#### **PERSONAL DATA:**

Last Name: **BAKHTIARI** 

First Name: MOHAMMAD REZA

Telephone Mobile:

Email: bakhtiari.09 [at] gmail.com

Marital Status: Married, 3 Children

Date of Birth: 24/May/1964

Gender: Male Country of Origin: Iran Present Nationality: Iranian



## **EDUCATION:**

## Degree(s) Earned:

**PhD**, Medical Biotechnology, Pasteur Institute, Tehran, Iran, 02/1996-04/2002. (1st grade) **DCLS** (Doctorate in Clinical Laboratory Sciences), Shahid Beheshti University, Tehran, Iran, 02/1989-02/1995.

#### PERSONAL SKILLS:

 Languages English (Fluent), French (Working Skills), Arabic (Familiar)

Good communication skills gained through studying the related texts and the experiences Communication skills

as congress secretary & teaching

Leadership (responsible for a team of 300 people, head of research projects) Managerial skills

Job-related skills Good command of quality control processes (familiar with statistics, ISO 9001, ISO

Good command of Microsoft Office tools, Statistical softwares, Computer hardware Computer skills

Swimming (trained), Photographing. Other skills

**Driving licence** 

#### **MAIN INTERESTS:**

Laboratory Medicine, Technological Development, Artificial Intelligence **Intellectual Property Rights** Endocrinology, **Negotiation Skills** 

#### **WORK HISTORY:**

Faculty Member, Biotechnology Dept., IROST, Tehran, Iran, 02/1996-2019

- Doing Research
- Teaching courses on Lab medicine / Biotechnology / Intellectual Property in IROST & other Research Centers/ Universities
- Examination of Inventions & Research Proposals

Chairman, Iranian Association of Clinical Laboratory Doctors (IACLD), April 2016- April 2018

Scientific Secretary, International Congress on Quality Improvement in Clinical Laboratories, 02/2008 – 2015, (Under the auspices of IFCC & EFLM)

- Head of Secretariat
- Organizing the scientific sessions

**Director General,** Technology Commercialization & University Entrepreneurship, IROST, Ministry of Science, Research and Technology, 2016-2018

**Director & General Director**, Intellectual Property Office, Ministry of Science, Research & Technology, Tehran, Iran, 02/2003-07/2012,

- Establishment of IP Office
- IP Awareness raising in Universities, Research Centers & Industries
- Giving Lectures related to IP
- Assisting inventors in patent filing & prosecution
- Preparing proposals and giving consultation to parliament in IP matters
- Doing research on the impact of IP on national development

Technical Manager, Clinical Laboratory, Shafa Polyclinic, Tehran, Iran, 2000-Present

Head, Medical Biotechnology Dept., IROST, Tehran, Iran, 10/1996-10/2006,

- Development of Research Strategies
- Guidance of Research Team
- Managing the Inventions & Research Examiners

**Technical Manager**, Health System Laboratories, Mahalat, Iran, 02/1995-02/1996,

- Quality Control
- Clinical labs Supervision

#### TRAINING AND PROFESSIONAL DEVELOPMENT:

## Certificates related to: Data Science, Data Analytics and Artificial Intelligence

- 1. Introduction to Data and Data Science. November 2022, 365DataScience
- 2. Data Literacy, October 2022, 365DataScience
- 3. Introduction to ChatGPT and Generative AI. August 2023, 365DataScience
- 4. Artificial intelligence applied to the Clinical Laboratory. June 2023, IFCC
- 5. Introduction to Artificial Intelligence (AI) in Health Care. 2023, American Medical Association
- 6. Introduction to Jupyter. 2023, 365DataScience
- 7. Data Analysis with ChatGPT. 2025, 365DataScience
- 8. Intro to AI Agents and Agentic AI. 2025, 365DataScience

# Certificates related to: Laboratory Medicine & Biotechnology

- 1. Training course on HPLC, IROST, Tehran, 16/07/1997 22/07/1997
- 2. Training course on Design of Experiments by Taguchi method, IROST, Tehran, 01/05/2000 11/07/2000
- 3. Workshop on Amino Acids HPLC, Knauer, Germany, 12/06/2001-14/06/2001
- 4. Workshop on Preparative Chromatography, Knauer, Germany, 14/06/2003-15/06/2003
- 5. Several Continuous Medical Education (CME) Programs, Ministry of Health, Iran
- 6. Training course on Application of Nanotechnology in Drug Delivery, Université de Genève, 11/09/2005-12/09/2005
- 7. Course on ISO 15189 Medical Testing & POCT, October 2023, Asia Pacific Accreditation Cooperation (APAC)
- 8. Cellular and Molecular Biomarkers of Metabolic Syndrome. 2024, Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB)
- 9. Counting the Cost of Inappropriate Laboratory Testing. 2025, International Federation of Clinical Chemistry and Laboratory Medicine (IFCC)

# Many other related certificates

## Certificates related to: IP / Technological Development

- 1. WIPO Regional Seminar on the Use of Technological Information Contained in Patent Documentation as a Tool for Development, Tehran, 2004
- 2. Seventh Session of WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, WIPO, Geneva, 2004
- 3. Primer on Intellectual Property, Distance learning (DL-001), WIPO, 2004
- 4. General Course on Intellectual Property, Distance Learning (DL-101), WIPO, 2005
- 5. Advanced Course on Intellectual Property Rights for Developing Countries, NAM, New Delhi, India, 2005
- 6. Advanced Course on Biotechnology and Intellectual Property, Distance Learning (DL-204), WIPO, 02/10/2006 10/11/2006
- 7. Advanced Training Course on the Legal, Administrative and Economic Aspects of Industrial Property, WIPO/CEIPI, Geneva, Strasbourg, 01/10/2005 15/11/2007
- 8. Workshop on Planning and Implementing International Technology Transfer, APCTT-IROST, Tehran, Iran, 21/10/2007 23/10/2007

- 9. WIPO International Seminar on the Strategic Use of Intellectual Property for Economic and Social Development, New Delhi, 2007
- 10. Workshop on Technology Commercialization, WBI-IROST, Tehran, Iran, 28/10/2007 29/10/2007
- 11. Training course on Obtaining, Enforcing and Evaluating Intellectual Property Rights in Europe, BOEHMERT & BOEHMERT, Munich, Germany, 30/06/2008 05/07/2008
- 12. Workshop on Institutional Process and Initiatives for Developing Countries' Positions for WTO Negotiations, IDB-IRTR-IROST, Tehran, Iran, 6/10/2008 8/10/2008
- 13. International Advanced Training Course on Intellectual Property Rights for NAM and Other Developing Countries, TIFAC, New Delhi, India, 12/07/2010 17/07/2010
- 14. International Workshop on Helal Food Standardization, Trade & Commercialization, IDB-IROST, Tehran, Iran, 08/09/2014 10/09/2014
- Workshop on Strengthening R&D Management Capacity of Researchers & Research Managers in the area of Nanotechnology, ESCAP-APCTT-IROST, Tehran, Iran, 25/02/2014 - 26/02/2014
- 16. The art of reading patent documentation. European Patent Academy, Munich, 2024

#### **PUBLICATIONS:**

- 1) Fallahpour M., Moazami N., Mirdamadi S., Mesgarian R., Vossoughi M., and <u>Bakhtiari M.R.</u>; Kinetic Behavior of alpha-galactosidase produced by *Absidia griseola. World Journal of Microbiology & Biotechnology*. 18: 649-653, 2002
- 2) Mirdamadi S., Sadeghi H., Sharafi N., Fallahpour M., Aziz Mohseni F., and <u>Bakhtiari M.R.</u>; Comparison of Lactic Acid Isomers Produced by Fungal and Bacterial Strains. *Iranian Biomedical Journal*. 6 (2&3): 69-75, 2002
- 3) Samiee S., Moazami N., Haghighi S., Aziz Mohseni F., Mirdamadi S., and <u>Bakhtiari M.R.</u>; Screening of Lovastatin by Filamentous Fungi, *Iranian Biomedical Journal*. 7, 1: 29-33, 2003
- 4) <u>Bakhtiari M.R.</u>, Moazami N., Fallahpour M., and Mirdamadi S.; Production and Purification of Cyclosporin A from Fermentation Broth of T. inflatum. *Scientia Iranica*. 10, 3: 367-371, 2003
- 5) Faezi Ghasemi M, <u>Bakhtiari M.R.</u>, Fallahpour M, Noohi A, Moazami N, and Amidi Z; Screening of Urease Production by Aspergillus niger. *Iranian Biomedical Journal*. 8, 1: 47-50, 2004
- 6) <u>Bakhtiari M.R.</u>, Faezi Ghasemi M, Fallahpour M., Moazami N. and Amidi Z; Medium optimization by orthogonal array designs for urease production by *Aspergillus niger* PTCC5011. *Process Biochemistry*. 41 (2006) 547-551

- 7) Morteza Rezapour, Seyed Kamran Bagheri, Maryam Rashtchi, and <u>Mohammad Reza Bakhtiari</u>; The Iranian patenting system: An introduction. *World Patent Information*. 29 (2007) 250-254
- 8) A. Ashoori, B. Moshiri, A. Khaki-Sedigh, and M. R. Bakhtiari, Optimal Control of a Nonlinear Fed-batch Fermentation Process Using Model Predictive Approach: Penicillin Production", *Journal of Process Control.* 19, 7 (2009), 1162-1173
- 9) A. Ashoori, B. Moshiri, A.Ramezani, M. R. Bakhtiari, and A. Khaki-Sedigh, pH Control of Penicillin Fermentation Process using Predictive approach, *Systems Science journal.* 35, 1 (2009), 65-74
- 10) E. Mahmodi Arjmanda, M. Saadatmand, M.R.Bakhtiari, M.Eghbal, Design and fabrication of a centrifugal microfluidic disc including septum valve for measuring hemoglobin A1c in human whole blood using immunoturbidimetry method. *Talanta*, 190, 1 (2018), 134-139
- 11) E Mahmodi Arjmand, M Saadatmand, M Eghbal, MR Bakhtiari, S Mehraji, A New Detection Chamber Design on Centrifugal Microfluidic Platform to Measure Hemoglobin of Whole Blood. SLAS TECHNOLOGY: *Translating Life Sciences Innovation*, 2472630320985456, 2021
- 12) J Parnian, Leila Ma'mani, Mohamad Reza Bakhtiari & Maliheh Safavi. Overcoming the non-kinetic activity of EGFR1 using multi-functionalized mesoporous silica nanocarrier for in vitro delivery of siRNA- Scientific Reports: 12, 17208, 2022
- 13) J Parnian, Leila Ma'mani, Mohamad Reza Bakhtiari & Maliheh Safavi. Inhibition of EGFR1 in Triple Negative Breast Cancer Cells Using siRNA Loaded with Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanoparticles. BioNanoScience: 14, 03, 2024
- 14) Masoud Abdoli, Alireza Tavakkoli, Mohammad Reza Bakhtiari, Abolghasem Danesh. Improvement of Cyclosporin A Production in the fungus Tolypocladium inflatum PTCC 5253 by Random Mutagenesis. Journal of Reports in Pharmaceutical Sciences: 13, 1, 2025

And more than 18 papers in Iranian Journals / Periodicals

## **CONFERENCE PAPERS:**

- 1) Medium optimization by orthogonal array designs for urease production by *Aspergillus niger* PTCC 5011- 12<sup>th</sup> European Congress on Biotechnology, August 21-24, 2005, Copenhagen, Denmark
- 2) Microbial production of Alpha-galactosidase for enzyme therapy of flatulence- 6<sup>th</sup> Iranian congress of gastroenterology and hepatology (ICGH6)- Page 27- Autumn 2006- Mashad- Iran
- 3) The Role of intellectual property in Technology Transfer and Development. Proceedings of APCTT-IROST Seminar on Planning & Implementing International Technology Transfer, October 21, 2007, Tehran, Iran
- 4) Design and characterization of a simulated immobilized enzyme for raffinose removal in beet molasses. 13<sup>th</sup> European Congress on Biotechnology, September 16-19, 2007, Barcelona, Spain
- 5) Protoplast fusion technique in *Tolypocladium inflatum* for increasing Cyclosporine production. 13<sup>th</sup> European Congress on Biotechnology, September 16-19, 2007, Barcelona, Spain

- 6) Model Predictive Control of a Nonlinear Fed-batch Fermentation Process. IEEE, 10th International Conference on Robotics, Automation, Control, and Vision (ICARCV 2008), Dec. 17-20, 2008, Hanoi, Vietnam
- 7) pH Control of a Fed-batch Fermentation Process using Model Predictive Control. 14th International Congress of Cybernetics and Systems of WOSC (ICCS 2008), Sept. 9-12, 2008, Wroclaw, Poland.
- 8) Protection of biotech, medical and pharmaceutical inventions in the patent law of Iran. International Advanced Training Course on Intellectual Property Rights (IPR) for NAM and Other Developing Countries, 12-17 July 2010, New Delhi, India
- 9) Patentability of biotechnological and medical invention in Iran. 1<sup>st</sup> Biotechnology World Congress, 14-15 February 2012, Dubai, United Arab Emirates
- 10) Important laboratory tests in diabetic nephropathy. 5<sup>th</sup> International Congress on Quality Improvement in Clinical Laboratories, 23-26 April 2012, Tehran, Iran
- 11) Biological and clinical experiments on compact disks. 5<sup>th</sup> International Congress on Quality Improvement in Clinical Laboratories, 23-26 April 2012, Tehran, Iran
- 12) A centrifugal microfluidic platform to measure hemoglobin of whole blood. 24<sup>th</sup> National & 2<sup>nd</sup> International Iranian Conference on Biomedical Engineering, Nov. 30-Dec.1, 2017, Tehran, Iran
- 13) The importance of effective relationship between laboratory& clinics in neurological diseases. The 10th International & 15<sup>th</sup> National Congress on Quality Improvement in Clinical Laboratories April 20-23, 2017, Tehran, Iran
- 14) The mutual relationship between thyroid disorders & obesity. The 10<sup>th</sup> International & 15<sup>th</sup> National Congress on Quality Improvement in Clinical Laboratories April 20-23, 2017, Tehran, Iran
- 15) Machine Learning and Artificial Intelligence Will Revolutionize Laboratory Medicine. The 14<sup>th</sup> International & 20<sup>th</sup> National Congress on Quality Improvement in Clinical Laboratories May 16-19, 2023, Tehran, Iran
- 16) Enhancing glycated hemoglobin measurement accuracy through data analytics: A comprehensive assessment of EQA program data. IFCC WorldLab, Dubai, 2024

and more than 500 Lectures in Iranian Conferences/Seminars/Workshops