

4. What are the current knowledge gaps and uncertainties that the regulators and industry need to consider for a pragmatic approach to decision making?

This project would consist of three phases.

Phase I – Bring together a core group of task members to define the scope of the project, identify specific active ingredients and product types, and undertake problem formulation from the risk assessment perspective.

Phase II – Organize a workshop bringing together expertise from industry, regulatory bodies, and researchers on human health effects and the risk assessment of nano-enabled pesticides, as well as the characterization of nanomaterials that have been identified in phase I.

Phase III – Recommend a sound methodological approach for generating data that is likely to be needed by the regulators. Identify research priorities where current knowledge or methodology are found to be inadequate.

The overall objective is to assist industry, contract research organizations (CROs), and regulators in determining an acceptable and practicable approach for generating the data relevant to human health risk assessment required for the registration of nano-enabled pesticide formulations. Broadly speaking, a nano-enabled pesticide represents a product where nanotechnology is employed (e.g. delivery via a nano-carrier) to enhance efficacy, reduce the environmental footprint, or the enhance usability of a pesticide active ingredient.

### References

1. Rai Kookana *et al.* Nanopesticides: Guiding Principles for Regulatory Evaluation of Environmental Risks. *J. Ag Food Chem* 62:4227-4240. 2014. <http://doi.org/10.1021/jf500232f>
2. Glen W. Walker *et al.* Ecological Risk Assessment of Nano-enabled Pesticides: A Perspective on Problem Formulation. *J. Ag Food Chem.* 2017. <http://doi.org/10.1021/acs.jafc.7b02373>

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## IUPAC100 Periodic Table Challenge

The year 2019 marks the 100th anniversary of IUPAC and the 150th anniversary of the Periodic Table. The IUPAC Centenary is an opportunity to reflect on the value and work that is carried out by the IUPAC. While doing so, we can inform audiences worldwide of the variety of IUPAC activities—and do so in a manner that covers each and every decade, not just recent years.



Given the anniversary of the Periodic Table and its central role in chemistry, this project seeks to create an online global competition centered on the Periodic Table and IUPAC. The objective of the project is to promote IUPAC's role in shaping the global affairs of chemistry through a competitive online quiz. With this global activity, we aim to reach a global audience of young students in a way that will be attractive, cost-effective, and that will give visibility to the work that IUPAC has been doing over the last 100 years.

### This is your chance to contribute

While some questions have already been prepared, the Task Group needs your input to reach its goal: a question linked to each and every one of the 118 elements, with a full diversity of topics covered. We are looking for creative multiple-choice questions: the focus of the question is free for you to choose. Some obvious choices are questions regarding the name, the chemical or physical properties of the elements, or aspects surrounding the element's discovery.

For examples of questions and to submit your own now, please visit the project page.

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[www.iupac.org/project/2017-031-1-050](http://www.iupac.org/project/2017-031-1-050)