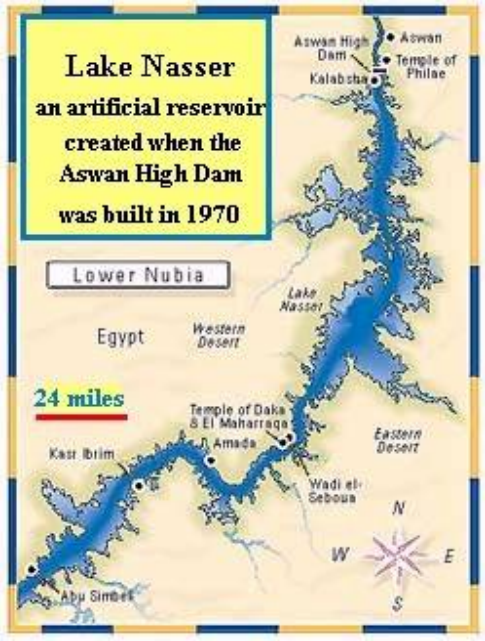
ANWENDUNGEN DER KZNAA IN DER UMWELTFORSCHUNG

KZAA wurde in den vergangenen Jahren als ein schnelles analytisches Verfahren zur Untersuchung von Umwelt-, biologischen-, geologischen- und archäologischen Materialien eingesetzt. Im Rahmen dieser Arbeiten wurde besonderes Augenmerk auf die Verbesserung der Nachweisgrenze, Genauigkeit und Reproduzierbarkeit der untersuchten Elemente gelegt. Die Arbeiten wurden in mehreren Publikationen zusammengefasst:

"INVESTIGATION OF SEDIMENT, MONAZITE, PHOSPHATE, COAL, SOIL"



TH, U AND TRACE ELEMENTS DETERMINATION IN EGYPTIAN LAKE SEDIMENTS BY INAA AND LASER FLUORIMETRY
S. S. Ismail, *A. Ghods, R. Awadallah and F. Grass*
J. Radioanal. & Nucl. Chem., Letters, 200(2), 95-108, 1995.

SHORT- AND LONG-TIME NEUTRON ACTIVATION ANALYSIS OF EGYPTIAN PHOSPHATE REFERENCE MATERIALS
S. S. Ismail *and F. Grass*
Mikrochim. Acta , II, 219- 224, 1989.

TRACE AND MAJOR ELEMENT PROFILES IN SOME EGYPTIAN COALS BY ICP-AES AND SHORT TIME ACTIVATION ANALYSIS
S. S. Ismail
J. Trace & Microprobe Techniques, 6 (4), 549-561, 1988.

NEUTRON ACTIVATION ANALYSIS OF SAMPLES OF SOME MONAZITE AND PHOSPHATE DEPOSITS IN EGYPT
R. Zaghloul, ***S. S. Ismail*** *and F. Grass*
J. Trace & Microprobe Techn., 6(4), 487-500, 1988.

SHORT-TIME ACTIVATION ANALYSIS OF LAKE SEDIMENTS
S. N. Moalla and ***S. S. Ismail***
J. Trace and Microprobe Techniques, 14(1), 233-242 (1996)

CHARACTERISATION OF NILE SEDIMENTS BY CHEMICAL ANALYSIS AND MULTIVARIATE TECHNIQUES
R. M. Awadallah, M. E. Soltan and ***S. S. Ismail***
J. Trace and Microprobe Techniques, 14(1), 223-232 (1996).

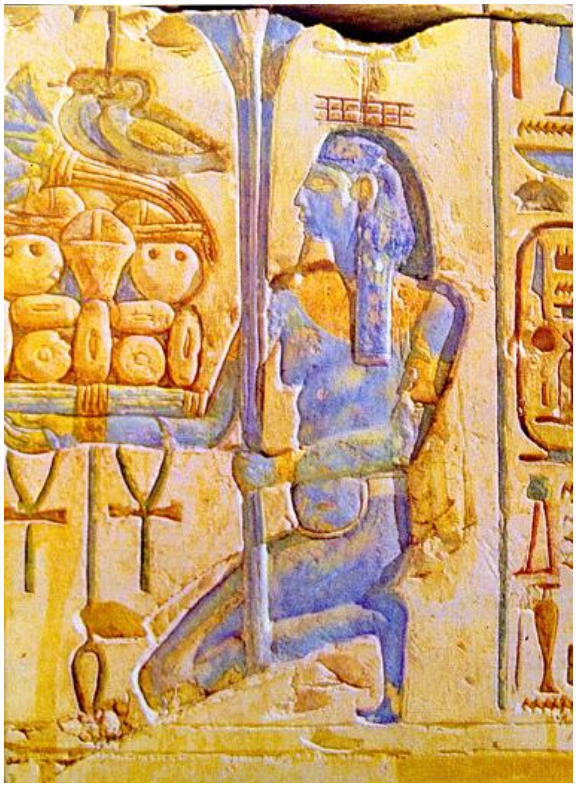
DISTRIBUTION OF ^{137}Cs AND ^{226}Ra IN THE SEDIMENTS OF ASWAN HIGH DAM LAKE
S. S. Ismail*, E. Unfried and F. Grass*
J. Radioanal. & Nucl. Chem., Letters, 186(2), 143-155, 1994.

DISTRIBUTION OF TRACE ELEMENTS IN MUD SEDIMENTS OF THE ASWAN HIGH DAM LAKE
R. M. Awadallah, ***S. S. Ismail****, A. R. Arifien, S. N. Moalla and F. Grass*
Chem. Erde, 54, 67-82, 1994.

INAA OF SOME RARE AND TRACE ELEMENTS OF EGYPTIAN SOIL
S. S. Ismail *and F. Grass*
Chem. Erde, 49, 235-240, 1989.

SHORT TIME ACTIVATION ANALYSIS OF SOIL SAMPLES
S. S. Ismail *and F. Grass*
Intern. Agrophysics, 4(1-2), 49-56, 1988.

"INVESTIGATION OF WATER SAMPLES"



Hapi, god of the River Nile. Temple of Abydos, Egypt

DISTRIBUTION OF TRACE ELEMENTS IN EGYPTIAN GROUND- AND NILE WATER
S. S. Ismail
J. Trace and Microprobe Techniques, 14(1), 243-253 (1996)

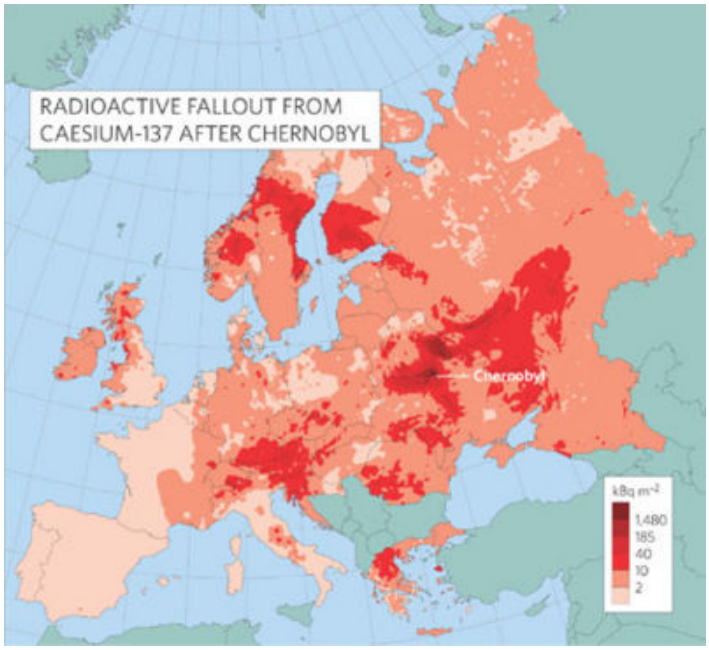
STEPWISE INVESTIGATION OF KIMA DRAIN INDUSTRIAL WASTE WATER DURING THE PERIOD OCTOBER 1986 - OCTOBER 1987
R.M.Awadallah**, S. S. Ismail** and M.E. Soltan
J. Environ. Sci. Health Part A- Environ. Sci. Eng. A31, 2, 273-282, 1996

CHEMICAL AND RADIOACTIVITY INVESTIGATION OF DRINKING WATER IN UPPER EGYPT
S. S. Ismail *and M. E. Soltan*
Bull. Fac. Sci. Assiut Univ., 23(2-B), 91-100, 1994

INVESTIGATION OF DRINKING- AND NILE WATER SAMPLES OF UPPER EGYPT
RM Awadallah, ***S. S. Ismail****, M. T. Abd El Aal and M. E. Soltan*
Water SA Vol. 19, No. 3, 1993

BACTERIOLOGICAL AND CHEMICAL STUDIES OF WASTEWATER FROM A CHEMICAL FERTILIZER PLANT
S.M. Mohawed, M.A. Meki, ***S. S. Ismail***
Biological Wastes, 28, 227-232, 1989.

"INVESTIGATION OF PLANTS AND MUSHROOMS"



^{137}Cs, TRACE AND TOXIC ELEMENTS DISTRIBUTION IN AUSTRIAN MUSHROOMS
S. S. Ismail*, P. Dolezel and V. Karg*
J. Radioanal. & Nucl. Chem., Letters, 200(4),315-336, 1995.

DISTRIBUTION OF Na, K, Rb, Cs, AND ^{137}Cs IN SOME AUSTRIAN HIGHER FUNGI
S. S. Ismail
Biological Trace Element Research, 43 (5), 707-714, 1994.

APPLICATION OF MULTI-ELEMENT CLUSTERING TECHNIQUES OF FIVE EGYPTIAN INDUSTRIAL SUGAR PRODUCTS
R.M. Awadallah, ***S. S. Ismail****, and A.E. Mohamed*
J. Radioanal. &Nucl. Chem. Articels, Vol. 196,No.2, 377-385,1995.

VERBINDUNG VON KZAA MIT ANDEREN ANALYTISCHEN VERFAHREN

INVESTIGATION OF ACCURACY AND PRECISION FOR DETERMINATION OF THE SHORT-LIVED NUCLIDES BY INAA AND MÖSSBAUER-EFFECT
***S. S. Ismail**, G. Wiesinger, R. Pavlovec and F. Grass*
J. Radioanal. & Nucl. Chem.,Articles, 169 (2), 435-442,1993.

NUCLEAR METHODS IN ENVIRONMENTAL RESEARCH
*G. Wiesinger and **S. S. Ismail***
Hyperfine Interactions, 66, 203-220, 1991.

CHARACTERISATION OF Fe BARING COMPOUNDS IN ENVIRONMENTAL SAMPLES
*G. Wiesinger and **S. S. Ismail***
Hyperf. Inter., 57, 2319-2325, 1990.

ENVIRONMENTAL SAMPLE CHARACTERIZATION BY THE MÖSSBAUER EFFECT
*G. Wiesinger, **S. S. Ismail**, P. Bottig*
Hyperf. Intern. 47, 515-516, 1989.

DIFFERENT SOURCES OF CONTAMINATION DETECTED BY NUCLEAR METHODS
***S. S. Ismail**, F. Grass, G. Wiesinger and A. G. Mostafa*
WMO, Special Environ. Report No. 16, 564-589, 1985.

PATTERN RECOGNITION TECHNIQUES AS A TOOL FOR IDENTIFYING SOURCES OF CONTAMINATION IN ENVIRONMENTAL SAMPLE ANALYSIS
***S. S. Ismail**, F. Grass and K. Varmuza*
J. Trace & Microprobe Techn., 6(4); 563-573,1988.

USE OF GEOLOGICALLY BIASED ENRICHMENT FACTORS (EF) AS INDICATORS OF NATURAL AIR POLLUTANTS
*F. S.M. Hassan and **S. S. Ismail***
J. Radioanal. & Nucl. Chem., Articles, 167 (2),237-246, 1993.

CHARACTERISATION OF NILE AND DRINKING WATER QUALITY BY CHEMICAL AND CLUSTER ANALYSIS
***S. S. Ismail** and A. Ramadan*
The Science of the Total Environment,173/174, 69-81, 1995.

APPLICATION OF MULTI-ELEMENT CLUSTERING TECHNIQUES OF FIVE EGYPTIAN INDUSTRIAL SUGAR PRODUCTS
*R.M. Awadallah, **S. S. Ismail**, and A.E. Mohamed*
J. Radioanal. &Nucl. Chem. Articels, Vol. 196,No.2, 377-385,1995.

PATTERN RECOGNITION ANALYSIS FOR CHARACTERIZATION OF COAL AND ASH SAMPLES
S. S. Ismail
J. Radioanal. & Nucl. Chem., Articles, 169 (2), 381-395, 1993.

TRACE AND MAJOR ELEMENT PROFILES IN SOME EGYPTIAN COALS BY ICP-AES AND SHORT TIME ACTIVATION ANALYSIS
S. S. Ismail
J. Trace & Microprobe Techniques, 6 (4), 549-561, 1988.

SHORT-TIME ACTIVATION ANALYSIS OF SOME PLANTS OF THE NUBIAN PART OF THE EASTERN EGYPTIAN DESERT
S. S. Ismail *and F. Grass*
Intern. Agrophysics, 5 (1-2),43-52,1989.

“INVESTIGATION OF GLASS”



INVESTIGATION OF ANCIENT MUMMY PEARLS BY STEADY STATE AND PULSE ACTIVATION ANALYSIS
H. F. Ali, ***S. S. Ismail*** *and F.Grass*
J. Trace & Microprobe Techn., 6(4), 521-533, 1988.

COORDINATION OF IRON IN SOME CABAL GLASSES
A.G.Mostafa, M.K.S. Sherif and ***S. S. Saleh***
Asw. Sci. Tech. Bull., Vol 1, No. 1, 11-21, 1979.

STUDY OF THE PARAMAGNETIC PROPERTIES OF SOME CABAL GLASSES CONTAINING IRON
A.G.Mostafa, M.K.S. Sherif and ***S. S. Saleh****, A.M. Sand, F.A. Mostafa*
Asw. Sci. Tech. Bull., Vol 1, No. 1, 52-58, 1979.