

RAIN, a new scale for the general public

Gyuseong Cho^{1*}

¹Korea Advance Institute of Science and Technology

*E-mail: gscho@kaist.ac.kr

Keywords: radiation monitoring detector, nuclear material, radiation monitoring, simulation study

A new scale for radiological risk, RAIN, is proposed. The general public often suffer from misunderstanding of the meaning of radiation risk during their daily conversation. Their misunderstanding may breed unnecessary fear of radiation such as a fear for birth abnormality (mutation) or cancer genesis. The purpose of proposing a new scale is to put the general public at ease with the concept of radiation doses. The new scale mimics the logarithmic earthquake scale so that the general public can understand quickly about the hazardous scale of the radiological accident or event of interest similarly to decibel and pH etc. It scales from zero to 10. The new scale hopefully serve as a common language in the communication for the general public with the radiation experts to converse matters related to radiological risk and/or safety in various situations such as radiological or nuclear accidents, medical use of X-ray, nondestructive test, examination of smuggling objects in ports, agricultural sterilization and keen observation in science studies by radiation etc. Such fruitful conversation will ultimately enhance the public to accept the use of radiation in our modern civilized society.

