



## Mohammad Golbashy

Assistant Professor

College: Faculty of Agriculture

### Education

Degree	Graduated in	Major	University
MSc	2010	Plant Breeding	University of Tehran
Ph.D	2015	Nanobiotechnology	University of Tehran

### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Department of Plant Production and Genetic Engineering, College of Agriculture, Agricultural Sciences and Natural Resources University of Khuzestan, Mollasani, Iran	Assistant Professor	On Contract	Full Time	2

### Work Experience

The main member of the board of directors of the Iranian Nanotechnology Association  
Director of International Relations of Iranian Nanotechnology Association  
International Director of the 4th International Conference on Science and Nanotechnology of University of Tehran (Aras International Campus - 2025)  
Member of the International Committee of the 18th National Congress and the 4th International Congress of Agricultural Sciences and Plant Breeding of Iran (Ferdowsi University of Mashhad - 2024)  
International Secretary of the International Conference on Artificial Intelligence and its Applications in Agriculture (Agricultural Sciences and Natural Resources University of Khuzestan - 2025)  
Member of the Implementation Committee of Scientific Research and Technology Working Group of Khuzestan Province (Permanent Secretariat of the Presidential Congress of Influential Women)  
Executive director and coordinator of scientific programs of the Faculty of Agriculture in the research week programs of 2023 ((Agricultural Sciences and Natural Resources University of Khuzestan - 2023)

## Awards

---

Member of the National Elite Foundation of Iran

Scholarship acceptance (postdoctoral) from the University of Arkansas, USA

Chosen as the best student of Tehran University in 2008

Selected as the best graduate thesis of Tehran University in 1989

Chosen as the best student of Tehran University in 2009

The winner of the second festival of the best innovative and technological ideas of Tehran University

First rank graduate - Bachelor in Agriculture and Plant Breeding

Graduated with the first rank - master's degree in the field of plant breeding

Second rank graduate - PhD degree in the field of nanobiotechnology

## Subjects Taught

---

Nanobiotechnology

Biotechnology and genetic engineering

Statistics and probabilities

Advanced statistical methods

Design and analysis of engineering experiments

## Executions And Scientific Activities

---

Cooperation in the research project: Synthesis of PEG-Cobalt nanoparticles by hydrothermal and study of the antibacterial activity by using alternating magnetic field on Escherichia coli and Staphylococcus aureus - jointly with Wasit University of Iraq

Cooperation in the research project: Studying the role of silicon nanoparticles in the composition of the rhizosphere microbiome of the sugarcane plant through metagenomics approach.

Conductor of the research project: Investigating the effect of foliar application and soil application of silicon nanoparticles on some effective traits in the yield and quality of sugarcane plants.

Cooperation in the research project: synthesis of montmorillonite-polyphenol nanocomposite as a drug delivery system.

Collaboration in the research project: Investigating the genetic and morphological diversity of different species of sage using the RAPD marker.

Cooperation in the research project: encapsulating polyphenol inside the plant cell as a drug delivery system.

Cooperation in the research project: encapsulating plant polyphenols in kaolin as a drug delivery

system.

Cooperation in the research project: Screening of seed corn genotypes for tolerance to drought stress. Agricultural Promotion, Education and Research Organization.

Cooperation in the research project: semi-final testing of fodder corn varieties in different regions of the country. Agricultural Promotion, Education and Research Organization.

Collaboration in the research project: study of yield and its components in maize hybrids using biplot analysis.

Cooperation in the research project: Studying the response of a number of white and red bean genotypes to limited irrigation.

Collaboration in the research project: effects of salinity and iron stress on leaf area index, light absorption percentage and their relationship with sunflower seed yield

Cooperation in the research project: investigating the effects of drought stress on vegetative and reproductive characteristics of different barley cultivars

Cooperation in the research project: investigating the effects of drought stress on morphological traits, yield and yield components of grain corn hybrids.

Collaboration in the research project: Investigating the genetic diversity of sugar beet lines to identify early lines for the second crop.

Cooperation in the research project: design, construction and evaluation of magnetic water preparation device for agricultural use.

Cooperation in the research project: the effect of mycorrhizal fungi and biological phosphorus fertilizer on the growth and yield of S.C 704 corn in Varamin Plain.

## Course Topics

---

Design and fabrication of nanobiosensors based on DNA

Nanoencapsulation of effective plant compounds with therapeutic purposes

Biosynthesis of different nanoparticles and investigation of antimicrobial properties

Production of nanofertilizers and slow-release nanopesticides and release control

Design and synthesis of nanoparticles with the capability of targeted delivery to cells

Principles and basics of biotechnology, genetic engineering, nanobiotechnology

Molecular techniques, DNA and RNA extraction, process and how to make cDNA gene library.

Primer design, PCR techniques, electrophoresis, gene cloning, SDS-PAGE, western blotting, protein extraction and purification.

Plant and animal cell culture, tissue culture, bacteria and fungi.

## Conferences

---

Director of International Relations of the Conference of New Research Findings, University of Vienna, Austria

The executive secretary of the first international training workshop on plant resistance to pests and diseases in Tehran University.

Executive Secretary of different periods (1st, 2nd and 3rd): Conference on new findings in the environment and agricultural ecosystems - University of Tehran.

Executive Secretary of different periods (first and second): conference of new achievements of aerospace, mechanics and allied sciences of Tehran University.

International director of different periods: International Nanotechnology Conference, University of Tehran

International Director of the 3rd International Conference and the 11th National Biotechnology Conference of the Islamic Republic of Iran

International Director of the 4th International Conference and the 12th National Biotechnology Conference of the Islamic Republic of Iran

Executive Secretary of Tehran University summer school workshops

## Membership in Scientific Societies

---

The main member of the board of directors of the Iranian Nanotechnology Association

Director of International Relations of Iranian Nanotechnology Association

Permanent member of the Iranian Nanotechnology Association

Permanent member of the Iranian Medical Nanotechnology Association

Permanent member of the Iranian Biotechnology Association

Permanent member of the Iranian Society of Agriculture and Plant Breeding

Permanent member of the Iranian Genetics Association