Won Ryu, Cheng Wu Jin, Han Shin Lee, Ji Yeon Lee, **Kumar Sapkota**, Beom Goo Lee, Chang Yeon yu, Myoung Ku Lee, Myoung jo Kim and Dong Ha Cho, Changes in total flavonoid contents and antioxidant activities of *Hibiscus cannabinus L. Korean Journal of Medicinal crop Science*, 14:307-310, 2006.

48. Sing-Mi Cho, Sun-Jin Moon, Soo-Jin Chung, Kwang-Sang Kim, Mi-Seong Kim, Young-Cheol Kim, Kwang-Yeol Yand, Young-Soo Choi, **Kumar sapkota**, and Baik-Ho Cho, Transformation of gourd through leaf explants regeneration, *Korean journal of plant resources*, 19:634-639, 2006.

49. Sook-Young Lee, Jae-Sing Kim, Ji-Eun Kim, **Kumar Sapkota**, Ming-Hua Shen, Seung Kim, Hong-Sung Chun, Jun-Cheol Yoo, Han-Suk Choi, Myung-Kon Kim, Sung-Jun Kim, Purification and Characterization of fibrinolytic enzyme from cultured mycelia of *Armillaria Mellea, Protein Expression and Purification*, 43;10-17,2005.

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51. M. Chetri, **K**.**Sapkota**, K. Basnet and B.D. Smith, Species Distribution and habitat preference of some aquatic fauna in the Karnali river, Nepal, *Proceedings of International Seminar on Mountains*, *Royal Nepal Academy of Science and Technology*, Kathmandu,523-534,2002.

52. B. D. Smith, R. K. Sinha, Z. Kaiya, A. Chaudhary, L. Renjun, W. Ding, B. Ahmed, A.K.M. A. Haque, R.S.Lal Mohan and **K. Sapkota**, Register of water development projects affecting river Cetaceans in Asia, R.R. Reeves, B.D. Smith and T.Kasuya (eds.), *Biology and conservation of freshwater cetaceans in Asia*. Species Survival Commission Occasional Paper No.23.IUCN, Gland, Switzerland, 22-39,2000.

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54. **K. Sapkota**, Fishes and Fishing activities in the Melamchi river, *Tribhuvan University Journal*, 21(1);85-94,1998.

55. **K. Sapkota,** Current status and conservation of swampland fisheries in the Koshi Tappu wildlife reserve and surrounding area; Eastern Nepal, Proceedings of 2nd National Conference on Science and Technology,RONAST,628-639,1994.

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Book:

Smith, B.D., Bhandari, B. and **Sapkota, K**., *Aquatic Biodiversity in the Karnali and Narayani River Basins-Nepal*. IUCN Nepal, Kathmandu.1996

Non-Refereed Publications:

(Presentations/ meeting abstracts)

1. Kumar Sapkota, Neuroprotective effects of Detoxified and non-detoxified Rhus verniciflua Stokes: Regulation of catecholamine biosynthesis and neurotrophic factors. The 2nd joint meeting of Kagoshima University, Japan and BK21 Research team for protein activity control of Chosun University, Republic of Korea on relationship between protein activity control and natural products.2009

2. **Kumar Sapkota**, Effects of detoxified *Rhus verniciflua* Stokes on brain-derived neurotrophic factor and glial cell line-derived neurotrophic factor gene expression in rat brain, International meeting of the Microbiological society of Korea,2006

3. **Kumar Sapkota**, Comparison of effects of *Rhus vernicifula* Stokes extracts and detoxified *Rhus vernicifula* Stokes extracts on tyrosin hydroxylase gene expression in rat brain tissue, International meeting of the Microbiological society of Korea,2006

4. **Kumar Sapkota**, and Sung Jun Kim, Effects of detoxified Rhus vernicifula extracts on tyrosine hydroxylase in rat tissue, Annual meeting and International symposium, Korean Society for microbiology and Biotechnology,2005.

5. **Kumar Sapkota**, and Sung Jun Kim, Molecular cloning, Expression and purification of fibrinolytic enzyme from Pleurotus ostreatus mycelium, Fourth meeting of East Asia, collaboration on edible fungi research, China, 2006.

6. **Kumar Sapkota**, and Sung-Jun Kim, Characterization and molecular cloning of a clinical fibriolytic enzyme, *Fourth meeting of East Asia collaboration on edible fungi research*, Nov, 2006.

7. **Kumar**,**Sapkota and** Sung-Jun Kim, Electrofusion and genetic analysis of yeast cells, *Fourth meeting of East Asia collaboration on edible fungi research*, Nov, 2006.

8. **Kumar Sapkota**, and Sung-Jun Kim, A new approach to produce organic germanium fortified *cordyceps militaris*, *Fourth meeting of East Asia collaboration on edible fungi research*, Nov, 2006.

9. **Kumar Sapkota**. Purification and characterization of fibrinolytic enzyme from trametes Trametes mycelim, *Fourth meeting of East Asia collaboration on edible fungi research*, Nov, 2006.

10. **Kumar Sapkota**, A fibrinolytic enayme from a medicinal mushroom*, Cordyceps militaris*, *The Mycological Society of Japan*, June, 2006.

11. **Kumar Sapkota**. Effects of Tripterygium regelii extracts on Catecholamine biosynthetic enzyme and Neurotrophic dactors gene expression in rat brain, *The 18th Annual Metting of the Korean Society for Molecular and Cellular Biology, Sep, 2006.*

12. **Kumar Sapkota**, Effect of *Mucuna pruriens* on induction of tyrosine hydroxylase gene in rat brain tissue, *2006 International meeting of the Microbiological society of Korea*, May, 2006.

13. **Kumar Sapkota**, and Sung-Jun Kim, Purification and characterization of fibrinolytic enzyme from cultured mycelia of *Lyophyllum ulmarium*. *2005 International meeting of the federation of Korea microbiological societies*, Oct, 2005.

14. **Kumar Sapkota**, and Sung-Jun Kim, Purification and characterization of fibrinolytic enzyme from cultured mycelia of *Pleurotus ostreatus*, *2005 International meeting of the federation of Korea microbiological societies,* Oct, 2005.

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- Editor-In-Chief, Nepalese Journal of Zoology (NJZ), Central Department of Zoology, TU, Nepal.
- Editor-In-Chief, Journal of Institute of Science and Technology, TU, 2015-2018
- Member, Institutional Research committee, IOST, TU, 2022-2024
- Member, Research committee, Central Department of Zoology, TU
- Member, Subject committee, Central Department of Zoology, TU
- Vise-President, Zoological society, Nepal, 2015
- Life Member, Zoological society, Nepal
- Life member, Nepal fisheries Society