Curriculum Vitae

Dr. Ahmad Manbohi

Iranian National Institute for Oceanography and Atmospheric Science (INIOAS)

Assistant professor in Analytical Chemistry

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Academic Background

- Ph.D. in Analytical Chemistry, Chemistry and Chemical Engineering Research Center of Iran (CCERCI), Tehran, Iran (2011-2015)
- M.Sc. in Analytical Chemistry, Tarbiat Modares University (TMU), Tehran, Iran (2009-2011)
- B.Sc. in Chemistry, Shahid Rajaee University, Tehran, Iran (2005-2009)

Positions & Work Experiences & Memberships

- Faculty Member, Faculty of Marine Science, Iranian National Institute for Oceanography and Atmospheric Science (Since 2015).
- Reviewer of ISI and ISC Journals.

Teaching Experiences

- Analytical Chemistry, Islamic Azad University (South-Tehran branch).
- Laboratory of Analytical Chemistry, Islamic Azad University (South-Tehran branch).

Research Activities

- Visiting Research Scholar (Sabbatical), MIT and Harvard University, Cambridge, MA, USA(2014-2015)
- Post-doctoral fellowship, Chemistry and Chemical Engineering Research Center of Iran, Tehran, Iran (2015-2016)

Research

- Application of electrochemistry and magnetic nanoparticles in chip, micro extraction (SPME), and active sampling.
- Automation and miniaturization.
- Chemometrics.

- Sensors and Biosensors.
- Microfluidics.

Full Papers

- Su Ryon Shin, Shrike Zhang, Tugba Kilic, Cristina Branco, Nupura Bhise, Julio Aleman, Anna Desalvo, **Ahmad Manbohi**, Anthoney Atala, HeaYeon Lee, Mehmet R. Dokmeci, Ali Khademhosseini. A Multi-Sensor-Integrated Organ-on-Chips Platform for Automated and Continual in situ Monitoring of Organoid Behaviors, *PNAS, 114 (2017) E2293–E2302, doi: 10.1073/pnas.1612906114.*
- Su Ryon Shin, Yu Shrike Zhang, Duck-Jin Kim, **Ahmad Manbohi**, Huseyin Avci, Antonia Silvestri, Julio Aleman, Ning Hu, Tugba Kilic, Wendy Keung, Martina Righi, Pribpandao Assawes, Hani A. Alhadrami, Ronald A. Li, Mehmet R. Dokmeci, and Ali Khademhosseini. Aptamer based microfluidic electrochemical biosensor for continuous monitoring of heart-on-a-chip, *Anal. Chem., 88 (2016), 10019–10027.*
- Seyyed Hamid Ahmadi, Parasto Davar and **Ahmad Manbohi**. Adsorptive removal of reactive orange 122 from aqueous solutions by ionic liquid coated Fe_3O_4 magnetic nanoparticles as an efficient adsorbent, *Iran. J. Chem. Chem. Eng., 35 (2016) 63-73.*
- **Ahmad Manbohi,** Seyyed Hamid Ahmadi. The use of Fe_3O_4 nanoparticles in the on-line microextraction of moxifloxacin, *RSC Adv.4 (2015) 64393*.
- **Ahmad Manbohi,** Seyyed Hamid Ahmadi. In-tube magnetic solid phase microextraction of some fluoroquinolones based on the use of sodium dodecyl sulfate coated Fe3O4 nanoparticles packed tube, *Analytica Chimica Acta 853 (2015) 335–341*.
- Seyyed Hamid Ahmadi, **Ahmad Manbohi**, Kourosh Tabar Heydar. Electrochemically controlled in-tube solid phase microextraction of naproxen from urine samples using an experimental design, *Analyst, 140 (2015) 497.*
- Seyyed Hamid Ahmadi, **Ahmad Manbohi**, Kourosh Tabar Heydar. Electrochemically controlled in-tube solid phase microextraction, *Analytica Chimica Acta 853 (2015) 335–341*.
- Seyyed Hamid Ahmadi, **Ahmad Manbohi**. Different morphologies of polypyrrole produced by flow-through and batch electropolymerizations: application in electrochemically controlled in-tube solid phase microextraction, *RSC Adv. 4 (2014) 64393.*
- **Ahmad Manbohi**, Ehsan Shamaeli, Naader Alizadeh. Nanostructure conducting molecularly imprinted polypyrrole film as a selective sorbent for benzoate ion and its application in spectrophotometric analysis of beverage samples, *Food Chemistry*, 155 (*2014) 186-191.*
- **Ahmad Manbohi** and Naader Alizadeh. Electrosynthesized sorbate doped polypyrrole films for electrochemically controlled solid-phase microextraction of sorbate ion, submitted.
- Su Ryon Shin, Shrike Zhang, Tugba Kilic, Cristina Branco, Nupura Bhise, Julio Aleman, Anna Desalvo, **Ahmad Manbohi**, Anthoney Atala, HeaYeon Lee, Mehmet R. Dokmeci, Ali Khademhosseini. A Multi-

Sensor-Integrated Organ-on-Chips Platform for Automated and Continual in situ Monitoring of Organoid Behaviors, 114 (2017) E2293–E2302, doi: 10.1073/pnas.1612906114.

National Conferences

Oral:

- **Ahmad Manbohi** and Seyyed Hamid Ahmadi , Flow-through analysis of antibiotics by Fe_3O_4 nanoparticles, 22nd Iranian Seminar of Analytical Chemistry, 26-28 January 2016, Tehran, Iran.

Poster:

- **Ahmad Manbohi** and Naader Alizadeh. Electrochemically controlled solid-phase microextraction of sorbate ion based on molecularly imprinted electrosynthesized nanostructure polypyrrole, 15th Iranian Chemistry Congress, Hamedan, septamber 4, 2011.
- **Ahmad Manbohi** and Naader Alizadeh. Electrochemically controlled solid-phase microextraction (EC-SPME) based on nanostructure conducting polypyrrole for spectrophotometery determination of benzoate ion, 15th Iranian Chemistry Congress, Hamedan, septamber 4, 2011.
- Seyyed Hamid Ahmadi, Abozar Karami, **Ahmad Manbohi.** Acid orange dye removal by mesoporous magnetic nanoparticles modified with CTAB, 1st National Congress of environment and health, Hamedan, septamber, 2014.
- **Ahmad Manbohi** and Seyyed Hamid Ahmadi , Electrochemically Enhanced In-Tube Solid Phase Microextraction of Non-Steroidal Anti-Inflammatory Drugs , 22nd Iranian Seminar of Analytical Chemistry, 26-28 January, Tehran, Iran.

book

- **Ahmad Manbohi,** Faride Bandarchian, Seyyed Hamid Ahmadi, Mahboubeh Sherafati. Chemometrics (Principals and Application), ISBN: 978-600-04-1424-5 (in Persian).

Patents

- **Ahmad Manbohi**, Seyyed Hamid Ahmadi. Use of modified magnetic particles produced by batch method in the in-tube Solid Phase Micro Extraction (in-tube SPME), No. 139350140003009814, Iran Intellectual Property Office, 2015.
- **Ahmad Manbohi**, Seyyed Hamid Ahmadi. Electrochemically Controlled in-tube Solid Phase Micro Extraction-High Performance Liquid Chromatography (EC in-tube SPME-HPLC), No. 82423, Iran Intellectual Property Office, 2014.
- **Ahmad Manbohi**, Seyyed Hamid Ahmadi. Different morphology of nanostructured polypyrrole electrosynthesized on wire and in-tube with one dopant- use of these wire and tube in solid phase micro extraction-HPLC, No. 83172, Iran Intellectual Property Office, 2014.
- **Ahmad Manbohi**, Seyyed Hamid Ahmadi. Electrochemically Controlled wire-in-tube Solid Phase Micro Extraction (EC wire-in-tube SPME-HPLC), No. 82422, Iran Intellectual Property Office, 2014.
- **Ahmad Manbohi**. pH modifier, No. 75296 Iran Intellectual Property Office, 2012.

Skills

- **Languages:** Fluent Arabic, Persian and English.
- **Computer Softwares:** Matlab, Microsoft Office, Minitab, Statgraphics, ChemDraw, HyperChem, AutoCAD, and Q-basic programs.
- **Instruments and Devices:** Microfluidic devices (Laser Cutter, Plasma Cleaner, Spine Coater), Analytical Instruments

(Fluorescence, UV-Vis, FT-IR, AAS HPLC, GC, AUTOLAB, CHI Electrochemical Analyzer).