

Nationality: Iranian  
Date of Birth: 10.09.1987  
**Yasamin Bide**

E-mail: [y.bide@irost.ir](mailto:y.bide@irost.ir)

### **ACADEMIC POSITIONS AND EDUCATIONS**

#### **Post-Doctoral Researcher 2/2019 – 12/2020**

Iranian Research Organization for Science and Technology funded by Iran's National Elites Foundation on “The design and production of polyionic draw solutes for forward osmosis process”.

#### **Post-Doctoral Researcher 08/2017 \_ 2/2019**

Shahid Beheshti University funded by Iran's National Elites Foundation on “The design and production of recyclable and efficient bifunctional catalysts for degradation of PET via glycolysis reaction”

#### **Post-Doctoral Researcher 04/2016 – 4/2017**

Shahid Beheshti University funded by Iran national science foundation and Shahid Beheshti University on “Synthesis of doped graphene-based structures as catalysts for hydrogen production from formic acid” (Iran)

#### **Organic Chemistry (Nanomaterials & Catalysts) Ph.D.**

Shahid Beheshti University, Tehran, Iran; Thesis title: Synthesis of novel catalyst supports containing micelles, yolk-shell magnetic nanoparticles, and N and S co-doped porous carbon to stabilize metal nanoparticles and their application in organic reactions

**09/2011-08/2015**

#### **Organic Chemistry (Polymer & Catalyst) M.S.**

Shahid Beheshti University, Tehran, Iran; Thesis title: Pd nanoparticles immobilized on PAMAM-grafted MWCNTs hybrid materials as new recyclable catalyst for Heck coupling reactions

**09/2009-8/2011**

#### **Pure Chemistry B.S.**

Shahid Beheshti University, Tehran, Iran

**09/2005-7/2009**

---

### **TEACHING EXPERIENCE**

- Teaching Laboratory Classes for undergraduate students **2011 – 2015**
- Teaching Organic Chemistry for undergraduate students **2013 – 2015**

### **Honors and Awards**

- Recipient of the grant of Iran’s National Elites Foundation for Postdoctoral position **2017-2019**.
- University excellent researcher 2016.
- IUPAC Scholarship covering registration fee for 8th International IUPAC Conference on Green Chemistry **2018**
- Academic Award for Ph.D. students from Shahid Beheshti University **2012-2015**
- Ranked 1<sup>st</sup> among the undergraduate students in Chemistry with the overall GPA of 18.88.
- Ranked 1<sup>st</sup> among the Chemistry students in Master with the overall GPA of 19.35.

### **RESEARCH INTERESTS**

- Synthesis, modification and characterization of nanomaterials including graphene, carbon nanotubes, metal nanoparticles and magnetic nanomaterials
- Nanocatalysts for various reactions such as hydrogen generation, Heck, oxidation and PET recycling
- Synthesis and characterization of novel micelles and stimuli responsive microgels designed for various applications

- Study of polyionic materials
- Draw solutes for forward osmosis development
- Study of the Polymers Morphology

## **PUBLICATIONS (ISI)**

Number of publications	<b>34</b>
Citations	<b>738</b>
<u>h-index</u>	<b>18</b>

1. Pd nanoparticles immobilized on PAMAM-grafted MWCNTs hybrid materials as new recyclable catalyst for Mizoraki–Heck cross-coupling reactions, MR Nabid, Y Bide, SJT Rezaei, *Applied Catalysis A: General* 406 (1-2), 124-132, 2011
2. The use of tetragonal star-like polyaniline nanostructures for efficient solid phase extraction and trace detection of Pb (II) and Cu (II) in agricultural products, sea food...M Behbahani, Y Bide, M Salarian, M Niknezhad, S Bagheri, A Bagheri, *Food chemistry* 158, 14-19, 2014.
3. Fe<sub>3</sub>O<sub>4</sub>–SiO<sub>2</sub>–P4VP pH-sensitive microgel for immobilization of nickel nanoparticles: An efficient heterogeneous catalyst for nitrile reduction in water, MR Nabid, Y Bide, M Niknezhad, *ChemCatChem* 6 (2), 538-546, 2014.
4. Gold nanoparticles supported on supramolecular ionic liquid grafted graphene: a bifunctional catalyst for the selective aerobic oxidation of alcohols, M Mahyari, A Shaabani, Y Bide, *RSC Advances* 3 (44), 22509-22517, 2013.
5. H40-PCL-PEG unimolecular micelles both as anchoring sites for palladium nanoparticles and micellar catalyst for Heck reaction in water, MR Nabid, Y Bide, *Applied Catalysis A: General* 469, 183-190, 2014.
6. A pH responsive nanogel composed of magnetite, silica and poly(4-vinylpyridine) for extraction of Cd(II), Cu(II), Ni(II) and Pb(II), M Behbahani, Y Bide, S Bagheri, M Salarian, F Omidi, MR Nabid, *Microchimica Acta*, 2015.
7. A new approach for the synthesis of polyaniline microstructures with a unique tetragonal star-like morphology, SJT Rezaei, Y Bide, MR Nabid, *Synthetic Metals* 161 (13-14), 1414-1419, 2011. IF: 2.526
8. PdNPs@ P2VP-Fe<sub>3</sub>O<sub>4</sub> Organic–Inorganic Hybrid Microgels as a Nanoreactor for Selective Aerobic Oxidation of Alcohols, MR Nabid, Y Bide, E Aghaghafari, SJT Rezaei, *Catalysis letters* 144 (2), 355-363, 2014.
9. Electrocatalytic oxidation of oxalic acid on palladium nanoparticles encapsulated on polyamidoamine dendrimer-grafted multi-walled carbon nanotubes hybrid mate...H Ahmar, AR Fakhari, MR Nabid, SJT Rezaei, Y Bide, *Sensors and Actuators B: Chemical* 171, 611-618, 2012.
10. Synthesis of a yolk/shell Fe<sub>3</sub>O<sub>4</sub>@ poly (ionic liquid) s-derived nitrogen doped graphitic porous carbon materials and its application as support for nickel catalysts, MR Nabid, Y Bide, Z Habibi, *RSC Advances* 5 (3), 2258-2265, 2015.
11. An efficient ultrasound-promoted one pot synthesis of spiroacenaphthylene pyrazolotriazole and pyrazolophthalazine derivatives, SJT Rezaei, Y Bide, MR Nabid, *Tetrahedron Letters* 53 (38), 5123-5126, 2012.
12. Ni@ Pd core–shell nanoparticles immobilized on yolk–shell Fe<sub>3</sub>O<sub>4</sub>@ polyaniline composites as a highly efficient, magnetically separable and atom-economical cat..., MR Nabid, Y Bide, N Ghalavand, M Niknezhad, *Applied Organometallic Chemistry* 28 (6), 389-395, 2014.
13. Iron (III) porphyrin supported on S and N co-doped graphene quantum dot as an efficient photocatalyst for aerobic oxidation of alcohols under visible light irradiation, M Mahyari, Y Bide, JN Gavani, *Applied Catalysis A: General* 517, 100-109, 2016.
14. Copper core silver shell nanoparticle–yolk/shell Fe<sub>3</sub>O<sub>4</sub>@ chitosan-derived carbon nanoparticle composite as an efficient catalyst for catalytic epoxidation in water, MR Nabid, Y Bide, M Abuali, *RSC Advances* 4 (68), 35844-35851, 2014.
15. Poly(2-aminothiazole) as a unique precursor for nitrogen and sulfur co-doped porous carbon:

Immobilization of very small gold nanoparticles and its catalytic applica..., Y Bide, MR Nabid, F Dastar, RSC Advances, 2015.

16. Application of pH-sensitive magnetic microgel as a sorbent for the preconcentration of phenoxy acid herbicides in water samples, Hadi Tabani, Kamal Khodaei, Yasamin Bide, Farzaneh Dorabadi Zare, Saeed Mirzaei, Journal of Chromatography A, 2015, 1407, 21-29.

17. One Pot Synthesis of Nickel Nanoparticles Stabilized on rGO/Polyethyleneimine Aerogel for the Catalytic Hydrogen Generation, MR Nabid, Y Bide, F Dastar, Catalysis Letters, 2015.

18. Boron and nitrogen co-doped carbon dots as a metal-free catalyst for hydrogen generation from sodium borohydride, MR Nabid, Y Bide, N Fereidouni, New Journal of Chemistry 40 (10), 8823-8828, 2016.

19. Facile synthesis and catalytic application of selenium doped graphene/CoFe<sub>2</sub>O<sub>4</sub> for highly efficient and noble metal free dehydrogenation of formic acid, Y Bide, MR Nabid, B Etemadi, International Journal of Hydrogen Energy 41 (44), 20147-20155, 2016.

20. Highly selective determination of amitriptyline using Nafion-AuNPs@ branched polyethyleneiminederived carbon hollow spheres in pharmaceutical drugs and biolo..., ZR Zad, SSH Davarani, AR Taheri, Y Bide, Biosensors and Bioelectronics 86, 616-622, 2016.

21. Morphological Investigation of Poly (2-aminothiazole) Prepared by Rapid Initiated Polymerization, MR Nabid, Y Bide, Advances in Polymer Technology, 1, 2016.

22. Copper (I) ion stabilized on Fe<sub>3</sub>O<sub>4</sub>-core ethylated branched polyethyleneimine-shell as magnetically recyclable catalyst for ATRP reaction, MR Nabid, Y Bide, N Ghalavand, Journal of Applied Polymer Science, 132 (33) 1, 2015.

23. Preconcentration and extraction of lead ions in vegetable and water samples by N-doped carbon quantum dot conjugated with Fe<sub>3</sub>O<sub>4</sub> as a green and facial adsorbent, M Mashkani, A Mehdinia, A Jabbari, Y Bide, MR Nabid, Food chemistry 239, 1019-1026, 2018.

24. A yolk shell Fe<sub>3</sub>O<sub>4</sub>@ PA-Ni@ Pd/Chitosan nanocomposite-modified carbon ionic liquid electrode as a new sensor for the sensitive determination of fluconazole in..., ZR Zad, SSH Davarani, A Taheri, Y Bide, Journal of Molecular Liquids, 2018, 253, 233.

25. Maghemite/nitrogen-doped graphene hybrid material as a reusable bifunctional catalyst for glycolysis of polyethylene terephthalate, MR Nabid, Y Bide, N Fereidouni, B Etemadi, Polymer Degradation and Stability 144, 434-441. 2017.

26. Ag@ Pd nanoparticles immobilized on a nitrogen-doped graphene carbon nanotube aerogel as a superb catalyst for the dehydrogenation of formic acid, MR Nabid, Y Bide, B Etemadi, New Journal of Chemistry 41 (19), 10773-10779, 2017.

27. Yolk/Shell AuNPs@ Polyethyleneimine-Derived Carbon Nanoparticles as Nanoreactor for Catalytic Nitroarenes Reduction, MR Nabid, Y Bide, M Shojaipour, F Dastar, Catalysis Letters 146 (1), 229-237.

28. Decoration of MoS<sub>2</sub>/Nitrogen Doped Graphene with Gold Nanoparticles for Catalytic Reduction of Nitro Aromatic Compounds, MR Nabid, Y Bide, N Fereidouni, Chemistry Letters 47 (8), 964-967.

29. One-step synthesis of Ni@Pd/NH<sub>2</sub>-Fe<sub>3</sub>O<sub>4</sub> nanoparticles as affordable catalyst for formic acid dehydrogenation, MR Nabid, Yasamin Bide, Mahsa Jafari, Chinese journal of chemical engineering, In press.

30. Toward tailoring of a new draw solute for forward osmosis process: Branched poly (deep eutectic solvent)-decorated magnetic nanoparticles, Yasamin Bide, Soheila Shokrollahzadeh, Journal of Molecular Liquids, Volume 320, 2020, 114409

31. Enhancing forward osmosis performance via an oligomeric deep eutectic solvent as a draw solute, Soheila Shokrollahzadeh, Yasamin Bide, Setareh Gholami, Desalination, Volume 491, 2020, 114473

32. High-Flux sodium alginate sulfate draw solution for water recovery from saline waters and wastewaters via forward osmosis, Fazeleh Khazaie, Soheila Shokrollahzadeh, Yasamin Bide, Shabnam Sheshmani, Ashraf S Shahvelayati, Chemical Engineering Journal, Volume 417, 2021, 129250.

33. Forward osmosis using highly water dispersible sodium alginate sulfate coated-Fe<sub>3</sub>O<sub>4</sub> nanoparticles as innovative draw solution for water desalination, Fazeleh Khazaie, Soheila Shokrollahzadeh, Yasamin

Bide, Shabnam Sheshmani, Ashraf S Shahvelayati, Process Safety and Environmental Protection, Volume 146, 2021, 789-799

34. Structural investigation and application of Tween 80-choline chloride self-assemblies as osmotic agent for water desalination, Yasamin Bide, Marzieh Arab Fashapoyeh, Soheila Shokrollahzadeh, Scientific Reports, Volume 11, 17068.

### **CONFERENCES**

1. MR Nabid, Y Bide, Copper<sub>core</sub>Silver<sub>shell</sub> Nanoparticles-Yolk/Shell Fe<sub>3</sub>O<sub>4</sub>@Chitosan-Derived Carbon Nanoparticles as an Efficient Catalyst for Catalytic Epoxidation in Water, 22nd Iranian seminar of organic chemistry; Tabriz University, 19-21 August 2014
2. MR Nabid, Y Bide, Nickel Nanoparticles Immobilized on Magnetic pH-Sensitive Microgel for Catalytic Reduction of Nitriles in Water; 11th International Seminar on Polymer Science and Technology, Iran Polymer and Petrochemical Institute, 6-9 October 2014.
3. MR Nabid, Y Bide, Synthesis of a Unimolecular Micelle Both as Anchoring Sites for Palladium Nanoparticles and Micellar Catalyst for Heck Reaction in Water; 10th International Seminar on Polymer Science and Technology, Amirkabir University of Technology, 21-25 October 2012.
4. MR Nabid, Y Bide, Pd nanoparticles immobilized on PAMAM-grafted MWCNTs hybrid materials as new recyclable catalyst for Heck cross-coupling reactions; 15th Iranian chemistry congress, Bu-Ali Sina University, 4-6 September 2011.
5. MR Nabid, Y Bide, Straightforward synthesis of nitrogen and sulfur co-doped porous carbon: Immobilization of very small gold nanoparticles and its catalytic application; 23rd Iranian seminar of organic chemistry; University of Kordestan, 8-10 September 2015
6. MR Nabid, Y Bide, Yolk-shell Nanoparticles with Iron Oxide Cores and Polyaniline Shells as a support for Nickel@Palladium nanoparticles: Investigation of catalytic activity for nitrobenzenes reduction; 23rd Iranian seminar of organic chemistry; University of Kordestan, 8-10 September 2015
7. MR Nabid, Y Bide, A reusable bifunctional catalyst for glycolysis of polyethylene terephthalate; 8th International IUPAC Conference on Green Chemistry, Thailand 9-14 September 2018

### **PROFESSIONAL ACTIVITIES**

1. Active participation in the project entitled "Design and production of catalysts based on nickel and gold nanoparticles encapsulated on porous carbon materials and its application in catalytic reduction of nitrile and nitro compounds" with the fund of Iran national science foundation.
2. Active participation in the project entitled "Design and synthesis of green biomimetic photocatalysts based on heteroatom doped graphene quantum dots with high quantum yields and their applications in oxidation reactions of organic compounds" with the fund of Iran national science foundation.
3. Participation in writing the book entitled "Graphene with a summary of carbon nanotubes and fullerenes" in the Shahid Beheshti University publications.