DETERMINATION OF CHROMIUM, MERCURY, SELENIUM AND ZINC IN MARINE FISH SPECIES OF MALAYSIA

Nazaratul Ashifa Abdullah Salim, Wee Boon Siong, Ezwiza Sanuri,
Mohd Suhaimi Hamzah, Md Suhaimi Elias,
Shamsiah Abd. Rahman, and Azian Hashim

Waste and Environmental Technology Group,
Malaysian Nuclear Agency (Nuclear Malaysia),
Bangi, 43000 Kajang, Selangor, Malaysia.

INTRODUCTION

- Water pollution increases the trace and toxic element concentrations in fish through **food web**.
- Chromium, Selenium and Zinc are **essentia**l elements - biological systems. BUT, produce toxic effect if taken in excessive level.
- The Hg **non-essential** element, as it is **toxic**, even in traces level.
- The monitoring of these elements in the environment and in food sources particularly seafood require processing numbers of samples to accurately characterize their abundance and to reach reliable conclusions.
- Important fishing areas: **Straits of Malacca and South China Sea.**

OBJECTIVES

- To **investigate the level of Cr, Hg, Se, and Zn** in commonly consume marine fish
- **To assess the dietary intake of Cr, Hg, Se, and Zn**