



حسین نصر اصفهانی

دانشکده شیمی-دانشگاه صنعتی شاهرود

Hossein Nasr-Isfahani
College of Chemistry, Shahrood University of Technology,
Shahrood, IRAN

Position:

Associate Professor of Organic Chemistry, From January 2010.

Assistant Professor of Organic Chemistry, From September 2002.

Marital Status:

Married, Two children.

Education:

Bsc: 1987-1991, Chemistry, College of Chemistry, Isfahan University, Isfahan, IRAN.

Msc: 1991-1993, Organic Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN.

PhD: 1996-2001, Organic Chemistry, College of Chemistry, Isfahan University of Technology, Isfahan, IRAN.

PhD Thesis: Synthesis of Monomeric and Polymeric Dyes Containing Azo Group Based on 4-Phenylurazole.

Teaching Experience:

Graduate:

1. Advanced Organic Chemistry.
2. Advanced Organic Physical Chemistry.
3. Advanced Polymer Chemistry.
4. Advanced Spectroscopy of Organic Compounds.
5. Advanced Synthesis of Organic Compounds.
6. Advanced Heterocyclic Chemistry

Undergraduate:

1. General Chemistry.
1. Organic Chemistry I, II, III.
2. Organic Physical Chemistry.
3. Polymer Chemistry.
4. Spectroscopy of Organic Compounds.
5. Synthesis of Organic Compounds.
6. Chemistry of Dyes and Pigments.
7. Biochemistry.
8. Medicinal Chemistry.

Research Experience

1. Preparation of New Monomers Suitable for Polycondensation.
2. Preparation of New Polymers via Polycondensation Reactions.
3. Synthesis of Organic Compounds.
4. Synthesis of Heterocyclic Compounds.

Journal Papers

1. A Convenient One-Step Synthesis of Dialkylbenzo[k]fluoranthenes and Tetraethyl bis-Benzo[k][k']fluoranthenes, **Organic Preparations and Procedures International**, Vol 28, pp 691-716 (1996).
2. Unusual Addition Elimination Reaction of Arynes, **Indian Journal of Chemistry, Section B**, Vol. 35, pp 557-560 (1996).
3. Synthesis of New Nitrogen Containing Poly(amides) With Urazole Rings, **Polymer Science, Section A**, Vol 43, pp 1907-1912 (2001).
4. Polymeric Azo Dyes Derived from 4-[4'-(4-dimethylaminophenylazo) phenyl]-1,2,4-triazolidine-3,5-dione and Diisocyanates, **Iranian Polymer Journal**, Vol. 10, pp 107-114 (2001).
5. Copolycondensation of 4-Cyclohexyl and 4-Phenylurazole with Aliphatic Diacid Chlorides, **Polymer Science, Section B**, Vol 43, 105-111 (2001).
6. An Efficient Method for the Oxidation of Urazoles Under Mild and Heterogeneous Conditions, **Synthetic Communications**, Vol. 30, pp 2573–2585 (2000).
7. Oxidation of Urazoles Under Mild and Heterogeneous Conditions via Insitu Generation of NO^+IO_x^- , **Synthetic Communications**, Vol. 31, pp 1965-1970 (2001).
8. Synthesis of Novel Azo-Containing Polyureas Drived from 4-[4'-(2-Hydroxy-1-naphthylazo) phenyl]-1,2,4-triazolidine-3,5-dione, **Journal of Applied Polymer Science**, Vol. 82, pp 3177-3183 (2001).
9. Synthesis of Novel Azo Dyes Derived from 4-Phenylurazole, **Indian Journal of Chemistry**, Vol. 41B, pp 169-174 (2002).
10. Synthesis of Novel Polyureas Derived from 4-(N-trimellitylimido)-1,2,4-triazolidine-3,5-dione, **Iranian Polymer Journal**, Vol. 11, pp 57-61 (2002).
11. Oxidation of Urazoles with 1,3-Dihalo-5,5-dimethylhydantoin, both in Solution and under Solvent-Free Conditions, **SYNLETT**, No. 5, pp 761–764 (2005).

12. Pd–Cu catalyzed heterocyclization during Sonogashira coupling: synthesis of 2-benzylimidazo[1,2-a] pyridine, **Tetrahedron Letters**, No. 49 pp 3819-3822 (2008).
13. Synthesis of 2-benzylimidazo[2,1-b][1,3]benzothiazoles through palladium-catalyzed heteroannulation of acetylenic compounds, **Tetrahedron Letters**, No. 49 pp 6188-6199 (2008).
14. An Efficient Procedure for the Synthesis of Hantzsch 1,4-Dihydropyridines Under Mild Conditions, **Acta Chim. Slov.** No 55 pp 644-647 (2008).
15. Synthesis and Characterization of New Polyamides Derived from 1,3-(4-Carboxy phenoxy) propane and Aromatic Diamines, **Journal of Applied Polymer Science** No 111 pp 1769-1774 (2009).
16. New Photosensitive Poly (amid-imide)s Containing Chalcone Moiety and Hydantoin derivatives in the Main Chain: Synthesis and Characterization, **Journal of Applied Polymer Science** No 112 pp 1097-1103 (2009).
17. Polystyrene-supported Palladium(II) Ethylenediamine Complex: A Recyclable Catalyst for the Syntheses of 2-Benzylimidazo [2,1-b][1,3]benzothiazoles by Sonogashira Reaction, **Chines Journal of Chemistry** No 27 pp 353-358 (2009).
18. Polystyrene-supported palladium(II) ethylenediamine complex: a Highly active and Recyclable Catalyst for the Synthesis of 2-Benzylimidazo [2,1-b]Pyridines Through Heteroannulation of Acetylenic Compounds, **Journal of Heterocyclic Compounds** No 46 pp 100-104 (2009).
19. Synthesis and Characterization of New Copoly(amide-imide)s Based on N-(4-carboxyphenyl) trimellitimide, Therphathaic, Fumaric and Adipic acids in the Main Chain, **Textile Science and Technology Journal** pp 43-55 (2009).
20. Synthesis and Characterization of New Optically Active and Heat Resistant Poly(amide-imide)s Derived from N,N'-(bicyclo[2,2,2]oct-7-ene-2,3,5,6-tetracarboxylic)-bis-L-leucine and Aromatic Diamines, **Turkish Journal of Chemistry** No 33 pp 459-470 (2009).

21. New Thermally Stable Polyesters Based on 2,5-Pyridine dicarbonyl dichloride and Aromatic Diols: Synthesis and Characterization, **Chinese Chemical Letters**, No 20 pp 885-888 (2009).
22. Synthesis and Characterization of New Optically Active Poly(amide-imide)s Based on N,N'-(bicyclo[2,2,2]oct-7-ene-2,3,5,6-tetracarboxylic)-bis-L-2-aminobutyric acid, **Designed Monomers and Polymers**, No 13, pp131-142 (2010).
23. Synthesis and Properties of New Optically Active Polyamides Containing 1,3-Dioxoisindolin-2-yl Units as Pendent Groups and Aromatic Diamines, **Designed Monomers and Polymers**, No 13, pp237-247 (2010).
24. Synthesis and Properties of New Poly(amide-imide)s Based on 1,3-Bis[4,4' (trimellitimido) phenoxy] Propane and Aromatic Diamines, **Journal of Applied Polymer Science**, No 117 pp 3293-3299 (2010).
25. New optically active poly(amide-imide)s from N,N'-(bicyclo[2,2,2] oct-7-ene-2,3,5,6-tetracarboxylic) bis-L-phenyl alanine and aromatic diamines: synthesis and characterization, **Polymer Bulletin**, 64, 633-646 (2010).
26. Novel Organosoluble Polyamides with Phthalimide Pendant Group: Synthesis, Physical and Thermal Characterization, **Macromolecules, an indian journal**, 7, 78-84 (2011).
27. Co-Polycondensation of 4-(4-Phthalimidophenyl)-1,2,4-triazolidine-3,5-dione and 4-(4-Nitrophenyl)-1,2,4-triazolidine 3,5dione with Diisocyanates, **Macromolecules, an indian journal**, 8, 7-11 (2012).
28. Polymerization of 4-(4-Tetrabromophthalimidophenyl)-1,2,4-triazolidin-3,5-dion with Diisocyanates, **Macromolecules, an indian journal**, 8, 19-23 (2012).
29. Mild and Heterogeneous Oxidation of Urazoles to Their Corresponding Triazolinediones Using Molybdato phosphoric acid, **Macromolecules, an indian journal**, 8, 279-282 (2012).
30. Synthesis and Identification of the Novel Urazolediamine with Phthalimide Group, **Indian Journal of Chemistry**, 51B, 366-369 (2012).

31. Highly efficient synthesis of 5,6-disubstituted-5H-pyrrolo[2,3-b]pyrazine-2,3-dicarbonitriles through a one-pot palladium-catalyzed coupling reaction/cyclization in water, **Tetrahedron Letters** 53 3126–3130 (2012).

Papers Presented at Seminars and Conferences (from 2004) :

1. Quantum Mechanical study of 4-phenyl urazoles containing of electron donating and electron accepting substitutes, **14thIranian Chemistry and Chemical Engineering Cogress**, February 17-19 2004, University of Tarbiat Moallem (Tehran).
2. *Ab initio* RHF and density functional B3LYP and B3PW91 study of 4-phenylurazole, **11th Iranian Seminar of Organic Chemistry, February 1-3 2005**, Isfahan University of Technology(Isfahan).
3. Synthesis of diethyl-1,4-dihydro-4- aryl(alkyl) pyridines-3,5-dicarboxylate under mild and solvent-free condition, **12th Iranian Seminar of Organic Chemistry**, March 7-9 2006, Ahwaz Jundi shapour University of Medical Science (Ahwaz).
4. Structural Evaluation of Fractional Components of Isfahan Linear Alkyl Benzene by Gas Chromatography/Mass Spectrometry, **The First National Conference on Surfactants Based on Linear Alkylbenzene**, November 22-24 2005, Iranian Chemical Industries Investment Company (Isfahan).
5. Preparation of New Copolymers Based on 4-[4-(2-Hydroxy-1-naphthyl azo)phenyl]- 1,2,4-triazolidine-3,5-dion, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
6. Copolycondensation of 4-phenylurazole and 4-[4-(2-Hydroxy-1-naphthyl azo)phenyl] urazole with Various Diisocyanates, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
7. Preparation of New Copolyureas Containing 4-Phenylurazole and 4-(4-Phthalimidophenyl) urazole, **14th Iranian Seminar of Organic Chemistry**, March 4-2008, University of Zabol (Zabol).
8. Copolycondensation of 4-(4-Nitrophenyl) urazole and 4-(4-Phthalimido phenyl) urazole With Varius Diisocyanates, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).

9. Preparation and Polymerization of 4-(4- Phthalimidophenyl)-1,2,4-triazolidine-3,5- dione, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
10. Synthesis of Novel Copolyureas Containing 4-(4-Tetrabromo phthalimidophenyl)- 1,2,4-triazolidine-3,5-dione, 14th Iranian Seminar of Organic Chemistry, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
11. Reaction of 4-Nitrophenyl urazole and 4-(4-Tetrabromo phthalimido phenyl) urazole with Diisocyanates, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
12. 4-(4-Tetrabromo phthalimidophenyl)-1,2,4-triazolidine-3,5-dione, A New Monomer for Polycondensation, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
13. Polycondensation of 4-(4-iodophenyl)-1,2,4-triazolidine-3,5-dione With Different Diisocyanates, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
14. Mild and Heterogeneous Oxidation of Urazoles to Their Corresponding Triazolinediones Using Molibdatophosphoric acid and Sodium Nitrite, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).
15. Wavelet Neural Network Modeling for Density Prediction of Alcohols over a Wide Range of Temperature and Pressure, **14th Iranian Seminar of Organic Chemistry**, March 4-6 2008, University of Zabol (Zabol).

۱۶- بررسی قابلیت تجزیه پذیری آلکیل بنزن سولفونات خطی توسط باکتری سودوموناس آئروژینوزا، اولین

همایش و نمایشگاه علمی زیست شناسی، ۲۷-۲۸ آبان ۱۳۸۶، دانشگاه پیام نور (تهران).

17. Copolymerization of 4-(4-iodophenyl)-1,2,4-triazolidine-3,5-dione With Different Diisocyanates, **15th Iranian Seminar of Organic Chemistry**, Razi University (Kermanshah).
18. Preparation of New Copolyureas Based on 4-[4-(4-Nitrophenylazo) phenyl]-1,2,4-triazolidine-3,5-dion, **15th Iranian Seminar of Organic Chemistry**, Razi University (Kermanshah).

- ۱۹- تهیه ۴-۴ (۴-تتراکلروفتالیمیدوفنیل)-۱،۲،۴-تری آزولیدین ۳،۵-دی اون و پلیمر کردن آن با دی ایزوسیانات‌ها، پنجمین همایش شیمی، ۱۱-۱۲ بهمن ماه ۱۳۸۶، دانشگاه پیام نور (تهران).
- ۲۰- تهیه ۴-۴ (۴-نیتروفنیل آزو) فنیل] یورازول به عنوان مولکولی جدید برای خواص نوری غیر خطی، پنجمین همایش شیمی، ۱۱-۱۲ بهمن ماه ۱۳۸۶، دانشگاه پیام نور (تهران).
- ۲۱- سنتز پلی اوره‌های جدید حاوی کروموفور نوری غیر خطی، پنجمین همایش شیمی، ۱۱-۱۲ بهمن ماه ۱۳۸۶، دانشگاه پیام نور (تهران).
- ۲۲- سنتز ۴-۴ (۴-یدوفنیل)-۱،۲،۴-تری آزولیدین-۳،۵-دی اون، پنجمین همایش شیمی، ۱۱-۱۲ بهمن ماه ۱۳۸۶، دانشگاه پیام نور (تهران).
- ۲۳- پیش بینی دانسیته ی ۱-آلکانول‌ها با استفاده از شبکه ی عصبی موجک در محدوده ی وسیعی از دما و فشار، پنجمین همایش شیمی، ۱۱-۱۲ بهمن ماه ۱۳۸۶، دانشگاه پیام نور (تهران).
- ۲۴- پیش بینی دانسیته ی ترکیبات آلی پنج کربنی با استفاده از شبکه ی عصبی مصنوعی در محدوده ی وسیعی از دما و فشار، پنجمین همایش شیمی، ۱۱-۱۲ بهمن ماه ۱۳۸۶، دانشگاه پیام نور (تهران).
25. Ab initio RHF and density functional B3LYP and B3PW91 study of 4-(4-phthalimidophenyl)-1,2,4-triazolidine-3,5-dione, **11th Iranian Physical Chemistry Seminar**, July 21-24, 2008 University of Mohaghegh Ardabili, (Ardabil).
26. Preparation of new co-polyamides based on 4-(4-methoxyphenyl)urazole, **17th Iranian Conference of Organic Chemistry**, October 12-14 2010 Mazanderan University (Babolsar).
27. Synthesis of 1,2-bis(ethoxycarbonylmethyl)-4-phenyl-1,2,4-triazolidine-3,5-dione, **17th Iranian Conference of Organic Chemistry**, October 12-14 2010 Mazanderan University (Babolsar).

28. 1,2-Bis(2-hydroxyethyl)-4-phenylurazole, A New Reactive Diol for Preparation of Polyurethanes, **15th Iranian Chemistry Conference**, September 4-6 2011 Bu-Ali Sina University (Hamadan).
29. Preparation of New Polyureas Based on Phthalimide Derivative of p-Urazine, **15th Iranian Chemistry Conference**, September 4-6 2011 Bu-Ali Sina University (Hamadan).
30. 4-Methoxybenzidine Derivative of p-Urazine, A Potent Molecule for Preparation of New Polyureas, **15th Iranian Chemistry Conference**, September 4-6 2011 Bu-Ali Sina University (Hamadan).

Awards: Shahrood University of Technology Distinguished Research Award 2008.

Administrative Position:

September 2006-January 2010: Chairman for the college of Chemistry, Shahrood University of Technology, Shahrood, I. R. Iran.

Alumni:

Rawat Rahele

Yousefi Somayye

Soldoozi Sara

Akbarpour Mohammad Javad

Farhangi Shiva

Rajaei Mahboobe

Mohammadi Marzie

Sinaei Sedigheh

Najafian.Faezeh

Moafi Neda

Ashjaie Nasrin

Joorbonyan Amir

Habibi Somayye

Nassiri Ramin

Mirzaie Saeideh