

ZAHRA SADREDINI AHMADIANI

[12th Farvardin St. , after East Pastoor cross section, Behdasht Dead-end, Block 4, No.1] [Tehran, Iran]

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EDUCATION [POLYMER ENGINEERING-TEHRAN-MASTER]

- Master degree: Nanotechnology branch of polymer engineering- Polytechnic of Tehran University-2010-; Supervisor: Prof. Saeed Pourmahdian (Funded by Government studentship)
GPA.: 18.38/20
Thesis: "synthesis of nanoporous microspheres of silica by sol-gel process"

[POLYMER ENGINEERING-TEHRAN-BACHELOR]

- Polymer engineering- Polytechnic of Tehran University-2007; Supervisor: Prof. Vahid Haddadi Asl (Funded by Government studentship)
GPA.: 16.33/20
Thesis: "Investigation of the effect of process and material parameters on some physical, mechanical and shrinkage properties of PE blowing films"

[MATHEMATICS-TEHRAN-PRE-UNIVERSITY & HIGH SCHOOL]

- Pre-University & High School diploma in Mathematics & Physics -Emamieh high school-2003; (Funded by Government studentship)
GPA: 19.5/20

RESEARCH INTEREST

- Design & Synthesis, processing and manufacturing of New materials, specially porous and polymeric materials
- Sustainability and recycling
- Plasmonic, photocatalysts and new bio-materials
- Sol-Gel and Emulsion process

TEACHING AND
PROFESSIONAL
EXPERIENCE

- ✓ Polymer Chemistry Lab Tutor, Amirkabir University of Technology, 2022
- ✓ Robatic Teacher, Roshangar school, 2017”
- ✓ Secretary of educational workshop, “Role of Women in the Society”, Isfahan Industrial University, 2010
- ✓ Editor of collegiate journal on Nanotechnology issues, 2005-2007
- ✓ Member of professional crew, conference of “Application of Polymers in Electronic industry”, 2003

SCHOLARS &
AWARDS

- ✓ Being ranked top student in master program, Amirkabir university of Technology, 2010.
- ✓ Achieving MSc position in Polymer and color engineering department without taking the entrance exam due to being ranked in 1st 10% top students in bachelor program, Amirkabir University of Technology, 2007.
- ✓ Ranked 1098th among 1million participants in the nationwide university entrance exam in Mathematics and Physics field (Konkur), 2003.

RESEARCH
EXPERIENCE

- ✓ Master of Business Plan project team, Chegalesh Petrochemical Company-2008
- ✓ Member of Electro Chromic Windows design and production group at Tehran university,2017
- ✓ Member of producing new corona-virus diagnosing kits and participating in testing experiments, 2020 (Biosensors and Bioelectronics 171(2021) 112731) our 1st article on our device.
- ✓ Member of two professional groups which work on two novel Q1 &/or Q2 review papers that are under preparation and will be published on Plasmonic nanomaterials and their applications, during next 6 months as well.2021-2022

LANGUAGE
SKILLS

- ✓ IELTS EXAM:
Academic version: Overall band score: 6.5
General version:7

PROFESSIONAL
WORKSHOPS
AND TRAININGS

- ✓ **ISO 9002 and HAZARDS workshop during work time ate Negar Azar Co.**
Engineering Softwares:
 - ✓ Matlab: In Advanced mathematics course, at MSc program ,all of the problems were solved with matlab software and specially finite elements problems were taught.

- ✓ HYSIS, ASPEN, Fluent, PIPE PHASE :These softwares were taught at MEM program (5 months designing petrochemical plants program) holding by National company of petrochemical of Iran And Chegalesh Oil company. All softwares were used at final business plan and designing petrochemical plant project.
- ✓ Office: good performance including PowerPoint, Excel, Word.

WORK EXPERIENCE [Nano technology expert, Nano Sav company, 2010]

Responsibilities:

- Nano consulter;
- Online marketing of nanomaterial;
- Company's website manager;

[COLOR SCIENCE & TECHNOLOGY INSTITUTE-2011]

Resin Lab Expert;
Research assistance;

[Institute of Science & Technology-part time-2011-2014]

- POLYMER SYNTHESIS EXPERT;
- PRODUCTION OF POLYSTYRENE SHELLS THROUGH EMULSION PROCESS;

[Negarazar Company of chemicals and cellulose materials-part time-2011-2019]

- MEMBER OF RESEARCH & DEVELOPMENT DEPARTMENT;
- QC EXPERT;
- RESEARCH ON NEW PRODUCTS AND CONSULTING MARKETING DEPARTMENT;

[TOTAS safety Company-part time-2018-2020]

- R&D MANAGER;
- RESEARCH ON NEW POLYMERIC MATERIALS USED AS PART OF SAFETY GLASSES, BELTS AND ETC.;

[Arina Chemical Company-part time-2020-now]

R&D MANAGER;
MARKETING ASSISTANT

**TECHNICAL &
EXPERIMENTAL
SKILLS**

- Accomplishment of Iso9001 & Iso14000 workshops' degree
- Synthesis of organometallic polymers and sol-gel process Emulsion-based polymerization
- Spin coating of polymeric materials on ITO surfaces
- Petrochemical plants design and achievement of related MEM degree
- Polyethylene film blowing process

- Producing electro chromic windows in lab scale

MEMBERSHIP

Iran Polymer Association; 2013-2016

PUBLICATIONS

Journal Papers:•

- Investigation of the fracture mechanism and mechanical properties of polystyrene/silica nanocomposite in various silica contents; J Mater Sci (2011) : I was polymer expert and member of the team
- ****A new article (under submission) : “A Novel Route for Synthesis of hierarchically nanoporous /mesoporous silica microspheres by emulsion-based sol-gel process as a Ziegler-Natta catalyst support”**
- Both of following articles are under preparation as review papers by our teams as I am one of them:
- The application of ceramic and plasmonic nanoparticles in thermodynamic therapies(in the field of bio technology) ,2021-2022
- Plasmon-enhanced photocatalysis(on chemistry), 2021-2022

CONFERENCE PAPERS AND POSTERS:

- ✓ Zahra Sadreddini, Saeed Pourmahdian
“SYNTHESIS OF POROUS SILICA PARTICLES BY SOL-GELPROCESS IN 3-PHASE EMULSION MEDIA”, **poster presentation**, , ISPST,2009,IPPI, Tehran, Iran.

- ✓ Zahra Sadreddini, Saeed Pourmahdian, “SYNTHESIS OF MESOPOROUS-CATALYST-SUPPORT-SILICA PARTICLES BY SOLGEL PROCESS”, **poster presentation**, Kish chemical Eng. Conf. , Kish Island, Iran, 2009.
 - ✓ Zahra sadreddini, Saeed Pourmahdian
“SYNTHESIS OF SILICA PARTICLES BY SOL-GEL PROCESS IN A O/W/O EMULSION MEDIA”, **Oral presentation, At PPS, Cyprus, 2009.**
 - ✓ Zahra sadreddini, Saeed Pourmahdian
“SYNTHESIS AND CHARACTERIZING OF NANOPOROUS-SPHERICAL-SILICA PARTICLES AS A CATALYST SUPPORT BY SOL GEL PROCESS” ,
Oral presentation candidate,(didn't participate), ASET,Ottawa,Canada,2010.
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