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## ESTABLISHMENT OF A COMPUTER DATABASE CONTAINING NUCLEAR AND DECAY DATA OF k0-NAA

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A computer database containing nuclear and decay data of about 125 nuclei interested in the reactor neutron activation analysis based-on the k0-standardization method (k0-NAA) has been presented. Each nuclide consists of data, e.g. element's name, radionuclide produced by reaction of the reactor neutrons, half-lives, Q0- resonance integral to activation cross-section ratio, - effective resonance energy, FCD- cadmium transmission factor, Eg- gamma-line energy and corresponding k0-factors, etc. The establishment of the computer database aims at automizing of data processing in the k0-NAA, i.e. nuclide identification, correction of reactor fast neutron reactions and of complex decay schemes (18 types), and calculation of elemental concentration as well as uncertainty and limit of detection. The TURBO-VISION environment has been chosen for managing the database since its user-friendly characteristic including windows and scroll-bar systems. The OOP (object-oriented programming) function has also been applied in order to link the database to other modules of a k0-NAA software. The application of the database in a general k0-NAA software developed at Dalat NRI will be demonstrated. The evaluation of analysis quality using the standard reference materials (SRM) has also been shown.