



## MAGNETIC FIELD WATER TREATMENT SECTION

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### PERSONNEL:

#### Research Staff:

Marek Kopeć, M.Sc.

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### OVERVIEW:

In the last year the activity of the team was focused on industrial implementing of methods developed, as well as on designing and implementing devices for magnetohydrodynamic water treatment and water filtration in the magnetic field.

– Phase I of research for Ostrowiec Steelworks in Ostrowiec Świętokrzyski (IFJ N-3454 Research) on the possibilities of implementation of the methods of magnetohydrodynamic water treatment in water and sewage circuits, as well as of the method of filtration in the magnetic field were completed. In this part of research, phase analyses of deposits from water and sewage circuits were carried out. In the rolling mill circuit of Ostrowiec Steelworks, a magnetic filter with a capacity of 200 m<sup>3</sup>/h, designed in the Institute of Nuclear Physics was installed and tested. Implementation of this filter is predicted for the year 1999.

– Research for the Koźienice Power Station in Świerże Górne (IFJ N-3450 Research) on determination of the phase composition of total suspended solids in water-steam circuits was completed.

– A preliminary evaluation was completed on economic effects of implementation of the prototype magnetic filter FM-500 which has been operational since 1993 in the circuit of turbine condensate cleaning in the 225 MW unit in the power station in Połaniec.

Marek Kopeć