



AKIPP 2020

# PENTAKSIRAN ALTERNATIF

## PENERANGAN UNSUR KIMIA BERDASARKAN JADUAL BERKALA

Projek ini melibatkan pelajar Asasi UMS yang dibahagikan kepada beberapa kumpulan. Setiap kumpulan dikehendaki mencari maklumat berkaitan dengan salah satu unsur yang terdapat di dalam jadual berkala. Pencarian maklumat tersebut dibincangkan melalui online discussion seterusnya dibentangkan melalui video, poster dan juga laporan. Pelajar perlu mencari maklumat secara berkumpulan, selain daripada mengembangkan kemahiran membuat video pembentangan secara kreatif dan tersusun. Projek ini dijangka dapat memberi impak kepada daya kreativiti, kemandirian dalam pencarian maklumat dan membina persaingan sihat dalam kalangan pelajar.

**SK0014**  
**PHYSICAL & INORGANIC CHEMISTRY**  
**PBL & E-POSTER**

Nineteenth-century chemists developed the periodic table by arranging elements in the increasing order of their atomic masses while the modern periodic table classifies the elements according to their atomic numbers, and thus also by their electron configurations. The importance and usefulness of the periodic table lie in the fact that we can use our understanding of the general properties and trends within a group or a period to predict with considerable accuracy the properties of any element, even though that element may be unfamiliar to us.

Your task is to choose an element from the periodic table.  
Each group has to choose different element.  
Based on your chosen element, provide the following:

**PART A (PBL)**  
Make a short video describing your element in terms of:  
 its physical and chemical properties  
 electron configuration - both in neutral and ionic form (note that ionic form may be more than one)  
 structures (molecular geometry, Lewis structure, crystal structure, etc.)  
 bond that can form (either within element or with another element)  
 thermal conductivity, atomic spectra, hybrid orbital and any information that can help.

**Video criteria:**  
 Video duration: 2-3 min  
 Featuring each group members (may be voice or face or both)\*  
 Use proper English  
 Suitable music  
 Include all required information  
 Include references & credits  
The main idea must be according to the content given  
 Originality and creativity are highly encouraged

**PART B (E-POSTER)**  
Industrial applications of your chosen element. Discuss your findings during online discussion and present it on e-poster.

**E-poster criteria:**  
 Present time: 5 min  
 Don't forget to include the EcoCampus, IR 4-O, 25 Years as well as the UMS logo (you may refer the guidelines to put these logos on your poster from UMS website)  
 In power point format (A2 size)  
 Use proper English  
 The main idea must be according to the content given  
 Originality and creativity are highly encouraged  
 Font & graphic must be clear  
 Follow scientific poster format

**PART C (REPORT)**  
Consist of all required information in both Part A and Part B.  
Do not divide your report into Part A and B, just combine the information into one report.  
Originality and creativity are highly encouraged

Any inquiries please refer to your respective tutor

### Jenis Pentaksiran:

Online Discussion

Video Presentation

e-Poster Presentation

Report



SCAN HERE FOR MORE  
INFORMATION



CHEMISTRY TEAM  
PUSAT PERSEDIAAN SAINS & TEKNOLOGI UMS