

Call for Expressions of Interest

Content developer for Out of Field Chemistry Teachers.

Position Overview:

The Out-of-Field content developer(s) will develop a selection of training and support material for educators are teaching the chemistry component of Year 7 - 10 general science but do not have formal training in chemistry. An aim of the project will be to enhance the skills, knowledge, and confidence of teachers in these classes. The content developer will work with members of the CEA committee to create learning modules (online and/or face-to-face) that are linked to Victorian and Australian curricula in 7-10 chemistry.

Your expression of interest will contain

- **a CV, with a maximum length of 2 pages, outlining your qualifications and any relevant experience.**
- **A sample professional learning plan of theoretical and practical work, up to two pages in length, for any one elaboration for the following item in the new Victorian Curriculum:**
 - The Atomic theory of matter can be used to model and explain the difference between elements, compounds and mixtures; elements, compounds and mixtures can be represented as two-dimensional and three-dimensional models, elements can be represented by symbols, and molecules and compounds can be represented by chemical formulas
- Choose one of the following elaborations for your professional learning plan
 - explaining why elements are represented by symbols, why compounds and molecules are represented by chemical formulas, and why mixtures are represented by percentages
 - using representations to show the classification of matter as elements, compounds and different types of mixtures such as solutions, suspensions and colloids
 - examining the information conveyed by different types of representations of elements and compounds, and identifying where and why these different representations are used

The role will involve some of the following responsibilities. We would also support expressions of interest for parts of the task. We envisage that this project will involve a team of developers and presenters.

1. Curriculum Development:

- Develop a structured and cohesive professional learning tailored to the specific needs of out-of-field teachers who are teaching chemistry.
- Ensure alignment with educational standards, curriculum frameworks, and learning objectives relevant to chemistry education.

2. Instruction and Delivery:

- Deliver engaging and informative instructional sessions, workshops, and seminars that cover fundamental concepts, principles, and applications of chemistry.
- Utilize a variety of instructional methods, including seminars, demonstrations, hands-on activities, and simulations, to facilitate learning and understanding.

3. Content Expertise:

- Serve as a subject matter expert in chemistry, providing in-depth knowledge, insights, and practical strategies to address common challenges faced by out-of-field teachers.
- Offer guidance on effective instructional strategies, laboratory safety protocols, and the integration of real-world applications into chemistry lessons.

4. Professional Development:

- Foster a supportive and collaborative learning environment where teachers can exchange ideas, share experiences, and enhance their pedagogical skills in chemistry.
- Provide ongoing mentoring, coaching, and feedback to participants to support their growth and development as effective chemistry educators.

The role will include development of some of the following and you should consider these in your expression of interest:

1. Resource Development:

- Create and curate educational resources, lesson plans, laboratory experiments, and supplementary materials that align with the course curriculum and support differentiated instruction.

- Recommend textbooks, online resources, software tools, and laboratory equipment suitable for teaching chemistry to out-of-field educators.

2. Assessment and Evaluation:

- Develop and administer assessments, quizzes, and projects to gauge participants' understanding of chemistry concepts and their ability to apply them in teaching.
- Analyse participant performance data, provide constructive feedback, and make recommendations for instructional improvements based on assessment outcomes.

3. Collaboration and Networking:

- Collaborate with educational institutions, professional organizations, and stakeholders to stay informed about current trends, research, and best practices in chemistry education.
- Establish partnerships to enhance program visibility, attract participants, and expand opportunities for professional development in chemistry teaching.

Contact Mick Moylan mmoylan@unimelb.edu.au

Applicants are very welcome to have a pre-application meeting with Mick before submitting an expression of interest.

Due Date: Monday 20 January