



Isfahan University  
of Technology

# 15<sup>th</sup> International Seminar on Polymer Science and Technology

# ISPST 2022

8-10 November, Isfahan University of Technology, Isfahan, Iran



## Introduction & Aims

### About ISPST

ISPST 2022 is the place where members of academics and industries in the field of polymer science and technology all around the world gather not only to actively participate in the scientific character of the conference but to enjoy the visit of the third biggest city in Iran, Esfahan, where numerous tourist attraction places including museums, memorials, cultural and historical sites can be found. Department of Polymer Engineering at Isfahan University of Technology has the great opportunity to host this event on 8 -10 November 2022.

The previous 14 seminars were:

- ISPST 2020, Tarbiat Modares University , Tehran, Iran
- ISPST 2018, AmirKabir University of Technology, Tehran, Iran.
- ISPST 2016, Islamic Azad University, Tehran, Iran.
- ISPST 2014, Iran Polymer and Petrochemical Institute, Tehran, Iran.
- ISPST 2012, Amirkabir University of Technology, Tehran, Iran.
- ISPST 2009, Iran Polymer and Petrochemical Institute, Tehran, Iran.
- ISPST 2007, Sharif University of Technology, Tehran, Iran.
- ISPST 2005, Amirkabir University of Technology, Tehran, Iran.
- ISPST 2003, Iran Polymer and Petrochemical Institute, Tehran, Iran.
- ISPST 2000, Amirkabir University of Technology, Tehran, Iran.
- ISPST 1997, Iran Polymer and Petrochemical Institute, Tehran, Iran.
- ISPST 1994, Shiraz University, Shiraz, Iran.
- ISPST 1990, Amirkabir University of Technology, Tehran, Iran.
- ISPST 1986, Amirkabir University of Technology, Tehran, Iran.

ISPST 2022 will be held in Isfahan University of Technology, on 8-10 November, 2022.





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# 15<sup>th</sup> International Seminar on Polymer Science and Technology

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## Aims

- ISPST 2022 aims to provide a platform for knowledge sharing in research and technology of polymers and polymer science
- To facilitate closer relationships between academic, industrial and research centers
- To provide a forum for the Iranian and international researchers in all polymer fields to exchange their ideas of recent advances
- Presenting the latest scientific achievements in various polymer fields

## Keynote Lecturer

### 1. Prof. Mehdi Nekoomanesh



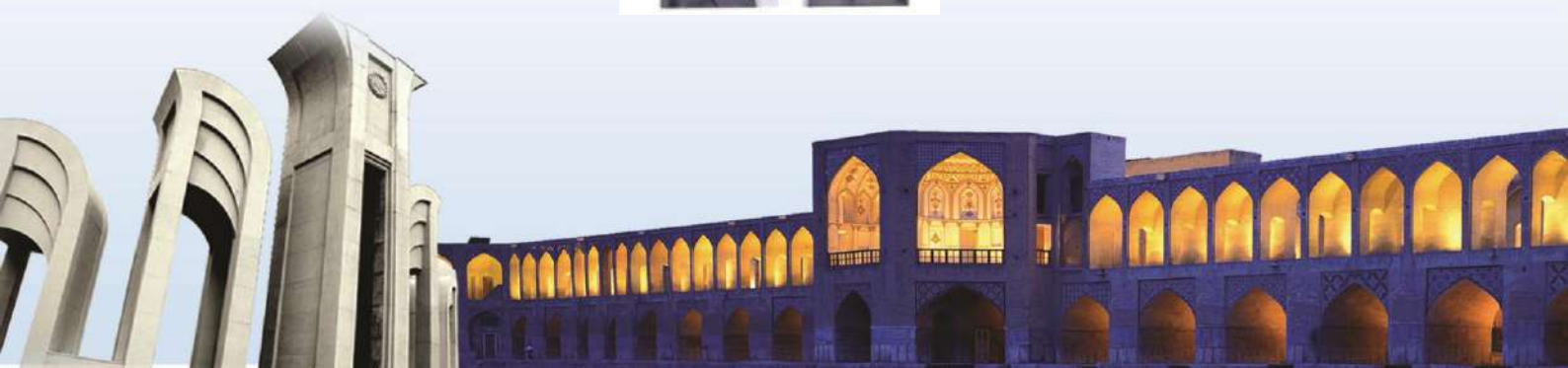
- Managing Director of Iran Polymer and Petrochemical Institute

**Email:** m.nekoomanesh@ippi.ac.ir

**subject of speech:**

**"Ionic Liquid assisted cationic polymerization of olefin monomers"**

### 2. Prof. Ahmad Ramazani





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- Full time Prof., Department of Chemical & Petroleum Engineering, Sharif University of Tech., Tehran, Iran

**E-mail:** Ramazani@sharif.edu

**subject of speech:**

**"Preparation and Characterization of Self-Stimuli Conductive Nerve Regeneration scaffolds"**

### 3. Dr. Ali salimi



- Assistant professor: Iran *Polymer* and Petrochemical Institute, Tehran,Iran

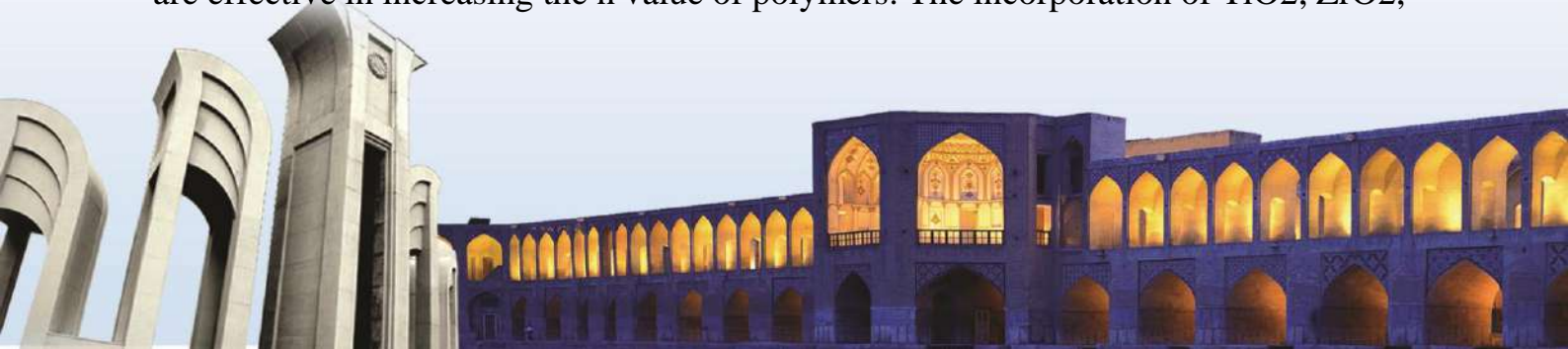
**Email:** A.Salimi@ippi.ac.ir

**subject of speech:**

**"Facing Challenges in Developing Adhesives and Coatings with High Refractive Index"**

#### **Abstract**

After a short introduction about the optoelectronic principles and devices, the technological requirements in developing optoelectronic devices will be reviewed. According to literature, the most important requirements are high refractive index polymers (HRIP) with  $n$  values over 1.7, optimum abbe number (20-30), low or zero birefringence and high optical clarity (transmittance over 90%). The high refractive index may be achieved either by introducing substituents with high molar refractions (intrinsic HRIPs) or by combining high- $n$  nanoparticles within polymer matrix (HRIP nanocomposites). The aromatic rings, halogen atoms except fluorine and sulfur atoms are effective in increasing the  $n$  value of polymers. The incorporation of  $TiO_2$ ,  $ZrO_2$ ,





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SiO<sub>2</sub>, PbS and ZnS nanoparticles resulted in promising n values in HRIP nanocomposites. However, the well dispersion of nanoparticles in matrix still remains a main challenge in developing HRIP nanocomposites with high transparency.

#### 4. Prof. Seid Mahdi Jafari



- Full-Time Prof., Dep. Food Materials & Process Design Eng., GUASNR, IRAN
- Part-Time Prof., Director of Agri-Food Research Center, UVigo, SPAIN
- Adjunct Prof., SINANO, CHINA

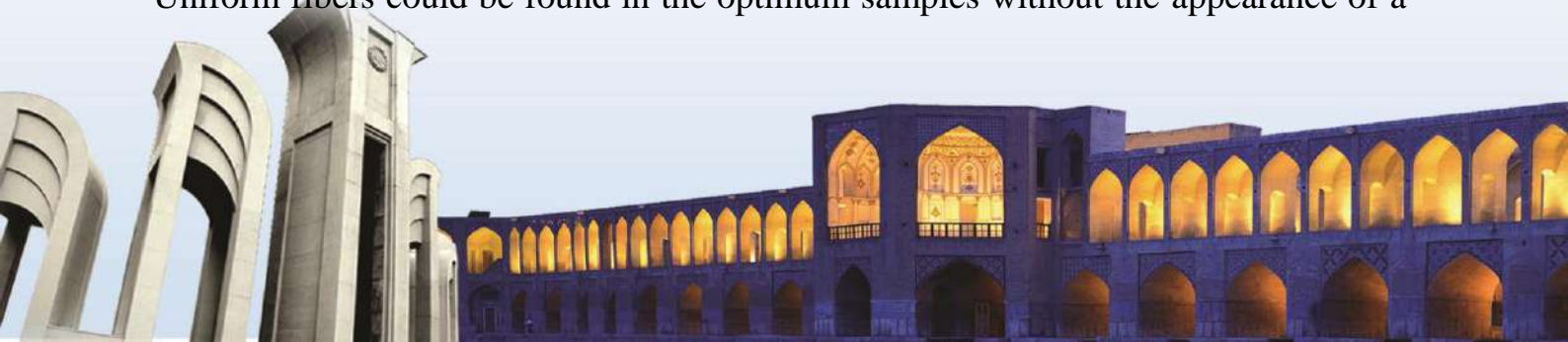
**Email:** jafarism@hotmail.com

**subject of speech:**

**"Fabrication, characterization, and cytotoxicity of propolis-loaded nanofibers made with polyvinyl alcohol and polycaprolactone"**

**Abstract**

Propolis-loaded electrospun nanofibers (PENs) have been regarded as promising candidates for biomedical purposes such as wound healing dressing owing to their outstanding pharmacological and biological properties. This study focuses on the development of electrospun nanofibers with optimum levels of propolis (PRP) and polymer type (polycaprolactone (PCL) and polyvinyl alcohol (PVA)) to investigate the variation of the scaffold characteristics including porosity, average diameter, wettability, release, and tensile strength. The overall optimum region with the best characteristics was found to be at PCL/6% PRP and PVA/5% PRP. After selecting the optimal samples, the cytotoxicity assay showed no toxicity for the optimal concentrations of PRP. Furthermore, Fourier transform infrared (FTIR) spectra revealed that no new chemical functional groups were introduced in the PENs. Uniform fibers could be found in the optimum samples without the appearance of a





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bead-like structure in the fibers. In conclusion, nanofibers containing the optimal concentration of PRP with suitable properties can be used in biomedical and tissue engineering.

## 5. Dr. Ali Akbari



- Assistant professor: Urmia University of Medical Sciences (UMSU)

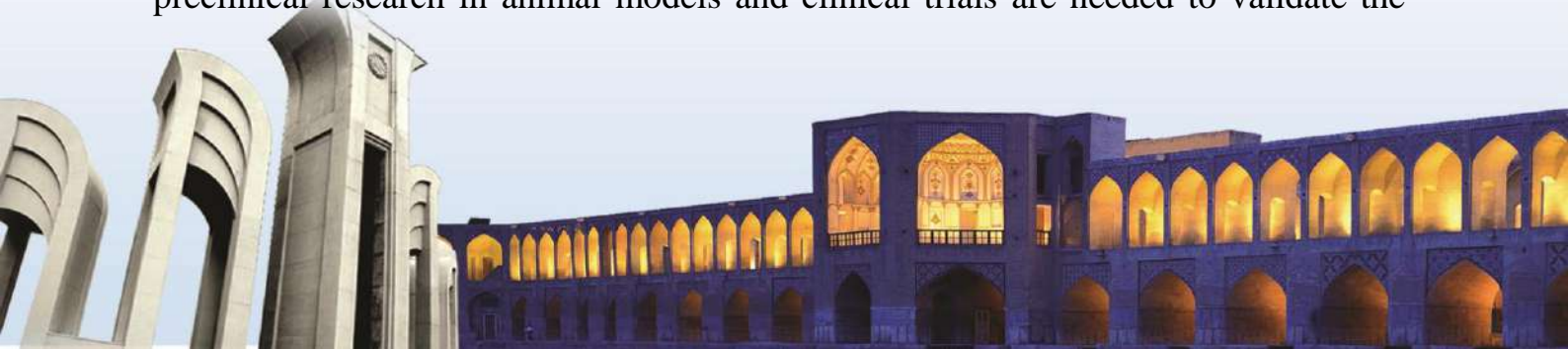
**Email:** akbari.a@umsu.ac.ir

**subject of speech:**

**"Antiviral Polymers as available weapons against novel coronavirus (2019-nCoV)"**

### Abstract

Polymers provide enormous opportunity to tailor antiviral activity via specific interaction with glycoproteins on the viral surface by varying molecular weight, type and degree of functionality, sequence distribution, extent of branching, and molecular architecture. Natural biopolymers with multiple functional groups like carrageenan, chitosan, and fucoidan are used directly to bind and form irreversible complexes with envelope glycoproteins on the viral surface to block virus-host cell interaction, fusion, and entry to the host cell. Natural nucleic acid polymers are used as antiviral agents after phosphorothioation to render them amphipathic and stabilization against nuclease degradation. Polymers deactivate the virus before cell internalization by inhibiting virus-host cell binding or after cell internalization by blocking virus replication. Brush polymers modified with sialic acid groups bind with high affinity to viral hemagglutinin to form complexes that block viral infection. Research results have demonstrated that natural and synthetic polymers are useful as broad-spectrum antiviral agents to fight against many different types of viral infections. Further preclinical research in animal models and clinical trials are needed to validate the





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antiviral activity of polymers to fight new viral infections in the absence of vaccines.

## 6. Dr. Akram Zamani



- Associate Professor: Industrial Biotechnology Swedish center for resource recovery, University of Borås, Borås, Sweden

**Email:** Akram.Zamani@hb.se

**subject of speech:**

**"Bioconversion of food waste to sustainable fungal textiles"**

### Abstract

Enormous economic and environmental loss occur due to the generation of large volume of food waste. At the same time, there is large demand for sustainable textile alternatives as a solution to shortage of cotton and environmental problems of synthetic textiles. This research introduces a novel approach for bioconversion of food waste to textile materials. Food waste was employed as a substrate for cultivation of filamentous fungi in a scalable process, which resulted in formation of mycelium, which is a branched network of fungal microfibers. Fungal microfibers were subjected to a wet spinning process and a continuous monofilament yarn was obtained. The fungal monofilament were biocompatible and exhibited antibacterial properties, which make them good candidates for biomedical applications. The fungal monofilament was successfully woven to a fabric. Furthermore, bioplastic and paper like materials were obtained by wet laying the fungal microfibers. Treatment of the fungal biomass with vegetable tannins resulted in formation of soft sheets after wet laying, with properties comparable to natural leather. Fungal proteins were recovered as a valuable byproduct of the fungal textiles. The findings of this research demonstrate that food waste derived fungal textiles have a high potential as environmentally friendly textiles for different applications.





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## 8. Dr. Fatemeh. Goharpey



Department of Polymer Engineering, Amirkabir University of Technology,  
Tehran, Iran

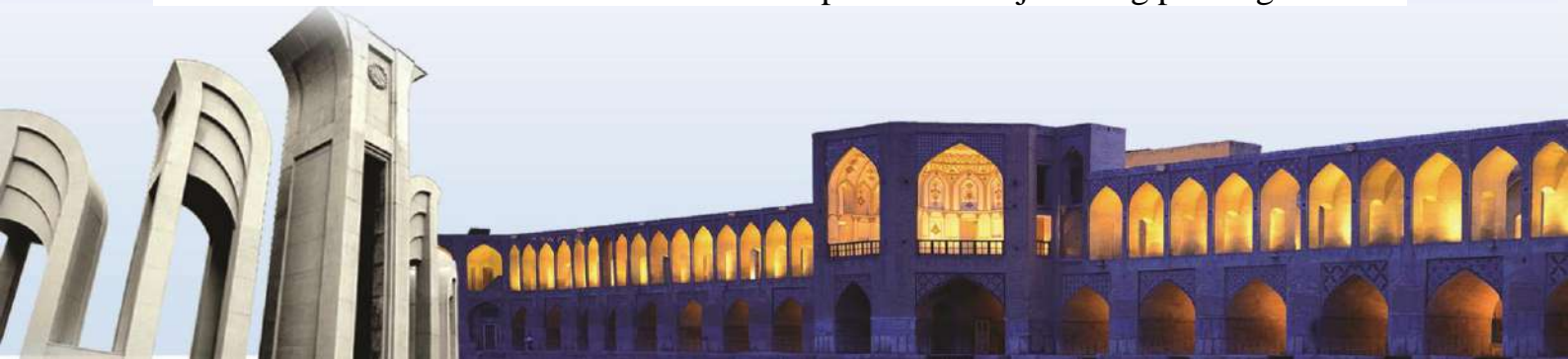
**Email:** goharpey@aut.ac.ir

**subject of speech:**

**"Different Shape Micro-Particle Manufacturing and Rheology of Dense Non-Brownian Suspension"**

### Abstract

In this work, we investigate the effect of polyhedron morphology on shear thickening, shear jamming and hysteresis characteristics of non-Brownian suspension of methacrylate particles in Newtonian silicon oil. We have fabricated the chemically equivalent particles with similar contact friction at three different shapes via photopolymerization based methods. Discontinuous shear thickening behavior are observed in polyhedron particle suspension which can be attributed to the heightened degree of inter-particle frictional contacts and subsequently the stronger frictional contact network. Additionally, it was found that polyhedron morphology enlarges the packing fraction range for shear jamming. Step up-down measurements also reveal a shear history hysteresis effect particle contact network configuration. Finally, it was found that the observed hysteresis loops in flow curves strongly depend on the volume fraction, which is enhanced with volume fraction and then collapses near the jamming packing fraction.





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## 8- Dr. Nayere Taebnia



- Karolinska Institutet ( Department of Physiology and Pharmacology), Stockholm, Sweden

**Email:** [nayere.taebnia@ki.se](mailto:nayere.taebnia@ki.se)

**subject of speech:**

**"Advanced Biomaterials for Capturing Complex 3D Physiology in Tissue Models "**

### Abstract

The field of tissue engineering is shifting towards the creation of complex in vitro tissue models to explain disease processes (disease modeling) and assess the toxicity and efficacy of therapies (i.e. drug testing). Tissue models, scalable to industrially relevant numbers, have been for long restricted to two-dimensional (2D) cell culture systems, which fail to recapitulate the complex three-dimensional (3D) microenvironment of the native tissues and consequently limit the predictive value of cellular response to the introduced stimuli. These limitations call for reliable in vitro models that capture more of the relevant complexity than traditional 2D cultures can achieve. Through various examples, this talk illustrates how advances in biomaterials, 3D(bio)printing, microfluidic devices and quantitative analyses are converging to allow the creation of more accurate in vitro models that capture some of the main complex features of the in vivo environment, and enable real-time monitoring of their function by applying various biopolymer-based sensing methodologies.







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## 9- Dr. Vajiheh Behranvand



**Email:** v\_bهرانvand@yahoo.com

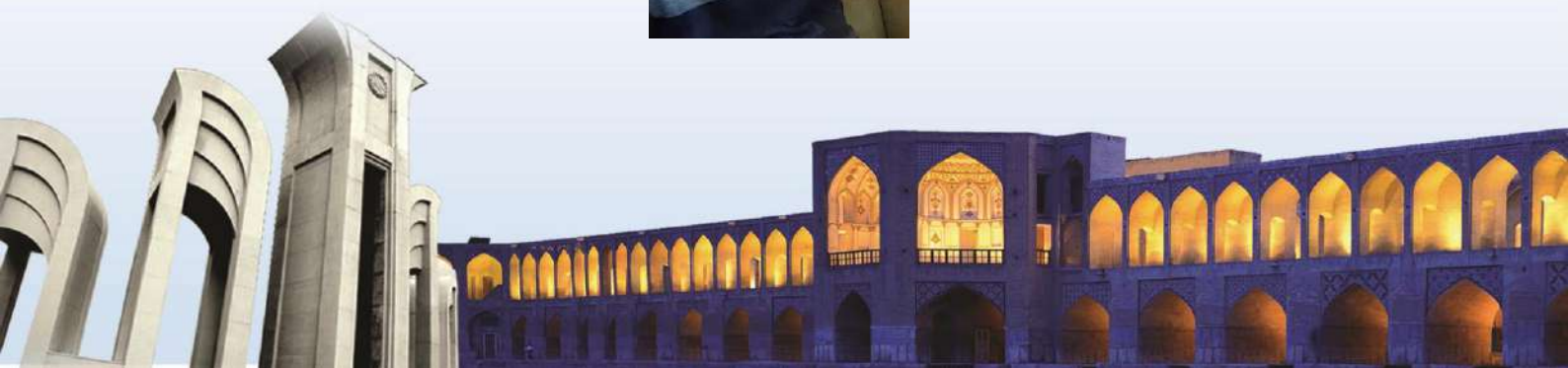
**subject of speech:**

**"Worldwide fight against COVID-19 using polymer science and nanotechnology"**

### Abstract

The role and importance of polymeric materials in human life are not hidden and these valuable materials are a part of our daily life. One of the lethal illnesses that humanity has ever seen is COVID-19 irrefutably. During the COVID-19 outbreak, diverse medical equipment and devices were designed and developed by using synthetic and natural polymers as infectious personal protective equipment such as masks, various types of face coverings, respirators, and gloves. On the other hand, for the enhancement of polymer capability, nanostructures have an efficient role in virus detection, prevention, protection, mitigation and control measures.

## 10. Dr. Ali Zarrabi





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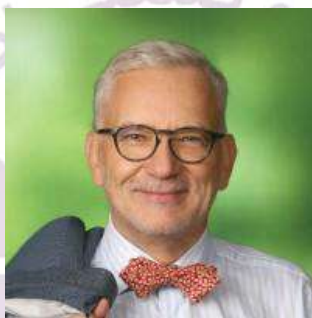
- Biomedical Engineering Department, Istinye University, Turkey

**Email:** akbari.a@umsu.ac.ir

**Subject of speech:**

**"Nanotheranostic Polymeric Platforms and Personalized Medicine: Recent Advances and Future Directions"**

### 11. Prof. Clemens Holzer



- Department Kunststofftechnik, Montanuniversität Leoben, Otto Glöckel-Str., Leoben, Österreich, Austria

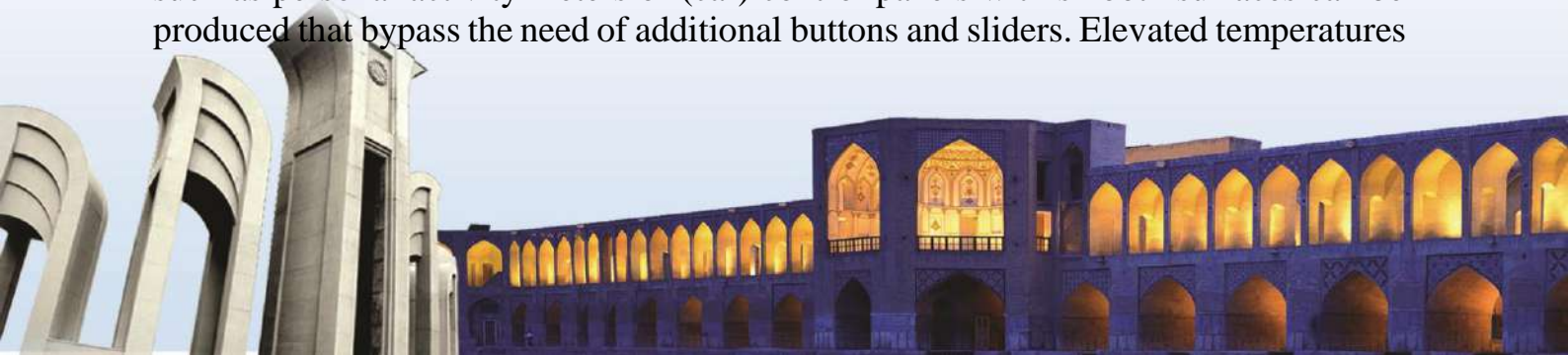
**Email:** Clemens.Holzer@unileoben.ac.at

**Subject of speech:**

**"Injection Moulding of flexible devices"**

### Abstract

The demand for low-cost, randomly shaped and lightweight electronic devices has increased significantly over the past years. Hereby one path is to employ the Injection Molded Structural Electronics (IMSE) process where electronic films are overmolded with a thermoplastic to form the final part. Those films can comprise surface mounted components, LEDs, capacitive sensors or flexible Printed Circuit Boards (flexPCBs) which are embedded between plastics sheets via lamination processes. Hence devices such as personal activity meters or (car) control panels with smooth surfaces can be produced that bypass the need of additional buttons and sliders. Elevated temperatures





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and shear stresses prevail during overmolding which can result in damaged parts after this final manufacturing step. Hence various factors such as the individual film(-layer) materials and injection molding parameters have to be considered carefully to ensure damage free manufacturing. The aim of this work was to investigate those aspects in principal by overmolding test film strips and to assess their visual integrity afterwards. These specimens consisted of a flexPCB encapsulated by two different thermoplastic polyurethanes (TPUs) as glue middle layer and polycarbonate (PC) or Polyethylene terephthalate (PET) sheets as outer layers. Injection molding parameter studies were performed where the films were inserted into a stepped plate mold and overmolded with PC using different melt temperatures, mold temperatures and injection speeds. The distortion on the films was found to be reduced with higher melt temperature, lower mold temperature and faster injection speed. At given molding settings films made of materials with the higher melting temperature performed better. Additional geometric conditions such as proximity to the gate and low mold thickness were found to affect the integrity of the produced films negatively.

## 12. Dr. Alireza Foroozani Behbahani



- post-doctoral researcher at the Johannes Gutenberg University of Mainz

**Email:** af.behbahani@iacm.forth.gr

**Subject of speech:**

**"Atomistic and Coarse-grained Simulations of Polymer Melts and Nanocomposites"**





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### **Abstract**

Molecular simulations are powerful and predictive tools for studying polymers in bulk and at interfaces. However, simulation of high molecular weight entangled polymers is not straightforward, because of the broad ranges of time and length scales involved in their motions. Here we present a hierarchical simulation methodology for the calculation of the dynamical and linear viscoelastic properties of polymer melts. At the finest level, chains are described via an atomistic model. At a moderately coarse-grained (mCG) level, few atoms (e.g., one monomer) of the chain are lumped into one CG bead. The mCG potentials are derived based on the finer level atomistic model. Through the mCG model, moderately entangled chains can be simulated. Also, the results of the mCG model are used to parameterize a highly coarse-grained slip-spring model in which several monomers of the chain are mapped into one bead. We also present the results of atomistic simulations for the behavior of polymer melts in the vicinity of nanoparticles (NPs). Interfacial packing of polymer chains close to the NP surface, statistics of the adsorbed chains, and interface induced dynamical heterogeneities are discussed.

### **13. Prof. Naser Mohammadi**



- **Professor, Amirkabir University of Technology - Tehran Polytechnic, Iran**

**Email:** mohamadi@aut.ac.ir

**Subject of speech:**





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**"Effect of water infiltration rate on mechanical properties of heat treated crumb rubber containing cementitious mortar"**

## 14. Dr. Shervin Ahmadi



- Head of Petrochemical Faculty, Iran Polymer and Petrochemical Institute, Tehran, Iran

**Email:** sh.ahmadi@ippi.ac.ir

**Subject of speech:**

**"Manipulating the morphology of PA6/POE blends using graphene to achieve electrical properties"**

## 15. Dr. Azadeh Seifi





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- Assistant Professor, Gachsaran Collage of oil, Yasouj University, Iran

**Email:** azi\_spr@yahoo.com

## Subject of speech:

**"Effect of Initial Silica Content on the Phase Composition, Morphology, and Thermal Oxidation Kinetic of Novolac-based Carbon Aerogel Composites"**

## Abstract

Polymer-derived carbon aerogels are a unique class of highly porous nanostructure materials that have excellent properties such as low density, low thermal conductivity, and high specific surface area. Novolac is widely used in manufacture of these aerogels due to economic considerations and the high char yield of this polymer. The main route for synthesizing these materials is the initial sol-gel polymerization followed by a drying step to form the polymeric aerogel and a final carbonization process to derive the carbon aerogel. These materials have application potential in many scientific areas, especially in thermal management systems such as thermal insulators and thermal shields. However, the main drawback of the low thermal oxidation temperature (upper than 450 °C) of these materials limits their widespread application. So, there is a need to modify these aerogels by preparing a composite aerogel with higher thermal stability. One of the most efficient ways to improve thermal stability is incorporating a more refractory phase component (Si-containing phase such as silica and silicon carbide) into the colloidal structure of the aerogel via the in-situ sol-gel polymerization. The synthesis route of these aerogel composites as well as their characterization and thermal performance were presented in this speech. Also, the Non-Parametric Kinetic analysis was introduced as the more reliable method than the other kinetic methods for evaluating the thermal oxidation kinetics of these nanostructure materials with highly porous character.





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## 16. Prof. Hamid Yeganeh



- Prof. Iran Polymer & Petrochemical Institute, Tehran, Iran

**Email:** h.yeganeh@ippi.ac.ir

**Subject of speech:**

"Vegetable oil-based polymers for controlled drug delivery systems"

## 17. Prof. Mohammad Atai



- Prof. Iran Polymer & Petrochemical Institute, Tehran, Iran

**Email:** M.Atai@ippi.ac.ir

**Subject of speech:**

"Adhesion in dentistry"

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## News & Events

Special topics:

- Polymer in Biomedical and tissue Engineering
- Polymeric Materials for Medical Care in the COVID-19 Pandemic

**First Announcement  
and Call for Papers**



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## ISPST 2022



8-10 November 2022  
Isfahan University of Technology  
Isfahan, Iran

Isfahan University of Technology (IUT) in conjunction with Iran Polymer Society are pleased to announce 15th International Seminar on Polymer Science and Technology (ISPST 2022). ISPST 2022 is held in IUT, on 8-10 November, 2022. The seminar is the continuation of the ISPST past successful series, which is aimed to provide a forum for presentation, discussion, and dissemination of current and future trends in polymeric materials and to facilitate information exchange among researchers with diverse interests, in various polymeric fields.

**Special Topic:**

- Polymer in Biomedical and Tissue Engineering
- Polymeric Materials for Medical Care in the COVID-19 Pandemic

**Seminar Topics:**

- Polymer Synthesis and Polymerization
- Green and Environmentally Sustainable Biopolymers
- Polymer Blends, Composites and Nano-composites
- Adhesives, Paints and Coatings
- Elastomers and Compounding Technologies
- Nano-structured Polymers and Smart Systems
- Fibers, Films and Polymeric Membranes
- Rheology and Polymer Processing
- Simulation and Modeling of Polymeric System

In view of your excellent contributions to the above fields, we would like to welcome you to the seminar.









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#### Contact for Further Enquiries

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ISPST 2022 Office Manager: M. Hafezi,  
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#### ► Registration Fee

National Participants Early Before  
October 8, 2022, Late Deadline October 24, 2022

Regular: 4,500,000 RIs, 5,000,000 RIs  
Student: 3,500,000 RIs, 4,000,000 RIs  
IPS Students: 2,500,000 RIs, 3,000,000 RIs  
IPS member: 4,000,000 RIs, 4,500,000 RIs  
Delegates from Industry: 15,000,000 RIs, 18,000,000 RIs

International Participants Early  
Before October 8, 2022,  
Late Deadline October 24, 2022

Regular: 300 €, 400 €  
Student: 100 €, 150 €

#### Seminar Language

The official language of the seminar is English.

The registration fee for participants covers full scientific activities, all official documents like conference program book and abstract CD, certificate, name badge, participant bag, coffee breaks, and meals. The full registration fee to be paid via online payment gateway of the website. ([www.ispst.ir](http://www.ispst.ir))

#### ► Seminar Venue

ISPST 2022 is held in Isfahan University of Technology (IUT). The university is located in Isfahan which is a vibrant city stretching along a spectacular river with three UNESCO world heritage sites, ancient Islamic architecture friendly and hospitable locals, gorgeous bridges, and plenty of hidden locations to discover. Isfahan, the third biggest city in Iran, should be top of every traveler's list in Iran.

#### ► Abstract Submission:

Authors are requested to submit their **Extended Abstract** through the seminar website ([www.ispst.ir](http://www.ispst.ir)). The extended abstracts are published as conference proceedings, which are distributed to the participants in the form of a CD. The extended abstracts must be submitted via the conference website and should be written in English. The abstract should include a Title, the information of Authors and Affiliations/Home page link, the Email address of Corresponding Author and Keywords. It must be prepared in accordance with the **ISPST 2022 Abstract Template**:  
<http://ispst.ir/files/site1/pages/template.doc>.

**Authors must complete the registration application form online before the abstract submitting.**

#### ► Important Dates

Abstract submissions deadline: July 23, 2022  
Abstract acceptance notification: August 27, 2022  
Early registration deadline: October 8, 2022  
Late registration deadline: October 24, 2022  
Conference dates: 8-10 November 2022

## Important Dates

- **Abstract Submission Deadline: August 1, 2022**
- **Abstract Acceptance Notification: September 16, 2022**
- **Early Registration Deadline: October 8, 2022**
- **Late Registration Deadline: October 24, 2022**
- **Conference Dates: 8-10 November 2022**





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## Welcome Message

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### Welcome Note of IPS President



**Dear All,**

Iranian Polymer Society invites all the participants from all over the world to attend "15<sup>th</sup> International Seminar on Polymer Science and Technology" during 8-10 November 2022 in Esfahan, at Isfahan University of Technology. This international gathering is primarily devoted to Application of Polymers in Management of Natural Disasters and includes Keynote presentations, Orals and interactive discussions, Poster presentations and Exhibitions on both scientific and social aspects of vast polymeric research activities. This long standing and biggest event on polymer science and technology in Iran seeks to achieve the best collection of expertise from academia and industry throughout Iran and other countries.

My colleagues and I would like to acknowledge and extend our gratitude to the hard working staff and students at Faculty of Polymer Engineering at Isfahan University of Technology to provide all the facilities to organize this event and share their experiences with all the participants to assure the best scientific gathering.

As the president of IPS, I have the honor to make sure that such scientifically versatile seminar fulfills its immediate and future objective goals.

**Prof. M. Nekoomanesh,  
IPS President**





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## Welcome Note of ISPST 2022 Chair of Scientific Committee



### Dear Participants,

It is my great pleasure and honor to invite all polymer scientists and specialists to the 15th international seminar on polymer science and technology, ISPST2022, which is to be held on November 8 -10, 2022 in Esfahan, Iran. Department of Chemical Engineering, Faculty of Polymer Engineering at Isfahan University of Technology in conjunction with the Iran Polymer Society (IPS) has the great privilege to host this important event. Previous series of ISPST have successfully provided a room for the exchange of knowledge among the academics working on polymer science and technology all over the world. With the continuation of previous objectives and goals, the upcoming gathering hopes to undertake a special task on establishing a closer link between the knowledge-oriented and technology-oriented researches, thereby promoting the transfer of knowledge between the academic area and industry. Members of industries are warmly welcome to discuss possibilities of cooperation in technology development and education in polymers alongside the seminar in special panels. The selected papers will be published in the "Iranian Polymer Journal" by the Springer International Publishing AG. The conference will be accompanied by an exhibition of products and activities of the most notable companies working in the Iran polymer industries.

**Dr. Tayebbeh Behzad**  
**ISPST 2022 Chair of Scientific Committee**





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## Report Of ISPST 2022

بسمه تعالی

پانزدهمین دوره از همایش های بین المللی علوم و فناوری پلیمر (ISPST 2022) در روزهای ۱۷ لغایت ۱۹ آبان ماه ۱۴۰۱ به میزبانی دانشگاه صنعتی اصفهان با حضور بالغ بر ششصد نفر برگزار شد. در راس کادر برگزارکننده این همایش، اساتید دانشکده مهندسی شیمی-گروه مهندسی پلیمر این دانشگاه، آقای دکتر روح الله باقری (رئیس همایش)، آقای دکتر محمود معصومی (دبیر اجرایی همایش) و خانم دکتر طیبه بهزاد (دبیر علمی همایش) حضور داشتند و همکاری انجمن پلیمر ایران به ریاست آقای دکتر مهدی نکومنش به بهتر برگزار شدن هرچه بیشتر این همایش کمک شایانی بخشید.

این همایش در ادامه مجموعه همایش های موفق بین المللی علوم و فناوری پلیمر قبلی که با هدف ارائه آخرین روند پیشرفت مواد پلیمری و تسهیل ارتباط و تبادل اطلاعات میان پژوهشگران و متخصصان در زمینه های مختلف علوم و مهندسی پلیمر می باشد، برگزار گردید. لازم به ذکر است که پس از حدود ۲۸ سال برگزاری این سری همایش ها از دانشگاه های پایتخت خارج و میزبانی پانزدهمین دوره برای اولین بار به دانشگاه صنعتی اصفهان سپرده شد. در زیر به معرفی میزبان های ۱۴ سری گذشته این سری همایش ها پرداخته شده است:

- ISPST 2020 ، دانشگاه تربیت مدرس، تهران.
- ISPST 2018 ، دانشگاه صنعتی امیرکبیر، تهران.
- ISPST2016 ، دانشگاه آزاد اسلامی، تهران.
- ISPST2014 ، پژوهشگاه پلیمر و پتروشیمی ایران، تهران.
- ISPST2012 ، دانشگاه صنعتی امیرکبیر، تهران.
- ISPST 2009 ، پژوهشگاه پلیمر و پتروشیمی ایران، تهران.
- ISPST 2007 ، دانشگاه صنعتی شریف، تهران.
- ISPST 2005 ، دانشگاه صنعتی امیرکبیر، تهران،
- ISPST 2003 ، پژوهشگاه پلیمر و پتروشیمی ایران، تهران.
- ISPST 2000 ، دانشگاه صنعتی امیرکبیر، تهران.
- ISPST 1997 ، پژوهشگاه پلیمر و پتروشیمی ایران، تهران.
- ISPST 1994 ، دانشگاه شیراز، شیراز.
- ISPST 1990 ، دانشگاه صنعتی امیرکبیر، تهران.
- ISPST 1986 ، دانشگاه صنعتی امیرکبیر، تهران.

پس از سپرده شدن میزبانی پانزدهمین دوره همایش به دانشگاه صنعتی اصفهان، به دستور مدیریت وقت دانشکده مهندسی شیمی، آقای دکتر محسن نصر اصفهانی، فضایی جهت برپایی دبیرخانه همایش در دانشکده اختصاص یافت و خانم مهندس مهشید حافظی به عنوان مسئول دبیرخانه همایش انتخاب شدند. همچنین، جمعی





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از دانشجویان در قالب گروه اجرایی همایش تحت نظر آقای دکتر محمود معصومی، دبیر اجرایی همایش،  
گرد هم آمدند.





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در ISPST 2022 به طور کلی تعداد ۶۲۷ مقاله توسط دبیرخانه این همایش دریافت گردید که پس از بررسی اولیه توسط دبیر علمی همایش و تایید و یا تغییر سرفصل‌های دریافتی مقالات، به سرگروه‌های داور مربوط به هر سرفصل ارسال شد و سرگروه‌ها نیز مقالات دریافتی را به داوران دارای تخصص و تجربه در آن سرفصل ارسال کردند. از این تعداد مقاله حدود ۲۵۰ مقاله حدنصاب نمره برای ارائه به صورت حضوری/شفاهی را دریافت نمودند، اما برای برگزاری همایش با نظم هر چه بیشتر با هر یک از این افراد ارتباط برقرار شد تا پس از تایید توانایی ارائه حضوری از جانب ایشان، ارائه‌های آن‌ها در جدول زمانبندی همایش قرار گیرد. در نهایت از تعداد ۶۲۷ مقاله دریافتی، تعداد ۱۲۹ مقاله به صورت ارائه حضوری، تعداد ۴۷۰ مقاله به صورت ارائه پوستر و تعداد ۲۸ مقاله مردود اعلام شدند. لازم به ذکر است از حیث تعداد دریافت مقاله، این همایش از رکوردداران این مجموعه همایش‌ها بوده است. این مقالات از دانشگاه‌های سرتاسر ایران دریافت شدند، که در این بین همانطور که در جدول زیر به ۵ دانشگاهی که بیشترین مقالات ارسالی را داشته‌اند اشاره شده است بیشترین تعداد مقالات از دانشگاه صنعتی امیرکبیر دریافت گردید.





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تعداد مقاله دریافتی	نام دانشگاه
۹۴	دانشگاه صنعتی امیرکبیر
۶۴	دانشگاه صنعتی سهند
۶۳	پژوهشگاه پلیمر و پتروشیمی ایران
۵۸	دانشگاه صنعتی اصفهان
۴۵	دانشگاه تربیت مدرس

سرفصل های این همایش و تعداد مقالات پذیرفته شده هر سرفصل نیز در جدول زیر جمع آوری شده است:

تعداد مقالات دریافتی در هر سرفصل	سرفصل های همایش
۸۸	کاربرد پلیمرها در مهندسی بافت و زیست پزشکی مواد پلیمری در زمینه مراقبت های پزشکی در همه گیری کووید-۱۹
۱۴۹	سنتز پلیمرها و پلیمریزاسیون
۴۹	زیست پلیمرهای سبز و سازگار با محیط زیست
۹۷	آلیاژهای پلیمری، کامپوزیتها و نانوکامپوزیتها
۴۴	چسبها، رنگها و پوششها
۳۱	الاستومرها و فناوریهای آمیزه سازی
۵۴	پلیمرهای نانوساختار و سامانه های هوشمند
۵۶	الیاف، فیلمها و غشاهای پلیمری
۳۶	رئولوژی و فرآیند پلیمرها
۲۳	شبیه سازی و مدل سازی سامانه های پلیمری





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این همایش به صورت مدون و برنامه ریزی شده در تالار شیخ بهایی و مجموعه تالارهای مفاخر دانشگاه صنعتی اصفهان در سه روز برگزار شد. برنامه های این تالارها به صورت مختصر در زیر بیان گردیده است:

### تالار شیخ بهایی:

برگزاری مراسم های افتتاحیه و اختتامیه  
پذیرش شرکت کنندگان در همایش  
ارائه سخنرانان ویژه برای تمامی حضار (Plenary Lectures)  
ارائه مقالات پذیرفته شده به صورت پوستر  
برقراری فضای نمایشگاهی برای ارتباط هرچه بیشتر صنعتگران و دانشجویان  
پذیرایی های زمان های استراحت







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### مجموعه تالارهای مفاخر:

ارائه سخنرانان کلیدی (Keynote Speakers) در تالار های مجزا متناسب با سرفصل ارائه شده در هر تالار

ارائه مقالات پذیرفته شده به صورت حضوری در ۵ تالار مجزا متناسب با سرفصل ارائه شده در هر تالار  
برگزاری جلسه انجمن پلیمر با رؤسای گروه های پلیمری دانشگاه های ایران در روز دوم در سالن شماره ۶ مجموعه تالار های مفاخر





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این برنامه ها طبق جدول های زمان بندی زیر انجام گردید:

روز اول- ۱۷ آبان ماه ۱۴۰۱

جشن افتتاحیه، سخنرانی های مهم و پذیرش (تالار شیخ بهایی) ۰۸:۱۵-۰۹:۴۵				
ارائه سخنران کلیدی				
(Prof. C. Holzer) (تالار شیخ بهایی) ۰۹:۴۵-۱۰:۱۵				
پذیرایی زمان استراحت، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) ۱۰:۴۵-۱۰:۱۵				
ارائه های همزمان در تالارهای مفاخر ۱۰:۴۵-۱۲:۴۵				
تالار ۵	تالار ۴	تالار ۳	تالار ۲	تالار ۱
(پلیمرهای نانوساختار و سامانه های هوشمند) و (شبيه سازی و مدل سازی سامانه های پلیمری)	زیست پلیمرهای سبز و سازگار با محیط زیست	(کاربرد پلیمرها در مهندسی بافت و زیست پزشکی) و (مواد پلیمری در زمینه مراقبت های پزشکی در همه گیری کووید- ۱۹)	آلیاژهای پلیمری، کامپوزیت ها و نانوکامپوزیت ها	سنتز پلیمرها و پلیمریزاسیون
ارائه مقالات حضور ۱۰:۴۵-۱۲:۴۵	سخنران کلیدی (۱۰:۴۵-۱۱:۱۵) Prof. H. Yeganeh	سخنران کلیدی (۱۰:۴۵-۱۱:۱۵) Prof. M. Atai	سخنران کلیدی (۱۰:۴۵-۱۱:۱۵) Dr. Sh. Ahmadi	ارائه مقالات حضور ۱۰:۴۵-۱۲:۴۵





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	ارائه مقالات حضوری ۱۱:۱۵-۱۲:۳۵	ارائه مقالات حضوری ۱۱:۱۵-۱۲:۳۵	ارائه مقالات حضوری ۱۱:۱۵-۱۲:۳۵	
<p>پذیرایی نهار (تالار پذیرایی هشت بهشت)، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) (۱۲:۳۰-۱۴:۰۰)</p>				
<p>ارائه سخنرانان کلیدی (Dr. A. Fooroozani Behbahani) و (Dr. N. Taebnia) (تالار شیخ بهایی) ۱۴:۰۰-۱۵:۰۰</p>				
<p>ارائه های همزمان در تالارهای مفاخر ۱۵:۰۰-۱۶:۴۰</p>				
تالار ۵	تالار ۴	تالار ۳	تالار ۲	تالار ۱
(پلیمرهای نانو ساختار و سامانه های هوشمند) و (شبه سازی و مدل سازی سامانه های پلیمری)	زیست پلیمرهای سبز و سازگار با محیط زیست	(کاربرد پلیمرها در مهندسی بافت و زیست پزشکی) و (مواد پلیمری در زمینه مراقبت های پزشکی در همه گیری کووید- ۱۹)	آلیاژهای پلیمری، کامپوزیت ها و نانو کامپوزیت ها	سنتز پلیمرها و پلیمریزاسیون
ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰
<p>پذیرایی زمان استراحت، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) ۱۷:۱۵- ۱۶:۴۰</p>				





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روز دوم- ۱۸ آبان ماه ۱۴۰۱

ارائه سخنرانان کلیدی				
-۱۰:۰۰ (تالار شیخ بهایی) (Dr. A. Zarrabi) (Dr. A. Akbari) (Prof. N. Mohammadi) ۰۸:۳۰				
- پذیرایی زمان استراحت، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) ۱۰:۳۰ ۱۰:۰۰				
ارائه های همزمان در تالارهای مفاخر ۱۰:۳۰-۱۲:۳۰				
تالار ۵	تالار ۴	تالار ۳	تالار ۲	تالار ۱
(الاستومرها و فناوری های آمیزه - سازی)، (شبه سازی و مدل سازی سامانه های پلیمری) و (پلیمرهای نانوساختار و سامانه های هوشمند)	زیست پلیمرهای سبز و سازگار با محیط زیست	(کاربرد پلیمرها در مهندسی بافت و زیست پزشکی) و (مواد پلیمری در زمینه مراقبت های پزشکی در همه گیری کووید-۱۹)	آلیاژهای پلیمری، کامپوزیت ها و نانو کامپوزیت ها	سنتز پلیمرها و پلیمریزاسیون
ارائه مقالات حضوری ۱۰:۳۰-۱۲:۳۰	ارائه مقالات حضوری ۱۰:۳۰-۱۲:۳۰	سخنران کلیدی (۱۰:۳۰-۱۱:۰۰) Prof. A. Ramazani ارائه مقالات حضوری ۱۱:۰۰-۱۲:۲۰	سخنران کلیدی (۱۰:۳۰-۱۱:۰۰) Dr. A. Seifi ارائه مقالات حضوری ۱۱:۰۰-۱۲:۲۰	ارائه مقالات حضوری ۱۰:۳۰-۱۲:۳۰
پذیرایی نهار (تالار پذیرایی هشت بهشت)،				





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بازدید پوسترها و بازدید فضای نمایشگاهی (۱۴:۰۰-۱۲:۲۰)

ارائه سخنرانان کلیدی

(Prof. H. Yeganeh) و (Dr. V. Baharvand) (تالار شیخ بهایی) ۱۴:۰۰-۱۵:۰۰

ارائه های همزمان در تالارهای مفاخر ۱۵:۰۰-۱۶:۴۰

تالار ۵	تالار ۴	تالار ۳	تالار ۲	تالار ۱
(الاستومرها و فناوری های آمیزه - سازی) و (چسب ها، رنگ ها و پوشش ها)	الیاف، فیلم ها و غشاهای پلیمری	(کاربرد پلیمرها در مهندسی بافت و زیست پزشکی) و (مواد پلیمری در زمینه مراقبت های پزشکی در همه گیری کووید-۱۹)	آلیاژهای پلیمری، کامپوزیت ها و نانوکامپوزیت ها	سنتز پلیمرها و پلیمریزاسیون
ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰	ارائه مقالات حضوری ۱۵:۰۰-۱۶:۴۰

پذیرایی زمان استراحت، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) ۱۷:۱۵-۱۶:۴۰





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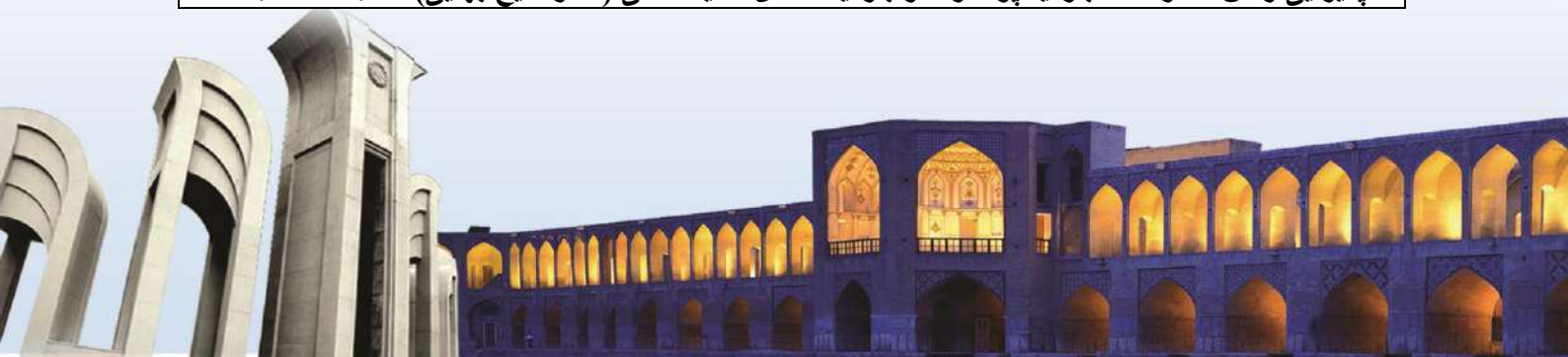
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روز سوم- ۱۹ آبان ماه ۱۴۰۱

ارائه سخنران کلیدی				
۰۸:۳۰-۰۹:۰۰ (تالار شیخ بهایی) (Prof. M. Nekoomanesh)				
پذیرایی زمان استراحت، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) ۰۹:۰۰-۱۰:۰۰				
ارائه های همزمان در تالارهای مفاخر ۱۰:۰۰-۱۲:۲۰				
تالار ۵	تالار ۴	تالار ۳	تالار ۲	تالار ۱
رئولوژی و فرآیند پلیمرها	زیست پلیمرهای سبز و سازگار با محیط زیست	(کاربرد پلیمرها در مهندسی بافت و زیست پزشکی) و (مواد پلیمری در زمینه مراقبت های پزشکی در همه گیری کووید-۱۹) و (الیاف، فیلم ها و غشاهای پلیمری)	چسب ها، رنگ ها و پوشش ها	سنتز پلیمرها و پلیمریزاسیون
سخنران کلیدی (۱۰:۰۰-۱۰:۳۰) Dr. F. Goharpey	ارائه مقالات حضوری ۱۰:۰۰-۱۲:۰۰	ارائه مقالات حضوری ۱۰:۰۰-۱۲:۲۰	سخنران کلیدی (۱۰:۰۰-۱۰:۳۰) Dr. A. Salimi	ارائه مقالات حضوری ۱۰:۰۰-۱۲:۰۰
ارائه مقالات حضوری ۱۰:۳۰-۱۲:۱۰			ارائه مقالات حضوری ۱۰:۳۰-۱۲:۱۰	
پذیرایی نهار (تالار پذیرایی هشت بهشت)، بازدید پوسترها و بازدید فضای نمایشگاهی (۱۲:۰۰-۱۴:۰۰)				
سخنرانی های مهم و جشن اختتامیه (تالار شیخ بهایی) ۱۴:۰۰-۱۵:۰۰				
پذیرایی زمان استراحت، بازدید پوسترها و بازدید فضای نمایشگاهی (تالار شیخ بهایی) ۱۵:۰۰-۱۵:۳۰				

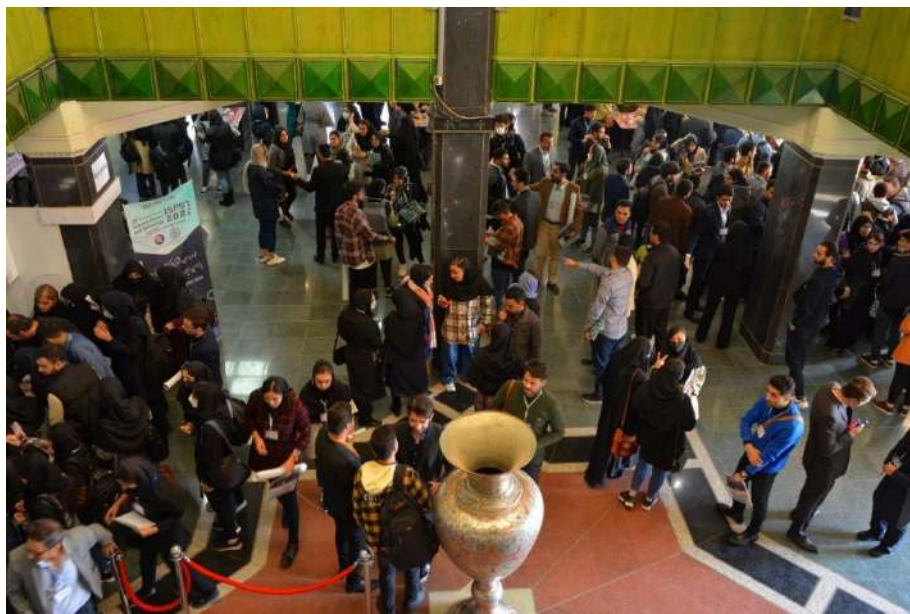




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## داوری ارائه ها

همان طور که ذکر شد مقالات ارائه شده در این همایش در دو دسته ارائه های حضوری و ارائه های پوستر قرار گرفتند. برای داوری ارائه های حضوری در سه روز همایش همواره یک تا سه نفر از اساتید برجسته و متخصص در حوزه موضوعات مورد ارائه و بحث در هر تالار به عنوان مدیر جلسات و داور حضور داشتند و در پایان هر بخش از ارائه ها نمرات و نظرات خود را در فرم های مربوطه درج نمودند و سپس این فرم ها توسط مسئول هر سالن برای بررسی های بعدی جمع آوری شد. در بخش ارائه پوسترها، ۴۵۳ عنوان مقاله در زمینه های مختلف و مباحث روز دنیا در سه روز متوالی در معرض دید عموم قرار گرفت و توجه بازدیدکنندگان و علاقه مندان بسیاری را به خود جلب کرد. همچنین، داوری علمی پوسترهای ارائه شده توسط اساتید برجسته و متخصص در هر سرفصل انجام و نمرات آن جهت انتخاب مقاله برتر ثبت گردید. پس از جمع بندی و بررسی نتایج داوری با همراهی انجمن پلیمر، ارائه برتر در هر سرفصل متعاقبا اعلام خواهد شد.

## مراسم های افتتاحیه و اختتامیه

مراسم افتتاحیه در صبح روز ۱۷ آبان ماه ۱۴۰۱ با حضور آقای دکتر سعید نوری خراسانی به عنوان گرداننده مراسم برگزار گردید. در زیر به صورت مختصر به بیان لیست برنامه های مراسم افتتاحیه پرداخته می شود:

تلاوت آیاتی از قرآن مجید و پخش سرود ملی جمهوری اسلامی ایران  
سخنرانی معاونت پژوهشی دانشگاه آقای دکتر صفوی

سخنرانی رئیس انجمن پلیمر آقای دکتر مهدی نکومنش  
سخنرانی رئیس همایش آقای دکتر روح الله باقری  
سخنرانی دبیر علمی همایش خانم دکتر طیبه بهزاد  
سخنرانی دبیر اجرایی همایش آقای دکتر محمود معصومی





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### Photo of the founders of Polymer

- Prof. Entezami
- Prof. Semarazadeh
- Prof. Ghazvini
- Prof. Makhadmeh
- Prof. Barikani
- Prof. Nazokdast
- Prof. Afshar
- Prof. Mirzadeh
- Prof. Karbassi
- Prof. Bakshbani
- Prof. Rahimi
- Prof. Bagheri
- Prof. Haghighatkhah



- Special topics:**
- Polymer in Biomedical and Tissue Engineering
  - Polymeric Materials for Medical Care in the COVID-19 Pandemic





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مراسم اختتامیه نیز در بعداز ظهر روز ۱۹ آبان ماه ۱۴۰۱ با حضور آقای دکتر عباس محمدی به عنوان گرداننده مراسم برگزار گردید. در زیر به صورت مختصر به بیان لیست برنامه های مراسم اختتامیه پرداخته می شود:

تلوت آیتی از قرآن مجید و پخش سرود ملی جمهوری اسلامی ایران  
سخنرانی رئیس انجمن پلیمر آقای دکتر مهدی نکومنش  
سخنرانی دبیر اجرایی همایش آقای دکتر محمود معصومی  
قدردانی از اساتید پیشکسوت حوزه پلیمر  
تقدیر از مقالات برتر توسط شرکت های پارسا پلیمر شریف (یک مقاله) و رازین پلیمر (دو مقاله) و سخنرانی  
مدیران این دو شرکت  
قدردانی از حامیان مالی همایش  
قدردانی از اساتید برجسته پلیمر حاضر در همایش  
معرفی و تقدیر از دانشجویان برتر شرکت کننده (۱۰ نفر) در مسابقه پاسخ به سوالات طراحی شده توسط  
انجمن پلیمر که حین برگزاری همایش انجام و در روز آخر مورد ارزیابی انجمن پلیمر قرار گرفت  
قدردانی از کادر اجرایی همایش  
عکس یادگاری دسته جمعی

## ضيافت شام قدردانی

به منظور قدردانی از حضور اساتید و صنعتگران حامی همایش، در شب دوم همایش (۱۸م آبان ماه) ضیافت شام قدردانی در مجتمع فرهنگی اردیبهشت دانشگاه صنعتی اصفهان واقع در خیابان آتشگاه اصفهان برگزار شد. این مراسم برای بیش از ۱۵۰ نفر تدارک دیده شده بود. مدعوین در حین پذیرایی ساعات خوشی را در کنار هم سپری کردند و در انتها به صرف شام پرداختند.

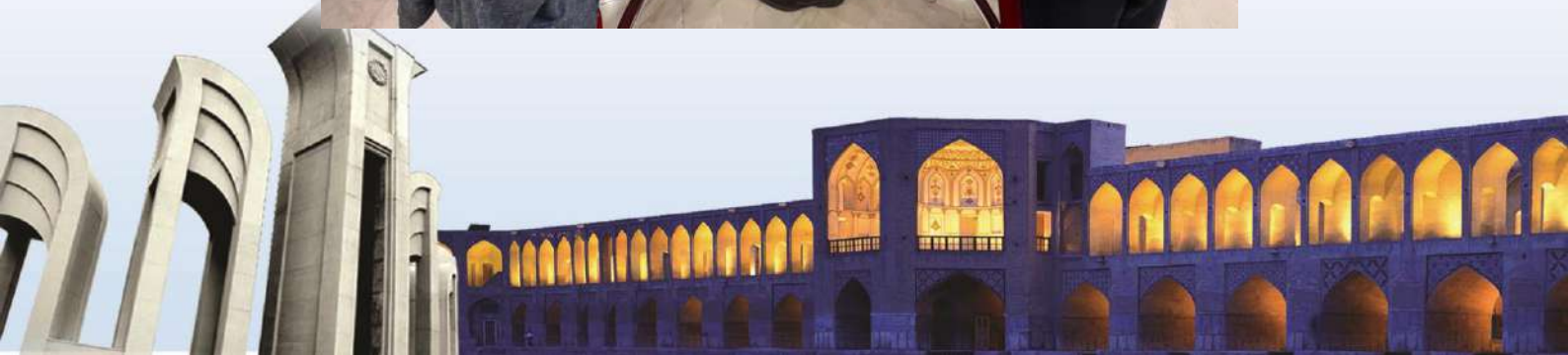




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## تور گردشگری شهر اصفهان

با توجه به برگزاری پانزدهمین دوره همایش ISPST در شهر تاریخی اصفهان، کادر برگزارکننده همایش برای ایجاد خاطره ای به یاد ماندنی برای شرکت کنندگان این همایش، دانشگاه صنعتی اصفهان و شهر اصفهان، اقدام به برگزاری تور گردشگری شهر در عصر روزهای ۱۷ ام و ۱۸ ام آبان ماه ۱۴۰۱ بعد از اتمام برنامه های همایش نمودند. شرکت کنندگان در روز اول از میدان نقش جهان و در روز دوم از پل خواجه بازدید کردند.

## پوشش خبری همایش

مراسم افتتاحیه این همایش به صورت زنده در آپارات پخش گردید. [www.aparat.com/iutnews/live](http://www.aparat.com/iutnews/live) همچنین خبرگزاری صدا و سیما نیز گزارش تهیه شده در حین برگزاری همایش و برخی مصاحبه های انجام شده پیرامون همایش را از شبکه اصفهان خبر پخش نمود.





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### حضور صنعتگران و حامیان مالی همایش

همایش های بین المللی علوم و تکنولوژی پلیمر با بیش از ۳۵ سال قدمت برگزاری به عنوان مهمترین همایش در زمینه پلیمرها در ایران به شمار می رود. علاوه بر ابعاد علمی این همایش، یکی دیگر از اهداف این همایش ها برقراری ارتباط موثر بین دانشگاه و صنعت می باشد. در پانزدهمین همایش بین المللی علوم و تکنولوژی پلیمر یک بستر ارتباطی مناسب میان صنعت و دانشگاه برقرار گردید که صنعتگران و محققین حوزه ی صنعت با ارائه مقالات و پوسترهای خود حضوری فعال در این همایش داشته باشند. در ادامه به معرفی شرکت های حاضر در همایش و سطح حمایت آن ها پرداخت شده است.





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سطح حمایت مالی	لوگو	اسامی شرکت ها
حامی سطح پلاتین		شرکت ظریف مصور
حامی سطح پلاتین		صنایع گیتی پسند
حامی سطح طلایی		شرکت رازین پلیمر
حامی سطح طلایی		انجمن مستر بیچ و کامپاند
حامی سطح نقره ای		شرکت آریا پلیمر پیشگام
حامی سطح نقره ای		شرکت پارسا پلیمر شریف





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حامی سطح نقره ای	 شرکت پتروشیمی اروند	پتروشیمی اروند
حامی سطح برنز	 kimia Polymer Apadana	شرکت کیمیا پلیمر آپادانا
حامی سطح برنز	 سینا پلیمر اسپادانا	شرکت سینا پلیمر اسپادانا
اخذ غرفه نمایشگاهی	 تجهیزات آزمایشگاهی ناز	شرکت تجهیزات آزمایشگاهی ناز

شرکت های مذکور با حضور در نمایشگاه جانبی همایش و دایر نمودن غرفه های خود ارتباطی موثر را ما بین خود و محققین ایجاد نمودند و این امر منجر به غنای هر چه بیشتر این همایش گردید.





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## Organization

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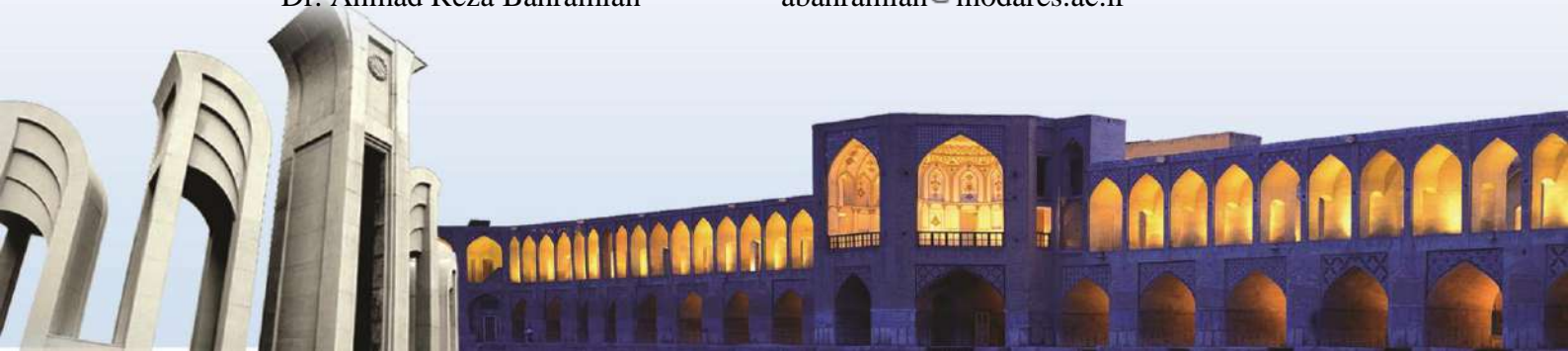
# ISPST 2022

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## Organizers & Sponsors

### 1. Organizers

	<p>Isfahan university of Technology</p>
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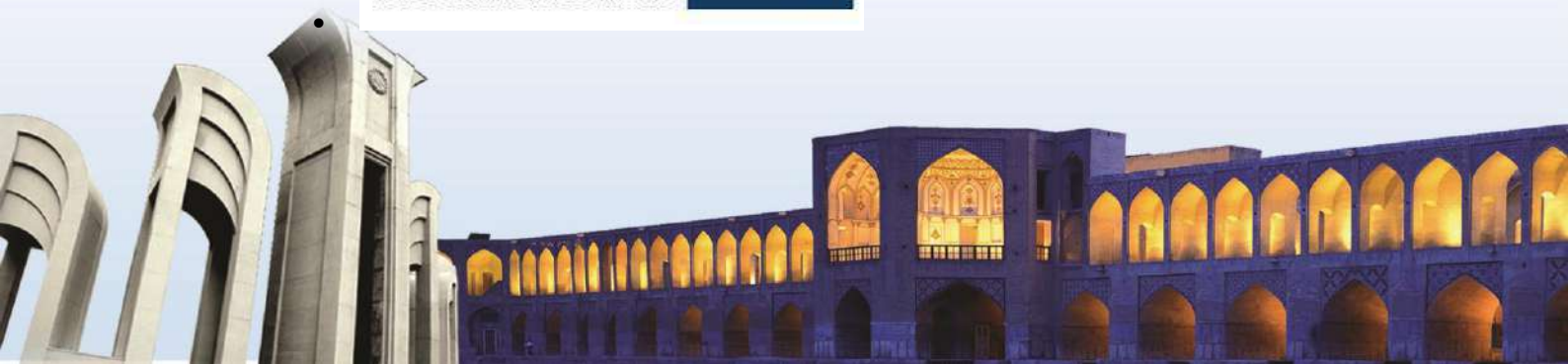


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Four levels of sponsorship are offered:

Level	Cost (RIs)
Platinum	700/000/000
Gold	400/000/000
Silver	300/000/000
Bronze	200/000/000

Credits to sponsorship members of ISPST 2022 ([pdf](#))

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## Registration Fees National

Participants	Registration (Before October 8, 2022)
Regular	4,500,000 RIs
Student (IPS member)	3,500,000 RIs ( 2,500,000 RIs)
IPS member	4,000,000 RIs
Delegates from Industry	15,000,000 RIs
Faculty member (with two orals)	15,000,000 RIs

## International





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Participants	Registration (Before October 8, 2022)
Regular	300 €
Student	150 €

- Please make payments by clicking on "Registration form" section through an online gateway.
- Or you can pay through the following account details and send your deposit receipt to the following email.
- Account name: Central Melli Bank
- Shaba number: IR860100004001071803022757  
( chemical engineering ID:30607186111540000000000000000713)
- E-mail: info@ipsts.ir

## Paper Submission

### Abstract Submission & Topics

#### Abstract Submission

Authors are requested to submit their Extended Abstract through the seminar website (<http://www.ispst.ir/>) in the up to date following areas:

#### Special topics:

- Polymer in Biomedical and tissue Engineering
- Polymeric Materials for Medical Care in the COVID-19 Pandemic

#### General topics:





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- Polymer Synthesis and Polymerization
- Green and Environmentally Sustainable Biopolymers
- Polymer Blends, Composites and Nano-composites
- Adhesives, Paints and Coatings
- Elastomers and Compounding Technologies
- Nano-structured Polymers and Smart Systems
- Fibers, Films and Polymeric Membranes
- Rheology and Polymer Processing
- Simulation and Modeling of Polymeric System

The extended abstracts are published as conference proceedings, which are distributed to the participants in the form of a CD. The extended abstracts must be submitted via the conference website and should be written in English. The abstract should include a Title, the information of Authors and Affiliations/Home page link, the E-mail address of corresponding author and keywords. It must be prepared in accordance with the [ISPST 2022 Abstract Template](#).

### Template:

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### NEWS

- Oral presentation and posters should be presented in English.
- Authors must complete the registration application form online before abstract submitting.





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## Program

### Seminar Program

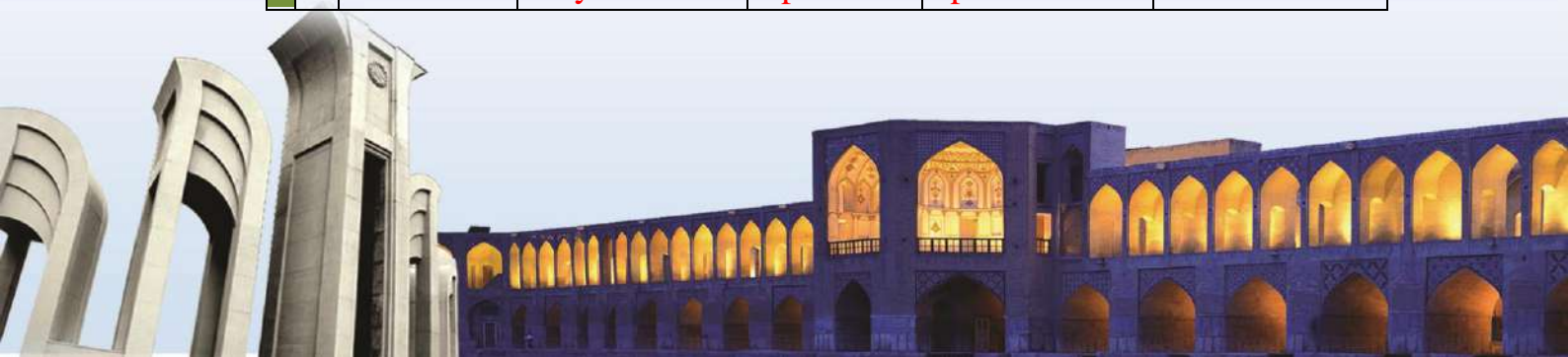
....

*The time program of the seminar*

[More information](#)

Tuesday, 8 November 2022

<b>Opening Ceremony, Important Speeches</b> 08:15-09:45				
<b>Plenary lecture</b> 09:45--10:15 (Dr. C. Holzer)				
<b>Break 10:15-10:45</b>				
Room 1	Room 2	Room 3	Room 4	Room 5
Polymer Synthesis and Polymerizati on	Polymer Blends, Composites, and Nano- composites	Polymers in Covid 19, Biomedic al and Tissue Engineeri ng	Green and Environmenta lly Biopolymers	Nano- structured and Smart systems Simulation and Modeling of Polymeric Systems
1	10:45- 11:05	<b>Keynote</b>	<b>Keynote Speaker</b>	<b>Keynote speaker</b>
				۱۰:۴۵-11:05 A-10-2138-1





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	A-10-2220-1	speaker (Dr. Sh. Ahmadi) 10:45-11:15	(Dr. Atai) 10:45-11:15	(Dr. Yeganeh) 10:45-11:15	
	11:05-11:25 A-10-2403-2				11:05-11:25 A-10-2219-1
2	11:25-11:45 A-10-2318-1	11:15-11:35 A-10-2399-1	11:15-11:35 A-10-2047-2	11:15-11:35 A-10-2209-1	11:25-11:45 A-10-2525-1
3	11:45-12:05 A-10-2508-3	11:35-11:55 A-10-2299-1	11:35-11:55 A-10-2464-2	11:35-11:55 A-10-2107-2	11:45-12:05 A-10-2335-2
4	12:05-12:25 A-10-2206-1	11:55-12:15 A-10-2565-1	11:55-12:15 A-10-2071-1	11:55-12:15 A-10-2346-1	12:05-12:25 A-10-2335-3
5	12:25-12:45 A-10-2105-1	12:15-12:35 A-10-2065-1	12:15-12:35 A-10-2309-1	12:15-12:35 A-10-2559-2	12:25-12:45 A-10-2336-1
Exhibition, Lunch (12:30-14:00)					
<b>Plenary Lectures</b> )14:00-14:30 Dr. N. Taebnia( 14:30-15:00 (Dr. A. Fooroozani Behbahani)					
Room 1	Room 2	Room 3	Room 4	Room 5	







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	Polymer Synthesis And Polymerization	Polymer Blends, Composites, and Nanocomposites	Polymers in Covid 19, Biomedical and Tissue Engineering	Green and Environmentally Biopolymers	Nano-structured and Smart systems Simulation and Modeling of Polymeric Systems
1	15:00-15:20 A-10-2039-2	15:00-15:20 A-10-2594-1	15:00-15:20 A-10-2292-1	15:00-15:20 A-10-2277-2	15:00-15:20 A-10-2322-2
2	15:20-15:40 A-10-2398-1	15:20-15:40 A-10-2231-1	15:20-15:40 A-10-2490-2	15:20-15:40 A-10-2559-1	15:20-15:40 A-10-2483-1
3	15:40-16:00 A-10-2514-1	15:40-16:00 A-10-2730-1	15:40-16:00 A-10-2093-1	15:40-16:00 A-10-2489-1	15:40-16:00 A-10-2510-2
4	16:00-16:20 A-10-2562-1	16:00-16:20 A-10-2159-3	16:00-16:20 A-10-2273-2	16:00-16:20 A-10-2320-1	16:00-16:20 A-10-2662-1
5	16:20-16:40 A-10-2407-1	16:20-16:40 A-10-2024-1	16:20-16:40 A-10-2400-1	16:20-16:40 A-10-2124-1	16:20-16:40 A-10-2058-1





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Break, Exhibition  
16:40-17:15

Wednesday, 9 November 2022

### Plenary Lectures

08:30-09:00 (Dr. N. Mohammadi)

09:00-09:30 (Dr. A. Akbari)

09:30-10:00 (Dr. A. Zarrabi)

### Break 10:00-10:30

Room 1	Room 2	Room 3	Room 4	Room 5
Polymer Synthesis and Polymerization	Polymer Blends, Composites, and Nanocomposites	Polymers in Covid19, Biomedical and Tissue Engineering	Green and Environmentally Biopolymers	Simulation and Modeling of Polymeric Systems Nano-structured and Smart systems Elastomers and Compounding Technologies





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# ISPST 2022



8-10 November, Isfahan University of Technology, Isfahan, Iran

1	10:30-10:50 A-10-2369-1	Keynote speaker (Dr. Seifi) 10:30-11:00 A-10-2291-1	Keynote Speaker (Dr. Ramazani) 10:30-11:00	10:30-10:50 A-10-2570-1	10:30-10:50 A-10-2394-1
2	10:50-11:10 A-10-2258-1			10:50-11:10 A-10-2330-3	10:50-11:10 A-10-2265-1
3	11:10-11:30 A-10-2419-1	11:00-11:20 A-10-2232-1	11:00-11:20 A-10-2359-2	11:10-11:30 A-10-2360-2	11:10-11:30 A-10-2379-1
4	11:30-11:50 A-10-2358-1	11:20-11:40 A-10-2293-2	11:20-11:40 A-10-2606-1	11:30-11:50 A-10-2209-2	11:30-11:50 A-10-2659-1
5	11:50-12:10 A-10-2503-2	11:40-12:00 A-10-2125-1	11:40-12:00 A-10-2569-1	11:50-12:10 A-10-2351-2	11:50-12:10 A-10-2453-1
6	12:10-12:30 A-10-2074-1	12:00-12:20 A-10-2255-2	12:00-12:20 A-10-2421-1	12:10-12:30 A-10-2277-3	12:10-12:30 A-10-2263-1

Exhibition, Lunch  
(12:20-14:00)





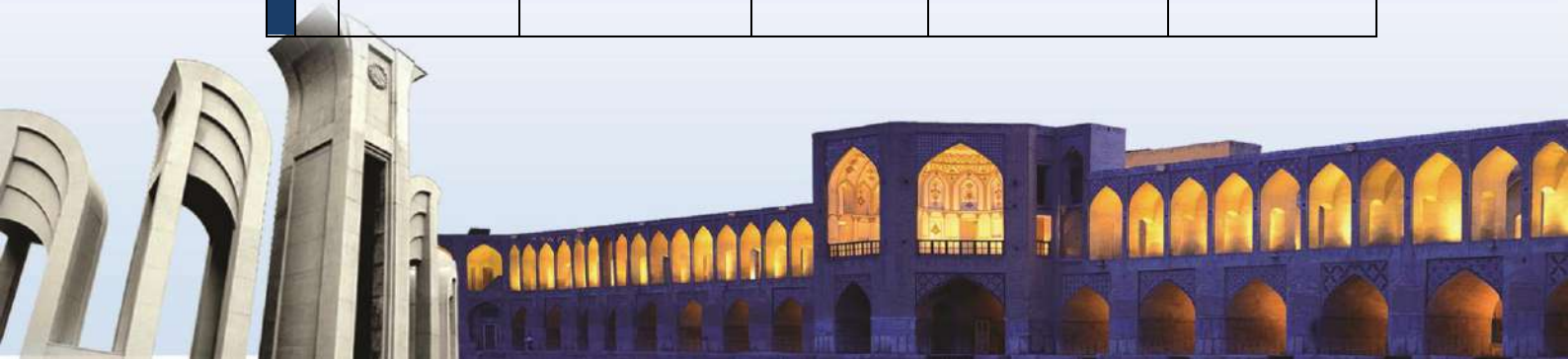
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Plenary Lectures					
14:00-14:30 (Dr. J. Foroughi)					
14:30-15:00 (Dr. Behranvand)					
Room 1	Room 2	Room 3	Room 4	Room 5	
Polymer Synthesis and Polymerization	Polymer blends, composites, and nanocomposites Rheology and Polymer Processing	Polymers in Covid19, Biomedical and Tissue Engineering	Fibers, Films, and Polymeric Membranes	Elastomers and Compounding Technologies, Adhesives, Paints and Coatings	
1	15:00-15:20 A-10-2286-2	15:00-15:20 A-10-2501-1	15:00-15:20 A-10-2128-1	15:00-15:20 A-10-2509-1	15:00-15:20 A-10-2257-1
2	15:20-15:40 A-10-2254-1	15:20-15:40 A-10-2539-2	15:20-15:40 A-10-2087-1	15:20-15:40 A-10-2278-2	15:20-15:40 A-10-2334-1
3	15:40-16:00 A-10-2593-1	15:40-16:00 A-10-2637-1	15:40-16:00 A-10-2102-1	15:40-16:00 A-10-2041-1	15:40-16:00 A-10-2453-2
4	16:00-16:20 A-10-2492-3	16:00-16:20 A-10-2642-1	16:00-16:20 A-10-2516-1	16:00-16:20 A-10-2079-1	16:00-16:20 A-10-2563-2





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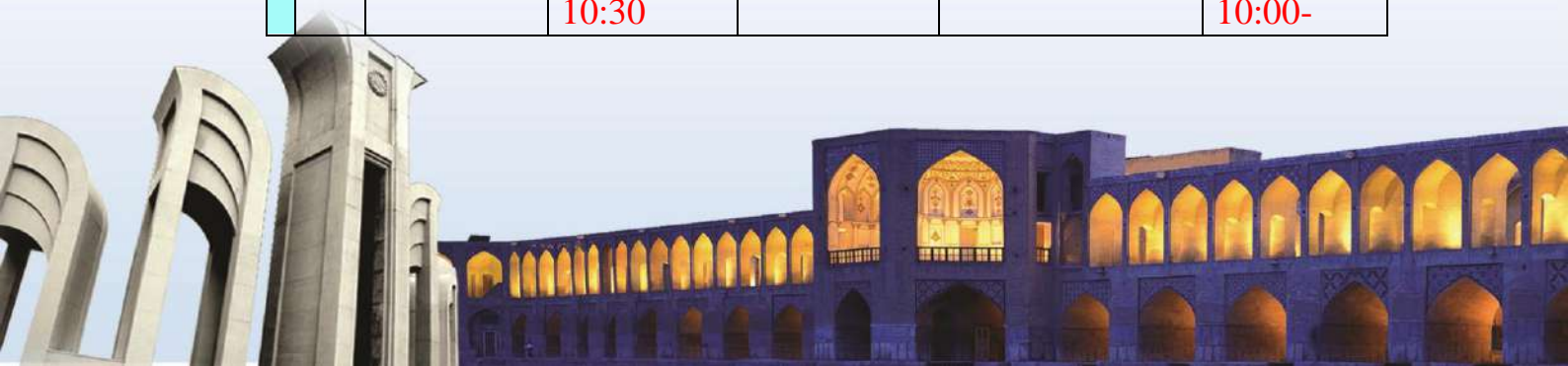


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5	16:20-16:40 A-10-2132-1	16:20-16:40 A-10-2616-1	16:20-16:40 A-10-2204-2	16:20-16:40 A-10-2248-1	16:20-16:40 A-10-2357-2
<b>Break, Exhibition 16:40-17:15</b>					

Thursday, 10 November 2022

Plenary Lectures 8:30-09:00 (Dr. M. Nekoomanesh) 09:00-09:30 (Dr. A. Zamani)					
Break 09:30-10:00					
Room 1		Room 2	Room 3	Room 4	Room 5
Polymer Synthesis and Polymerization		Adhesives, Paints and Coatings	Polymers in Covid19, Biomedical and Tissue Engineering Fibers, Films, and Polymeric Membranes	Green and Environmental Biopolymers	Rheology and Polymer Processing
1	10:00-10:20 A-10-2530-1	<b>Keynote speaker (Dr. A. Salimi)</b> 10:00-10:30	10:00-10:20 A-10-2241-1	10:00-10:20 A-10-2186-1	<b>Keynote Speaker (Dr. Goharpey)</b> 10:00-





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					10:30
2	10:20- 10:40 A-10- 2572-1	10:30- 10:50 A-10- 2094-3	10:20- 10:40 A-10- 2639-1	10:20-10:40 A-10-2641-1	10:30- 10:50 A-10- 2030-1
3	10:40- 11:00 A-10- 2592-1	10:50- 11:10 A-10- 2162-1	10:40- 11:00 A-10- 2558-1	10:40-11:00 A-10-2209-3	10:50- 11:10 A-10- 2066-4
4	11:00- 11:20 A-10- 2076-2	11:10- 11:30 A-10- 2326-1	11:00- 11:20 A-10- 2573-1	11:00-11:20 A-10-2347-1	11:10- 11:30 A-10- 2481-1
5	11:20- 11:40 A-10- 2566-2	11:30- 11:50 A-10- 2563-1	11:20- 11:40 A-10- 2276-1	11:20-11:40 A-10-2084-1	11:30- 11:50 A-10- 2352-1
6	11:40- 12:00 A-10- 2538-1	11:50- 12:10 A-10- 2595-1	11:40- 12:00 A-10- 2079-2	11:40-12:00 A-10-2566-1	11:50- 12:10 A-10- 2564-1
7			12:00- 12:20 A-10- 2410-2		
<b>Exhibition, Lunch</b> <b>12:00-14:00</b>					





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Important speech and closing ceremony  
14:00-15:00

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## Presentation

### Oral

### Note

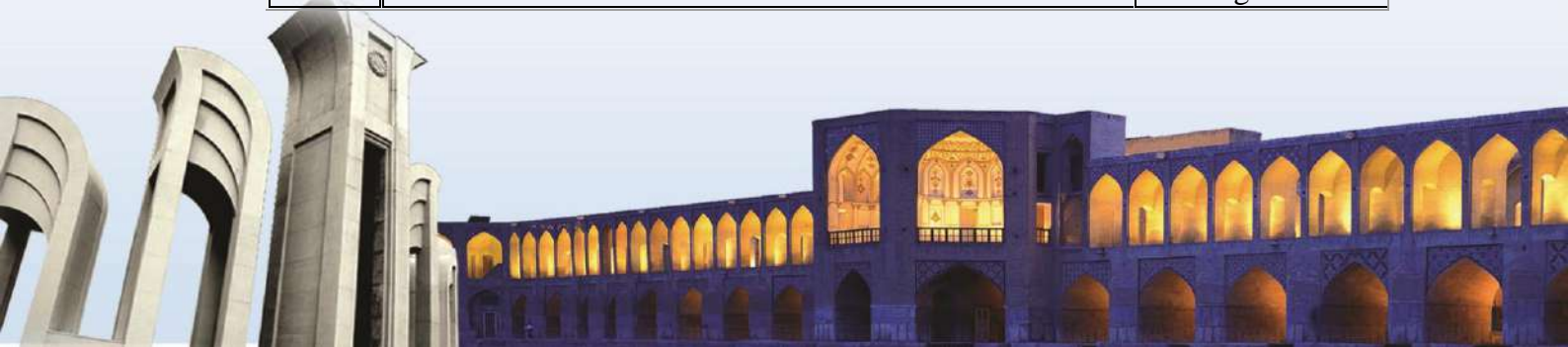
### Note:

Authors are requested to submit their Extended Abstract through the seminar website (<http://www.ispst.ir>) before submission deadline (23 July, 2022).

After accepting the article, you will be informed about the next steps.

### Presented Oral

A-10-2162-1	A novel epoxy/MXene nanocomposite adhesive in aluminum-aluminum bonded joints: Mechanical properties and lap shear strength	Adhesives, Paints and Coatings
A-10-2357-2	Synthesis of Hybrid Graphene-Based Filler as a Promising Filler to Alter the Hydrophobicity/Hydrophilicity of the Polymeric Coatings	Adhesives, Paints and Coatings
A-10-2334-1	Evaluation of Surface Energy for CPP Film Using the Lifshitz-van der Waals/ Acide-Base Method	Adhesives, Paints and Coatings
A-10-2094-3	Effect of silanized polyurethane content on adhesion properties of a polyurethane-acrylic hybrid adhesive	Adhesives, Paints and Coatings
A-10-2563-1	Viscoelastic Properties of a Zinc Oxide-Filled Acrylate Pressure Sensitive Adhesive	Adhesives, Paints and Coatings
A-10-2595-1	Evaluation of peel strength of a polyurethane/acrylic pressure-sensitive adhesive	Adhesives, Paints and Coatings





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A-10-2563-2	Zinc Oxide-Filled, Acrylate Pressure Sensitive Adhesive: Adhesion and Antibacterial Evaluations	Adhesives, Paints and Coatings
A-10-2453-2	Passenger Tire Tread Formulation Based On Silica/Carbon Black Hybrid Reinforcement System	Elastomers and Compounding Technologies
A-10-2041-1	Novel graphene oxide semi-IPN nanocomposite hydrogel based on partially hydrolyzed polyacrylamide: preparation, swelling properties and adsorption studies of cationic methylene blue dye from water	Fibers, Films and Polymeric Membranes
A-10-2276-1	Fabrication and characterization of L-Asparagine monohydrate functionalized-TiO <sub>2</sub> /PES nanofiltration membrane with enhanced antifouling properties in removal of dye pollution from water	Fibers, Films and Polymeric Membranes
A-10-2278-2	Synthesis and characterization of novel poly(sulfone urethane) based on urethane diol oligomer for membrane desalination	Fibers, Films and Polymeric Membranes
A-10-2079-1	Synthesis, characterization, and membrane desalination application of a novel poly(sulfone sulfide)	Fibers, Films and Polymeric Membranes
A-10-2079-2	Synthesis and characterization of novel high performance poly(sulfone-amid) alternative copolymers for water desalination membranes	Fibers, Films and Polymeric Membranes
A-10-2410-2	Preparation of PVDF-HFP Gel Polymer Electrolytes with Honey Comb-Like Morphology Structure for Lithium-Ion Battery Application	Fibers, Films and Polymeric Membranes
A-10-2509-1	surface modification of silica nano particles by graft polymerization of acrylamide and effect of the particles on the gas separation properties of Pebax membrane	Fibers, Films and Polymeric Membranes
A-10-2248-1	Synthesis and optimized electrospinning of oxidized carboxymethyl cellulose	Fibers, Films and Polymeric Membranes
A-10-2124-1	beaded superabsorbent hydrogels based on starch_g_poly(acrylic acid) assisted by cellulose nanofibers for cu ions removal	Green and Environmentally Sustainable Biopolymers
A-10-2186-1	Green Synthesis and characterization of micronization Polylactide foam (lactirofoam)	Green and Environmentally







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		Sustainable Biopolymers
A-10-2209-1	Quaternary ammonium containing polyhydroxyurethane-graft-poly( $\epsilon$ -caprolactone) nanofibers as an antibacterial wound dressing	Green and Environmentally Sustainable Biopolymers
A-10-2209-2	Hybrid Non-isocyanate polyurethane surface modified by gelatin as a wound dressing membrane	Green and Environmentally Sustainable Biopolymers
A-10-2277-2	Investigation of Thermal Behavior of Bulk-Aminolyzed PLA with PAMAM	Green and Environmentally Sustainable Biopolymers
A-10-2351-2	Investigating the effects of non-clay on polymeric edible coating based on psyllium mucilage	Green and Environmentally Sustainable Biopolymers
A-10-2107-2	Barrier properties of PLA/PBAT/Nanoclay Bionanocomposite films for food packaging	Green and Environmentally Sustainable Biopolymers
A-10-2489-1	Immobilization of Laccase Nanoflower in Polydopamine Biofilm for Biocathode Formation and Its Integration with Glucose Dehydrogenase Bioanode in a Membrane-free of Glucose/O <sub>2</sub> Biofuel Cell	Green and Environmentally Sustainable Biopolymers
A-10-2209-3	Preparation and evaluation of antibacterial PVA/Gelatin/NIPU wound dressing membranes containing Guanidine hydrochloride moieties	Green and Environmentally Sustainable Biopolymers
A-10-2320-1	Preparation and properties of biodegradable nanocomposite foams based on PLA/PBAT/Nanoclay	Green and Environmentally Sustainable Biopolymers
A-10-2360-2	Extraction of cellulose nanofibers from paper pulp using mechanical-chemical method	Green and Environmentally Sustainable Biopolymers





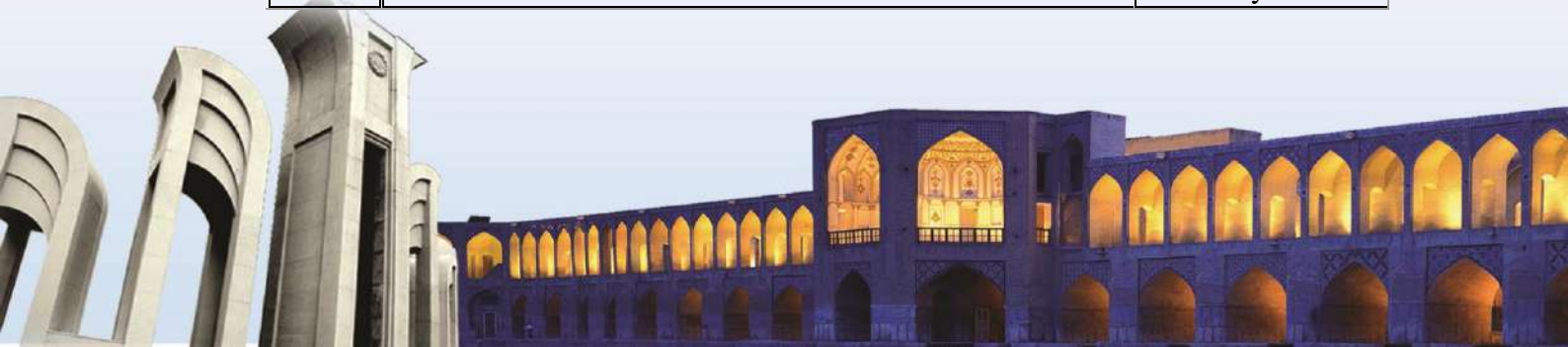
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A-10-2330-3	Oxidized lignin cross-linked O-carboxymethyl chitosan /aminosilane modified LDH for enhanced tetracycline removal	Green and Environmentally Sustainable Biopolymers
A-10-2277-3	Four different methods of acrylic acid grafting on PLA nonwoven for further layer-by-layer modification	Green and Environmentally Sustainable Biopolymers
A-10-2559-1	Analyzing the Swelling Behavior of Persian Gum-g-Polyvinyl Acetate Film Using Ternary Interaction Parameter	Green and Environmentally Sustainable Biopolymers
A-10-2566-1	Effect of Nano-clay incorporation on the mechanical properties of nanocomposite IPNs based on GelMA/Alginate/Nano-clay	Green and Environmentally Sustainable Biopolymers
A-10-2570-1	Printability of GelMA/Alginate IPN reinforced by COF for tissue engineering application	Green and Environmentally Sustainable Biopolymers
A-10-2347-1	Synthesis of reactive core-shell particles and their use in toughening of poly(lactic acid)	Green and Environmentally Sustainable Biopolymers
A-10-2559-2	Effect of Oxidant Concentration on Intrinsic Viscosity and Swelling Behavior of a Chemically Modified Persain Gum (PG) in Water	Green and Environmentally Sustainable Biopolymers
A-10-2346-1	Preparation and charecterisation of PLA/PBAT/pMDI blends suitable for food packaging	Green and Environmentally Sustainable Biopolymers
A-10-2641-1	Green starch composite films reinforced bysecond-generation bioethanol production byproduct	Green and Environmentally Sustainable Biopolymers
A-10-2058-1	Stabilizing Organized Surface Structures in Casting Solutions of Ionic Block Copolymer Membranes	Nano-structured Polymers and Smart Systems





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A-10-2265-1	Preparation of thermochromic polymer based on rhodamine B for development of anticounterfeiting inks	Nano-structured Polymers and Smart Systems
A-10-2322-2	Post-Polymerization Modification of Amide Functionalized Copolymer Nanaoparticles with Oxazolidine for Advanced Anticounterfeitng and Information Encryption	Nano-structured Polymers and Smart Systems
A-10-2379-1	Preparation of light-responsive nanofibrous polymers	Nano-structured Polymers and Smart Systems
A-10-2335-2	The Effect of Acrylic Based Ionomer Gel Microstructure and Electrolyte Type on the Volume Conductivity of Assembled Battery Separator	Nano-structured Polymers and Smart Systems
A-10-2335-3	Mono-size Polyisocynate nanoparticles as the interfacial crosslinker of WPU/Acrylic core-shell latexes to adhesively bond laminates	Nano-structured Polymers and Smart Systems
A-10-2483-1	Fluorescent Polymer Nanoparticles as High-Security Anti-counterfeiting Ink	Nano-structured Polymers and Smart Systems
A-10-2394-1	Visualization of Latent Fingerprints by Powder Dusting of Spiropyran Copolymer Nanoparticles	Nano-structured Polymers and Smart Systems
A-10-2065-1	An Environmentally Friendly Adsorbent Aerogel with Outstanding Mechanical Performance	Polymer Blends, Composites and Nano-composites
A-10-2125-1	Preparation and characterization of hybrid organic-inorganic nanoparticle/PVDF blends	Polymer Blends, Composites and Nano-composites
A-10-2231-1	Preparation and properties of co-continuous PC/PET/MWCNT/GNP engineering polymer blend nanocomposites	Polymer Blends, Composites and Nano-composites
A-10-2232-1	Investigating the effect of extruder die temperature on rheology-morphology relationship in polypropylene/polyethylene terephthalate blend	Polymer Blends, Composites and Nano-composites
A-10-2024-1	Significant enhancement of Thermal conductivity in epoxy filled ceramic fillers	Polymer Blends, Composites and Nano-composites





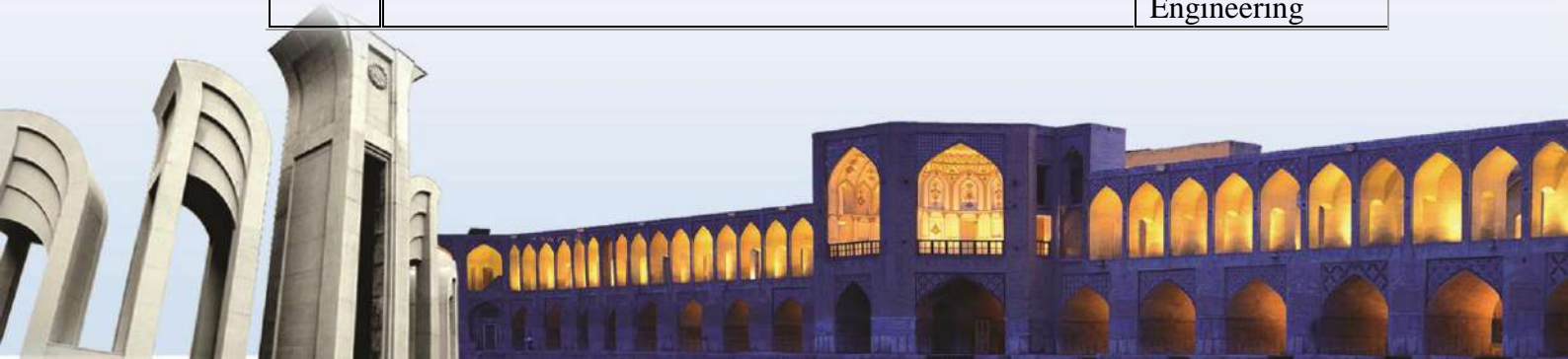
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A-10-2291-1	Effect of Initial Silica Content on the Phase Composition, Morphology, and Thermal Oxidation Kinetic of Novolac-based Carbon Aerogel Composites	Polymer Blends, Composites and Nano-composites
A-10-2299-1	Preparation of paraffin/CNT/PP aerogel composite as a new phase change material	Polymer Blends, Composites and Nano-composites
A-10-2399-1	Mechanical and rheological properties of Poly Lactic Acid (PLA) and Poly Butylene Succinate (PBS) nanocomposites incorporating cellulose nanocrystals	Polymer Blends, Composites and Nano-composites
A-10-2159-3	Calendering Process of Bio-based Kenaf/Low Density Polyethylene Composites Sheets	Polymer Blends, Composites and Nano-composites
A-10-2642-1	Conduction mechanism and dielectric properties of PP/EVA/MWCNTs nanocomposites in the presence of PP-g-MA comatiblizer	Polymer Blends, Composites and Nano-composites
A-10-2565-1	Effect of Modified Carbon Fiber on Shape Stability and Leakage Reduction of Phase Change Systems Based on Polyethylene Glycol	Polymer Blends, Composites and Nano-composites
A-10-2637-1	Morphological and rheological investigation of PP/PC/SBS/Clay nanocomposites	Polymer Blends, Composites and Nano-composites
A-10-2594-1	Polystyrene/Poly(lactic acid) Janus particles prepared by emulsion solvent evaporation method	Polymer Blends, Composites and Nano-composites
A-10-2730-1	The Effect of Wood Content and layer thickness on Tensile Properties of Wood Flour/ PLA Composites Fabricated by FDM	Polymer Blends, Composites and Nano-composites
A-10-2093-1	Antibacterial Nanobiocomposite Hydrogels Based on Polyphenolic Nanosheets Decorated with Ionic Liquid for Tissue Engineering	Polymer in Biomedical and Tissue Engineering
A-10-2128-1	Poly(ionic liquid) based Antibacterial Hydrogels for Wound Healing	Polymer in Biomedical and Tissue Engineering
A-10-2047-2	Investigating the influence of UHMWPE fibers as a toughening agent for PMMA in denture base	Polymer in Biomedical and Tissue Engineering





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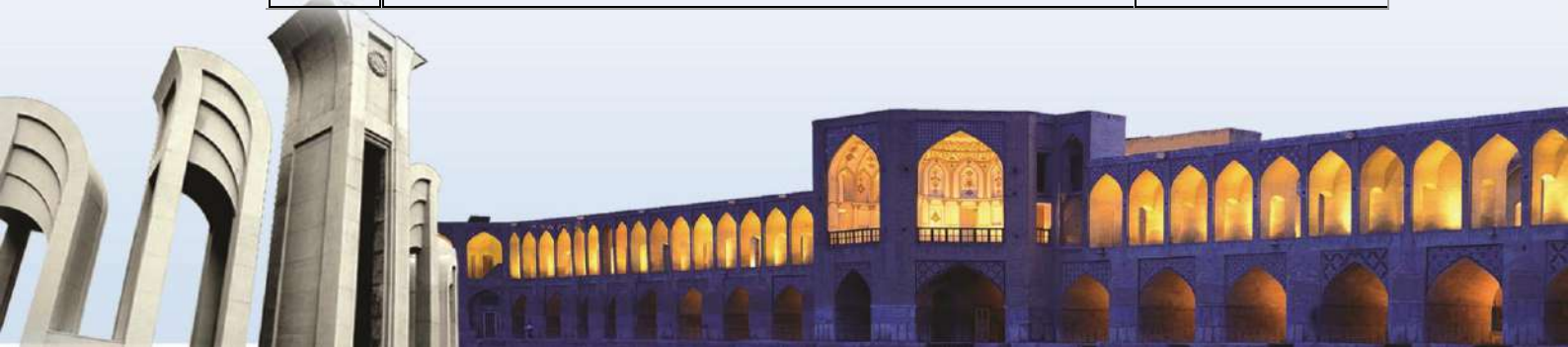
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A-10-2087-1	Fabrication of PLGA microcarriers with oxygen release capability for bone tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2204-2	Investigation of polymerization temperature profile of PMMA bone cement/nano-silica composite by infrared thermography	Polymer in Biomedical and Tissue Engineering
A-10-2071-1	The effect of hydroxypropyl cellulose presence on the morphology and physical properties of polyvinyl alcohol nanofibers	Polymer in Biomedical and Tissue Engineering
A-10-2569-1	Effect of modified graphene oxide nano-plate on mechanical properties of GelMA nanocomposite in tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2359-2	Fabrication of gelatin/ poly (vinyl alcohol)/ carboxymethyl cellulose composite nanofibrous sponge for hemostatic application	Polymer in Biomedical and Tissue Engineering
A-10-2309-1	Preparation of poly(L-lactic acid)/gelatin co-electrospun nanofibers as potential products for biomedical applications	Polymer in Biomedical and Tissue Engineering
A-10-2490-2	Investigation of the effect of chitosan on polyurethane bioadhesive based on castor oil	Polymer in Biomedical and Tissue Engineering
A-10-2292-1	Granular Hydrogels Composed of Modified Jammed Microgels For 3D Printing Applications	Polymer in Biomedical and Tissue Engineering
A-10-2516-1	Fabrication of nanofibrous Piezoactive bioscaffold based on PVDF-GO/PLLA nanocomposite by hybrid electrospinning method	Polymer in Biomedical and Tissue Engineering
A-10-2558-1	Introducing a nanocomposite transdermal patch: Adhesion and ketoprofen release	Polymer in Biomedical and





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		Tissue Engineering
A-10-2464-2	Mimicking Mechanical Behavior of Human Tissue with 3D Printable Elastomeric Hydrogel	Polymer in Biomedical and Tissue Engineering
A-10-2573-1	Click for bioprinting: Development of autonomous curable bioinks based on Diels-Alder click chemistry	Polymer in Biomedical and Tissue Engineering
A-10-2421-1	Three Dimensionally Culture of Sheep Preantral Follicles in a Thiolated Hyaluronic Acid Hydrogel	Polymer in Biomedical and Tissue Engineering
A-10-2102-1	Fabrication and characterization of 3D bio-printed electroconductive hydrogel scaffold based on Alginate and its application in cardiac tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2400-1	A Promising Success in the Full Regeneration of Critical-Size Bone Defects	Polymer in Biomedical and Tissue Engineering
A-10-2606-1	Rheological study of alginate-gelatin hydrogel for tissue engineering bioprinting	Polymer in Biomedical and Tissue Engineering
A-10-2273-2	The effect of the presence of Chondroitin sulfate on porosity and mechanical properties of enzymatically cross linked silk fibroin/ chondroitin sulfate hydrogel	Polymer in Biomedical and Tissue Engineering
A-10-2639-1	Interpenetrated network hydrogel based on GelMA/ alginate and nano SiO <sub>2</sub>	Polymer in Biomedical and Tissue Engineering
A-10-2132-1	Control of hydrogen response for Polypropylene Obtained by Ziegler-Natta Catalyst: Effect of External Donor	Polymer Synthesis and Polymerization





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A-10-2220-1	Supercooling suppression of microencapsulated phase change materials (mPCMs) with melamine formaldehyde shell by adding nucleating agent into the core material prior to encapsulation	Polymer Synthesis and Polymerization
A-10-2105-1	Enhanced CO <sub>2</sub> capture on nitrogen-doped porous carbon materials derived from phenolic resins based on deep eutectic solvent precursor	Polymer Synthesis and Polymerization
A-10-2254-1	Preparation and characterization of photochromic polymer nanoparticles for the development of highly efficient anticounterfeiting nanoinks	Polymer Synthesis and Polymerization
A-10-2074-1	Synthesis of nanocellulose functionalized with pH-sensitive polymer to remove methylene blue from wastewater	Polymer Synthesis and Polymerization
A-10-2258-1	Preparation of core-shell acrylonitrile-styrene-acrylate impact modifier particles through seeded emulsion polymerization	Polymer Synthesis and Polymerization
A-10-2286-2	Synthesis of Water-Soluble Sulfonated Polyaniline (SPANI) and Investigation of Its Effect on the Short-Circuit Current in the Perovskite Solar Cells	Polymer Synthesis and Polymerization
A-10-2076-2	Surface Engineering of Reduced Graphene Oxide by Grafting Poly(butyl acrylate) chains for Use in Dielectric Polymer Nano-Composites	Polymer Synthesis and Polymerization
A-10-2369-1	Preparation of Polystyrene Microparticles by on-chip UV-Polymerization through Microfluidic Channels	Polymer Synthesis and Polymerization
A-10-2318-1	Experimental Investigation on Morphological Characteristics and Stability of Poly(vinyl chloride) Microspheres by Microsuspension Polymerization	Polymer Synthesis and Polymerization
A-10-2407-1	Cellulose-based recyclable polymer electrolytes	Polymer Synthesis and Polymerization
A-10-2403-2	Investigation of effective parameters on cloud point of poly(acrylamide-co-acrylonitrile) in aqueous solutions	Polymer Synthesis and Polymerization
A-10-2566-2	Synthesising Iron Oxide@Silica@Gelatin Nanoparticles	Polymer Synthesis and Polymerization





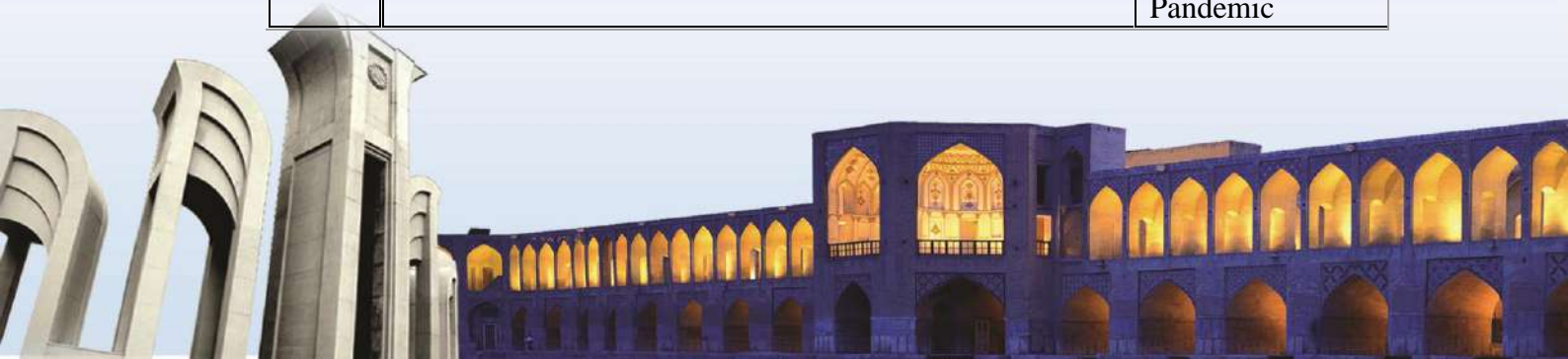
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A-10-2419-1	Polyurethane Rigid Foam Synthesis Using Response Surface Methodology(RSM); Morphological Study	Polymer Synthesis and Polymerization
A-10-2398-1	Synthesis and characterization of poly(aniline-co-carbazole)@Fe <sub>3</sub> O <sub>4</sub> magnetic nanocomposite for X-band microwave shielding application	Polymer Synthesis and Polymerization
A-10-2492-3	Synthesis and characterization of 2D layered Cu-pPDA coordination polymer	Polymer Synthesis and Polymerization
A-10-2530-1	Synthesis of imidazolium-based polymeric ionic liquid as supercapacitor active material	Polymer Synthesis and Polymerization
A-10-2538-1	Stimuli-Responsive PAMAM Dendritic Macromolecules for Optical Detection of Food Spoilage	Polymer Synthesis and Polymerization
A-10-2562-1	Water absorption and thermal stability of waterborne polyurethaneacrylate/nanoclay films	Polymer Synthesis and Polymerization
A-10-2592-1	Synthesis of novel triazole-based poly vinyl imidazolium Ionic liquid for demulsification of water in crude oil emulsions	Polymer Synthesis and Polymerization
A-10-2593-1	Kinetic study of Butyl Acrylate Solution Polymerization at High Temperature	Polymer Synthesis and Polymerization
A-10-2508-3	Titanium-Silasequioxane Coordination Compound as a Heterogeneous, Thermally Stable Catalyst: Synthesis and Characterization	Polymer Synthesis and Polymerization
A-10-2572-1	Ethylene-Propylene copolymerization using Et(Ind) <sub>2</sub> ZrCl <sub>2</sub> metallocene catalyst: Synthesis and Microstructure Analysis	Polymer Synthesis and Polymerization
A-10-2039-2	Monitoring the effect of initiator, stabilizer, and water/alcohol medium on the conversion of synthesized polystyrene by dispersion polymerization method by Design Expert software	Polymer Synthesis and Polymerization
A-10-2084-1	Electrospinning of Polyhydroxybutyrate/Lignin/Cellulose-nanofibers Bio-nanocomposite Scaffold for Bone Tissue Engineering Application	Polymeric Materials for Medical Care in the COVID-19 Pandemic







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A-10-2241-1	The potential of PIM-1/nano silver air separation membranes application in the production of the face masks in the COVID-19 pandemic	Polymeric Materials for Medical Care in the COVID-19 Pandemic
A-10-2066-4	Rheological behavior of poly(lactic acid)/ silicon rubber/ Silicon Modified Graphene Oxide	Rheology and Polymer Processing
A-10-2257-2	Pitch Mesophase Common Rheological Behaviors	Rheology and Polymer Processing
A-10-2030-1	The solid state rheological investigation of core-shell impact modifier nanoparticles efficacy: 3-D networking	Rheology and Polymer Processing
A-10-2352-1	The rheological characterization of different concentrations of bacteria in the polymer solution	Rheology and Polymer Processing
A-10-2481-1	Modification of Polypropylene-graft-Maleic Anhydride with Epoxy by Reactive Extrusion for Preparation of High-Melt-Strength Polypropylene	Rheology and Polymer Processing
A-10-2501-1	Studying Rheology of the FENE-P Chains Using a Micro-Macro Approach	Rheology and Polymer Processing
A-10-2564-1	Influence of molecular weight, molecular weight distribution, random and impact co-polymerization on the rheological behavior of polypropylene	Rheology and Polymer Processing
A-10-2539-2	Chemorheological Characterization of HTPB Based Polyurethane Formulations Containing Different Chain Extender Contents	Rheology and Polymer Processing
A-10-2263-1	Simulation of Rubber Hose Curing	Simulation and Modeling of Polymeric System
A-10-2219-1	The Abnormal Analysis of Number Average Molecular Weight of Sulfonated Melamine Formaldehyde (SMF)	Simulation and Modeling of Polymeric System





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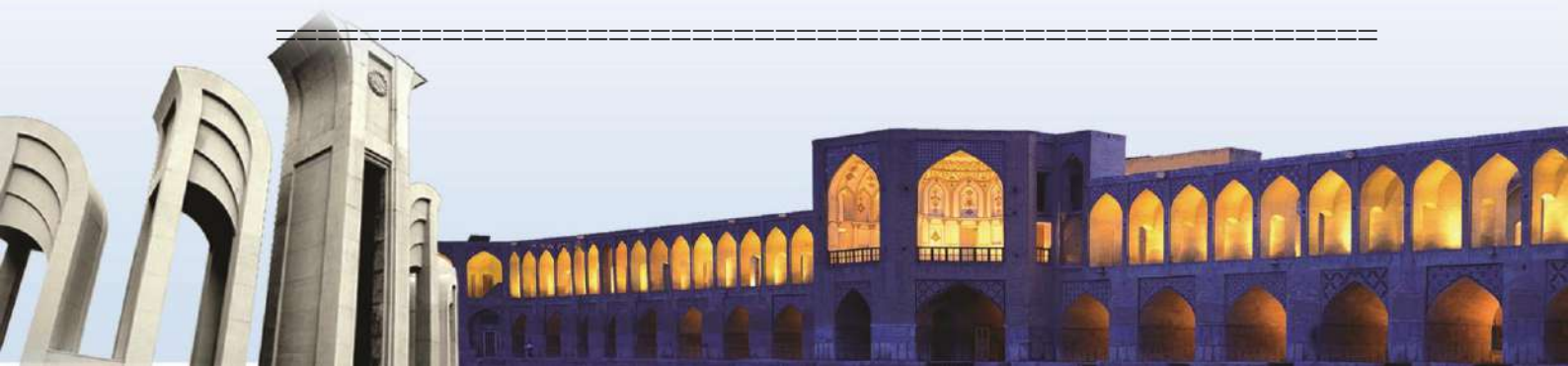
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A-10-2138-1	New Protocol For Modeling of Thermal Degradation Kinetics of Epoxy Nanocomposites	Simulation and Modeling of Polymeric System
A-10-2257-1	Modeling and Temperature Control of Isocyanate-Water Side Reactions	Simulation and Modeling of Polymeric System
A-10-2453-1	Multiscale Modeling Approach to Predict the Mechanical Behavior of elastomer nanocomposites	Simulation and Modeling of Polymeric System
A-10-2336-1	The Effect of Bulk Acoustic Waves on Glass Bead Dispersion Inside The 3D Prinint Resin Materials	Simulation and Modeling of Polymeric System
A-10-2525-1	A novel approach for synthesis of zwitterionic polyurethane coatings through molecular dynamics simulation study	Simulation and Modeling of Polymeric System
A-10-2510-2	Space State Temperature Control of poly(butylene succinate) esterification reactions	Simulation and Modeling of Polymeric System
A-10-2659-1	Numerical Study on The Effect of The viscosity on The Pinch-Off Behavior of The Droplet in Drop Formation Process	Simulation and Modeling of Polymeric System
A-10-2662-1	The Origin of Charge Transport Synergism in the Hybrid of Geometrically Anisotropic and Conductive Nanoparticles: A Monte Carlo Simulation Study	Simulation and Modeling of Polymeric System
A-10-2418-2	Oxygen permeation rate through PBAT: a molecular dynamics simulation	Simulation and Modeling of Polymeric System





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Poster

[Poster Information](#)





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- Poster display is 90 cm tall by 60 cm wide, which is known as "Portrait" format – see [Poster Presentations Layout](#)
- You should prepare the poster in English and use the [Poster Template](#) for more uniformity.
- The title should be about 40 cm long in bold font.
- Limit the number of font types
- The following sections should be included in your poster:

- Title, authors and their Institutions.
- Abstracts
- Introduction
- Experimental
- Result and discussion
- Conclusion
- References
- Tables and figures

### Notes:

1. The poster must be placed in the allocated [panel](#) by the own presenter on November 8, 2022.
2. All posters will be presented within the seminar days 8-10 November.

### Presented Posters

A-10-2041-2	Various co-polymers of MBA-poly(N-vinyl-2-pyrrolidone) macromolecular coordination complex as a novel and recyclable Lewis acid catalyst: synthesis, characterization, and performance towards well-know organic reaction	Adhesives, Paints and Coatings
A-10-2052-1	The Effect of Crosslinker on Glass Transition Temperature and Crystallinity During Synthesis of Liquid Crystalline Elastomers	Adhesives, Paints and Coatings
A-10-2062-1	Synthesis and Curing of Thermoset Bismaleimide Resin Based on Epon 828 Epoxy Resin	Adhesives, Paints and Coatings





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A-10-2029-1	Monitoring the Curing Process of Bismaleimide / Epoxy Blend by FT-IR Spectroscopy	Adhesives, Paints and Coatings
A-10-2044-1	Synthesis and characterization of corrosion resistance and superhydrophobic fluorine-based coating via sol-gel process	Adhesives, Paints and Coatings
A-10-2113-1	Emulsion Copolymerization of Acrylic Monomers to Prepare Pressure Sensitives Adhesive (PSA): Effect of Triethylamine (TEA) as an Adhesion Promoter on Mechanical Properties	Adhesives, Paints and Coatings
A-10-2088-1	Investigation Rate Constant of isocyanate blocking reaction as coupling agent	Adhesives, Paints and Coatings
A-10-2036-2	Prediction of TDI-Based Polyaspartic Polyurea's Abrasion Resistance	Adhesives, Paints and Coatings
A-10-2141-1	Development of a two-part acrylic adhesive with high thermal resistance	Adhesives, Paints and Coatings
A-10-2112-1	Synthesis of an Eco-friendly multifunctional fluorinated urethane-acrylate resin as a promising UV-cured coating for anticorrosive applications	Adhesives, Paints and Coatings
A-10-2195-1	Investigation of substitute extenders of titanium dioxide by Barium sulfate and Aluminum silicate in order to use in rezins coatings	Adhesives, Paints and Coatings
A-10-2121-1	Effect of Graphite Oxide on Hydrophobicity of Epoxy Resin Coatings	Adhesives, Paints and Coatings
A-10-	Hydrophobicity Achievement of Polyurethane Coating Using Nano-Silica and Teflon Powders	Adhesives, Paints and Coatings





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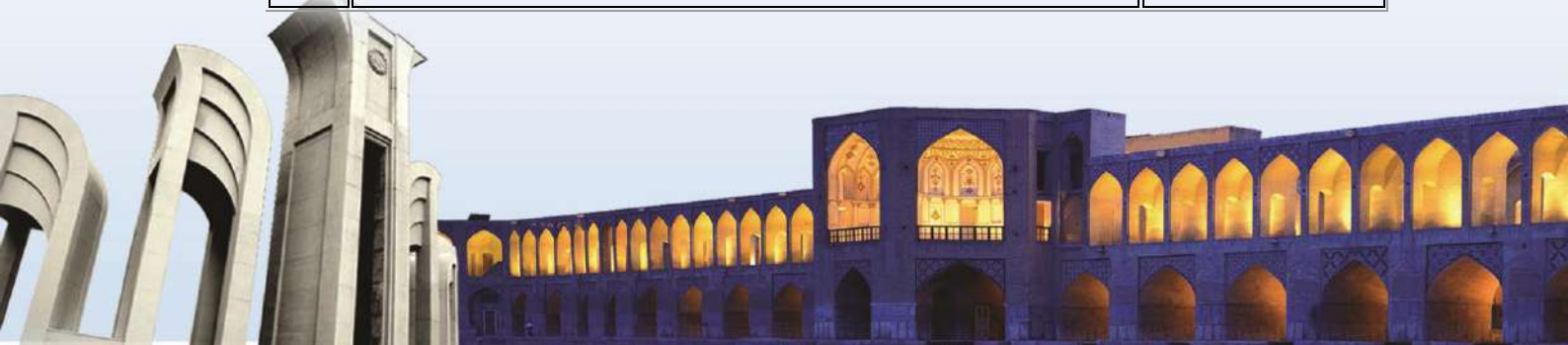
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2235 -1		
A-10-2205 -2	Improving the anti-corrosion performance of hydroxyapatite-based coating in the presence of an organic modifier	Adhesives, Paints and Coatings
A-10-2112 -2	Preparation of self-healing and anticorrosive epoxy coatings loaded with various inhibitor doped PANI nanofibers	Adhesives, Paints and Coatings
A-10-2357 -1	The effect of graphene quantum dots on the stability of graphene-based conductive inks	Adhesives, Paints and Coatings
A-10-2357 -3	Preparation and Evaluation of Water-in-Soybean Oil Emulsions	Adhesives, Paints and Coatings
A-10-2364 -1	Synthesis of a novel bisphotochromic dye based on 1,3-Diazabicyclo[3.1.0]hex-3-ene	Adhesives, Paints and Coatings
A-10-2367 -1	Eco-friendly UV-cured AMPS doped polyaniline-urethane methacrylate coating as a corrosion protection coating	Adhesives, Paints and Coatings
A-10-2094 -2	Adhesion properties of a polyurethane-acrylic hybrid adhesive synthesized through modification of polyol with a silane coupling agent	Adhesives, Paints and Coatings
A-10-2409 -1	The effect of PVP Molecular weight and Synthesis Temperature on Silver Nanowire Morphology	Adhesives, Paints and Coatings
A-10-2468 -1	Synthesis of the uv curable anticounterfeiting ink based on waterbased urethane acrylate resin, modified with Rhodamin B	Adhesives, Paints and Coatings





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A-10-2498-1	Synthesis and evaluation of optical and adhesion properties of a fluorescent pressure-sensitive adhesive	Adhesives, Paints and Coatings
A-10-2391-1	CO <sub>2</sub> adsorption of PET fabric coated with graphene oxide	Adhesives, Paints and Coatings
A-10-2519-1	Synthesis of water-based acrylic resin modified with epoxy resin to improve printability properties of coatings on PVC substrate	Adhesives, Paints and Coatings
A-10-2532-1	Synthesis, characterization and properties of UV cured and UV resistant polyurethane acrylate nano-composite coatings, modified by ZnO-based nanoparticles and Tinuvin 292	Adhesives, Paints and Coatings
A-10-2548-1	Synthesis of three novel silane-based carboxylic acids for application in methacrylated epoxy-based oligomers and their ability in the UV curable hybrid coatings	Adhesives, Paints and Coatings
A-10-2579-1	Studying the effect of changing the amino number of curing agent on the properties of antifouling coating of E-PVC reactors in Arvand petrochemical complex	Adhesives, Paints and Coatings
A-10-2522-2	A Comparative study on adhesion properties of polyurethane hot-melt adhesives, including C5 and C9 hydrocarbon tackifiers	Adhesives, Paints and Coatings
A-10-2601-1	Preparation of a Magneto-Responsive Acrylic Pressure-Sensitive Adhesive	Adhesives, Paints and Coatings
A-10-2063-1	Investigation of the Effect of Mixing Time and Speed on the Glass Transition Temperature of Tire Tread Filled with Nanoparticles	Elastomers and Compounding Technologies





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A-10-2054-1	Preparation of Elastomeric Sound Absorber Flexible Thin sheets via Devulcanized Tire Wastes	Elastomers and Compounding Technologies
A-10-2066-3	Graphene Oxide/Silicon Rubber/PLA as a Conductive Thermoplastic Vulcanizates	Elastomers and Compounding Technologies
A-10-2228-3	Chemical and Mechanical Assessment of Peroxide Cured EPDM for Fuel Cell Gasket Application	Elastomers and Compounding Technologies
A-10-2250-1	The Effect of Fumed Silica and ATH on the Vulcanization and Mechanical Properties of Silicone Rubber	Elastomers and Compounding Technologies
A-10-2247-2	Effect of water infiltration rate on mechanical properties of heat-treated crumb rubber containing cementitious mortar	Elastomers and Compounding Technologies
A-10-2298-1	Analyzing the Role of Interface in Creep Resistance of Natural Rubber-Silica Composites	Elastomers and Compounding Technologies
A-10-2261-1	Influence of Molecular Microstructure of Solution-polymerized Styrene-butadiene Rubber Types on Vulcanization Kinetics	Elastomers and Compounding Technologies
A-10-2316-1	Comparison the Effect of OPS vs. MWCNT on Mechanical and Ablation Behavior of EPDM Nanocomposites	Elastomers and Compounding Technologies
A-10-2301-1	How Does Modification of interface by a Long Chain Silane Alter Gas Transport in NBR/Silica Composites?	Elastomers and Compounding Technologies







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A-10-2284-1	Effect of Reduced Graphene Oxide on Cure Kinetics of Polydimethylsiloxane	Elastomers and Compounding Technologies
A-10-2301-2	Investigating the Impact of Bound Rubber on Cavitation Resistance of Silica-Reinforced NBR Composites	Elastomers and Compounding Technologies
A-10-2315-1	Curing characteristics and mechanical properties of (styrene butadiene rubber /ethylene propylene diene monomer)blend in the presence of a hybride of carbon black and nanocalay	Elastomers and Compounding Technologies
A-10-2494-1	Effects of recycled nanosilica on the cure properties and wear resistance of the green tire	Elastomers and Compounding Technologies
A-10-2185-1	Studying the microstructures of Hydroxyl-terminated polybutadiene and Hydrobrominated Hydroxyl-terminated polybutadiene using NMR analysis	Elastomers and Compounding Technologies
A-10-2162-2	Elastomeric nanocomposite based on SR/ IIR/ Silica Nanoparticles(SiNP): Design, preparation and characterization	Elastomers and Compounding Technologies
A-10-2496-1	Compatibility Study and Mechanical Properties of Nitrile rubber/Ethylene- Propylene-Diene Rubber Blends	Elastomers and Compounding Technologies
A-10-2517-1	Self healable Diels-Alder Crosslinked Polyurethane Elastomers Based on Furane Modified Calix[4]arene	Elastomers and Compounding Technologies
A-10-2578-2	Silicone Rubber Compounds as Sealant for Polymer Fuel Cells: A Study of Curing systems and Nanoparticle Properties	Elastomers and Compounding Technologies





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A-10-2274-1	The Effect of Chopped Carbon Fiber on Ablative Behaviour of EPDM Based Elastomeric Insulation	Elastomers and Compounding Technologies
A-10-2487-1	The role of carbon black as the secondary filler in improving non-linear viscoelastice behavior of styrene-butadiene rubber compound filled with modified silica	Elastomers and Compounding Technologies
A-10-2608-1	Effect of Secondary to Primary Accelerator Ratio on Curing, Mechanical and Ablation Behavior of Elastomeric Composite Based on EPDM	Elastomers and Compounding Technologies
A-10-2724-1	Curing haracteristics and mechanical properties of NR/CR/SBS blends	Elastomers and Compounding Technologies
A-10-2047-1	Investigating the properties of Teflon nanocoatings containing Zinc nanoparticles on the steel surface	Fibers, Films and Polymeric Membranes
A-10-2126-1	TFC organic solvent nanofiltration membrane fabricated by a novel HDPE membrane support covered by manganese dioxide /Tannic acid-Fe (III) layers	Fibers, Films and Polymeric Membranes
A-10-2137-1	Preparation of Polyvinyl pyrrolidone (PVP)/carboxymethyl starch (CMS) hydrogel for excellent absorption of wound secretions	Fibers, Films and Polymeric Membranes
A-10-2125-3	Sulfonated Aromatic Polymers and Organically Modified Montmorillonite Nanocomposite Membranes for Fuel Cells Applications	Fibers, Films and Polymeric Membranes
A-10-2115-1	Fabrication of electrospun polyvinylalcohol nanofiber containing Ferula assa-foetida gum extract and investigating its antibacterial properties	Fibers, Films and Polymeric Membranes





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A-10-2228-4	Polyelectrolyte Membrane Based on Chitosan Blend for Direct Methanol Fuel Cell Application	Fibers, Films and Polymeric Membranes
A-10-2228-5	Investigating The Effect of Imidazole on Electrochemical Properties of Sulfonated Polystyrene Membrane for Direct Methanol Fuel Cell Application	Fibers, Films and Polymeric Membranes
A-10-2249-1	Investigating the Effect of Silica Nanoparticles Modified by Dendrimer on Performance of Polycarbonate Thin Film Nanocomposite Membranes in Submerged Membrane Systems for Waste Water Treatment	Fibers, Films and Polymeric Membranes
A-10-2249-2	Amino functionalized ZnO nanoparticles were incorporated to a polycarbonate/polyvinyl alcohol thin film membrane to improve water treatment	Fibers, Films and Polymeric Membranes
A-10-2267-2	Study on the Effect of Processing Parameters and LLDPE Concentration on the Haze of LDPE/LLDPE Blown Films	Fibers, Films and Polymeric Membranes
A-10-2276-2	Dye rejection by nanofiltration membrane based on polysulfone and bohemite particles modified with lysine	Fibers, Films and Polymeric Membranes
A-10-2276-3	Fabrication and modification of PVDF mixed matrix ultrafiltration membranes by PEG and PVP hydrophilic polymers	Fibers, Films and Polymeric Membranes
A-10-2280-2	In situ green synthesis of copper nanoparticles on nylon with Safflower extract	Fibers, Films and Polymeric Membranes
A-10-2216-1	Fabrication and Characterization of High Modulus Composites as End Plate for Polymer Electrolyte Membrane Fuel Cell Application	Fibers, Films and Polymeric Membranes





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A-10-2068-2	Electrospinning of polymer solutions containing silica-poly (caprolactone)	Fibers, Films and Polymeric Membranes
A-10-2456-1	The synergetic antibacterial effects of amine terminated dendritic groups/ cationic gemini surfactant on cotton goods	Fibers, Films and Polymeric Membranes
A-10-2237-3	Investigating electrospinning conditions on the mechanical properties of polyamid (PA) fibers	Fibers, Films and Polymeric Membranes
A-10-2344-1	Hydrazone-linked covalent organic framework@PSf/PVP mixed matrixed membrane: A new approach to dye wastewater purification	Fibers, Films and Polymeric Membranes
A-10-2473-2	Fabrication and characterization of Polyvinylidene Fluoride Nanofiltration Membrane for Wastewater Treatment	Fibers, Films and Polymeric Membranes
A-10-2378-1	Polyurethane / cellulose /activated carbon nanocomposite membranes for removal of methylene blue from water	Fibers, Films and Polymeric Membranes
A-10-2416-1	Surface Modification of Polypropylene Hollow Fiber Ultrafiltration Membrane by plasma and polyethylene glycol	Fibers, Films and Polymeric Membranes
A-10-2414-1	Investigation of solvent system Effect on alginate sulfate/polyvinyl alcohol electrospun nanofibers	Fibers, Films and Polymeric Membranes
A-10-2390-2	Using polyaniline/montmorillonite adsorbent nanocomposite to remove tannic acid pollutant from water environment	Fibers, Films and Polymeric Membranes





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A-10-2480-1	Preparation and Properties of Blend Membranes of Highly Sulfonated Polysulfone/Fully Fluorinated Poly(Aryl Ether) for Proton Exchange Membrane Fuel Cell Application	Fibers, Films and Polymeric Membranes
A-10-2480-2	Effect of Sulfonation Degree and Thermal Treatment on the Stability and Proton Conductivity of Blend Membranes of Highly Sulfonated Polysulfone/Fully Fluorinated Poly(Aryl Ether) for Fuel Cell Application	Fibers, Films and Polymeric Membranes
A-10-2480-3	Preparation and Properties of Polycarbonate/ Polysulfone Blend Membranes for Potential Application in Water Treatment	Fibers, Films and Polymeric Membranes
A-10-2122-1	Design and Characterization of Electrospun PVDF Nanofibers Containing Graphene Oxide/Metal-Organic Framework Composites for Potential Piezoelectric Applications	Fibers, Films and Polymeric Membranes
A-10-2109-1	Application of PNANI/MWCNT/Cu Nanofibrous Electrode in Detection of Nitrate Ions	Fibers, Films and Polymeric Membranes
A-10-2106-1	Synthesis of thermoplastic polyurethane membranes with different molar ratios and investigation of their CO <sub>2</sub> /N <sub>2</sub> /H <sub>2</sub> gases permeability	Fibers, Films and Polymeric Membranes
A-10-2378-2	Polyurethane / cellulose /activated carbon nanocomposite membranes for removal of basic violet 16 from water	Fibers, Films and Polymeric Membranes
A-10-2523-1	Fabrication of Zirconium Oxide Complex Bridged by Terephthalic Ligands (UIO66)-PVDF Mixed Matrix Membrane for Lithium Ion Battery Separator	Fibers, Films and Polymeric Membranes
A-10-2576-1	The effect of Mg-Al layered double hydroxide nanoparticles on the performance of polycarbonate membranes in water treatment	Fibers, Films and Polymeric Membranes





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A-10-2591-1	Preparation of hydrogel nanofibers of lignin through electrospinning	Fibers, Films and Polymeric Membranes
A-10-2162-3	Evaluation of Electrolyte role on the Surface Properties of Synthetic Fiber by a Chemical Process	Fibers, Films and Polymeric Membranes
A-10-2618-1	Investigating the effect of Cu nanoparticles on the absorption of basic dyes on PAN nanofibers	Fibers, Films and Polymeric Membranes
A-10-2557-1	Preparation of micro-nano structure from polyacrylonitrile (PAN) by electrospun and selective removal	Fibers, Films and Polymeric Membranes
A-10-2638-1	Surface modification of Poly Ether Block Amide membrane – The Role of amine compounds in carbon dioxide gas separation properties	Fibers, Films and Polymeric Membranes
A-10-2638-2	Study of Surface Modification of Pebax-2533 Membrane by Mediocrity-Sized Amine Compounds on CO <sub>2</sub> Gas Separation Properties	Fibers, Films and Polymeric Membranes
A-10-2523-2	Zeolitic imidazolate frameworks (Zif 67) Mixed Matric Membrane in CO <sub>2</sub> Separation: Fabrication and Permeability Study	Fibers, Films and Polymeric Membranes
A-10-2734-1	Flexible cation exchange membrane based on modified K-Carrageenan/PVA double network hydrogel with high ionic conductivity	Fibers, Films and Polymeric Membranes
A-10-2035-1	Mimicked Tri-layer Scaffold for Chemo-Photothermal Therapy of Breast Cancer Cells	Green and Environmentally Sustainable Biopolymers





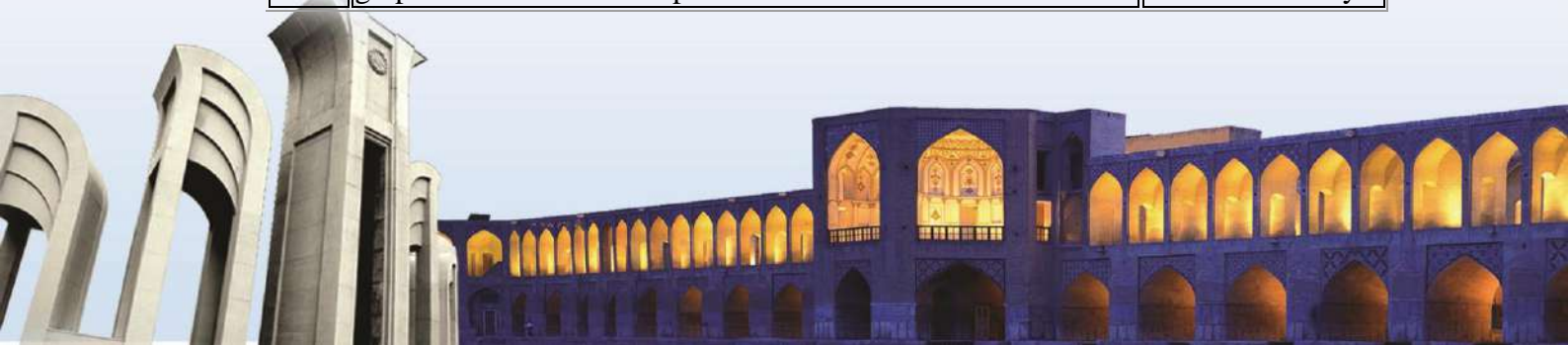
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A-10-2096-1	Accelerated wound healing through a Poly-vinyl alcohol/chitosan/honey/clay nanocomposite hydrogel wound dressing	Green and Environmentally Sustainable Biopolymers
A-10-2110-1	Toughness enhancement of Poly(lactic) acid as a biopolymer by the use of Polybutadiene rubber	Green and Environmentally Sustainable Biopolymers
A-10-2035-2	Chemo-Phototherapy of Breast Cancer Cells by Dopamine Nanoparticles Embedded in Alginate Hydrogels	Green and Environmentally Sustainable Biopolymers
A-10-2107-1	LLDPE/Cellulose Microfiber/Nanoclay Nanocomposites Based on Insitu Intercalated Nanoclay	Green and Environmentally Sustainable Biopolymers
A-10-2049-1	Environmental aspects of using seawater-based polymer systems in improving water-based drilling fluids properties	Green and Environmentally Sustainable Biopolymers
A-10-2617-2	The effect of eggshell powder on biodegradability and permeation of PLA Films	Green and Environmentally Sustainable Biopolymers
A-10-2280-1	The green synthesis of silver nanoparticles on cotton fabrics by Henna leaves extract	Green and Environmentally Sustainable Biopolymers
A-10-2107-3	Morphological and mechanical properties of PLA/PBAT/Nanoclay Bionanocomposite films for food packaging	Green and Environmentally Sustainable Biopolymers
A-10-2362-1	Alginate/citric acid-sawdust/Fe <sub>3</sub> O <sub>4</sub> bio-adsorbent for malachite green removal from aquatic solutions	Green and Environmentally Sustainable Biopolymers
A-10-	Investigation on mechanical properties of basil seed gum/graphene oxide nanocomposite	Green and Environmentally





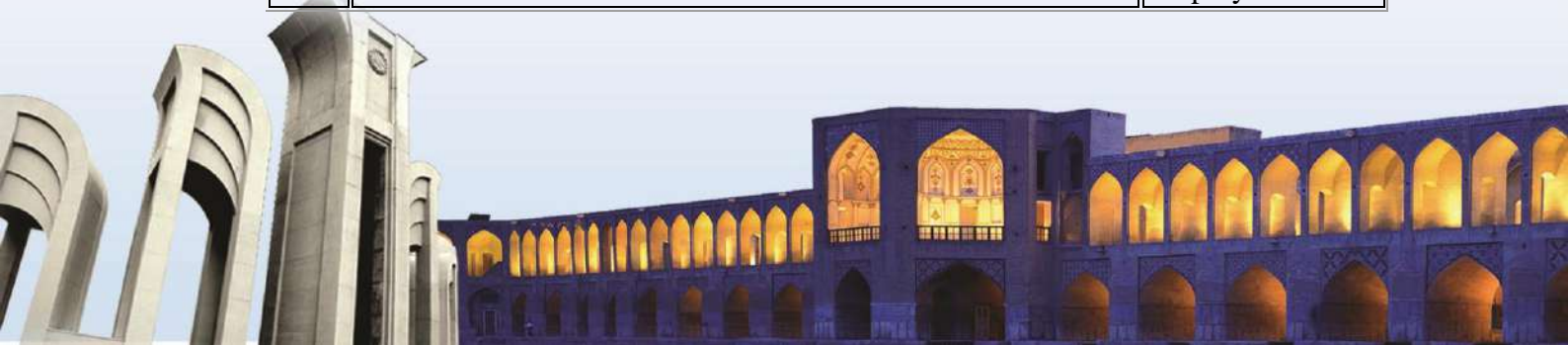
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2283 -1		Sustainable Biopolymers
A- 10- 2283 -2	Hybridization of graphene oxide with tragacanth gum to diminish its cytotoxicity effect	Green and Environmentally Sustainable Biopolymers
A- 10- 2392 -1	Investigation of the microstructure, mechanical properties, biodegradability of nanocomposites of PCL/GO-ZnO	Green and Environmentally Sustainable Biopolymers
A- 10- 2297 -1	Fabrication of Alginate-carboxymethyl cellulose blend beads via Titanium(IV) oxide/Covalent organic frameworks hybrids under ultrasonic irradiation	Green and Environmentally Sustainable Biopolymers
A- 10- 2142 -2	Production of biodegradable polylactic acid polymer from agricultural waste	Green and Environmentally Sustainable Biopolymers
A- 10- 2476 -1	Effect of PLA on tensile properties of soft PVC	Green and Environmentally Sustainable Biopolymers
A- 10- 2472 -2	Synthesis of green magnetic biopolymer tannin gel in the simultaneous removal of Malachite green and Sunset Yellow dyes	Green and Environmentally Sustainable Biopolymers
A- 10- 2545 -1	Manufacturing and Characterizing of Interpenetrating Polymer Network Films Based on Carboxymethyl Cellulose and Tetraethylorthosilicate	Green and Environmentally Sustainable Biopolymers
A- 10- 2646 -1	An assessment on morphological and thermal properties of the poly (lactic acid)/poly (butylene adipate-co-terephthalate) films with chain extender	Green and Environmentally Sustainable Biopolymers
A- 10- 2463 -3	Effects of Lauroyl Peroxide on Structural Modification and Physical Properties of Polylactic Acid	Green and Environmentally Sustainable Biopolymers







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A-10-2513-1	Preparation and properties of biodegradable PLA/PBAT/Nanoclay nanocomposite	Green and Environmentally Sustainable Biopolymers
A-10-2052-3	Performance evaluation of clarithromycin-loaded poly ( $\epsilon$ -caprolactone) nanoparticles: A comparison between microfluidic and bulk mixing methods	Nano-structured Polymers and Smart Systems
A-10-2021-1	Transparent film heater based on silver nanowires	Nano-structured Polymers and Smart Systems
A-10-2052-4	Preparation and characterization of propargylated electrospun cellulose acetate nanofibers as precursor for click chemistry	Nano-structured Polymers and Smart Systems
A-10-2044-2	Chitosan-based Microneedle Patches containing Insulin-Cyclodextrin for Sustained Transdermal Delivery	Nano-structured Polymers and Smart Systems
A-10-2044-3	Synthesis and Characterization PVA Electro-Spun Nanofibers Containing Encapsulated Vitamin C in Chitosan Microspheres	Nano-structured Polymers and Smart Systems
A-10-2131-1	Preparation of thermoswitchable chromic nanocapsules containing leuco-dye via miniemulsion polymerization	Nano-structured Polymers and Smart Systems
A-10-2131-2	Thermo- and photo-switchable nanocapsules containing leuco-dye mixture and spiropyran	Nano-structured Polymers and Smart Systems
A-10-2201-1	Covalent triazine-based framework as a pH-dependent sustained-release nanocarrier for anticancer drug	Nano-structured Polymers and Smart Systems





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A-10-2049-3	A comparative review of the performance of different nanopolymers in improving the properties of drilling fluids	Nano-structured Polymers and Smart Systems
A-10-2269-1	Synthesis of organo-soluble gold nanoparticles on poly(N,N-dimethyl aminoethyl methacrylate)	Nano-structured Polymers and Smart Systems
A-10-2272-1	Superhydrophobic polyurethane foams coated with Fluorobutanol modified rGO nanosheets for effective continuous oil-water separation	Nano-structured Polymers and Smart Systems
A-10-2279-1	Effects of polarity and functionality on optical properties of fluorescent polymer nanocarriers	Nano-structured Polymers and Smart Systems
A-10-2256-1	Development of pH sensing light-responsive polymer nanoparticles	Nano-structured Polymers and Smart Systems
A-10-2302-1	Polyaniline nanoparticles suspension: Ion exchange behavior	Nano-structured Polymers and Smart Systems
A-10-2056-1	Effect of the Structure of Activated Carbon on the Absorption Property	Nano-structured Polymers and Smart Systems
A-10-2314-1	Enhancement of the PVDF's Piezoelectricity by magnetic-conductive hybrid nanoparticle-nanoplates	Nano-structured Polymers and Smart Systems
A-10-2319-1	Reduction-sensitive flower like magnetomicelle based on PCL-ss-PEG-ss-PCL triblock copolymer as anti-cancer drug delivery system	Nano-structured Polymers and Smart Systems





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A-10-2324-1	Preparation of tosyl cellulose acetate nanoparticles via nanoprecipitation	Nano-structured Polymers and Smart Systems
A-10-2332-1	Investigation of Effect of Electrospinning Parameters on Morphology of Polyvinyl Alcohol Nanofibers	Nano-structured Polymers and Smart Systems
A-10-2332-2	The Influence of Electrospinning Parameters on Morphological Properties of Polyamide-6,6 Nanofibers	Nano-structured Polymers and Smart Systems
A-10-2549-1	Acidochromic behavior of N,N-dihydroxyethyl azobenzene doped in poly(methyl methacrylate)	Nano-structured Polymers and Smart Systems
A-10-2395-1	Synthesis of Spiropyran Functionalized Polymer Nanoparticles and Investigation the Effect of Local Polarity on Kinetics of Photoresponsivity	Nano-structured Polymers and Smart Systems
A-10-2342-1	Aqueous Electrospinning of Carboxymethyl Chitosan sulfate/Polyethylene Oxide Nanofibers	Nano-structured Polymers and Smart Systems
A-10-2383-2	Fabrication of drug-carrying nanocomposites from polylactic acid, polyethylene glycol and hydroxyapatite	Nano-structured Polymers and Smart Systems
A-10-2472-1	Study on the preparation, properties, and performance of new superparamagnetic nanocomposite of PANI-Fe <sub>3</sub> O <sub>4</sub> -TiO <sub>2</sub> in polymer solar cells	Nano-structured Polymers and Smart Systems
A-10-2200-1	The Release Behavior of Tetracycline hydrochloride (TCH) from Carboxymethyl Chitosan (CMCS)/ Montmorillonite (MMT) Microcapsules	Nano-structured Polymers and Smart Systems





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A-10-2384-2	Chamomile Extracted Polyphenol Based Nanoparticles Made by Oxidative Coupling Assembly	Nano-structured Polymers and Smart Systems
A-10-2504-2	Synthesis and Characterization of Reversible Photochromic Spiropyran Containing Ionic Liquid	Nano-structured Polymers and Smart Systems
A-10-2385-3	Wearable electronic nose sensor based on PVDF/ carbon black electrospun layers	Nano-structured Polymers and Smart Systems
A-10-2528-1	Synthesis of Amide Functionalized Photoluminescent Polymer Nanoparticles Containing Oxazolidine for Development of Photoluminescence OLEDs	Nano-structured Polymers and Smart Systems
A-10-2535-1	Preparation of dual emission MXene derived quantum dots	Nano-structured Polymers and Smart Systems
A-10-2459-1	Surface modification of silica aerogel nanostructure by citric acid for wastewater treatment	Nano-structured Polymers and Smart Systems
A-10-2393-2	Investigation the Effect of Polymer Chain Flexibility on Kinetics of Spiropyran Photochromism in Copolymer Nanoparticles	Nano-structured Polymers and Smart Systems
A-10-2486-1	Biodegradable Thermoplastic Vulcanizate Nanocomposite with Thermoresponsive Shape Memory Behavior Based on PLA/NBR/CNC	Nano-structured Polymers and Smart Systems
A-10-2347-3	Investigation of the strain sensing performance of PP/EPDM/CNT nanocomposites	Nano-structured Polymers and Smart Systems





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A-10-2590-1	Fabrication of Self-Healing Hydrogels Through Inclusion Complexation of Vinyl Modified Macrocyclic Monomers	Nano-structured Polymers and Smart Systems
A-10-2603-1	Supramolecular Hydrogels Using Host-Guest Inclusion Complexes with Cyclodextrins	Nano-structured Polymers and Smart Systems
A-10-2609-1	Modification of cellulose paper with photoluminescent acrylic copolymer nanoparticles containing fluorescein as pH-sensitive indicator	Nano-structured Polymers and Smart Systems
A-10-2635-1	Fluorescent Polymer Nanoparticles as pH Sensor platforms	Nano-structured Polymers and Smart Systems
A-10-2660-2	Determining the pKa value of the fourth generation poly(propylene imine) dendrimer functionalized with 4-carboxyphenylboronic acid by pH titration method	Nano-structured Polymers and Smart Systems
A-10-2041-3	Preparation and characterization of semi-IPN magnetic nanocomposite hydrogels based on partially hydrolyzed polyacrylamide/guar gum/ Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> NPS for enhanced oil recovery	Polymer Blends, Composites and Nano-composites
A-10-2057-1	Preparation of Flexible shields for Protection against Gamma Rays	Polymer Blends, Composites and Nano-composites
A-10-2083-1	Preparation and investigation the properties of graphene-reinforced nanocomposites based on PMMA/PEO	Polymer Blends, Composites and Nano-composites
A-10-2082-1	Preparation and X_COM simulation of X-ray epoxy-based polymer shielding	Polymer Blends, Composites and Nano-composites





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A-10-2125-2	Gel polymer electrolyte based on synthesised organic-inorganic nanoparticles/PVDF	Polymer Blends, Composites and Nano-composites
A-10-2190-1	Conductive Polyacrylamide Aerogel	Polymer Blends, Composites and Nano-composites
A-10-2203-1	Synergistic effect of hybrid Halloysite nanotube– Calcium Carbonate as a nanofiller in enhancing the mechanical properties of PVC composites	Polymer Blends, Composites and Nano-composites
A-10-2271-1	Improving fire performance of thermoplastic Polyurethane with an intumescent Flame Retardant system and Nanomolybdenum disulfide	Polymer Blends, Composites and Nano-composites
A-10-2287-1	Study of MA-POSS nanoparticles dispersion in the Poly(ethylene glycol) dimethacrylate (PEGDMA) matrix	Polymer Blends, Composites and Nano-composites
A-10-2250-2	Effect of Alumina Nanoparticles on of the Fracture behaviour of Epoxy Nanocomposites	Polymer Blends, Composites and Nano-composites
A-10-2082-3	Review of Properties, application, dispersion, and compatibilizing of some mineral particles in the presence of branched/ functional polymers	Polymer Blends, Composites and Nano-composites
A-10-2258-2	The influence of crosslinked acrylonitrile-styrene-acrylate impact modifier on the mechanical and thermal properties of rigid poly(vinyl chloride)	Polymer Blends, Composites and Nano-composites
A-10-2300-1	The Influence of Silica Localization on the Mechanical Behavior of Polyamide 6- Reclaimed Rubber Blends	Polymer Blends, Composites and Nano-composites





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A-10-2032-1	The synergistic effect of graphene nano-platelets and antioxidant in improving the thermo-oxidative stability of high-density polyethylene	Polymer Blends, Composites and Nano-composites
A-10-2251-1	Mechanical and electroconductive properties of glass fiber reinforced polyethylene filled with graphite	Polymer Blends, Composites and Nano-composites
A-10-2251-2	Improvement of thermal properties of polypropylene and investigation of mechanical properties of Cyclic Copolymer/polypropylene blend	Polymer Blends, Composites and Nano-composites
A-10-2306-1	Mechanical improvement of Glass fiber/PA66 composite using surfacemodified glass fiber and SEBS-g-MA as an Impact modifier	Polymer Blends, Composites and Nano-composites
A-10-2312-1	Epoxidized Natural Rubber as a Compatibilizer in Chlorosulfonated PE/Organoclay Nanocomposites	Polymer Blends, Composites and Nano-composites
A-10-2286-4	The Investigation of Solvent Synergy Effect on Conjugated Polymer Photo-physics Properties: A Case Study of MEH-PPV	Polymer Blends, Composites and Nano-composites
A-10-2210-1	Investigating of nanofiber orientation on the ILSS of epoxy resin/ glass fiber composite laminates.	Polymer Blends, Composites and Nano-composites
A-10-2250-3	Synthesis of Polyurethane Nanocomposites and Investigation of Their Mechanical Properties	Polymer Blends, Composites and Nano-composites
A-10-2339-1	Rheology, Morphology and Electrical Conductivity of Polyethylene (PE)/Ethylene vinyl acetate (EVA) Blends Filled with Carbon Black	Polymer Blends, Composites and Nano-composites





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A-10-2340-1	The Effect of Pre-impregnated Tape Width on Printability and Shear Properties of Continuous Fiber-Reinforced Composites	Polymer Blends, Composites and Nano-composites
A-10-2343-1	Theoretical and Experimental Study on Aluminum Particulate Composites as Thermal Radiation Barrier	Polymer Blends, Composites and Nano-composites
A-10-2328-1	The relationship between hydrogen bonding, degree of crystallinity and shape memory behavior of PU/Fe <sub>3</sub> O <sub>4</sub> nanocomposites	Polymer Blends, Composites and Nano-composites
A-10-2340-2	The influence of nano and micro SiO <sub>2</sub> particles on the mechanical behavior of 3D printed samples	Polymer Blends, Composites and Nano-composites
A-10-2341-1	Thermodynamical Evaluation of the Reinforcing Mechanism in Graphene Oxide/ Acrylonitrile Butadiene Rubber Composites	Polymer Blends, Composites and Nano-composites
A-10-2286-3	Study on photo-physical properties of semi-conducting polymers with different feeding manners: A Case Study of MEH-PPV	Polymer Blends, Composites and Nano-composites
A-10-2159-1	Low Density Polyethylene based Micro/Nanocomposites: Feasibility of Calendering Process	Polymer Blends, Composites and Nano-composites
A-10-2634-1	Synergistic Effect of Cellulose Nanofibers lamina and clay nanoParticles on Mechanical Properties of Epoxy Resin	Polymer Blends, Composites and Nano-composites
A-10-2371-1	Crystallization and Micro-Phase Separation of Thermoplastic Polyurethane/Polyaniline Blends: Influence of Polyaniline Nanorods Content	Polymer Blends, Composites and Nano-composites







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A-10-2387-1	Investigation on permeability of packaging films based on Polyethylene/Ethylene vinyl alcohol/Nanoclay nanocomposite	Polymer Blends, Composites and Nano-composites
A-10-2374-1	Effect of GO-ZnO nanohybrid on biodegradability and mechanical properties of Polybutylene succinate	Polymer Blends, Composites and Nano-composites
A-10-2457-1	Epoxy/Amine Dual-Curable System Prepregs: Changes of Viscosity by Different Cure Systems and Cure Cycles	Polymer Blends, Composites and Nano-composites
A-10-2159-2	Nanoclay/Kenaf/Polyester Hybrid Composites: Synergistic Effects on Energy Absorbance	Polymer Blends, Composites and Nano-composites
A-10-2477-1	Influence of Speed Print and Raster Angle on the Mechanical Properties of ABS Polymer Parts Produced by Fused Deposition Modelling	Polymer Blends, Composites and Nano-composites
A-10-2355-1	Effect of Graphite Oxide on the Shape Stabilization of Polyethylen Glycol Phase Change Materials Systems	Polymer Blends, Composites and Nano-composites
A-10-2626-1	Investigation of Conductivity, Rheological and Morphological Properties of High Density Polyethelene Filled with Carbon Black	Polymer Blends, Composites and Nano-composites
A-10-2495-2	Investigating the effect of Oscillatory shear strain on the dielectric properties of PS/TiO <sub>2</sub> nanocomposite	Polymer Blends, Composites and Nano-composites
A-10-2236-1	Synthesis and characterization of thermoplastic polyurethane composite based on epoxy filler	Polymer Blends, Composites and Nano-composites





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A-10-2100-3	The effects of reduced graphene oxide on thermal properties of polylactic acid/ethylene vinyl-acetate copolymer blends	Polymer Blends, Composites and Nano-composites
A-10-2386-1	Effect of Elastomer Type on Spherulitic Structure and Deformation Behavior of Isotactic Polypropylene	Polymer Blends, Composites and Nano-composites
A-10-2368-1	Morphology, mechanical properties and melt rheology of PLA/EVA blend reinforced with silicon carbide (SiC) nanoparticles	Polymer Blends, Composites and Nano-composites
A-10-2512-1	Bending behavior of Glass/ Epoxy multilayer sandwich composites reinforced with weft-knitted spacer fabrics	Polymer Blends, Composites and Nano-composites
A-10-2527-2	The effect of zinc stearate on the processability of high density polyethylene (HDPE)	Polymer Blends, Composites and Nano-composites
A-10-2252-1	Preparation of new fillers based on polyurethane and their application in 3D printing resins	Polymer Blends, Composites and Nano-composites
A-10-2255-1	Investigation of Polyurethane-based Elastomeric Microcomposites Reinforced with Titanium Dioxide (TiO <sub>2</sub> )	Polymer Blends, Composites and Nano-composites
A-10-2340-3	An investigation of the effect of fiber surface treatment on the flexural properties of 3D printed composites	Polymer Blends, Composites and Nano-composites
A-10-2255-3	Melt Processing of Acrylonitrile-butadiene-styrene (ABS) on Liquid Deposition Modeling (LDM) 3D Printing and Injection Molding: Process Feasibility	Polymer Blends, Composites and Nano-composites





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A-10-2172-1	Removal of basic violet-16 cationic dye from aqueous solution by novel nanocomposite hydrogel containing halloysite nanoclay	Polymer Blends, Composites and Nano-composites
A-10-2172-2	Synthesis of new hydrogel nanocomposite based on acrylamide and its application to remove Basic violet 16 dye from water	Polymer Blends, Composites and Nano-composites
A-10-2551-1	Effect of Core Material on the Mechanical Properties of Hybrid CFRP Sandwich Composites	Polymer Blends, Composites and Nano-composites
A-10-2515-1	The effect of the hybrid presence of two nanoparticles on improving the toughness of PLA/NR eco-friendly blend	Polymer Blends, Composites and Nano-composites
A-10-2645-1	Flammability reduction of flexible polyurethane foams using GO and LDH nanoparticles-based multilayer coatings	Polymer Blends, Composites and Nano-composites
A-10-2472-3	Synthesis of graphene@Fe <sub>3</sub> O <sub>4</sub> @polyaniline nanocomposite for simultaneous removal of a binary mixture of Malachite Green cationic dye and Acid Red 1 anionic dye from aqueous solutions	Polymer Blends, Composites and Nano-composites
A-10-2596-1	Polyacrylamide hydrogel conductivity enhancement, the efficiency of MWCNT composition methods	Polymer Blends, Composites and Nano-composites
A-10-2598-1	Effect of nanoparticles concentration on electrical conductivity of a TPU/MWCNT nanocomposite	Polymer Blends, Composites and Nano-composites
A-10-2578-1	Solid and semi-liquid state foaming of polypropylene copolymers towards production of expanded polypropylene beads with double melting peaks	Polymer Blends, Composites and Nano-composites





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A-10-2658-1	Study on the effect of heat treatment on the tensile properties of nanofibrous composites	Polymer Blends, Composites and Nano-composites
A-10-2610-1	Compatibilized PE/PP blends for the property enhancement of PE/PP waste	Polymer Blends, Composites and Nano-composites
A-10-2605-1	Effect of soybean oil on dynamic mechanical properties of Epoxy/Polyurethane IPNs	Polymer Blends, Composites and Nano-composites
A-10-2556-1	Fabrication of Thin Film Nanocomposite Based on PVB and SWCNTs as a Transparent Electrode in Photovoltaic Applications by Spin Coating	Polymer Blends, Composites and Nano-composites
A-10-2620-1	Biodegradable PBAT/EVOH/Zinc oxide nano composites	Polymer Blends, Composites and Nano-composites
A-10-2497-2	Investigating the Toughness and Tensile Strength of Epoxy Nanocomposites Based-Ionic Modified SiO <sub>2</sub> Nanoparticles.	Polymer Blends, Composites and Nano-composites
A-10-2637-2	Correlation between morphology and mechanical properties in low density polyethylene/ethylene vinyl acetate copolymer blends	Polymer Blends, Composites and Nano-composites
A-10-2729-1	The Influences of the POE-MAH compatibilizer on the morphology, mechanical, and Rheological behavior of N6/PC/GO nanocomposites	Polymer Blends, Composites and Nano-composites
A-10-2731-1	EVA nanocomposite Foams Containing MWCNT as Electromagnetic Wave Absorbent.	Polymer Blends, Composites and Nano-composites





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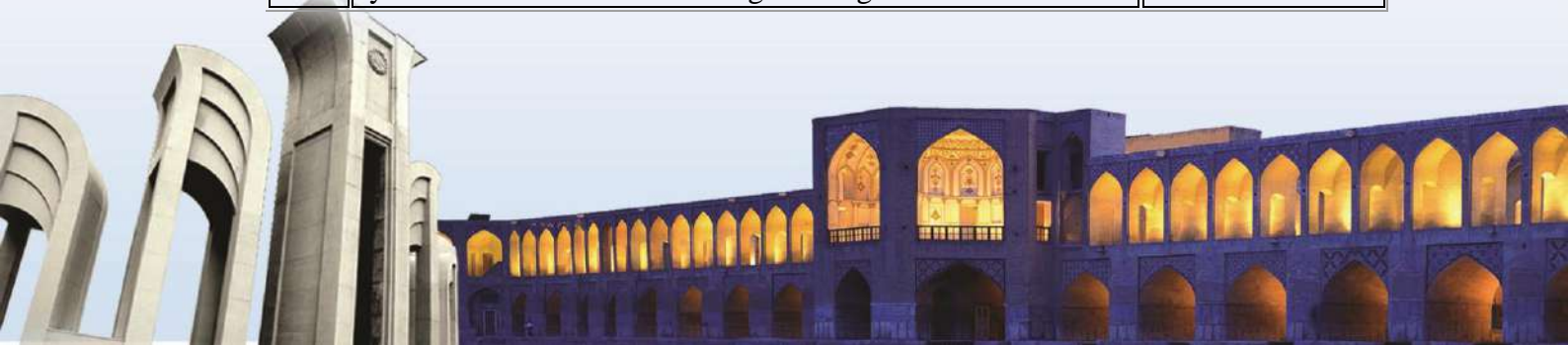
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A-10-2721-1	Conductive nanocomposite hybrid and biopolymer in presence of metal oxide particles for sensor applications	Polymer Blends, Composites and Nano-composites
A-10-2325-1	Optically transparent Eudragit nanofibrous membrane with potential use in ocular tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2204-1	Influence of PMMA bone cement composition on its mechanical properties	Polymer in Biomedical and Tissue Engineering
A-10-2213-1	Modification and evaluation of Polylactic Acid (PLA) for improved its hemocompatibility and hydrophilicity	Polymer in Biomedical and Tissue Engineering
A-10-2213-2	Evaluation of chemical functionalization of Polylactic Acid as a spacer for surface immobilization of biomacromolecules	Polymer in Biomedical and Tissue Engineering
A-10-2225-1	Synthesis of nano-Gelatin Containing Curcumin and Investigating the Effect of Glutaraldehyde as a Crosslinker in Drug Delivery	Polymer in Biomedical and Tissue Engineering
A-10-2229-1	Laboratory investigation of the effect of carbon nanotubes used in polyacrylamide preformed particle gels on Conformance control of high water production wells	Polymer in Biomedical and Tissue Engineering
A-10-2233-1	Toxicity assessments of polymeric nanoparticles in biomedicine	Polymer in Biomedical and Tissue Engineering
A-10-2242-1	Hydroxyapatite / Polysaccharides Composite Hydrogels as Biocompatible Nano-carriers for Bone infection	Polymer in Biomedical and Tissue Engineering
A-10-	Fabrication of a self-healing antibacterial hydrogel using $\beta$ -cyclodextrin dimer/modified alginate/AgNO <sub>3</sub>	Polymer in Biomedical and





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2268 -1		Tissue Engineering
A- 10- 2212 -1	Polycaprolactone/Pluronic F127 scaffold fabricated by 3D printing for bone tissue engineering	Polymer in Biomedical and Tissue Engineering
A- 10- 2193 -1	Gelatin nanofibers incorporating ZIF-8 nanoparticles as wound dressings	Polymer in Biomedical and Tissue Engineering
A- 10- 2233 -3	Biodegradable polymeric micelles for biomedical applications	Polymer in Biomedical and Tissue Engineering
A- 10- 2066 -6	The study of Poly (erythritol-co-dodecanedioate)/ lignocellulose nanofiber for tissue engineering application	Polymer in Biomedical and Tissue Engineering
A- 10- 2204 -3	Applying k-means clustering technique on physical and mechanical properties of various PMMA/silica bone cements	Polymer in Biomedical and Tissue Engineering
A- 10- 2402 -1	Rheological and structural behavior of gellan-agar comprising poly aniline-graphene nanocomposite as a candidate for neural conduit	Polymer in Biomedical and Tissue Engineering
A- 10- 2223 -1	Reinforcement of nanofibrous scaffolds based on polylactic acid/alginate using platelet-enriched plasma	Polymer in Biomedical and Tissue Engineering
A- 10- 2031 -1	Synthesize of hydrogel nanocarriers for controlled release of anti-cancer drug	Polymer in Biomedical and Tissue Engineering
A- 10- 2361 -1	Assessing printability map of PLA solution in immersion precipitation 3D printing (ip3DP)	Polymer in Biomedical and Tissue Engineering





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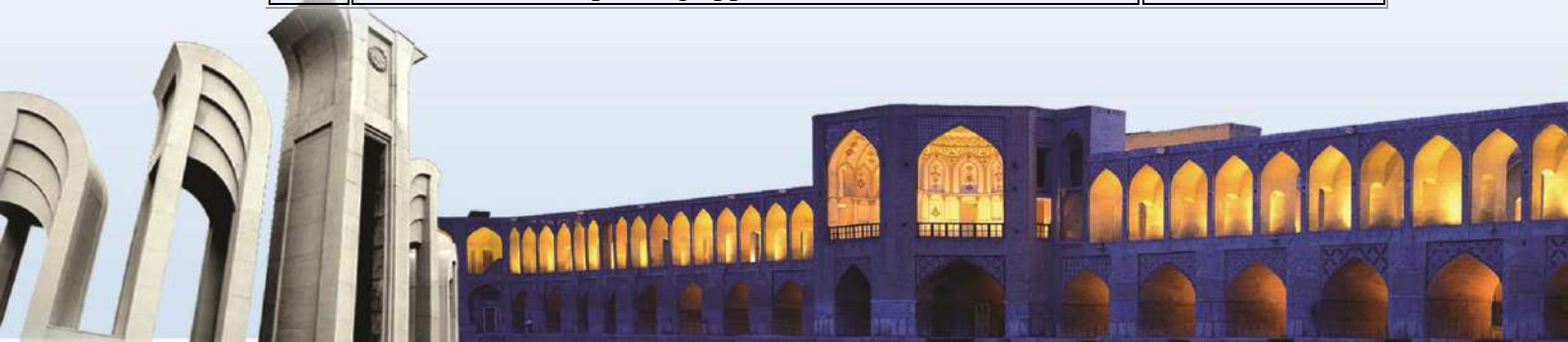
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A-10-2363-1	Reinforced poly (lactic acid) by modified cellulose nanofibers extracted from rice straw applicable for tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2224-1	Investigating the hydrophilic properties of polycaprolactone containing Capparis spinosa extract for use in tissue engineering applications	Polymer in Biomedical and Tissue Engineering
A-10-2396-1	Gelatin/polycaprolactone composites as bioinspired scaffolds for tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2353-1	Preparation and characterization of DOX delivery carrier by polymer/silica nanostructure	Polymer in Biomedical and Tissue Engineering
A-10-2303-1	Electrospun polyurethane (PU) nanofibers for vascular graft application	Polymer in Biomedical and Tissue Engineering
A-10-2304-1	Soft contact lenses with high oxygen permeability and high surface wettability	Polymer in Biomedical and Tissue Engineering
A-10-2405-1	The comparison between degradation of polymeric in-situ forming implants in in-vitro and in-vivo conditions	Polymer in Biomedical and Tissue Engineering
A-10-2179-1	Preparation of Hydrophobic Acrylic Foldable Intraocular Lens for Cataract Surgery	Polymer in Biomedical and Tissue Engineering
A-10-2253-3	Synthesis and characterization of thermosensitive gel containing PCL nanoparticles as a promising candidate for drug delivery	Polymer in Biomedical and Tissue Engineering
A-10-	Printability study of polyelectrolyte bioinks based on chitosan for 3Dbioprinting applications	Polymer in Biomedical and





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2342 -2		Tissue Engineering
A- 10- 2405 -2	A study on accelerated drug release from in-situ forming implants and the correlation with real-time profiles	Polymer in Biomedical and Tissue Engineering
A- 10- 2490 -1	Synthesis and characterization of polyurethane bioadhesive based on castor oil	Polymer in Biomedical and Tissue Engineering
A- 10- 2200 -2	PVA hydrogels incorporated with croboxymethyl chitosan microcapsules containing tetracycline hydrochloride: morphology and antibacterial behavior	Polymer in Biomedical and Tissue Engineering
A- 10- 2070 -1	The effect of titanium dioxide nanoparticles on the morphology and physical/mechanical properties of poly(L-lactic acid)/gelatin hybrid nanofibers as potential scaffolds in tissue engineering	Polymer in Biomedical and Tissue Engineering
A- 10- 2133 -1	Preparation and Characterization of Novel Antibacterial Waterborne Polyurethane Electrospun Fibers Based on Tannin for Wound Dressing Application	Polymer in Biomedical and Tissue Engineering
A- 10- 2568 -1	Printability of thiol-ene photoclick initiated bioinks	Polymer in Biomedical and Tissue Engineering
A- 10- 2542 -1	Development of a novel duple acrylic coating with an anti-fungal effect for bio applications	Polymer in Biomedical and Tissue Engineering
A- 10- 2541 -2	Investigating the mechanical properties of hydrogel nanocomposite with lignin nanoparticles: A short review	Polymer in Biomedical and Tissue Engineering
A- 10- 2067 -1	PLA/NMP system containing silica hybrids for bone tissue engineering	Polymer in Biomedical and Tissue Engineering







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A-10-2491-2	Multi-Functional Core–Shell Nanofibrous Scaffolds for Accelerating Wound Healing	Polymer in Biomedical and Tissue Engineering
A-10-2599-1	Synthesis and characterization of carboxymethylhexanoyl chitosan as a promising biomaterial	Polymer in Biomedical and Tissue Engineering
A-10-2600-1	Preparation of bone tissue scaffold with improved biocompatibility, comprising of PCL and PVDF nanofibers via electrospinning process	Polymer in Biomedical and Tissue Engineering
A-10-2612-1	3D printing of alginate/gelatin scaffold reinforced by nanofibers with hydroxyapatite coating for bone tissue engineering	Polymer in Biomedical and Tissue Engineering
A-10-2613-1	Interpenetrating polymer networks of poly(2-hydroxyethyl methacrylate) and poly(dimethyl siloxane) films for biomedical applications	Polymer in Biomedical and Tissue Engineering
A-10-2615-1	Waterborne polyurethane films impregnated with Ag@GO-PDA nanostructures for photothermal therapy of infected dermal wounds	Polymer in Biomedical and Tissue Engineering
A-10-2602-1	Efficacy of biocompatible polymers polyethylene glycol and chitosan in surface modification of carbon nanotubes for medical application	Polymer in Biomedical and Tissue Engineering
A-10-2575-1	Investigating the rheological and hydrophilic behavior of polyethylene glycol (monomethyl ether)-maleic anhydride	Polymer in Biomedical and Tissue Engineering
A-10-2518-1	Optimization of polycaprolactone and collagen polymers for tissue engineering applications	Polymer in Biomedical and Tissue Engineering
A-10-	PU foam with interior walls of PCL nanofibers	Polymer in Biomedical and





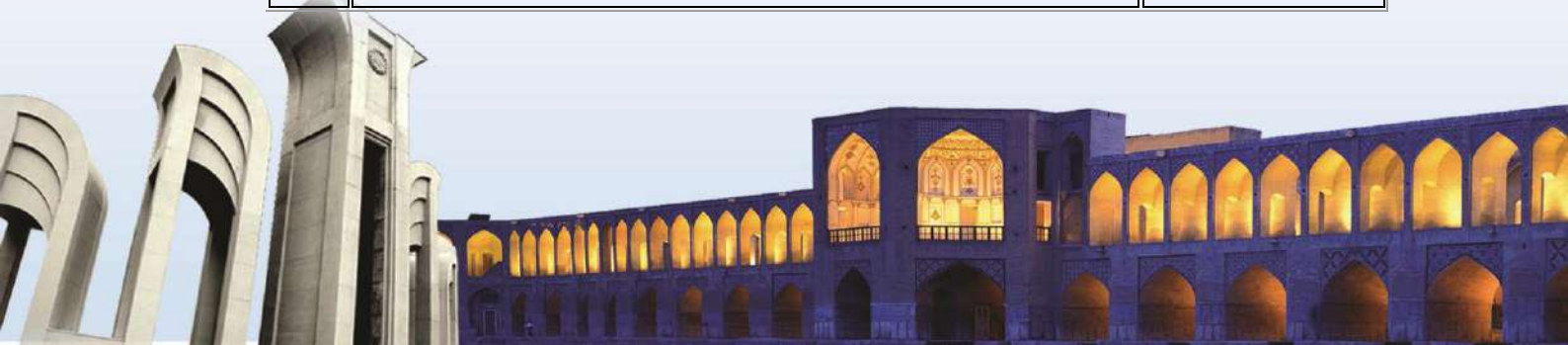
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2400 -2		Tissue Engineering
A-10-2400 -3	Facile Technique for GelMA Synthesis Providing Increased Methacrylation Degree	Polymer in Biomedical and Tissue Engineering
A-10-2607 -2	The effect of chitosan- biopolymer as coated solid lipid nanoparticles in mucoadhesive drug delivery	Polymer in Biomedical and Tissue Engineering
A-10-2625 -2	Preparation of poly(vinyl alcohol)/Sodium alginate nanofibers	Polymer in Biomedical and Tissue Engineering
A-10-2640 -3	Preparation and Characterization of Hybrid PCL/Collagen Sponge	Polymer in Biomedical and Tissue Engineering
A-10-2072 -1	The effect of carboxymethylcellulose on the cellular structure of polyethylene foam	Polymer Synthesis and Polymerization
A-10-2073 -1	Effect of the organic additive on the polyvinyl chloride nanocomposite properties	Polymer Synthesis and Polymerization
A-10-2073 -2	Study on mechanical and thermal properties of polyvinyl chloride nanocomposites reinforced with the azo-containing phenol derivative	Polymer Synthesis and Polymerization
A-10-2085 -1	Synthesis of Well-known RAFT Agent for Living Polymerization of 2-Hydroxyethyl Methacrylate (HEMA)	Polymer Synthesis and Polymerization
A-10-2081 -1	Synthesis and application of grafted microcrystalline cellulose with imidazolium-based ionic liquid for demulsification of W/O emulsion	Polymer Synthesis and Polymerization





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A-10-2100-1	Rheological properties of PE-b-PEG block copolymer in selective solvent	Polymer Synthesis and Polymerization
A-10-2262-1	Synthesis of chitosan/polyvinyl alcohol beads for adsorption of copper from aqueous solution	Polymer Synthesis and Polymerization
A-10-2426-1	Using Raman and FTIR spectroscopy for demonstrate fillers in polypropylene compound structure	Polymer Synthesis and Polymerization
A-10-2117-1	Investigation of acid and base treatment of halloysite on catalytic performance in Poly-alpha-olefin hydrogenation reaction	Polymer Synthesis and Polymerization
A-10-2117-2	Effect of various catalyst supports in catalytic activity for Poly-alpha-olefin hydrogenation	Polymer Synthesis and Polymerization
A-10-2036-1	Effect of Castor Oil Content on Viscosity of Castor TDI Prepolymers	Polymer Synthesis and Polymerization
A-10-2118-1	Effect of alcohol content of support on the catalytic performance of Ziegler-Natta catalysts in propylene polymerization	Polymer Synthesis and Polymerization
A-10-2069-1	Random copolymerization of alpha-olefins with functional monomers by cationic AlCl <sub>3</sub> /H <sub>2</sub> O catalytic system	Polymer Synthesis and Polymerization
A-10-2129-1	Halloysite and ionic liquid composites as catalysts for oligomerization and hydrogenation of polyalphaolefins	Polymer Synthesis and Polymerization





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A-10-2129-2	Synthesis of polymer-Clay composite with application for hydrofinishing reactions	Polymer Synthesis and Polymerization
A-10-2120-1	Novel mesoporous melamine-rich covalent organic polymer/cupric oxide-based microgel beads as promising robust heterogeneous nanocatalyst for highly efficient catalytic reduction of emerging water pollutants:...	Polymer Synthesis and Polymerization
A-10-2134-1	Novel AlCl <sub>3</sub> /ionic-liquid initiator system for the polymerization of isobutylene to conventional grade PIB	Polymer Synthesis and Polymerization
A-10-2672-1	Preparation and mechanical characterization of the polyurethane and vitrimers polymers	Polymer Synthesis and Polymerization
A-10-2036-3	Synthesis of Waterborne Epoxy Based on E6 and Diethanolamine	Polymer Synthesis and Polymerization
A-10-2215-2	Investigation the effects of Temperature & Oxygen on the epoxy resin yellowing during synthesis	Polymer Synthesis and Polymerization
A-10-2101-1	Investigating the electron-withdrawing effect of aryl substituents in the catalytic behavior of $\alpha$ -diimine nickel (II) catalyst on ethylene polymerization	Polymer Synthesis and Polymerization
A-10-2101-2	Investigating the electron-donating effect of aryl substituents in the catalytic behavior of $\alpha$ -diimine nickel (II) catalyst on ethylene polymerization	Polymer Synthesis and Polymerization
A-10-2225-2	Evaluation of the Toluene Progen Effect on Porous Polymer Emulsion Poly (Styrene-Divinylbenzene)	Polymer Synthesis and Polymerization





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A-10-2040-1	Molecular and Morphological Studies to Understand the Strain Hardening Behavior of UHMWPE/HDPE blends	Polymer Synthesis and Polymerization
A-10-2230-1	Synthesis and characterization amino-modified magnetic core-shell triazine-based covalent organic polymer as an efficient dye adsorbent	Polymer Synthesis and Polymerization
A-10-2111-1	Synthesis of new Ziegler Natta catalyst based on magnesium ethoxide with controlled morphology in the presence of different internal donor structures for polypropylene polymerization	Polymer Synthesis and Polymerization
A-10-2238-1	Flexible cellulose/PEGEMA based solid and gel polymer electrolytes	Polymer Synthesis and Polymerization
A-10-2238-2	Cellulose-based polymer electrolytes for electrochemical devices	Polymer Synthesis and Polymerization
A-10-2114-2	Synthesis of Low Viscosity Polyalphaolefin Oils Using Deep Eutectic Solvent/ Aluminium chloride system	Polymer Synthesis and Polymerization
A-10-2268-2	Synthesis and characterization of chromium-based heterogeneous catalysts containing tridentate ligands for the production of 1-hexene	Polymer Synthesis and Polymerization
A-10-2278-1	Effect of molecular weight on the performance of asymmetric polysulfone membranes	Polymer Synthesis and Polymerization
A-10-2098-1	Smart block copolymers as fluorescence chemosensors	Polymer Synthesis and Polymerization





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A-10-2289-1	Synthesis of bisphenol A-free epoxy resin from pentaerythritol tetraacetate ester	Polymer Synthesis and Polymerization
A-10-2187-2	Fabrication of phosphazene based covalent triazine polymer with excellent flame retardancy and smoke suppression for thermoplastic polyurethane	Polymer Synthesis and Polymerization
A-10-2095-1	Effect of Polymerization Techniques and Reaction Temperature on Glass Transition Temperature (T <sub>g</sub> ) of Poly(methyl methacrylate) (PMMA)	Polymer Synthesis and Polymerization
A-10-2404-1	Synthesis and characterization of fluorinated waterborne epoxy dispersion	Polymer Synthesis and Polymerization
A-10-2068-1	Synthesis of pH sensitive DMAEMA-co-HEMA for drug delivery application	Polymer Synthesis and Polymerization
A-10-2285-1	Phase morphology, thermophysical and mechanical properties of PCL and PDMS based two soft segments TPU	Polymer Synthesis and Polymerization
A-10-2226-1	Synthesis and characterization of fluorescent polyurethane	Polymer Synthesis and Polymerization
A-10-2322-1	Synthesis of Janus Nanoparticles Based on Methylmethacrylate/Methacrylamide Copolymer by Emulsion Polymerization: Investigation of Size and Morphology	Polymer Synthesis and Polymerization
A-10-2317-1	Synthesis of PMMA Latex Nanoparticles Containing Different Functional Groups by Emulsion Polymerization for Development of Photoswitchable Spiropyran Polymer Nanoparticles	Polymer Synthesis and Polymerization





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A-10-2345-1	Synthesis and characterization of nanocomposites based on thermoplastic polyurethane/cellulose nanocrystals	Polymer Synthesis and Polymerization
A-10-2364-2	Fe <sub>3</sub> O <sub>4</sub> Nanoparticles grafted on microcrystalline cellulose/imidazolium-based ionic liquid: Efficient nanodemulsifier for separation of water in crude oil emulsion	Polymer Synthesis and Polymerization
A-10-2370-1	Structure-Properties Comparison of Random and Block Hydroxyl Terminated Polyether Copolymer (HTPE and TPEG)	Polymer Synthesis and Polymerization
A-10-2237-2	Preparation and investigation of poly (styrene-co-butyl acrylate) composite particle size and color properties by suspension polymerization	Polymer Synthesis and Polymerization
A-10-2305-1	Synthesis and properties of poly(styrene-co-butyl acrylate)/clay nanocomposite prepared by latex compounding method	Polymer Synthesis and Polymerization
A-10-2080-3	Comparison of HDPE films from Basel and Mitsui slurry plants	Polymer Synthesis and Polymerization
A-10-2080-4	Gel origin in the 7000F type HDPE films	Polymer Synthesis and Polymerization
A-10-2194-1	Investigation of APTMS Effect on the Mechanical Properties of Waterborne Polyurethanes based on Castor Oil	Polymer Synthesis and Polymerization
A-10-2403-1	Synthesis of amphiphilic diblock copolymer PEG-b-PMMA by atom transfer radical polymerization and investigation of its surface properties	Polymer Synthesis and Polymerization





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A-10-2094-1	Designing a polyurethane based on PPG and MDI capable to participate in free radical polymerization	Polymer Synthesis and Polymerization
A-10-2375-1	Synthesis of polyvinylidene fluoride/polythiophene as gel polymer electrolytes for lithium-ion batteries	Polymer Synthesis and Polymerization
A-10-2356-1	Green synthesis of Titanium(IV) oxide with Covalent organic frameworks hybrid under ultrasonic irradiation	Polymer Synthesis and Polymerization
A-10-2411-1	Synthesis and identification of porous organic polymer based on triazine and its application in Volatile iodine adsorption	Polymer Synthesis and Polymerization
A-10-2308-1	Preparation of spherical micelles from diblock terpolymer based on poly(acrylic acid) in organic solvent	Polymer Synthesis and Polymerization
A-10-2079-3	Novel poly(amide-urethane)s for high thermal stability applications	Polymer Synthesis and Polymerization
A-10-2377-1	Polypyrrole nanoparticles synthesized in a Continuous Microfluidic Reactor	Polymer Synthesis and Polymerization
A-10-2389-3	Ionomer containing methacrylate double bond pendant groups: synthesis and characterization	Polymer Synthesis and Polymerization
A-10-2389-4	Poly(acrylic acid-co-itaconic acid) based antiscalant: synthesis and properties	Polymer Synthesis and Polymerization







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A-10-2135-2	Effect of hydrophobic monomer type on the rheological properties of the hydrophobically modified polyacrylamides synthesized via micellar polymerization	Polymer Synthesis and Polymerization
A-10-2114-3	Characterization of conventional grade polyisobutene for viscosity improver applications	Polymer Synthesis and Polymerization
A-10-2465-1	Evaluation the influence of polyether/polyester mixed soft segments on Hydrogen bonding and micro-phase separation of thermoplastic polyurethanes	Polymer Synthesis and Polymerization
A-10-2466-1	Synthesis of Star-shaped polycaprolactone using Glycerol as initiator	Polymer Synthesis and Polymerization
A-10-2462-1	The Effect of Polymerization Temperature of Ultra High Molecular Weight Polyethylene (UHMWPE) on Microstructure	Polymer Synthesis and Polymerization
A-10-2479-1	Reflectance and photophysical properties of rhodamine 6G (Rh 6G)/2-(4-methyl-2-oxo-2H-chromen-7-yloxy) acetic acid (MOHCYAA) hybrid for application in cold dye	Polymer Synthesis and Polymerization
A-10-2479-2	Poly (acrylamide-co-(7-(Allyloxy)-2H-chromen-2-one) and poly (acrylamide-co-N-(Rhodamine-6G) lactam-N-Allyloxy ethylenediamine)-derived Fe <sup>3+</sup> selective fluorescent sensor in aqueous media	Polymer Synthesis and Polymerization
A-10-2508-2	High-performance comb-like PCE Superplasticizer and their interactions with cement particles	Polymer Synthesis and Polymerization
A-10-2485-1	Synthesis and identification of a porous organic polymer and its application for adsorption of anionic dyes	Polymer Synthesis and Polymerization





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A-10-2466-2	Synthesis of star-shaped polyurethane using polycaprolactone with three arms and investigation of its shape memory performance	Polymer Synthesis and Polymerization
A-10-2366-2	Nano Porous Polymer Beads Based on Cross-linked Poly(styrene -co-butylacrylate) Prepared through Suspension Polymerization for Extraction of Anthocyanin	Polymer Synthesis and Polymerization
A-10-2172-3	Synthesis and characterization of hydrogel nanocomposite polyacrylamide /halloysite nanotubes /chitosan for wound dressing	Polymer Synthesis and Polymerization
A-10-2055-2	Synthesis of sulfonated polyaniline composite on the surface of pencil graphite electrode and its application in ammonium detection	Polymer Synthesis and Polymerization
A-10-2502-1	Study on characteristics and properties of chitosan-based polymer electrolytes	Polymer Synthesis and Polymerization
A-10-2524-1	$\kappa$ -Carrageenan/triazin-based covalent organic framework nanocomposite: preparation, characterization, and application in BB41 dye removal	Polymer Synthesis and Polymerization
A-10-2492-5	Investigation of electrocatalytic properties of Cu-pPDA Coordination Polymer in CO <sub>2</sub> RR	Polymer Synthesis and Polymerization
A-10-2504-1	Synthesis, Characterization and Polymerization of HEMA on Fe <sub>3</sub> O <sub>4</sub> Nanoparticles via SI-ATRP	Polymer Synthesis and Polymerization
A-10-2510-1	Long-chain branched random poly (butylene adipate-co-ethylene terephthalate) tetrapolymers: synthesis and rheological properties	Polymer Synthesis and Polymerization





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A-10-2504-3	Synthesis of Graphene Oxide@Mill 101(Cr) composite to investigate the absorption of pollution from industrial effluents	Polymer Synthesis and Polymerization
A-10-2403-3	Synthesis of Poly(ethylene glycol)-b-Polystyrene Microbubbles	Polymer Synthesis and Polymerization
A-10-2521-1	Synthesis of imidazolium based triazol poly(ionic liquids) by atom transfer radical polymerization (ATRP) in the presence of green macroinitiator to demulsification of W/O emulsion	Polymer Synthesis and Polymerization
A-10-2533-1	Synthesis and Characterization of Biodegradable Anti-Bacterial Polyurethane Coatings in Deep Eutectic Solvents	Polymer Synthesis and Polymerization
A-10-2419-2	Density and Thermal Conductivity Study of Rigid Polyurethane Foams using RSM	Polymer Synthesis and Polymerization
A-10-2567-1	Synthesis of MOF525@Pani composite as absorbent of organic dyes	Polymer Synthesis and Polymerization
A-10-2464-1	Traceable Smart Hydrogel with High Capacity for Efficient Drug Administration	Polymer Synthesis and Polymerization
A-10-2055-3	Synthesis of sulfonated polyaniline composite on the surface of pencil graphite electrode and its application in dopamine detection	Polymer Synthesis and Polymerization
A-10-2597-1	Synthesis of Hydroxyl-Terminated Polyether (HTPE) by Innovative Approach Using The Williamson Method	Polymer Synthesis and Polymerization





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A-10-2604-1	Fabrication of a novel polyol from sunflower oil for synthesis of antibacterial polyurethane coating	Polymer Synthesis and Polymerization
A-10-2611-1	graft copolymerization of Lignin-Polycaprolactone(PCL) and evaluation of its structural characteristics	Polymer Synthesis and Polymerization
A-10-2543-1	Synthesis of sulfonated polyaniline-nylon6 nanoblend	Polymer Synthesis and Polymerization
A-10-2348-2	Simulation of bulk photopolymerization of furfuryl acrylate	Polymer Synthesis and Polymerization
A-10-2619-1	Synthesis and characterization unsaturated random copolyether-ester and investigation their curing mechanism using rheology	Polymer Synthesis and Polymerization
A-10-2278-3	Effect of the percentage of sulfonation monomer in hydrophilicity of sulfonated poly (arylene ether sulfone) water treatment membranes	Polymer Synthesis and Polymerization
A-10-2647-1	Synthesis and characterization of Modified polyisobutylene-based oil-soluble dispersants from Polyisobutylene Succinimides	Polymer Synthesis and Polymerization
A-10-2660-1	Synthesis of poly (propylene imine) dendrimer with ethylenediamine core and investigation of dendrimer's response to glucose at different pH	Polymer Synthesis and Polymerization
A-10-2725-1	Investigating the Progress of Polymerization of Bismaleimide Using Mark-Houwink-Sakurada Equation	Polymer Synthesis and Polymerization





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A-10-2728-1	Synthesis and characterization of a novel conductive copolymer based on imidazole derivative compound and aniline	Polymer Synthesis and Polymerization
A-10-2613-2	Temperature responsive PS-b-PNIPAM grafted substrates developed by surface-initiated ATRP technique	Polymer Synthesis and Polymerization
A-10-2722-1	Synthesis and characterization of conductive polymers based on carbazole structure and investigation of their physical, electrochemical and sensor properties	Polymer Synthesis and Polymerization
A-10-2307-2	Advances of SARS-CoV-2 Vaccine Delivery Using Supramolecular Structuring of Mesoporous Silica Nanoparticles Modified with $\beta$ -Cyclodextrins	Polymeric Materials for Medical Care in the COVID-19 Pandemic
A-10-2139-1	Rheological behaviors as criteria for the size of blow molded polyethylene articles	Rheology and Polymer Processing
A-10-2191-1	Diluent elimination may impact the crystalline structure of the polymer in a polymer-diluent system	Rheology and Polymer Processing
A-10-2191-2	Crystallization Temperature of Diluted Polymers: Dependency on Cooling Rate and Composition	Rheology and Polymer Processing
A-10-2237-1	An Investigation on Mechanical and Rheological Properties of Recycled PET (r-PET) by using Toluene diisocyanate (TDI) as a chain extender	Rheology and Polymer Processing
A-10-2267-1	Rheological Properties and Miscibility Studies of Blown Films Made From Recycled LDPE/LLDPE Films	Rheology and Polymer Processing





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A-10-2221-1	Rheological Properties Investigation of Flopaam 360S Solution Regard to Temperature and Salinity	Rheology and Polymer Processing
A-10-2316-2	Stydy Effect of POSS Side Pendant Group Length on Rheological Properties of LDPE and PS Nanocomposites	Rheology and Polymer Processing
A-10-2316-3	Effect of Alkyl Chain Length in Phthalate Plasticizer via Rheological Investigation of PVC Plastisol Gelation and Fusion	Rheology and Polymer Processing
A-10-2116-1	Preparation of the Modified Polyethylenes Using Reactive Extrusion for Using in Packaging Industries and Investigation of their Physical and Mechanical Properties	Rheology and Polymer Processing
A-10-2191-3	Molecular weight and dispersity competition to govern the crystalline features of poly(3-hexylthiophene)	Rheology and Polymer Processing
A-10-2108-2	Evaluation the rheological behavior of high filled CU-ABS 3d printing filament	Rheology and Polymer Processing
A-10-2536-1	Rheological study of modified starch with multifunctional citric acid	Rheology and Polymer Processing
A-10-2423-2	Van Gulp-Palmen plots for blends of linear and branched polyethylenes at various temperatures	Rheology and Polymer Processing
A-10-2415-1	Investigation the effect of different parameters on the size of polydimethylsiloxane particles using the microfluidic method	Rheology and Polymer Processing





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A-10-2501-3	The Transient Shear Flow of Viscoelastic Fluids in Concentric Annuli	Rheology and Polymer Processing
A-10-2500-1	Investigation of rheological behaviors of PP and PP-PE copolymer	Rheology and Polymer Processing
A-10-2500-2	A study on rheological behavior of PP/PE copolymers based on generalized maxwell model	Rheology and Polymer Processing
A-10-2561-1	Chemical degradation of pipe grade polyethylene in the chlorinated water-Effect of comonomer type and distribution	Rheology and Polymer Processing
A-10-2550-1	Investigation of xylene permeability as pesticides and herbicides solvent in cylindrical plastic bottles	Rheology and Polymer Processing
A-10-2474-1	Investigation of Rheological Behavior of poly (lactic acid) (PLA) /HCNT Nanocomposites	Rheology and Polymer Processing
A-10-2052-2	Effect of temperature on diffusion coefficient and nematic-isotropic phase transition in liquid crystalline elastomers using molecular dynamics simulation	Simulation and Modeling of Polymeric System
A-10-2217-1	Modeling of Critical Properties in Bionanocomposite Hydrogels Prepared by Freeze-Thaw Method	Simulation and Modeling of Polymeric System
A-10-2217-2	Application of Genetic Algorithm to Model and Interpret Mechanical Properties in Thermoplastic Starch-Based Biocomposites Reinforced by Rice Straw	Simulation and Modeling of Polymeric System





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A-10-2082-2	Simulations of the X-ray shielding materials using the MCNP metod	Simulation and Modeling of Polymeric System

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Venue

Seminar Venue

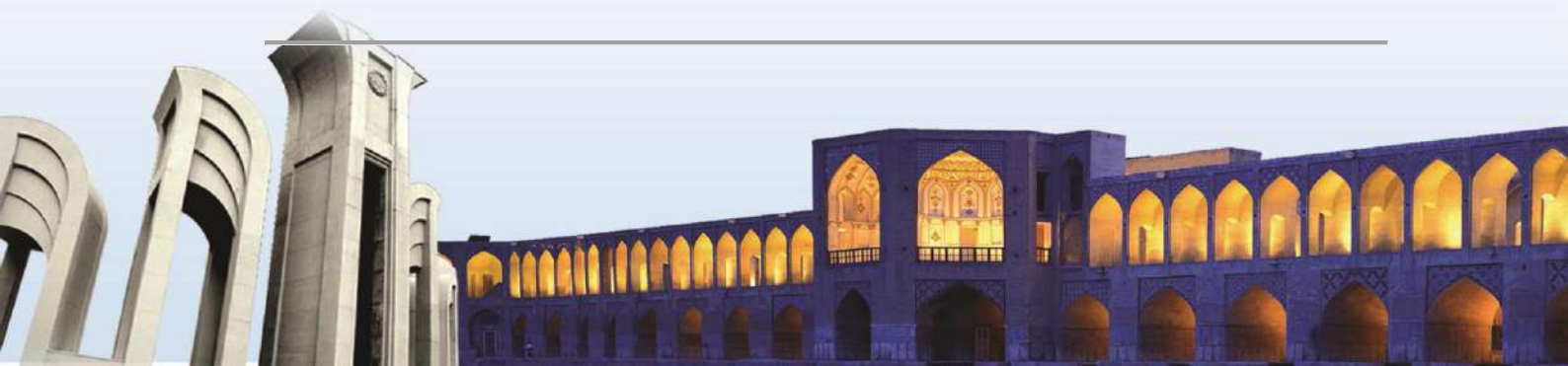
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Seminar will be held at the Chemical Engineering Department (Polymer Group), Isfahan University of Technology on 8-10 November, 2022.

Address: Isfahan University of Technology, Isfahan, Iran



Polymer Group, Chemical Engineering Department, Isfahan University of  
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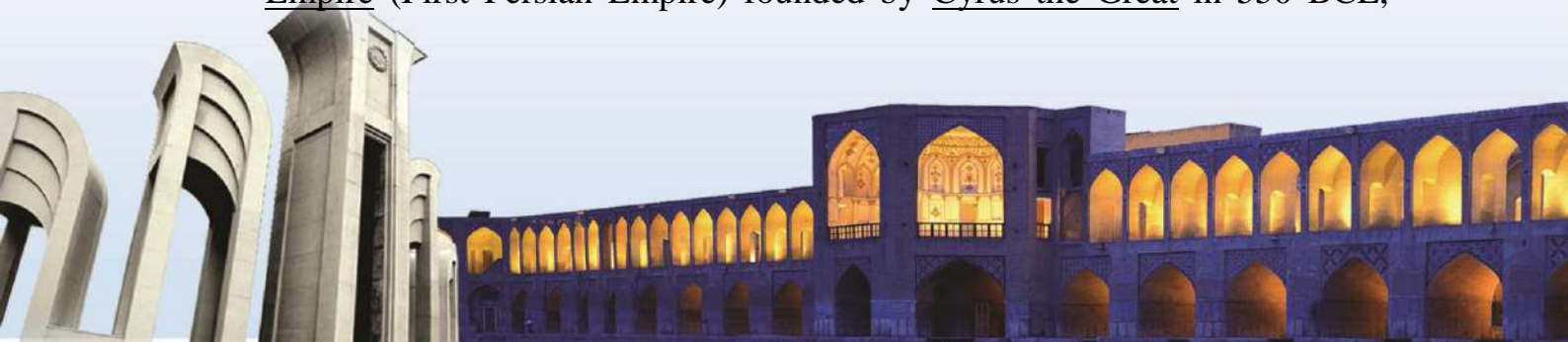
## About Iran

### Iran



Iran, also known as Persia officially the Islamic Republic of Iran since 1980, is a country in Western Asia. It is bordered on the north by Armenia, Azerbaijan and Turkmenistan, with Kazakhstan and Russia across the Caspian Sea; on the east by Afghanistan and Pakistan; on the south by the Persian Gulf and the Gulf of Oman; on the west by Iraq; and on the northwest by Turkey. Comprising a land area of 1,648,195 km<sup>2</sup> (636,372 sq mi), it is the second-largest nation in the Middle East and the 18th-largest in the world; with over 77 million inhabitants, Iran is the world's 17th most populous nation. It is the only country that has both a Caspian Sea and Indian Ocean coastline. Iran has been of geostrategic importance because of its central location in Eurasia and Western Asia and the Strait of Hormuz.

Iran is home to one of the world's oldest civilizations, beginning with the formation of the Proto-Elamite and Elamite kingdom in 3200 – 2800 BCE. The Iranian Medes unified the country into the first of many empires in 625 BCE, after which it became the dominant cultural and political power in the region. Iran reached the pinnacle of its power during the Achaemenid Empire (First Persian Empire) founded by Cyrus the Great in 550 BCE,





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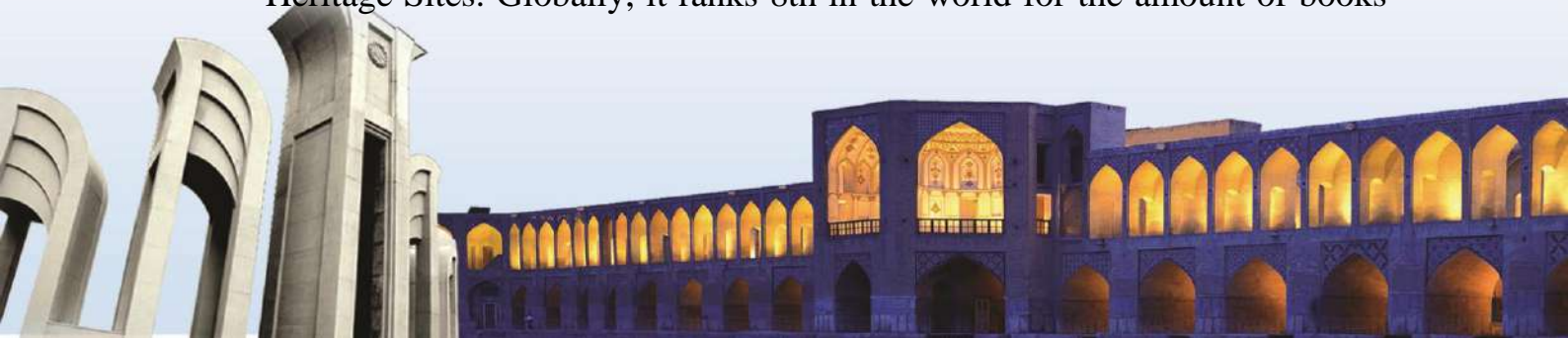


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which at its greatest extent comprised major portions of the ancient world, stretching from Thrace and Macedon on the northeastern border of Greece in the west, to the Indus Valley in the east, making it the largest empire the world had yet seen. The empire collapsed in 330 BCE following the conquests of Alexander the Great. The area eventually regained influence under the Parthian Empire and rose to prominence once more after the establishment of the Sasanian dynasty (Neo-Persian empire) in 224 CE, under which Iran again became one of the leading powers in the world along with the Byzantine Empire for the next four centuries.

Manichaeism and Zoroastrianism were largely replaced after Rashidun Muslims invaded Persia in 633 CE, and conquered it by 651 CE. Iran thereafter played a vital role in the subsequent Islamic Golden Age, producing numerous influential scientists, scholars, artists, and thinkers. The emergence in 1501 of the Safavid dynasty, which promoted the Twelver school of thought as the official religion, marked one of the most important turning points in Iranian and Muslim history. It also culminated into tensions, which in 1514 led to the Battle of Chaldiran. Starting in 1736 under Nader Shah, Iran would for the last time rise to high prominence, reaching its greatest territorial extent since the Sassanid Empire, and briefly possessing over what was probably the most powerful empire in the world. The Persian Constitutional Revolution of 1906 established the nation's first parliament, which operated within a constitutional monarchy. Following a coup d'état instigated by the UK and the US in 1953, Iran gradually became autocratic. Growing dissent against foreign influence and political repression culminated in the Iranian Revolution, which led to the establishment of an Islamic republic on 1 April 1979.

Tehran is the capital and largest city, serving as the cultural, commercial, and industrial center of the nation. Iran is a major regional and middle power, exerting considerable influence in international energy security and the world economy through its large reserves of fossil fuels, which include the largest natural gas supply in the world and the fourth-largest proven petroleum reserves. It hosts Asia's fourth-largest number of UNESCO World Heritage Sites. Globally, it ranks 8th in the world for the amount of books





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published per year, and was ranked first in scientific progress in the world in 2011.

Iran is a founding member of the UN, NAM, OIC and OPEC. Its unique political system, based on the 1979 constitution, combines elements of a parliamentary democracy with a religious theocracy run by the country's clergy, wherein the Supreme Leader wields significant influence. A multicultural nation comprising numerous ethnic and linguistic groups, most inhabitants are Shi'ites, the Iranian rial is its currency, and Persian is the official language.

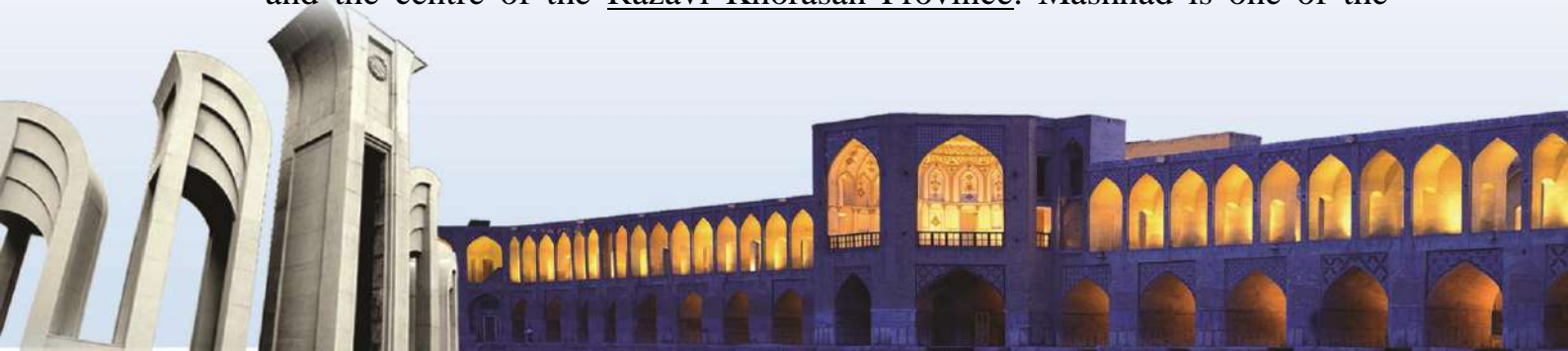
## Provinces and cities

Tehran, with a population of 7,705,036, is the largest city in Iran and is the capital. Tehran, like many big cities, suffers from severe air pollution. It is the hub of the country's communication and transport network.



Mount Damavand, Iran's highest point, is located in Amol County, Mazanderan.

Mashhad, with a population of 2,410,800, is the second largest Iranian city and the centre of the Razavi Khorasan Province. Mashhad is one of the





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holiest Shia cities in the world as it is the site of the Imam Reza shrine. It is the centre of tourism in Iran, and between 15 and 20 million pilgrims go to the Imam Reza's shrine every year.

Another major Iranian city is Isfahan (population 1,583,609), which is the capital of Isfahan Province. The Naqsh-e Jahan Square in Isfahan has been designated by UNESCO as a World Heritage Site. The city contains a wide variety of Islamic architectural sites ranging from the 11th to the 19th century. The growth of the suburban area around the city has turned Isfahan into Iran's second most populous metropolitan area (3,430,353).

The fourth major city of Iran is Tabriz (population 1,378,935), the capital of the East Azerbaijan Province. It is also the second industrial city of Iran after Tehran. Tabriz had been the second largest city in Iran until the late 1960s and one of its former capitals and residence of the crown prince under the Qajar dynasty. The city has proven extremely influential in the country's recent history.

The fifth major city is Karaj (population 1,377,450), located in Alborz Province and situated 20 km west of Tehran, at the foot of the Alborz mountains; however, the city is increasingly becoming an extension of metropolitan Tehran.

The sixth major Iranian city is Shiraz (population 1,214,808); it is the capital of Fars Province. The Elamite civilization to the west greatly influenced the area, which soon came to be known as Persis. The ancient Persians were present in the region from about the 9th century BCE, and became rulers of a large empire under the Achaemenid dynasty in the 6th century BCE. The ruins of Persepolis and Pasargadae, two of the four capitals of the Achaemenid Empire, are located in or near Shiraz. Persepolis was the ceremonial capital of the Achaemenid Empire and is situated 70 kilometres (43 mi) northeast of modern Shiraz. UNESCO declared the citadel of Persepolis a World Heritage Site in 1979.





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## Languages

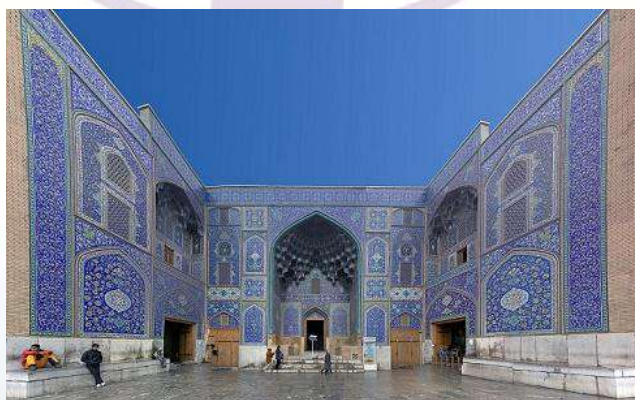
The majority of the population speaks the Persian language, which is also the official language of the country, as well as other Iranian languages or dialects.

## Arts and literature

Ruins of the Achaemenid palace of Persepolis, now a UNESCO World Heritage Site.



Tiles of Sheikh Lotf Allah Mosque





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Iran is home to one of the richest artistic traditions in world history and encompasses many disciplines, including architecture, painting, weaving, pottery, calligraphy, metalworking and stonemasonry. Carpet-weaving is one of the most distinguished manifestations of Persian culture and art, and dates back to ancient Persia. Persians were among the first to use mathematics, geometry, and astronomy in architecture and also have extraordinary skills in making massive domes which can be seen frequently in the structure of bazaars and mosques. This greatly inspired the architecture of Iran's neighbors as well. The main building types of classical Iranian architecture are the mosque and the palace. Besides being home to a large number of art houses and galleries, Iran also holds one of the largest and most valuable jewel collections in the world.

Iran ranks seventh among countries in the world with the most archeological architectural ruins and attractions from antiquity as recognized by UNESCO. Fifteen of UNESCO's World Heritage Sites are creations of Iranian architecture.

Poetry is used in many Persian classical works, whether from literature, science, or metaphysics. Persian literature has been considered by such thinkers as Goethe as one of the four main bodies of world literature. The Persian language has produced a number of famous poets; however, only a few poets as Rumi and Omar Khayyám have surfaced among western popular readership, even though the likes of Hafiz, Saadi, Nizami, Attar, Sanai, Nasir Khusraw and Jami are considered by many Iranians to be just as influential.

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[Isfahan City Tour](#)

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Isfahan University  
of Technology

# 15<sup>th</sup> International Seminar on Polymer Science and Technology

# ISPST 2022



8-10 November, Isfahan University of Technology, Isfahan, Iran

## Isfahan History

Isfahan is one of the world's most beautiful cities, an unforgettable international tourism destination popular all over the world, an encyclopedia of Iranian and Islamic civilization, locally famous as half of the world. Isfahan presents the real Persian character, the most glorious in historical and architectural wealth. Monuments in Isfahan are great examples of our art and architecture.



## The City of Isfahan briefly

Isfahan Nesf-e-Jahan, 'Isfahan is half the world'

This well-known saying was originally coined to describe Isfahan in Safavid times, when the city was at the height of its glory. Even today, Isfahan remains one of Iran's most beautiful cities and its monuments can be ranked among the most splendid of the Islamic world. The atmosphere in town is a relaxed one: this is a place to wander in, to get to know slowly, with its gardens, its river side, and its shopping streets.





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## THE SAFAVID ROYAL CITY

The central of Isfahan city during the Seljuq period was the Friday Mosque and the Meidan-e Kuhneh, to the north of the present Royal Square. In 1598, Shah Abbas decided to shift this center-according to some, in order to annoy a rich merchant who was reluctant to part with his property-and turned to the Naqsh-e Jahan ...



## Travelers to Esfahan

Fortunately for a researcher, Esfahan has always remained a halting point for any traveler. A Succession of voyagers, drawn to the country either by commercial interests or by a taste for exploration, has left valuable ac-counts of Esfahan's glorious past.

The first comprehensive picture of the city is given by Naser Khosrow (1004-1088), the celebrated Persian poet, philosopher, and Ismailite propagandist. After his visit to Esfahan in 1052, he wrote in Snfar-Nal1 leh ("Travelogue")







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## Travel to Iran without Isfahan is not complete

According to tourists who visited Iran and Isfahan, it is one of the most beautiful and most visited cities in Iran. It seems that there's something in Isfahan that makes the city so likable. As it's got some of the highlights of a trip to Iran, the absolute majority of tour operators plan the itineraries in a way that Isfahan is the first or the last stop before leaving Iran.



## Isfahan the Persian Florence

Isfahan is a city that different parts of Iranian identity represented by it.

An identity that owes its reputation to Iranian cultural and artistic traditions especially the city of Isfahan. Isfahan among the cities of Iran is like a piece of jewelry that has kept its Glory, Shines, and greatness despite its historical fluctuations for centuries.





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### JOLFA quarter ON THE SOUTH BANK

Jolfa, the Armenian and Christian quarter of Isfahan, was established in 1603 on the south bank of the Zayandeh and was linked to the Muslim town by Si-o-Se pol. As all the caravans that arrived from Shiraz and the south of the country passed through Jolfa on their way to the Royal Square, it rapidly became a flourishing trading quarter. Shah Abbas had been counting on this prosperity when, despite strong opposition on their part, he imported entire Armenian families from the town of Jolfa on the Araxes River in Azerbaijan.



### Climate of Isfahan

The city is located in the lush plain of the Zayandeh River, at the foothills of the Zagros mountain range. No geological obstacles exist within 90 kilometers (56 miles) north of Isfahan, allowing cool northern winds to blow from this direction. Situated at 1,590 meters (5,217 ft) above sea level on the eastern side of the Zagros Mountains, Isfahan has an arid climate.





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## Get In / Around Isfahan

Isfahan is served by the Isfahan International Airport.

Isfahan Metro is under construction and will include 2 lines with 43 km (27 mi) length.

Isfahan is connected to three major rail lines.

Isfahan's internal highway network is currently under heavy expansion which began during the last decade



## Excursions around Isfahan

On Azdegan Avenue, which forms part of the ring road around the south of the city (just before Basij-e Mostazafin Square, is the tomb of Baba Rokn od-Din. This mausoleum, with its rather original ten-sided conical roof and drum, was built in 1629 by Shah Abbas to commemorate a theologian who died in the 14th century

Unfortunately a large part of the tilework, both inside and outside, has now disappeared.





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## Handicrafts in Isfahan

Isfahan as one of the old historical cities of Iran is the center of different kinds of arts as follows:

Carpet weaving, Enamel Work (Mina), Inlaid Work (Khatam), Painted Matters (Ghalamkar) Tile & Tile Mosaic Work, Calligraphy, Miniature Paintings, Metal Work, Embroidery, Brocade, Papier Mache.



## Cuisine Isfahan

One thing for sure, Iran and to be a little more specific, Esfahan, has some of the world's most delicious foods.

You should test and eat the famous eating of Isfahan like Biryani, Fesenjan, Gaz, and Pulaki





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## Isfahan Industry

The distribution of economic activities within Isfahan, with an urbanism of 76 percent, is highly uneven. The oasis of Isfahan, watered by the Zāyandarud, is responsible for nearly half of rural activities, while the other half is spread out across the province.



## Education and Cultural Affairs

Two famous university in Isfahan:  
Isfahan university was founded partly in the former Hezar Jarib Garden in 1956A.D.  
Isfahan University of Technology branched out in 1977 A.D. About ten years later.





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- **Accommodation**

### Hasht Behesht Hotel

Provider: Isfahan University of Technology Hotel

Description:

هتل هشت بهشت دانشگاه صنعتی اصفهان (چهار ستاره) که در بهمن ماه سال ۱۳۹۷ به بهره برداری رسید، با محیطی آرام و بی نظیر، چشم انداز زیبا و امکانات رفاهی عالی، آماده پذیرش میهمانان در طول سال می باشد.



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1. **Hasht Behesht Hotel** in Isfahan University of Technology  
( [To more information please click here](#) )

- [Reservations](#)

## Student Dormitory

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## Contact

## Contact Information

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## Papers of Previous Seminar

- [The Book of ISPST 2020](#)
- [The Book of ISPST 2018](#)
- [The Book of ISPST 2016](#)

