

Guide for Simulating Job Interviews through Role-Playing Activities

EMI Version – *English as a Medium of Instruction*

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JoAQuīm

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**Role-playing and Peer Assessment for the Integration of Professional
Competences for Employability in Chemistry Studies (JOAQUIM)**

Emerging Educational Innovation Project (PIEE) at the University of Valencia



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Images on pages 3, 5, 8, 9, and 12 were generated using artificial intelligence via ChatGPT (OpenAI), July 2025.

Presentation

In addition to the specific knowledge inherent to each academic discipline, advanced undergraduate courses, and particularly master's programs, should aim to prepare students effectively for successful integration into the job market while fostering critical thinking skills. Specifically, in Chemistry studies, this preparation should encompass both technical and industry-specific content (such as legal regulations, commercial strategies, or safety protocols), as well as practical professional competencies (*soft skills*), including, for example, the ability to manage successfully a job interview.

The JOAQUIM project arises precisely with the main objective of integrating such practical skills into the curriculum for students in the final years of undergraduate and master's studies in Chemistry.

Within the framework of this project, and specifically in the subject *Industry, Chemistry and Society* in the Master's Degree in Chemistry, we have designed a role-play activity that simulates a job recruitment process, including interviews.

This note presents a brief guide for implementing this activity, making it available to fellow educators who may wish to adapt or apply it in their own teaching contexts.



Objectives of the Activity

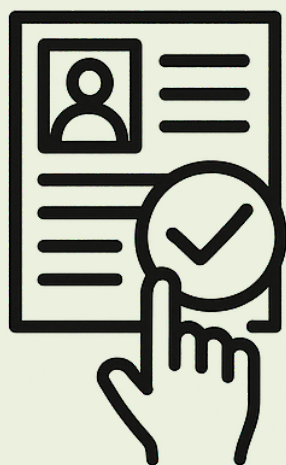
This simulated job selection activity has the overall objective of **promoting the acquisition of professional competencies and essential soft skills for entering the job market** in the field of Chemistry, while complementing the technical content covered in the theory classes.

The specific objectives of the activity are:

- **To practice writing application documents** (CV and cover letter) in a clear, structured way, tailored to a specific job posting in the chemical sector.
- **To become familiar with real-life job selection dynamics**, including personal or group interviews, and to understand the key elements being assessed.
- **To develop oral communication and expression skills**, with a special focus on clarity, confidence, and coherence in responses.
- **To receive personalized feedback** on performance in each phase of the process, in order to identify strengths and areas for improvement.
- **To promote critical thinking and self-assessment** through observing peer interviews and participating in follow-up discussions.
- **To understand and apply evaluation criteria for professional skills**, both from the perspective of the selection committee and from that of the students themselves.

Objectives of the Activity

Writing



Practicing



Reflecting



Observing



Communicating



Assessing

Development of the Activity

1. **Pre-activity preparation:** before the role-play session on interviews, students received a training lecture with guidelines on how to write resumés and prepare cover letters.
2. **Posting of a fictitious job offer:** students submit their applications (resumé + cover letter) through the assigned task in the virtual classroom.
3. **Initial assessment (by the teaching staff):** evaluation of the submitted documents based on punctuality, correct formatting, and relevance of the content to the job offer.
4. **First round:** simultaneous individual interviews (1–1.5 hours).
 - Based on accumulated experience, when group size permits, it is preferable to conduct simultaneous interviews for all students to ensure active participation.
 - All students are interviewed individually and in parallel by different instructors, organized into three or four groups. In our implementation, the activity was conducted with three instructors and about 15 students.
 - In the case of very large groups, an initial pre-selection may be considered, although this reduces the participation opportunities for students who are not selected.
 - Individual feedback is provided at the end of each interview.
 - Each instructor selects one candidate to advance to the next phase.

Development of the Activity

5. Second round: public interview (1 h)

Two methodological options:

A. Individual interview (classic format): each selected candidate responds individually to similar questions in front of the committee and the rest of the class.

B. Group interview (dynamic format): three candidates are interviewed simultaneously, with open-ended questions and scenarios that may require, if desired, interaction and cooperation. This format significantly speeds up the activity and makes it less boring for observing students.

6. Deliberation and final selection (20 min)

- The committee deliberates privately to decide which candidate will be awarded the position.
- Observing students also vote for their preferred candidate.
- The results of the votes from the committee and students are compared to identify discrepancies.

7. Final debate (30 min)

- A space for open discussion on selection criteria, the importance of preparation, and the skills valued during the interviews.
- An opportunity to collect opinions from students and suggestions about the activity.

8. Assessment

- Conducted using a rubric.
- Peer assessment is possible, although limited, as not all students have observed all the interviews.

Graphical Overview of the Phases

I. Job Posting and CV Review by Faculty



II. First Round of Interviews and Initial Selection

III. Final Public Interview Stage



Graphical Overview of the Phases



IV. Committee
Deliberation,
Peer Voting,
and Selection
Outcome

V. Final Debate



VI. Final Assessment
of All Students

Rubric for Written Submission

Level	1 point Poor	2 points Fair	3 points Good	4 points Excellent
Submission punctuality (10%) × 0.1	Submitted after the deadline, without justification or extension request.	Significant delay but with agreed extension request.	Minor justified delay.	Submitted within the established deadline.
Format: structure & coherence (35%) × 0.35	Unprofessional document with serious formatting issues.	Basic structure but with clear formal errors.	Adequate structure with minor formatting issues.	Well-structured, clear, and professional document.
Content aligned with job offer (35%) × 0.35	Missing essential elements commonly expected in a CV or cover letter; no attempt to tailor to the job.	Contains relevant information but lacks clarity or specificity; limited adaptation to the offer.	Includes key components of the CV and cover letter; reasonably adapted, though some parts are poorly justified.	Well-developed CV and cover letter, including all key elements and clearly tailored to the job offer.
Writing quality & language (20%) × 0.2	High number of serious linguistic or expression errors.	Several noticeable but non-critical language or expression errors.	Good writing with minor errors.	Clear, correct, and coherent writing. Free of language errors.

Rubric for the Interviews

Level	1 point Poor	2 points Fair	3 points Good	4 points Excellent
Relevance of Responses (40%) × 0.4	Incoherent responses or no clear relation to the job profile.	Vague or general responses with weak relation to CV/job offer.	Appropriate responses with minor inconsistencies or lack of detail.	Very coherent and well-founded responses aligned with CV and job offer.
Effective Communication (25%) × 0.25	Unclear communication, struggles to express ideas.	Generally understandable, but with clarity issues.	Good communication with occasional insecurity.	Clear, fluent, assertive, and respectful communication.
Handling Difficult Questions (15%) × 0.15	Blocked or unable to answer challenging questions.	Notable difficulties managing difficult questions.	Handles questions with some hesitation.	Answers with calm, confidence, and effective problem-solving.
Attitude and Non-verbal Language (20%) × 0.2	Passive or unmotivated attitude; negative body language.	Neutral attitude, insecure body language.	Motivated attitude with appropriate body language.	Highly proactive and motivated attitude; excellent non-verbal communication.

Instructions for the Rubrics

- The **scores obtained in each section** are multiplied by the **corresponding weight factor** (from 0.1 to 0.4) and then added together. Thus, each rubric has a **maximum score of 4 points**. This value can be converted to a 10-point scale (score obtained on the 4-point scale divided by 0.4), if preferred.
- One of the risks of this type of rubric is the reluctance to award the maximum score, which can excessively penalize students. The difference between a score of 3 out of 4 (75%) and 4 out of 4 (100%) is significant. For this reason, we encourage instructors to be aware that it is entirely appropriate to assign a score of 4 when justified, and that it does not need to be reserved exclusively for “perfection.”
- **Half-points are allowed** (e.g., 3.5 instead of 3 or 4).
- **OPTIONAL:** In parallel with the instructors’ assessment, **peer assessment** by classmates can also be used. In this case, the use of Moodle’s “Workshop” tool is recommended. Only instructors may assign half-points, while students assign whole points.

For guidance on using peer assessment and implementing it in Moodle, we recommend referring to our *Guide to Peer Assessment in Oral Presentations* (<https://doi.org/10.5281/zenodo.16224965>).



Example of Job Offer

ALC-Chem | *Innovation is our field*

R&D Technician

About Our Company

A leading company in plant protection products and biostimulants, at the forefront of innovation, research, and technological development in Spain, and one of the main players in Europe.

Job Description

- Performing tasks associated with the management and coordination of a research laboratory
- Leading and coordinating applied research and development projects
- Carrying out applied research project tasks
- Technical execution and management of international projects
- Managing and maintaining direct relationships with clients

Job Requirements

- University degree in Engineering or Chemical Sciences (a specialized master's degree will be valued)
- Experience in technical R&D work
- High level of English (Cambridge B2 certificate or equivalent is a plus)
- Availability for mobility and travel
- Driver's license

Valuable Competencies

- Ability and willingness to work in a team
- Enthusiasm and motivation
- Excellent communication skills (spoken and written) and client interaction
- Problem-solving skills and work precision

What We Offer

- Great career and professional development opportunity

Interested? Send us your complete application (cover letter, CV, and certificates) in a single PDF file via our company's web application.

Contact: Mr. R. Campos-Verdes

Job reference: JJ-XX-3535

Model Interview Questions

1. Introduction and Motivation Questions

- Can you briefly tell us about your academic and professional background so far?
- Why are you interested in this job offer?
- What do you know about our company, and why would you like to work with us?
- What are your medium-term professional goals?

2. Questions on Technical Competencies

- Do you have previous laboratory experience? What kinds of techniques or equipment have you used?
- Describe a research project or academic practicum on which you have worked and how you contributed.
- How do you document and manage experimental data during a project?
- Have you ever worked with laboratory safety regulations?

3. Questions on Soft Skills and Personal Abilities

- What are your strengths and areas for improvement as a candidate?
- Describe a complex situation in which you had to work in a team. What was your role?
- How do you handle mistakes in an experimental or technical context? Give us an example.
- Have you ever encountered an unexpected technical problem? How did you handle it?
- How do you explain complex results to people without a technical background?

Model Interview Questions

4. Workplace Scenario Questions

- Imagine you detect inconsistent results in a series of experiments that seem to be due to a colleague's actions. What steps would you take?
- You are asked to coordinate a small project with tight deadlines and multiple stakeholders. How would you organize yourself?
- You are in a meeting with a client who requests a solution that is not technically feasible. What do you do?

5. Language Skills Questions (in Spanish, if applicable)

- Puede describir brevemente un proyecto en el que haya trabajado durante sus estudios de grado?
- ¿Cómo explicaría un proceso químico complejo a un cliente extranjero que no sea científico?
- ¿Cuál es su experiencia trabajando en ambientes internacionales o con compañeros extranjeros?

6. Closing Questions

- What would you like to learn or improve if you joined our team?
- What are your salary expectations?
- Do you have any questions for the selection committee?

Concluding Remarks

- The integration of **soft skills** through **active methodologies** such as **role-playing activities** not only enhances the **preparation of students** for the **job market** but also fosters a teaching style that is more connected to professional realities.
- Simulating **realistic selection processes** provides an optimal space for **observing** and **assessing skills** that are often difficult to measure through traditional formats, such as **communication skills**, **emotional management**, or real-time **decision-making**.
- The design of the activity allows for the implementation of a formative assessment model that combines **both instructor and peer perspectives**. It promotes self-analysis, **shared responsibility**, and a more **critical** attitude toward one's own learning process.
- This methodological approach places students in an **active and responsible role**, contributing to the development of an **early professional identity** and strengthening their autonomy.
- The systematization of this experience, with clear rubrics, feedback spaces, and **adaptable materials**, enables its **transfer to other subjects and disciplines**, promoting a shared teaching culture based on continuous improvement.

NOTES

A large grid of graph paper for taking notes, consisting of 30 columns and 40 rows of small squares.

NOTES

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.

Campus of Bujassot-Paterna
Campus of Experimental Sciences
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