REPORT ON THE FIFTH FLUORINE SYMPOSIUM IN SZCZECIN

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On September 25, 1992, Szczecin, Poland, was the venue of the fifth Fluorine Symposium. The subject was: Biological risks posed by fluorine compounds. Participants were affiliated with 15 national and international Centers. The program comprised 8 reports and 20 posters, and opened with a message from Professor Gene Miller (USA), Secretary of the International Society for Fluoride Research.

Z Machoy (Szczecin) presented a report, "Biological risk to fallow deer by fluorine compounds in the area of the future Odra Riverside Park", on a plan by Poland and Germany to organize a national park in the Lower Odra river basin. The environmental hazard has prompted the Polish Hunters' Association to set up a deer protection Foundation for the Western Pomerania regions.

U Kierdorf (Göttingen) and H Kierdorf (Cologne) in the next report, "Pathological tooth changes in roe deer (Capreolus capreolus) caused by chronic fluoride intoxication", presented analytic data concerning increased fluoride accumulation in the bones of roe deer stemming from the highly industrialized Ruhr Basin in Germany. The animals displayed the characteristic pathogenic changes in teeth which result from protracted fluoride poisoning: increased wear, poorly mineralized enamel and discoloration.

M Borysewicz-Lewicka (Poznan) in "Influence of fluoride on mineralization in the oral cavity" reported an investigation of fluoride influences on mineralization of immature supragingival dental calculus.

D Chlebna-Sokól (Łódz) and E Czerwinski (Krakow) in their paper "Computerized X-ray image analysis in assessment of bone mineralization in children with dental fluorosis" reported on a part of their long-term and complex studies on the effects of overoptimal fluoride concentrations in potable water on the health and physical development of school-age children. They reported greater height and area of bone trabeculae in male children with dental fluorosis compared with the control group.

E Renner (Giessen) in "Effect of calcium intake on the bone mineral content and incidence of osteoporosis" provided data which support the hypothesis that appropriate consumption of calcium with milk and dairy products in childhood and during the maturation period are decisive both for achieving maximal bone mass and for protection against osteoporosis.

J Markiewicz (Kraków) in "Some analytical problems in determination of trace amounts of fluorine compounds" reported and discussed results of interlaboratory testing for fluorine compounds in soil and plant material samples.

J Krechniak (Gdansk) in "Hair as an index of exposure to fluoride" concluded that hair provides a useful global indicator of environmental and occupational exposure and is a valuable first screening method - much less inconvenient than monitoring of blood and urine.
Finally D Chlubek (Szczecin) in "Significance of placental transfer of fluoride" discussed viewpoints on placental fluoride transport and the difficulties with implementation of gained knowledge on this subject in clinical practice.

A commission of three evaluated the posters and discussed the contributions with each author. The subjects presented included: fluoride content of body fluids and its share in mineralization of bones and teeth; intoxication of experimental animals; and interaction of fluoride and enzymes.

In summary, the Symposium found that in Poland fluorine continues to be a major contaminant of the environment. The proceedings have been published in a book, (in Polish): Metabolism of Fluorine '92, with summaries in English.

INTRODUCTION TO THE FIFTH FLUORINE SYMPOSIUM IN POLAND

Gene W Miller, Secretary
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Congratulations to all participants in the Fifth Fluorine Symposium to be held in Poland. On behalf of the ISFR I wish you successful meetings, interesting discussions and fruitful research. In the past I have followed with interest your Fluorine Symposia of 1979, 1986 and 1988.

Accounts of these meetings were published in the journal Fluoride. I encourage you again to submit a summary of your Symposium, so that it may be published in Fluoride and enable our members throughout the world to be informed about fluoride research in Poland. I am very appreciative of the efforts of Professor Dr Zygmunt Machoy from Szczecin who has kept us informed about the fluoride meetings and research in Poland. Professor Machoy has been a member of ISFR for many years and has actively participated in many of the international conferences. He is presently serving on the the Editorial Board of ISFR as does Dr Edward Czerwinski (Kraków Academy of Medicine) and Dr Jerzy Krechniak from Gdansk. The research on fluorine that has originated in Poland is extensive in the areas of plant, animal and human studies. Many excellent papers from Poland on fluoride toxicology have been cited frequently by researchers world-wide.

I would like to encourage all researchers in the area of fluoride to become members of the International Society for Fluoride Research and submit manuscripts and abstracts for publication in the Fluoride journal. Dr John Colquhoun (New Zealand) is new editor of the journal and welcomes your input to Fluoride. The fluorine research that is being conducted in Poland is of much value to all that are concerned with effects of fluoride. We acknowledge the excellence of this research and your colleagues throughout the world congratulate you on your dedication.