



## THE ROLE OF CHEMISTRY IN TOURISM AND HOTEL MANAGEMENT

*Author:*

**Tohirov Bobur**

*Tashkent Tourism and Hotel Management Technical School*

*Teacher of General Education Department*

### ABSTRACT

This article discusses the importance and practical role of chemistry in the tourism and hotel management industry. The study analyzes the significance of chemistry in maintaining sanitation and hygiene standards, ensuring food safety, using cleaning agents effectively, and supporting environmental sustainability in hospitality services. Furthermore, the article highlights the role of chemical knowledge in developing professional competencies among specialists working in tourism and hotel management sectors.

**Keywords:** chemistry, tourism, hotel management, sanitation, hygiene, food safety, ecology, hospitality industry.

## KIMYO FANINING TURIZM VA MEHMONXONA SOHASIDAGI O‘RNI

*Maqola muallifi:*

**Tohirov Bobur**

*Toshkent turizm va mehmonxona menejmenti texnikumi*

*Umumta'lim kafedrası Kimyo fani o'qituvchisi*



## ANNOTATSIYA

Mazkur maqolada kimyo fanining turizm va mehmonxona sohasidagi ahamiyati hamda amaliy qo'llanilish jihatlari yoritilgan. Tadqiqotda mehmonxonalarda sanitariya-gigiyena talablarini ta'minlash, oziq-ovqat xavfsizligi, tozalash vositalaridan foydalanish va ekologik barqarorlikni saqlashda kimyo fanining o'rni tahlil qilingan. Shuningdek, turizm va mehmondo'stlik sohasida faoliyat yurituvchi mutaxassislar uchun kimyoviy bilimlarning kasbiy kompetensiyalarni rivojlantirishdagi ahamiyati asoslab berilgan.

**Kalit so'zlar:** kimyo, turizm, mehmonxona xo'jaligi, sanitariya, gigiyena, oziq-ovqat xavfsizligi, ekologiya, xizmat ko'rsatish.

## KIRISH

Bugungi kunda turizm va mehmonxona sohasi jahon iqtisodiyotining eng tez rivojlanayotgan tarmoqlaridan biri hisoblanadi. Ushbu sohada xizmat sifati, sanitariya-gigiyena talablari hamda oziq-ovqat xavfsizligini ta'minlash muhim ahamiyat kasb etadi. Mazkur jarayonlarda kimyo fani alohida o'rin tutadi.

Kimyo fani orqali mehmonxonalarda qo'llaniladigan tozalash vositalari, dezinfeksiya moddalarining tarkibi, oziq-ovqat mahsulotlarini saqlash usullari va ekologik xavfsizlik masalalari ilmiy asosda tushuntiriladi. Shu sababli turizm va mehmonxona yo'nalishida tahsil olayotgan o'quvchilar uchun kimyoviy bilimlar muhim kasbiy kompetensiya hisoblanadi.

## THE IMPORTANCE OF CHEMISTRY IN TOURISM AND HOTEL MANAGEMENT

### Sanitation and Hygiene Processes



Maintaining sanitation and hygiene standards in hotels is one of the key factors in ensuring service quality and customer safety. Various chemical agents are used for room disinfection, kitchen sanitation, laundry services, and surface cleaning.

Knowledge of chemical substances helps:

- use cleaning agents correctly;
- prevent harmful effects on human health;
- organize effective disinfection processes.

### **Food Safety Management**

Food quality and safety are among the most important aspects of tourism and hospitality services. Chemistry plays a crucial role in understanding food preservation, storage conditions, and preventing food spoilage.

For example:

- shelf life control;
- food additives;
- preservatives and stabilizers;
- water quality monitoring

are directly connected with chemical science. This ensures safe and high-quality service in hotels and restaurants.

### **CLEANING AGENTS AND CHEMICAL SUBSTANCES**

Hotels regularly use different cleaning chemicals during daily operations. Understanding the composition and safe application of detergents, disinfectants, and bleaching agents is essential for effective service management.



Improper use of chemicals may cause:

- poisoning;
- allergic reactions;
- environmental pollution.

Therefore, hospitality workers should possess sufficient knowledge of chemical safety regulations.

### **ENVIRONMENTAL SUSTAINABILITY AND “GREEN TOURISM”**

In recent years, ecological tourism and “green hotel” concepts have become increasingly popular worldwide. The use of environmentally friendly chemical products is essential for protecting nature and ensuring sustainable tourism development.

Chemistry contributes to:

- developing eco-friendly products;
- recycling waste materials;
- protecting water and air quality;
- applying energy-saving technologies.

These processes support sustainable tourism and environmental protection.

### **PROFESSIONAL IMPORTANCE OF CHEMICAL KNOWLEDGE**

Specialists working in tourism and hotel management should understand:

- sanitation standards;
- food safety requirements;
- safe handling of chemical products.



Studying chemistry helps students develop:

- practical skills;
- professional responsibility;
- safety culture.

As a result, the quality and efficiency of hospitality services improve significantly.

## CONCLUSION

The findings of this study indicate that chemistry is an essential component of tourism and hotel management. Chemical knowledge plays a vital role in maintaining sanitation and hygiene standards, ensuring food safety, and supporting environmental sustainability.

Therefore, teaching chemistry through practical and profession-oriented approaches in tourism and hospitality education contributes to improving educational effectiveness and professional competence.

## REFERENCES

1. Karimov, B.X. *Sanitation Fundamentals in Hotel Management*. Tashkent, 2021.
2. Abdullayev, A.A. *Chemistry and Food Safety*. Tashkent: Fan, 2020.
3. UNESCO. *Sustainable Tourism Development*. Paris, 2022.
4. WHO. *Hygiene and Food Safety Standards*. Geneva, 2021.
5. Tourism and Sanitation Regulations of the Republic of Uzbekistan, 2023.