留学博士研究生培养方案英文版

Ph.D. Degree Program in Food Science and Engineering

Discipline code: 0832

Ⅰ.General introduction of the discipline and the research fields

Our discipline established the first Ph.D program of Agricultural Products Processing in China in 1993, the first-grade Ph.D. program in Food Science & Engineering in 2003, and the second-grade Ph.D. program in Food Nutrition & Safety in 2006. The second-grade discipline of Processing & Storage Engineering of Agricultural Products has been authorized as Jiangsu Provincial Key Discipline since the 9th Five-Year Plans, through 10th, 11th up to 12th Five-Year Plans. The teaching team of this discipline have won the Jiangsu Excellent Echelon of Discipline twice. A Project Funded by the Priority Academic Program Development of Jiangsu Higher Education Institutions was acquired in 2014. One Doctoral dissertation was ranked among the China's 100 Excellent Doctoral Dissertations in 2008 and one other was nominated the China's 100 Excellent Doctoral Dissertations in 2010. And five others were awarded as Jiangsu Excellent Doctoral Dissertations.

The post-doctoral program in Food Science and Engineering was acquired firstly in China in 1998, only 4 universities acquired at that time.

The Ph.D. Degree Program in Management focuses on:

1. Rapid & nondestructive detection technology & equipment for quality of food and agricultural products
2. Food physical processing technology & equipment
3. Food nutrition & safety
4. Food biological technology & equipment

Ⅱ. Goal and objectives

The school of Food and Biological Engineering aims to equip students with the ability to apply their expertise to food engineering disciplines. In order to achieve the goal of this major, following objectives are to be accomplished by the time the candidate completes the 3-5 years training. The Ph.D. Degree Program in Food Science and Engineering focuses on:

1. With correct outlook on life and values, good moral character, strict style of study,

strong sense of enterprise and pioneering spirit.

2. With firm grasp of the basis theory of food science and engineering, professional knowledge and experimental skills, professional development and frontiers; being competent of reading and writing academic papers; with the ability to carry out independently scientific research work, being competent in the specialized field of teaching, research, and food-related science and technology management; with new insights in scientific or specialized technique.
3. With good physical and mental health.

Ⅲ. Study duration and the way to cultivate

The graduate students for food science and engineering major should finish the required course credits that must be at least a total of 14 credits, and the credits for degree courses should be no less than 10. The completion of these courses is usually within 1 to 2 years, while the additional 2 to 3 years is used to complete the dissertation research and thesis oral defense. Moreover, every student is also required to commit several presentations/lectures that are closely relevant to his/her research project, attend academic conferences/workshops at least 15 times.

Ⅵ.Requirement for the course credits

Course Category		Course name	Credits	Term	School by which Courses opened	Type of the Courses	Remark
Degree Courses	**Public Degree Courses**	Overview of China	2	1	Overseas Education College	English-taught course	Compulsory
		Chinese	3	1	Language & Culture Center	English-taught course	
	Fundamental &Theoretical Courses	Mathematical Model	2	1	School of Science	English-taught course	At least one course
		Advanced Mathematical Statistics	2	1	School of Science	English-taught course	
	Core Specialized Degree Courses	Special theme on food science and technology	3	1	School of Food and Biological Engineering	English-taught course	Compulsory
Non-degree courses	**Special Fundamental Courses**	Modern Food Chemistry	2	1	School of Food and Biological Engineering	English-taught course	At least one course

		Advanced Instrumental Analysis	3	1	School of Food and Biological Engineering	English-taught course/ experimental platform courses	
		Advanced Food Microbiology	2	1	School of Food and Biological Engineering	English-taught course	
		Theoretical Basis for Food Nondestructive Detection Techniques	2	1	School of Food and Biological Engineering	English-taught course	
	Special Elective Courses	Frontiers in Food Science	1	1,2	School of Food and Biological Engineering	English-taught course/Frontiers Lecture	At least one course
		Modern Food Physical Processing Technologies and Equipments	2	1,2	School of Food and Biological Engineering	English-taught course/ experimental platform courses	
		Food Bio-manufacture	2	1,2	School of Food and Biological Engineering	English-taught course/ experimental platform courses	
		Modern Molecular Biology and Analytical Technique	2	1,2	School of Food and Biological Engineering	English-taught course/ experimental platform courses	
		Image Recognition	2	1,2	School of Food and Biological Engineering	English-taught course	
		Optimization, Simulation and Control of Food Processing	2	1,2	School of Food and Biological Engineering	English-taught course	
		Food nutrition and metabolism	2	1,2	School of Food and Biological Engineering	English-taught course	
		Introduction of food safety	2	1,2	School of Food and Biological Engineering	English-taught course	
	Public Elective Courses	All courses in all discipline					Selective

Type of the courses: English-taught course or experimental platform courses

Ⅴ.Credits requirement for the practice

The postgraduate students should take part in the practical activities and gain practical credits. Only those who have met the practical requirements are eligible to submit the thesis.

1. Academic Activities (2 credits)

In order to broaden academic views of postgraduate students, the PhD candidates should take part in 'lectures on academic ethics' and academic seminar/report from Sino-foreign well-known experts. The academic report should be finished after the seminar. PhD candidates are encouraged to attend international and high level national academic conference and present their research. Each PhD candidate is required to attend and present their research no less than once at Sino-foreign academic conference, and should also attend professional conferences more than 15 times. The grade shall be assessed by the supervisor(s).

2. Literature Reading (2 credits)

Ph.D. students should read a number of literatures for the development of the ability to acquire knowledge by themselves. The ability to do literature review will be assessed by the group of experts. The students will get 2 credits when qualified; otherwise, they will not be able to proceed to the opening.

3. Seminar (2 credits)

Each PhD candidate has to present seminar(s) within the faculty publicly on topics such as literature review and research progress frequently. More than twice seminars should be finished within the faculty publicly.

4. Teaching Practices (1 credit)

PhD candidates should take part in practices of teaching assistant according to the requirement of the University. Generally, each PhD student needs to deliver 3-4 lectures during his/her study. The grade shall be assessed by the supervisor(s).

5. Comprehensive Assessment (2 credits)

The comprehensive assessment to PhD candidate should be finished before the commencement of their thesis study project. The aim of this assessment is to assess the academic ethics, theoretical basis, and research ability of the PhD candidate. The comprehensive assessment should be arranged prior to the end of the second semester. Each PhD candidate should attend the assessment on schedule. If the PhD candidate cannot attend the comprehensive assessment due to uncontrollable causes, he/she can

apply for a delay of the assessment (the application should be submitted to the discipline in advance, and confirmed the deadline which shouldn't more than 6 months).

The comprehensive assessment is organized by the discipline/faculty, and the formats of the assessment generally consist of written examination and interview. An academic committee consists of at least 5 academic staffs. At least half of members must be from the discipline, except for the supervisor and research team members. The major advisor who assigned by discipline as the chairman of the committee will be set up for the comprehensive assessment. The grades of the assessment are: Excellent, Satisfactory.

The date and content of the comprehensive assessment should be announced by the discipline on the website at least one month prior to the assessment. The list of PhD candidates who have passed the comprehensive assessment should also be announced on the website. More detailed requirements are available in <Rules for comprehensive assessments of PhD candidates>.

Ⅵ. Advisory committee and supervisory

The Ph.D. students should be directed by a committee panel containing several qualified co-advisors/committee members in order to ensure the high quality of Ph.D. program. The Advisory Committee initially consists of at least 5 members of the Graduate Faculty, including the Major Advisor, who acts as the chair. The committee should be in charge of the following tasks:

1) Help the student choose appropriate courses, and provide consultation on how to improve the level of lecture delivery;

2) Organize the Thesis Proposal Presentation;

3) Supervise the research progress and conduct the Medium-term examination;

4) Check the thesis before being submitted.

The committee should be established by the end of the second semester of the student's graduate career.

Ⅶ. Dissertation

As an important symbol, the level of the quality of doctoral thesis is a comprehensive measure of doctoral training quality and academic standards. Dissertation can be basic research, basic research applying, or engineering application research, particularly researches to strengthen the study of the frontier disciplines and the field of cross interdisciplinary penetration, participate in a major issue to solve the forefront of high-tech

development, put forward a new concept, new theories, new methods, or new technologies；Participate in solving the major theoretical and engineering problems of national economic construction, and, as far as possible, participate in an important national research project which is undertaken by the supervisor or School of Food and Biological Engineering. The thesis should reflect that the author has grasped solid and wide basic theory as well as systemic expertise in this discipline. The dissertation should normally include theoretical analysis and experimental research. It also should focus on the depth and breadth of content, highlighting the innovative and original insights or open up new areas. Dissertation should be, under the guidance of an instructor, completed by the doctoral students himself or herself to indicate that the author has the ability to undertake independent scientific research or to be independently responsible for the specialized technical work.

including：

（1）Topics of the report

After enrollment, the Ph.D. student should know his research direction clearly, under the guidance of the instructor, and participate in scientific research. Usually after passing the qualification exam within the second school year, through the collection and read literature, the Ph.D. students should carry out research and experimental work, complete the report about topics of dissertation, and employ experts of the relevant disciplines and evaluate the report of the topics. After the passage of the deliberations of the topics of the report, the Ph.D. student prepares the implementation plan of thesis under the guidance of the instructor. Topics of reports and papers on the work plan are triplicate. One is saved by the supervisor, another by the student, and the third by College within 2 weeks after the passing. In the process of dissertation work, allowing for partial adjustment of the work plan, however, in principle, the titles are not allowed to change. If there are special reasons that support to change the title, candidate for Ph.D. degree should write an application himself or herself, and signing an opinion on the application by your major supervisor, recorded by the College Graduate Office, and timely redo report about topics of dissertation.

（2）Novelty

In order to improve the quality of the doctoral students in our school, ensure the innovation of doctoral thesis further strengthen the management of the Ph.D. degree theses, topics of Doctoral Dissertation implement check of Novelty. Under the guidance of the major supervisor, the doctoral candidate should check the Novelty on the topics in School

science and technology project consulting department or the new center of other outcomes, retrieve topics of the research dynamics, horizontal, and research methods at home and abroad, and fill out and submit the novelty report.

（3）Thesis stage research report

The major supervisor of doctoral student should carry out regular checks on the Ph.D. dissertation work. In the medium-term of doctoral thesis work, Ph.D. student should stage research report. Assessment team (including the supervisor) are organized by more than five associate professors of the colleges or experts of equivalent professional and technical positions, specify the person in charge, and hold public report meetings. Through the full description of the work of stage thesis by doctorial students, members of the assessment team question, and point out the problems and suggest improvements. The report meetings are needed to make a detailed record, and when the report meetings end, appraisal forms for postgraduate research work will be filled out, based on reviews and results given by the assessment team after discussion. Then the doctoral student hands it over to assessment team for signature. Test results are served as one of the reference materials for degree-granting.

（4）Workshop

Seminar would be held for doctoral students l ~ 2 times per semester, the total number should be at least six times; Symposiums are participated in by the supervisor, the member of the Advisory Committee (or some teacher and graduate students of related discipline) and the candidate; Symposiums are held in public, the candidate reviews literatures in his research field or report on his thesis in progress, and other members question and give guidance; After the symposium, doctoral student fills in the seminars profile table, together with the report of symposium, hands it over for auditing.

（5）Papers pre-defense

To improve the quality of doctoral thesis, Ph.D. dissertation of the discipline should implement the pre-defense system. Doctoral dissertation pre-defense is an important part of effectively checking the doctoral thesis work, ensuring the quality of doctoral thesis.

（6）Paper Reviewers and respondents

Work of application for the respondent of the doctoral thesis, reviewing and defense should be strictly in accordance with the requirements of the "Interim Implementation Measures of the Regulations Concerning Academic Degrees of the People's Republic of China", as well as adopted by the Academic Degrees Committee of the degree-granting work rules and other related documents and regulations.

VIII. Other Issues and requirements

All graduate students are required to initiate their dissertation study project prior to the end of the second semester. The medium-term examination for dissertation project is generally scheduled in the fourth semester. Other following schedules relevant to your graduate study could be found from the Overseas Education College (OEC) at Jiangsu University. By the end of the first year, students are required to have a research proposal and program of study accepted by his/her Graduate Advisory Committee. A list of completed courses and those proposed to meet school requirements should also be prepared. A meeting of the Advisory Committee should be convened by the student to discuss his/her proposal and course work.

For Ph.D. candidates in Food Science and Engineering, the academic papers published must meet one of the following 1), 2) requirements,

1) As the first author published at least 1 paper in the journals on the subject of SCI (E) whose impact factor is located in the 1 District (recognized by the Science and Technology Department) ,and the paper was collected in SCI (E).
2) As the first author, or the tutor as the first author and the applicant as the second author published 2 papers and both of which were collected in SCI (E), of which at least 1 paper the applicant as the first author.

Note: Jiangsu University should be the first unit.

The dissertation must demonstrate a mastery of research techniques, ability to perform original and independent research, and skill in formulating conclusions that enlarge upon or modify accepted ideas.

The above achievements are required to be with the first unit of Jiangsu University.

Ⅸ.Financial Assistance

Applicants from a foreign country can apply a variety of Chinese government scholarship that may fully or partially support your degree study at JU. For further information regarding these scholarships provided by Chinese government, please surf on the website of Overseas Education College (OEC), JU, at http://oec.ujs.edu.cn/pub/eng/Scholarship/GS/. In addition to apply these funding supports, School of Food and Biological Engineering in JU also provides scholarship for PhD graduate students, with which the total amount of the funding assistance may be possibly updated, depending on the applicants' performance in academic research, at http://asp1.ujs.edu.cn/sp/.

Attachments：

（Ⅰ）. Guide for thesis and dissertation research proposal and plan of study

School of Food and Biological Engineering, Jiangsu University

Zhenjiang, Jiangsu Province

(Date)

TITLE: A brief, clear, specific designation of the subject of the research. The title, used by it, should give a good indication of the project.

OBJECTIVES: A clear, complete, and logically arranged statement of specific objectives of the project. If several objectives are proposed, they must be closely related. List them as 1, 2, 3, etc.

JUSTIFICATION: Should present the motivation and importance of the research.

PREVIOUS WORK AND PRESENT OUTLOOK: A brief summary covering pertinent previous research on the problem, citing important and recent publications, the status of current research, and additional information needed, to which the project is expected to contribute. This review will help to determine work already accomplished.

PROCEDURE: A statement of essential work plans and methods to be used to attain each of the stated objectives. The procedure should correspond with objectives, and follow the same order. Phases of the work to be undertaken should be designated.

RESEACH METHOD: should specify the research method of the project, if the theoretical analysis is conducted, the basic model description should be given, if the empirical study is conducted, the possible source of data should be indicated.

PROBABLE DURATION: An estimate of the maximum time likely to be required to complete research and publish results.

LITERATURE CITED: List important and recent publications involving this field of work.

(Ⅱ).The directory of mainly classic books needed to be read.

1. Owen R. Fennema. Food Chemistry. New York, Marcel Dekker, Inc., 1996
2. Belitz, H. D., Grosch, W. Food Chemistry. New Yolk: Springer verlag, Berlin Heidelberg, 1999
3. Principles and Techniques of Practical Biochemistry (5th Edition). Keith Wilson and John Walker, Cambridge Press, 2000

4. Modern Food Microbiology, Edited by James M. Jay, Martin J. Loessner, David A. Golden, Published in 2005 Springer.
5. Microliology, Edited by Prescott, L.M., Harley, J.P., Klein, D.A. Published in 2002, McGrawHill
6. Modern detection technologies in the Food Industry, Edited by Zhao JieWen and Sun Yong Hai, Published in 2008 by Chinese Light Industry Press.
7. Chemometrics Methods, Edited by Xu Lu and Shao XueGuang, Published in 2004 by Science Press.
8. Niir Board. Modern Technology of Agro Processing and Agricultural Waste Products. National Institute Of Industrial Re, 2000
9. Carl W. Hall. Processing Equipment for Agricultural Products. Avi Publishing Co Inc., 1963
10. Food Biotechnology (Advances in Biochemical Engineering/ Biotechnology), Edited by Ulf Stahl, Published in 2008 by Springer Press.
11. Fermentation Processes Engineering in the Food Industry, Edited by Carlos Ricardo Soccol, Ashok Pandey and Christian Larroche. Published in 2013 by CRC Press.
12. Dong Quan, Min Yanping, Zeng Kaifang. Storage and Processing of AgriculturalProducts[M]. Chong Qing: Southwest China Normal University Press, 2010.
13. Xia Wenshui. Food Technology[M]. Beijing: China Light Industry Press, 2006.
14. Li Lite. Technology of Storage and Processing of Grain and Oils[M]. Beijing: China Agricultural Press, 2002
15. Ye Xingqian. Processing Technology of Fruits and Vegetables[M]. Beijing: China Agricultural Press, 2002
16. Digital Image Processing. (Third Edition) Rafael C. Gonzalez & Richard E. Woods. Publishing House of Electronics Industry
17. Digital Image Processing S. K. Ghosh UK: Alpha Science International Limited; 2013
18. Literatures recently published

19. Functional foods, Yaoguang Zhong, Chemical industry press, 2011.
20. The science of functional foods, Jianxian Zheng, China light industry press, 2003.
21. Research and application of functional food, Moucheng Wu, Chemical industry press, 2004.
22. Yin shian, Wang zhixu, etc. Translation. «Present knowledge in nutrition» Beijing: Chemical Industrial Press, 2004
23. Liu zhigao, Etc. Edit. «Food Nutriology». Beijing： China Light Industry Press, 2004
24. Schmidt, R. H.; Rodrick, G. E., Food Safety Handbook. John Wiley & Sons: 2003.
25. Hutter, B. M., Managing Food Safety and Hygiene: Governance and Regulation as Risk Management. Edward Elgar Publishing: 2011.
26. Knechtges, P. L., Food Safety: Theory and Practice. Jones & Bartlett Publishers: 2011.
27. D'Mello, J. F., Food Safety: Contaminants and Toxins. CABI: 2003.
28. Wu Y, Chen Y. Food Safety in China. J Epidemiol Community Health. 2013; 67(6): 478-479.
29. Yotova, L.; Grabchev, I.; Betcheva, R.; Marinkova, D., Smart Biosensors for Determination of Mycotoxines. In Detection of Bacteria, Viruses, Parasites and Fungi, Springer: 2010; pp 389-414.
30. Yongning Wu, Present Knowledge in Food Safety. Chemical Industry Press: 2005.

（Ⅲ）. The directory of mainly professional academic journals needed to be read.

1. Advances in Food Science.
2. Analytical Methods
3. Agricultural and Food Science
4. Agro Food Industry Hi-tech
5. Annual Review of Food Science and Technology
6. British Food Journal
7. Comprehensive Reviews in Food Science and Food Safety
8. Food & Nutrition Research

9. European Food Research and Technology
10. Cereal Chemistry
11. Journal of Agricultural and Food Chemistry
12. American Journal of Food Science and Technology
13. Food Biotechnology
14. Food Microbiology
15. Food ,Nutrition and Agriculture
16. International Journal Food Science and Nutrition
17. International Journal of Computer Vision
18. International Journal of Robotics Research
19. Journal of The Japanese Society for Food Science and Technology-Nippon Shok
20. Journal of Cereal Science
21. Journal of Dairy Science
22. Journal of Texture Studies
23. Journal of the Science of Food and Agriculture
24. Journal of the American Oil Chemists' Society, with INFORM (International News on Fats, Oils & Related Materials)
25. Transaction of the ASAE
26. Transaction of the American Society of Agricultural Engineering
27. Food Packaging Testing Methods and Applications
28. Food Product Development
29. Journal of Food Nutrition
30. Journal of Food Processing
31. Journal of Food Quality
32. Computer Vision and Image Understanding
33. Food Analytical Methods
34. Food and Bioprocess Technology
35. Food Engineering Reviews
36. Innovative Food Science & Emerging Technologies
37. Journal of Food Composition and Analysis

38. Journal of Food and Nutrition Research
39. Journal of Food Process Engineering
40. Journal of Food Processing and Preservation
41. Journal of Food Quality
42. Journal of the Science of Food and Agriculture
43. Trends in Food Science & Technology
44. Journal of Food Biochemistry
45. Journal of Food Safety
46. Journal of Food Science
47. Journal of Food Chemistry
48. Food Research International
49. Czech Journal of Food Science
50. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
51. IEEE Sensors
52. Journal of Ultra Sono-chemistry

(Ⅳ).Course Content

1. **Special theme on food science and technology**

Goal

The main contents of the course is to make the students understand the main research progress in the field of food science and technology, especially on the development course and the present situation of the four main research directions: food physical processing technology and equipments, rapid nondestructive testing technology and equipments, food nutrition and safety food, and biological technology and equipments. And with these study, to make students master the theoretical basis and provide basic technical methods for the related fields of scientific research, technology and new product development work.

Essential Objectives

Through the study of this course, students should receive the following basic knowledge and ability training:

1. Through the study of this course, the doctoral student can fully understand the core science and technology in the field of the subject and have a deep understanding of the connotation of the subject.

Expand the scientific field of vision and improve the overall quality.

2. Grasping the scientific basis, technological principles, technological means and development trend of four main directions, and facilitate the subsequent research topics and research work.

3. By the training of doctoral graduate students, to lay a theoretical foundation and provide basic technical methods in the future of food science research.

4. To enable students to have the ability to develop and apply food processing technology and to analyze and solve other specific problems in food development.

Content Coverage

Special theme on food science and technology includes four aspects: food physical processing technology and equipment , food non-destructive testing technology and equipment , food nutrition and safety , and food biotechnology and equipment .

Evaluation

Attendance: You are expected to attend each class meeting for the full scheduled time.

Examination: work report given at end of the course.

2. Modern Food Chemistry

Goal

The goals of Modern Food Chemistry are to (1) introduce the structure, properties and functions of the main ingredients in food raw materials and their changes in the chemical composition during the processing and the relationship with the nutritional quality, sensory quality and safety control of food products, (2) reveal the relationship between the structure and function of food ingredients and the mechanism of change during the processing of preservation, (3) reveal the food to maintain the color, smell, taste, texture, nutrition and ensure the safety of food to provide a theoretical basis, and (4)cultivate innovative awareness and potential.

Essential Objectives

a. Understand the history, research content, and the important role in food industry

b. Master the structure, physical and chemical properties and functions of the main components in foods such as water and ice, carbohydrates, lipids, amino acids and proteins, vitamins, minerals.

c. Understand the changes of these components during food processing and storage, and the impact of these changes on the food quality.

Content Coverage

The structure, properties and functions of the main components in foods

The changes of these components during food processing and storage, and the impact of these changes on the food quality.

Evaluation

_ open-book examination

_Score= 10%* attendance +90%* examination.

3. Advanced Instrumental Analysis

Goal

Instrumental Analysis is a broad and continually expanding subject as new technologies emerge, but these methods can generally be categorized as spectroscopic, electrochemical, or chromatographic. In this course, we will essentially take the cover off these "black boxes" to see how these instruments are constructed and how measurements are made from the underlying chemical and physical properties of the substance. In fact, you are likely to see instrumentation represented from other courses you've taken, demonstrating the broad impact instrumentation has in science. Quantitative problem solving will be utilized as a means to demonstrate the chemical and physical principles applied to the design and performance of instruments.

The goal of this course is NOT to make you an "expert" on every type of instrumentation to be encountered in a science lab, but rather to introduce and educate you to the common principles as well as the variety of instrumentation available for chemical analysis and the type(s) of information these instruments provide. It is my hope that you will then expand your knowledge of the instruments you come into contact with during your scientific career, thereby avoiding the "black box" problem.

Essential Objectives

By the end of this course, you should be able to demonstrate:

a. an understanding of how chemical and physical properties of substances are used in the design and construction of modern sophisticated instrumentation used for chemical analysis

b. a broad knowledge of the types of instrumentation generally available and the information provided by each, applications

c. a knowledge of appropriate instrumental methods for addressing a chemical analysis problem

d. the advantages and limitations of different instruments used for similar types of analyses

Content Coverage

The content of this course are divided into nine sections:

a. Biological mass spectrometry and its application for protein identification

b. Two-dimensional electrophoresis and methods of protein separation

c. Basic principles of chromatography

d. Classical liquid chromatography

e. Atomic absorption, ICP basic principles and its application

f. The fluorescence spectra in the analysis of biological samples

g. Infrared spectra and its application in food analysis

h. UV-visible absorption spectroscopy and its application in food analysis

i. PCR, quantitative PCR, fluorescence differential display

Evaluation

_ Attendance: You are expected to attend each class meeting for the full scheduled time.

_ Examination: There will be a final examination given at end of this course.

4. Advanced Food Microbiology

Goal

At the completion of this course, the students should know the relationship between microorganisms and food: their advantage and disadvantage to food, how to use the microorganisms in food production and storage, and how to control the decay of food caused by pathogen. Besides, students should know the basic technique in the research of food microbiology: Isolation of a microorganism strain, Identification of a microorganism strain, Storage of a microorganism strain, microbial culture and strain improvement. What's more, students should know the research progress of food microbiology.

Essential Objectives

a. Learn the relationship between microorganisms and food: their advantage and disadvantage to food.

b. Learn how to use the microorganisms in food production and storage, and how to control the decay of food caused by pathogen.

c. Learn the basic technique in the research of food microbiology: Isolation of a microorganism strain,

Identification of a microorganism strain, Storage of a microorganism strain, Microbial culture and strain improvement.

d. Learn how to get the literature about food microbiology

e. Discuss the research progress of food microbiology.

Content Coverage

The advantage of microorganisms to food, the disadvantage of microorganisms to food, the use of microorganisms in food production and storage, the control of the decay of food caused by pathogen, isolation of a microorganism strain, identification of a microorganism strain, storage of a microorganism strain, microbial culture, strain improvement, the research progress of food microbiology.

Evaluation

_Oral presentation: an oral presentation focused on food microbiology should be presented by each student.

_ Assessment by the review paper related to food microbiology prepared by each student.

5. Theoretical Basis for Food Nondestructive Detection Techniques

Goal

At the completion of this course the student shall be able to interpret Food Nondestructive Detection Techniques. In this course will discuss about Near Infrared Spectroscopy Technology, Computer Vision Technology, Spectral Imaging Detection Technology, Biosensor Detection Technology. The students not only shall understand the principles, methods, characteristics and applications of each testing method, but also can initially learn the correct selection of non-destructive testing methods to check and evaluate the quality of food.

Essential Objectives

a. Understand the status and needs of food testing.

b.Learn about several food nondestructive detection technologies that this course focuses on.

c. Learn to choose a reasonable nondestructive detection technology of different food testing.

Content Coverage

Food Nondestructive Detection Techniques course includes Near Infrared Spectroscopy Technology,

Computer Vision Technology, Spectral Imaging Detection Technology, Biosensor Detection Technology .This course shall describe the principles, methods, characteristics, and applications of each testing method.

Evaluation

_ Essay Report

6. Frontiers in Food Science

Goal

This course includes a wide range of contents towards food science, especially frontiers of food science. Screening of study interests, skill in funding application, comprehensive reading of scientific papers, experimental design, patent application and many other similar aspects will be introduced and discussed on the class. Meanwhile, seminars focusing on above-mentioned aspects will be given by both teachers and students. Therefore, doctorial candidates will learn effective methods in scientific research and the newest developments in this area.

Essential Objectives

a, To encourage interests of doctorial candidates in scientific research, and improve their knowledge towards the newest developments in food science.

b, To improve comprehensive ability of doctorial candidates in scientific research, particularly catching a novel idea, designing related experiment(s) and organizing a manuscript.

c, To improve academic morality of doctorial candidates.

Content Coverage

Contents as follows will be introduced and discussed: how to screen research interests; typical methods in scientific research; cross and interaction between food science and other areas; frontiers in food science; abilities and skills in funding application; skills in experimental design and scientific manuscript writing.

Evaluation

Class presentation and seminar.

A review in the frontiers of food science and other similar areas.

7. Modern Food Physical Processing Technologies and Equipments

Goal

It is a core of professional basic courses for Food Science and Engineering major. The objectives of this course are to (1) introduce the background knowledge of modern processing technologies and equipments, (2) recommend the most commonly used equipments in separation, purification, drying, fermentation, analysis and detection, and (3) learn the working principle of these equipments and their application in agricultural product scientific research.

The main contents are divided from the equipments needed and mechanism of action to the application of equipments in agricultural product fields, as well as the present study direction and trend of these equipments. This course elaborates the food scientific alness and related topics, and provides the career guidance for persons who engage in the food science and engineering.

Essential Objectives

a. Learn to understand the history, classification and the important role of modern processing technologies and equipments in agricultural product fields.

b. Master the common used processing technologies and equipments in separation, purification, drying, fermentation, analysis and detection.

c. Learn the mechanism of action of these equipments and their application in agricultural product scientific research.

Content Coverage

The classification, mechanism of action, and the application of separation, purification, drying, fermentation, analysis and detection

The present study direction and trend of these technologies and equipments in agricultural products

Evaluation

_ the course is assessed by writing academic reports

8. Food Bio-manufacture

Goal

At the completion of this course, the students should know the main biological techniques which can be used in food bio-manufacture: microbial technology, enzyme technology, genetic engineering

technology, and protein engineering. Besides, students should know how to use these biological techniques in food bio-manufacture, and know the research progress of food bio-manufacture. What's more, students should know how to use these biological techniques in their research.

Essential Objectives

a. Learn the main biological techniques which can be used in food bio-manufacture: microbial technology, enzyme technology, genetic engineering technology, and protein engineering.

b. Learn how to use microbial technology, enzyme technology, genetic engineering technology, and protein engineering in food bio-manufacture.

c. Learn how to get the literature about food bio-manufacture.

d. Discuss the research progress of food bio-manufacture.

e. Learn how to use these biological techniques in their research.

Content Coverage

Microbial technology, enzyme technology, genetic engineering technology, protein engineering, the use of these technologies in food bio-manufacture, key scientific issues in food bio-manufacture; functional regulation and optimization of food microorganism; food bio-manufacturing products; application strategy of genetic engineering technology in food bio-manufacture.

Evaluation

Assessment by the review paper written by students.

9. Modern Molecular Biology and Analytical Technique

Goal

Modern Molecular Biology and Analytical Technique helps students understand essence of biological processes at molecular level. Students are expected to learn and master molecular mechanisms of transcriptional and translational regulations in prokaryotes and eukaryotes, to master and understand basic analytical techniques of DNA manipulation and recombination, and to comprehend bioinformatics approaches for analyzing gene structure, expression and functional characterization.

Essential Objectives

a. Learn molecular mechanisms of prokaryotic and eukaryotic gene expressional regulation.

b. Learn basic methodology of DNA manipulation and DNA recombination.

c. Learn basic strategy of gene structure, gene expression and functional analysis.

Content Coverage

Regulation of Prokaryotic Gene Expression at Transcription and Translation Levels, Transcriptional and Translational Regulations of Eukaryotic Gene Expression, Nucleic Acid Blotting and Molecular Hybridization, Polymerase Chain Reaction, DNA Sequencing, DNA Chip Technology, Yeast and Mammalian Hybrid Systems, Enzymes as Tools in Recombinant DNA Technology, Preparation of Interested DNA, DNA Vectors in Recombinant DNA Technology, Procedure of DNA Cloning, Prokaryotic and Eukaryotic Expression Systems, Application of Recombinant DNA Technology, Bioinformatics Search and Alignment of Gene Sequences, Identification of Gene Transcription Start Site, Promoter Structure and Functional Analysis, Structural Analysis of Coding Regions, Analytical Strategy of Gene Expression, Application of Bioinformatics in Prediction of Gene Function, Identification of Biological Function of Gene.

Evaluation

_ Attendance

_ Exam (open)

10. Image Recognition

Goal

Students who have taken this course should keep in mind the concepts of digital image processing and master the basic methods in digital Recognition. They should be able to solve certain problems in detection external quality of samples using a computer vision and get a clue in object recognition.

Essential Objectives

The principal objectives are to provide an introduction to methodologies for digital image processing and basic techniques for object recognition. And to develop a foundation that can be used as the basis for further research in this field. Students who have taken this course should keep in mind the concepts of digital image processing and master the basic methods in digital image recognition. They should be able to solve certain problems in detection external quality of food or agricultural product samples using a computer vision and get a clue in object recognition.

Content Coverage

Image recognition fundamentals, Image enhancement skills, advanced Image segmentation techniques,

Color image processing, Image representation， description, Image understanding and object recognition，application cases.

Evaluation

Course work with PPT and class presentation account for the final marks.

11. Optimization, Simulation and Control of Food Processing

Goal

By studying this course, students can learn the approaches how to solve a complex problem in practical food engineering. They also need to learn the methods to model and optimize food processes including food drying, separation/extraction, enzymatic process, fermentation, and sterilization. The advantages of computer simulation to solve a complicated food engineering are shown by learning simulation software. Students are required to find a solution to overcome the problems existing in the practical food engineering.

Essential Objectives

1. apply the simulation software and mathematic model in food process, solve the practical problems in food engineering by model establish, calculate the unknown parameters of food process according to the inlet and outlet of materials and energy.
2. Simulate the practical process of food engineering using COMSOL Multiphysics, integrate the fields of liquid flow, ultrasonic and heat fields to obtain a right result of practical food engineering process.

Content Coverage

Food processes of drying, extraction, fermentation, catalysis reactions, sterilization as well as COMSOL Multiphysics will be introduced in this course. The case of simulation will also be presented, mainly focusing on proteinextraction from rice residual.

Evaluation

_ Day to day obseration of residents work including documentation and interpretation

_ A written report to simulate a food engineering process.

12. Food nutrition and metabolism

Goal

By learning this course, students need to understand the latest progress and development trend of research in the field of food nutrition and metabolism, master the digestive and metabolic processes of all kinds of nutrients in the body, learn the new research methods and techniques with nutrition, to establish a close relationship between the metabolism of nutrition and food science.

Essential Objectives

a. Understand the latest progress and development trend of research in the field of food nutrition and metabolism

b. Master the digestive and metabolic processes of all kinds of nutrients in the body

c. Learn the new research methods and techniques with nutrition

d. Establish a close relationship between the metabolism of nutrition and food science.

Content Coverage

The objective of this course is a frontier science to further explore the distribution and metabolism of nutrients in food, and the consequences of insufficient and excess food intake on the basis of modern nutrition. This course involves genomics, proteomics, metabolomics, system biology and their application in food nutrition and metabolic research. The present studies regarding food nutrition is not limited to nutritional deficiency diseases induced by insufficient intake of nutrient, but also focus on the prevention of chronic disease by excess nutrients.

Evaluation

Open Exam / Essay Report

13. Introduction of food safety

Goal

The purpose of this course is to make students know some concepts of modern food safety. These include basic theory of food safety, and familiar with some modern food safety analysis techniques such as high-performance liquid chromatography (HPLC), gas chromatography (GC), enzyme-linked immunosorbent assay (ELISA) and some other functional materials based new detection methods; some new technologies used forthe detection of heavy metal ions and mycotoxins, and so on.

Essential Objectives

a. Familiar with the basic theory and main concept of modern food safety, using the theory of modern food safety concept to guide for scientific research, food processing and production, as well as the health care.

b. Understanding the concept of food safety, parameters that impact food quality and safety, the importance of food safety all over the world.

c. Learn to propose some integrated methods, to qualitatively and quantitatively analyze the unsafe or contaminated food.

Content Coverage

Genetically modified food and mycotoxins on food safety and their detection methods, environmental pollution on food safety and the detection methods, the impact of pesticide and veterinary drug residues on food safety and their detection methods, food additives and food safety, and heavy metal pollution on food safety and their detection methods, some new food safety analysis technology.

Evaluation

_Assessment at ordinary times of students work include attendance rate and performance in the class and so on. Final assessment method is by the type of essay report.

(V). Information of Professors

Ma Hai-Le Ph.D

Second-level Professor; Committee Chair of School of Food and Biological Engineering, Jiangsu University; director of *Jiangsu Provincial Research Center for Agri-product Biological Processing and Separation Engineering, China*; director of *Jiangsu Provincial Key Lab for Agri-product physical Processing, China.*

Education Background

Ph.D. 1996, Agri-Product Processing & Preservation Eng., Jiangsu Univ. of Sci. & Tech.
M.S. 1989, Agri-Product processing Eng., Northwestern Agri. Univ., China
B.S. 1985, Agricultural Mechanization, Northwestern Agri. Univ., China
Postdoctory.1997-1999, Food Science & Technology, Jiangnan Univ., China

Working Experience

1985-1993, lecturer, Agri. Eng., Northwestern Agri. Univ., China
1996-2001, associate professor, Jiangsu Univ. of Sci. & Tech., China
2001-2003, professor, Jiangsu Univ. of Sci. & Tech., China
2003- Present, professor, PhD supervisor, Jiangsu Univ., China
2005-2006, visiting scholar, UC Davis, USA

Research Interesting

Prof. MA's current research is focused on the physical processing method of food, such as the Super- or sub-critical CO_2 extraction and ultrasonic- assisted extraction of active ingredients in natural products, functional peptide preparation by ultrasonic assisted enzymatic, food sterilization by pulse magnetic field, and the development of above processing equipment. More than 300 papers and 8 books have been published.

- separation of active factors in agri-products;
- preparation of functional peptides;
- non-thermic sterilization by high intensity pulsed magnetic field;
- food processing equipment.

Contacts

Tel: 0086-511-88790958
E-**mail**: mhl@ujs.edu.cn

Zou Xiao-Bo Ph.D

Second-level Professor, Dean of School of Food and Biological Engineering, Jiangsu University.

Education Background

2002-2005, Jiangsu University of Science and Technology, Ph.D.

1997-2001, Jiangsu Institute of Technology, M.S.

1993-1997, Jiangsu Institute of Technology, B.S.

Working Experience

Oct. 2008-Oct. 2009, worked at Food and Nutrition Engineering Leeds University, Leeds, UK as a visiting scholar, the topics studied were Evaluation of milk and melon quality by Ultrasound and Near infrared Spectroscopy.

Dec. 2013-Feb. 2014, Visiting Professor, Utah state University, California Institute of Technology

Research Interesting

Dr. Zou's research interests are in the area of quality and safety evaluation of food and agricultural products. He applies optical, mechanical, electrical, and other state-of-the-art technologies to develop sensors and sensing techniques for rapid, nondestructive evaluation of quality and safety of agricultural products. His current research emphasis is developing new gas sensors, hyperspectral imaging technology and biosensors for assessing quality of food and agricultural products. He has been authorized 25 invention patents and published 80 papers.

- Study on the safety and quality of food by new colorimetric biosensors;
- Non-destructive diagnosis of nutrient deficient crops by hyperspectral imaging information;
- Detection the fermentation process of Zhenjiang Vinegar by biosensors;
- New gas sensors development and its detection food qualities.

Contacts

Tel: 0086-511-88780085

E-mail: zou-xiaobo@ujs.edu.cn

Chen Bin Ph.D

Professor, doctoral supervisor, executive director of the Harvesting & Processing Machinery Branch of Chinese Society of Agricultural Machinery, director of the Analytical Machinery Branch of China's 7th Instrument & Control Society, director of China Association for Instrumental Analysis, member of the Optical Instrument Association of China Instrument & Control Society, member of the Professional Committee of Physical & Optical Instruments, and member of the Professional Committee of Near Infrared Spectrometry

Education Background

Ph.D., Jiangsu University of Science and Technology, 1996-2001
Major research areas: Agricultural products processing and storage
M.S., Jiangsu Institute of Technology, 1986-1990
Major research areas: Agricultural products processing and storage
B.S., Zhenjiang Institute of Agricultural Machinery, 1978-1982
Major: Machinery manufacturing process, equipment and automation

Working Experience

Teaching assistant at Zhenjiang Institute of Agricultural Machinery, 1983-1987
Lecturer at Department of Agricultural Machinery, Jiangsu Institute of Engineering, 1987-1996
Associate professor at School of Agricultural Machinery, Jiangsu University of Science and Technology, 1996-2004
MSc supervisor at School of Agricultural Machinery, Jiangsu University of Science and Technology, 1997 till now
Professor at School of Biological and Environmental Engineering, Jiangsu University, 2004 till now
PhD supervisor at School of Food and Biological and Engineering, Jiangsu University, 2005 till now
Research Interesting
Professor Chen's current research is mainly focused on optical detection methodology for agricultural product quality.

Contacts

E-mail: ncp@ujs.edu.cn

Tel: 0511-88780174, 139****1790

Huang Xing-Yi Ph.D

Second-level Professor, vice dean of School of Food and Biological Engineering.

Dr. Huang's research interests are focused on nondestructive detection techniques for food & agricultural product. Current projects include evaluating quality of food & agricultural product via computer image processing technique, developing colorimetric sensor array for detection and identification of agricultural product, and estimating the quality of food and agricultural product using fusion techniques based on machine vision, E-nose & E-tongue. In addition, her research involves application of electronic tongue in food engineering.

Education Background

Ph.D., Jiangsu University of Science and Technology, 1996.9-1999.12

M.S., Jiangsu Institute of Technology, 1985.9-1988.6

B.S., Jiangsu Institute of Technology, 1981.9-1985.8

Working Experience

Jan. 2000~Jan. 2001 Postdoctoral research, University of Saskatchewan, Canada

Feb.2001~present Professor, School of Food & Biological Engineering, Jiangsu University,

Oct. 2009~Oct.2010 Visiting Professor, Michigan State University, USA.

Research Interesting

Nondestructive detection technique and equipment for evaluation of quality of food and agricultural product.

Contacts

Tel: 0086-511-88792368

E-mail: h_xingyi@163.com

Ma Yong-Kun Ph.D
Professor of School of Food & Biological Engineering

Education Background

Ph.D.2001-2005, China Agricultural University, Major: Agricultural Products Processing and Storage Engineering,

M.S.1996-1999, Northwest Agriculture-Forest University, China, Major: Agricultural Products Processing and Storage Engineering

B.S. 1982-1986, Shanghai Ocean University, China, Major: Food Processing

Working Experience

2004- present, Jiangsu University, Professor, Ph.D. supervisor

2002.1-2002.12, Xinrui tomato products Co. Ltd, Hebei province, Technical Director

1986-1997, Shihezi University, Xinjiang, Lecturer and Associate Professor

2009-2010, Ohio state university of USA, visiting scholar

Research Interesting

Food high pressure processing

Fruit wine fermentation engineering

Food flavors analysis and application

Modern processing technology of fruit and vegetable

Contacts

Tel: +86-139****9511

E-mail: mayongkun@ujs.edu.cn

Cai Jian-Rong Ph.D

Professor of School of Food & Biological Engineering

Deputy dean of Institute of Agriculture Products Processing Engineering.

Prof. CAI's current research is focused on rapid quality detection of agricultural and food products by nondestructive detection technology. The applied technologies include image processing, hyperspectral image processing, X-ray image processing, acoustic detection, electrochemical, etc.

Education Background

1989, Jiangsu Institute of Technology, Specialized Agricultural Mechanization, Bachelor, China.

1996, Jiangsu University of Science and Technology, Specialized Agricultural Agricultural Products Process Engineering, Master, China.

2005, Jiangsu University, Specialized Agricultural Agricultural Products Process Engineering, Ph.D, China.

2005, Hannover University, Specialized Bio-robot and and its application, Visiting Scholar, Germmay.

Working Experience

1989-1995, Department of Science and Technology, Jiangshu University

1995-2012, Department of Food Science and Technology, Jiangshu University

2012-Present, Institute of Agriculture Products Processing Engineering, Jiangshu University

Research Interesting

Rapid quality detection of agricultural and food products.

The fruit and vegetable harvesting robot.

Biological sensing detection for agriculture and food products.

Contacts

Tel & Fax: 0086-511-88797308

E-mail: jrcai@ujs.edu.cn

Zhang Hong-Yin **Ph.D**

Professor of School of Food & Biological Engineering

Education Background

Ph.D. in Food Microbiology, Zhejiang University, P. R. China, 2004

M.S. in Food Biochemistry, Henan University of Technology (Pre Zhengzhou Grain College), P. R. China, 2001

B.C. in Food Science and Technology, Huazhong Agricultural University, P. R. China, 1995

Working Experience

Aug. 2008- Sep. 2009, worked at School of Land, Crop and Food Science, The University of Queensland, Australia, as a visiting scholar.

Research Interesting

- Food Microbiology
- Biological Control of Postharvest Diseases of Fruits and Vegetables
- Postharvest Physiology and Pathology of Fruits and Vegetables

Contacts

Tel.：+86-138****1167

Email: zhanghongyin@ujs.edu.cn

Zhang Zhi-Cai **Ph.D**

Professor of School of Food & Biological Engineering

Education Background

Ph.D.

Working Experience

1988.7-1989.8 Jiangsu Huaiyin Food Industry School;
1989.9-1995.6 Institute of Jiangsu Huaiyin Agriculture science;
1995.6-2000.6 Jiangsu Huaiyin pharmaceutical factory;
2000.6-2002.8 Jiangsu Taixin Tongyuantang bioengeering plant;
2006.6- present: Jiangsu University

Research Interesting

- Biofermentation: involved in the fungi, isolation and purify and biofunction of active components;
- Bioenergy: Biotransformation of stalk
- Fermentation equipment

Contacts

Tel.：+86-136****4460

Email: zhangtamei@163.com

Chen Quan-Sheng, PhD

Professor of Food and Biological Engineering

Education Background

Anhui Agricultural University, PR China, B.S., 1997

Anhui Agricultural University, PR China, M.S., 2004

Jiangsu University, PR China, Ph.D., 2007

Working Experience

2007.06- 2009.06, Jiangsu University, PR China, Lecture

2009.06-2013.08, Jiangsu University, PR China, Associate Professor

2010.09-2011.09, University of Tennessee, US, Visiting scholar

2013.06-Present, Jiangsu University, PR China, Professor

Research Interesting

- Rapid & nondestructive detection of Agri-product & food
- Real-time quality monitoring and control in food processing
- Emerging analytical tools in analysis of food quality and safety, especially including near infrared spectroscopy (NIR), E-nose, E-tongue, biosensors, and multispectral/hyperspectral imaging tool.

Contacts

Tel: +86 136****7948

E-mail: qschen@ujs.edu.cn

Chen Guan-Hua Ph.D

Professor of Food and Biological Engineering

Education Background

PhD of analytical chemistry, Hebei University, China, 2003; Master of analytical chemistry, Hebei University, China, 1996; Bachelor of physics, Hebei University, China, 1982.

Working Experience

Apr. 2008-Oct. 2008, worked at College of Pharmacy, University of Georgia as a visiting scholar, the topics studied was the separation of an oligonucleotide drug and its metabolite by capillary gel electrophoresis.

Research Interesting

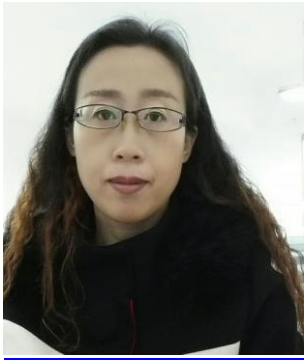
Prof. Chen's current research is focused on the detection technology applied in food safety and the mechanism of the anti-oxydation of active component in natural products. More than 50 papers and 1 book have been published.

- Sensitive detection for agrochemcal and veterinary drug residues by capillary electrophoresis or high performance liquid chromatography;
- Synthesis of molecularly imprinted material used in solid extraction;
- Kit of fast detection base on chemical coloration for agrochemcal and veterinary drug residues;
- Cooperation of anti-oxydation between natural antioxidant and antioxidase.

Contacts

Tel & Fax: 0086-511-88780201

E-mail: chengh@ujs.edu.cn



Duan Yu-Qing Ph.D

Professor of Food and Biological Engineering

Education Background

2001.9-2004.6, Ph.D. of Agricultural product processing and storage, School of Food Science and Technology, Huazhong Agricultural University.

1998.9-2001.7, Master of Chinese Medicine, Jilin Agricultural University;

1994.9-1998.7, Bachelor of Pharmaceutical Botany, Jilin Agricultural University;

Working Experience

2004.7-present, Engaged in teaching and research work, School of Food & Biological Engineering, Jiangsu University. Professor, Doctoral Tutor, Professor Committee Member of School of food and biological engineering in 2013. "Blue Project" Young Academic Leaders of Universities and "Six Talent Peaks" Cultivation Object of Jiangsu Province in 2014.

2015.1-2016.1, Visiting scholar, Department of Food Science, University of Massachusetts Amherst, USA.

2012.8-2013.1, Visiting scholar, Laboratory of Natural Product Chemistry, Department of Pharmacy, Osaka University, Japan.

2010.10-2012.10, Postdoctoral research, Postdoctoral Research Station of Agricultural Engineering, Jiangsu University;

2006.11-2009.11, Postdoctoral research, Postdoctoral Research Station of Food Science and Engineering, Jiangsu University;

Research Interesting

Food science and nutrition, functional food science, natural product chemistry.

Contacts

Tel：+86-511-88780201

E-mail: dyq101@ujs.edu.cn

He Rong-Hai Ph.D
Professor of Food and Biological Engineering

Education Background

Ph.D. 2006,Jiangsu University, China, Major: Agricultural Product Processing and Preservation Engineering

M.S. 2004, Jiangsu University, China, Major: Agricultural Product Processing and Preservation Engineering

B.S. 1993, Jiangsu Agricultural Institute, China, Major: Food Engineering

Working Experience

2006.06- School of Food and Biological Engineering, Jiangsu University, Prof., Assistant Dean

2007.2-2008.5 University of Tennessee, Knoxville, USA, Postdoctoral Research Associate

1993.8-2001.8 Nanjing Tianhuan Food Group, China, Engineer

Research Interesting

Functional food

Food phisycal processing technology ang equipiment

Social academic post and honor

Member of Agricultural Products Storage and Processing-Branch of CAASS

Contacts

Tel： +86-511-88795305

E-mail: heronghai@163.com

Zhou Cun-Shan Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Ph.D September 2002-June 2007, Food Science and Engineering, Jiangsu University

Working Experience

RIKEN, Heddle Initiative Research Unit, Institute of Advanced Science, Visiting Scientist, 2013.July.11-2014.January.11

Jiangsu University, School of Food and Biological Engineering, Associate Professor, 2012, April- Present

Zhejiang A & F University, School of agricultural and food science, lecturer July 2007-November 2009, Associate Professor November 2009- March 2012

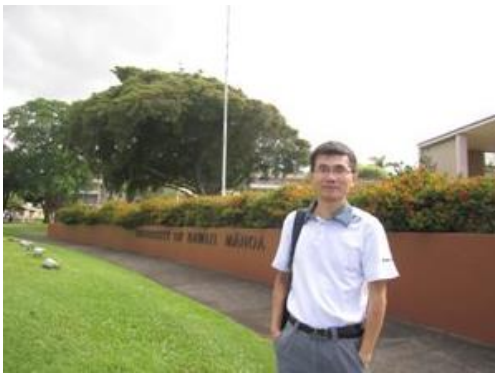
Research Interesting

Protein engineering preparation and Carbohydrate biomass energy.

- Chemical and acoustic principles of solid-liquid extraction with ultrasound-assisted
- Modeling of mass transfer phenomena in food and bioprocess engineering
- Converting biomass into industrial feedstock and products with green catalyst (Ionic liquid)
- Applied and fundamental research to characterize and evaluate biological materials using advanced instrumentation

Contacts

Tel & Fax: 0086-511-88780201
E-mail: cunshanzhou@163.com



Cui Heng-Lin Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Ph.D., Microbiology, Institute of Microbiology, Chinese Academy of Sciences (IMCAS), 2004-2007.
M.S., Microbiology, 2001, College of Life Sciences, Nanjing Normal University (NJNU), 1998-2001.
B.S., Biology, 1994, Department of Biology, Nanjing Normal University (NJNU), 1990-1994.

Working Experience

08/2013-present, Professor, School of Food & Biological Engineering, Jiangsu University.
02/2013-02/2014, Visiting scholar, School of Science, The Hong Kong University of Science and Technology (HKUST).
08/2012-08/2013, Associate Professor, School of Food & Biological Engineering, Jiangsu University.
08/2011-08/2012, Postdoctoral Fellow, Department of Civil and Environmental Engineering, University of Hawai'i at Mānoa (UHM).
08/2007-08/2011, Associate Professor, School of Food & Biological Engineering, Jiangsu University.
06/2001-07/2007, Lecturer, School of Biological & Environmental Engineering, Jiangsu University.

Research Interesting

Food microbial diversity and safety

Microbial diversity and application of extremophiles

Contacts

Tel: +86-159****1926

E-mail: cuihenglin@ujs.edu.cn, cuihenglin@sohu.com

Sun Wen-Jing Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Ph.D. 09. 2003 - 06.2007: Candidate in Ecology, Hebei Normal University, P.R. China;

B.S 09.1982- 06.1986: in Biology, Lanzhou University, P.R. China;

Working Experience

06. 2008-Present: Professor, School of Food and Biological Engineering, Jiangsu University, P.R. China;

12. 2001- 05.2008: Professor, Shanxi Institute of Biology, P.R. China;

06. 1986 -10. 2001: Assistant Professor, Associate Professor, Shanxi Institute of Biology, P.R. China;

Research Interesting

- Bioproduction technology of Food additives
- Development and Utilization of Microbial Sources
- Comprehensive Utilization and Bioconversion of Agricultural Products

Contacts

Tel: 0086-139****0489 **Fax：** 0086-511-88884068

E-mail: juswj@163.com

Jiang Song Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Ph.D.2000-2009 Jiangsu University, China, Major: Engineering of agricultural product processing and storage.

M.S.1992-1996 Jiangsu University, China, Major: Engineering of agricultural product processing and storage.

B.S.1981-1985 Jiangsu University, China, Major: Agricultural machinery design and manufacture.

Working Experience

2006.4-present, School of food and biological engineering, Jiangsu University, Deputy Dean.

2001-present, Director, Jiangsu creation research institute.

2001.12-2005.3, School of biological and environment engineering, Jiangsu University, Deputy Dean.

1995-1998, Department of food science and engineering, Jiangsu University, Deputy Director.

1985.7-present, Jiangsu University, Teaching Assistant, Lecturer, Associate Professor and Professor.

Research Interesting

Rheological properties and evaluation of texture of food and agricultural products.

Storage and preservation of agricultural products.

Processing machinery and device of food and agriculture products.

Contacts

Tel: +86-51188790211

E-mail: jszhl@ujs.edu.cn,jszhlyy@163.com

Lin Lin Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Jiangsu University, Mechanical Engineering, BS, 2001.

Jiangsu University, Agricultural Engineering, MS, 2005.

Jiangsu University, Food Science, PhD, 2007.

Working Experience

Aarhus University (Denmark), Nanoscience, Postdoctor, 2011.

Research Interesting

Food Preservation

Food Packaging

Bioenergy

Nanotechnology for Biological Applications

Contacts

Tel: +86- 86137****9596

E-mail: linl@ujs.edu.cn

Gao Rui -Chang Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Shandong Agriculture University. Agricultural Product Processing, BS, 2001

Hebei Agriculture University. Processing and Storage Engineering of Farm Products, MS, 2004.

Ocean University of China. Food Science. Ph.D. 2007

Working Experience

2015.07- Professor, Department of Food Science and Engineering, Jiangsu University, Zhenjiang, Jiangsu, China

2014.05-2015.05 Visit Scholar, University of Massachusetts Amherst, USA.

2012.02-2014.02 Food Science Division, Deparment of Life Sciences National Natural Science Foundation of China, Beijing, China

2010.08–2012.01 Associate Professor, Department of Food Science and Engineering, Jiangsu University, Zhenjiang, iangsu, China

2007.06–2010.07Lecturer, Department of Food Science and Engineering, Jiangsu University, Zhenjiang, Jiangsu, China

Research Interesting

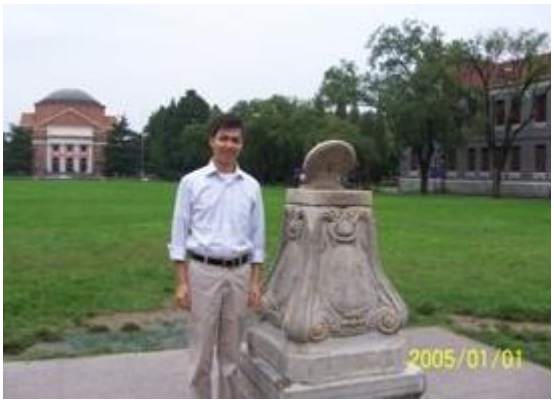
Aquatic product chemistry and processing

Food flavor

Contacts

Tel: +86-511-88780174

E-mail: xiyuan2008@ujs.edu.cn



Xun Bin Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

Ph.D. Food Science 2011 Jiangsu University

M.S. Food Science 2005 Jiangsu University

B.S. Grain Science and Engineering 1990 Jiangnan University

Working Experience

School of Food and Biological Engineering, Jiangsu University, Zhenjiang, Jiangsu, China

Research Interesting

Engaged mainly in full utilization technology research and equipment development for food by-products, focusing on theoretical researches and engineering technology like sub-critical fluid extraction, microwave enzyme inactivation and sterilization of soybean germ, wheat germ, rice bran, corn germ, corn gluten meal and other bulk food by-products, and related products development and equipment development.

- Sub-critical fluid extraction technology research and engineering of cereal germ oil
- Research and equipment development of microwave enzyme inactivation and sterilization technology for low-moisture cereal germ
- Deep-processing technology and industry application of corn gluten meal

Contacts

Tel: +86-511-88788203

E-mail: taotaoxu@126.com

Wang Yun Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

BSc. Jiangsu Agricultural College, 1996

MSc. Yangzhou University, 1999

PhD. Nanjing Agricultural University, 2006

Working Experience

Lecture in Department of Biology at Changshu Institute of Technology, 1999-2002

Associate professor of Biochemistry, and Department Head of Biotechnology, School of Food and Biological Engineering, Jiangsu University, 2006-current

Visiting research fellow in School of Biological and Biomedical Sciences, Durham University (UK), 2010-2011

Research Interesting

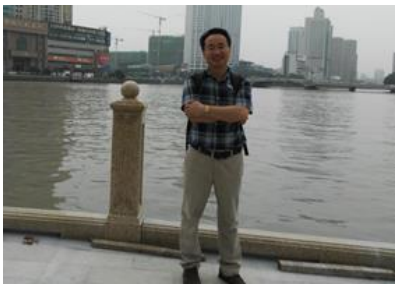
Research interests involve the use of multidisciplinary methodologies from molecular biology, proteomics and metabolomics to (i) decipher the underlying mechanisms involved in physiological and nutritional changes in fruits and vegetables during post-harvest storage and process; (ii) investigate the interaction between fungi (such as Aspergillus flavus, Penicillium expansum) and their host and the possible regulatory networks involved in mycotoxin biosynthesis.

Another research interest includes the development of immunoaffinity chromatography and its application to pesticide and veterinary medicine residues detection in food samples.

Contacts

Tel: +86-511-88797059

E-mail: wangy1974@ujs.edu.cn



Qi Xiang-Hui Ph.D

Professor of School of Food and Biological Engineering, Jiangsu University

Education Background

2016-2016 Yale University, Exchanging Research

2015-2016 University of California, Los Angeles, Visiting Professor

2009-2011 Nanjing University of Technology, Chemical Engineering and Technology, Postdoc

2003-2006 Guangxi University, State Key Laboratory for Conservation & Utilization of Subtropical Agro-bioresources, Microbiology, PhD.

Working Experience

2016-Present Professor, Master & PhD Supervisor, Jiangsu University

2013-2014 The government of Jingkou District of Zhenjiang, Jiangsu Province, General manager Assistant of Sinograin (Zhenjiang), China

2010-2016 Associate Prof. Master Supervisor, Jiangsu University

2007-2010 Lecturer, Jiangsu University

1998-2000 Environmental Protection Bureau of Yuanshi, Hebei Province, China

Research Interesting

- Food microorganism, , Biosynthesis, Pathway engineering & fermentation
- Food enzyme engineering, bio-catalysis & biotransformation.

  Mainly focusing on: the Biosynthesis of high value-added chemicals by microbes and engineered strains; Isolation, identification and evolution of microbes; Metabolic engineering & Pathway engineering of functional microbes, and Biotransformation; Discovery of novel genes, enzymes and new strains; Metabolic regulation based on the research of microbial omics; Rational & Irrational design of microbial enzymes; Application of high value-added products including functional sugar alcohols by biosynthesis and biotransformation based on microbial engineered strains.

Contacts

Tel: +86- 139****2912

E-mail: qxh@ujs.edu.cn

APPLICATION FORM FOR THE SCHEDULE

Comments of Discipline： Person in charge（Signature）： Date
Review opinion of college academic degree sub-committee: Person in charge （Signature）： Date