

- Department of Medicinal and Applied Chemistry (Undergraduate, Master's and PhD Programs)
- Department of Biomedical and Environmental Biology (Undergraduate and Master's Programs)
- Department of Biotechnology (Undergraduate and Master's Programs)



▶ The Winner of Nobel Prize in Chemistry, Professor, Akira Suzuki (third from right), visited and lectured in KMU.

Characteristics and Honors

There were 598 SCI papers published by the faculty of teachers in the College of Life Science from 2009~2013, accounting for one-tenth of the SCI papers of the school.

There were 285 research projects awarded grant funding by NSC in the College of Life Science from 2019~2013. The total amount of subsidies was NT 303,484,481.

There were 55 students' research projects awarded grant funding by NSC in the College of Life Sciences from 2009~2013, amounting to four-tenths of the student projects subsidized by MOST at KMU.

According to WOS's information in 2010, the Department of Biological Medicine and Environmental Biology ranked No.8 in "Biology", No.12 in "Ecology/Environmental Sciences" and No.7 in "Plant and Animal Science" categories, respectively, in national rankings.

According to WOS's information in 2010, in the Department of Biotechnology ranked No.8 in both "Molecular Biology and Genetics" and "Immunology and Microbiology" categories in national rankings.

According to the statistics of the World University research paper quality rating in 2013, the amount of chemistry-related papers in the College of Life Science ranked No.11 in Taiwan, and was amongst the top 500 chemistry departments of the world (ranked No.474).

There were 38 subsidized industrial-academic collaboration awarded to the faculty of the College of Life Science. The total amount of subsidies was NTD 40,543,284.

There were 62 technology transfer cases and 32 patented cases awarded to the faculty of the College of Life Science from 2011~2013.

- Students of the College of Life Science won the awards in creativity contests:
- First place in National Campus Creativity and Enterprise-starting Group of the Seventh Session of Warring States Strategies
 - KMU's Potential Award of Future Enterprise Starting
 - First and Third places in National Campus Enterprise-starting Group of the Eighth Session of Warring States Strategies
 - The Gold Medal in the Creativity contest in the South Taiwan Science Park
 - Second place in the Student Group of the Tenth Session of the National Creativity Contest
 - Third place in the Student Group of the Tenth Session of the National Creativity Contest

The College of Life Science was founded in January 1, 2000, which was composed of the Department of Chemistry (Master's Degree Program included) and the Department of Biology. In response to the advent of the Post-human Genome Era, life sciences had entered a new avenue, including understanding and control of evolution of life, renovated ways to tackle diseases, regeneration and reinvigoration of the environment, reformation of industrial process, and the use and processing of biological information, etc..

Therefore, the Department of Chemistry was renamed to the "Department of Medicinal and Applied Chemistry" (Master's Degree Program and In-Service Master's Degree Program included) on August 1, 2003. Meanwhile, the Ph.D. Degree Program was set up, to improve research and development in medicine and biomaterials and to cultivate professionals in medicine and chemistry. On the other hand, the Department of Biology was renamed to "Department of Biomedical and Environmental Biology" and the Master's Degree Program was set up to integrate the theory of basic biology and the application of modern biotechnology. In addition, "Department of Biotechnology" was founded on August 1, 2003, and in 2007, the Master's Degree Program began to enroll students independently. The focus of this department is to transform molecular and biomedical research into practical applications of biotechnology. The three departments of the College of Life Science support one another in teaching and research to intensify the abilities of biomedical application and development. To follow KMU's developmental direction, the College of Life Science strives to promote collaboration projects with industries and institutes of healthcare services.

Besides, in response to world industry trends and government's policy, the biomedical and biotechnology industry has developed rapidly; therefore, the industry of biopharmaceuticals will demand a great number of research professionals in the near future. On August 1, 2014, "Master's Degree Program in Biopharmaceutical Research" was established. The program places the emphasis on integrating interdisciplinary professions, and its courses were designed to combine the professions of biology, chemistry, pharmacy, and intellectual properties. Such an effort should facilitate the cultivation of new generation biopharmaceutical professionals.

The College of Life Science integrates each faculty's professions, including medicinal chemistry, genetics and bioinformatics, biomaterials, disease mechanism, and environmental biology and ecology. By translating the basic theories into related applications the College of Life Science aims to assist and support Taiwan's



▶ Dr. Ann-Shyn Chiang (forth from right), Tsing Hua Chair Professor, visited and lectured in KMU.

biotechnological industry and at the same time, to while cultivating professionals of life sciences well-educated with both theory and practice.

The College of Life Science not only creates an interactive environment for teachers and students to be involved in activities including entertainment, collaborative research projects, and undergraduate and graduate students' research paper contests, but encourages students to do academic research at overseas universities and research institute. Besides, the College invited renowned overseas scholars to participate in academic communication (Nobel Prize Winner in Chemistry, Professor Akira Suzuki (picture 1) and Professor Chaitan Khosla from Harvard University). Furthermore, the College of Life Science had signed Memorandum of understanding (MOU) with Chongqing University and Xiamen University on academic and student exchange project. By international academic exchanges, we hope that the research capacity of our teachers and students will continue to grow with global vision.

Focuses of development:

1. Nano Biomedical Research
2. Innovative small-molecule drug development
3. Biodiversity research
4. Design and development of biotechnology and pharmaceutical screening
5. Sustainable green chemistry research
6. Cell and Gene Research
7. Investigation of the disease mechanism and therapy
8. Biomedical Materials and Materials Chemistry Applications



▶ Second Place in Student Group of the Tenth Session of the National Creativity Award



▶ International students celebrated Diwali, Hindu "festival of lights" in KMU