Transformed ferroalloy waste products as possible scavengers in the Krka River Estuary (Eastern Adriactic Coast, Croatia)

Halka BILINSKI, Zeljko KWOKAL and Marko BRANICA

"Rudjer Boskovic" Institute, ZAGREB (Croatia)

In the recent paper describing processes affecting the fate of mercury in the Krka River Estuary (BILINSKI *et al.*, 1992) we have identified some of the minerals at the freshwater-seawater interface (FSI). The sampling station was under the waterfalls (Skradinski Buk). The identified solid phases were calcite, quartz, calcium silicate hydrate and takanelite. It was assumed that some of these particles are connected with industrial wastes from the ferroalloy factory situated in the vicinity of the city of Sibenik, 30 km downstream from the sampling station. aMn and aFe are produced in the factory from the ore braunite. Slags identified with calcium manganate and with bustamite are deposited in the vicinity of the factory. Industrial dust is released in the air in large quantity. In the present work, transformations of these waste products were studied in the Krka River estuarine waters of different salinities. The greatest part of the waste is rather water soluble. In addition to natural minerals, different minerals were obtained by the dissolution and reprecipitation process, some of which were identified earlier in the Krka River Estuary and can act as scavengers for many trace metals.

REFERENCES

BILINSKI H., KWOKAL Z. and BRANICA M., 1992.- Processes affecting the fate of mercury in the Krka River Estuary, Water Research (in press).