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(Eds.)

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# Early Computer Development in Poland

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**Abstract.** The paper describes the history of early computing in Poland from the establishment of the Mathematical Apparatuses Group in 1948, which later changed into the independent Mathematical Apparatuses Division of the Polish Academy of Sciences and then finally became the Institute of Mathematical Machines, where the ZAM computers were designed and produced. Two other research and development centers, which were most important in the late 1950s and 1960s are also described: the Faculty of Telecommunications of the Warsaw Institute of Technology (UMC machines) and Elwro (Odra series). When the production of RYAD computers started in 1973, the production of these machines had to be dropped.

**Keywords:** History of computing · Polish computing

## 1 Introduction

The early development of computers in Poland has been very sparsely documented in English-language publications. English-language articles published in professional periodicals during that period usually detailed specific technical solutions, and seldom gave sufficient historical context. PIPS – the Polish Information Processing Society (Polskie Towarzystwo Informatyczne – PTI) has been trying to collect all of these articles, but currently only has two of them in its archives [1, 2], which might be partially considered historical studies. Both concentrate primarily on the personal achievements of the authors and dedicate less detail to other works carried out in parallel. Moreover, these works focus on the 1940s and ‘50s, and do not take into account the consequences of these developments in the following decades.

The Polish-language resources are richer [3–14], but even they do not provide a full picture. Some, which are not referenced here, were simply juxtapositions of dates and milestones. Others were limited to very specific computer applications in particular sectors of the economy or overly personalized memories. Often times, attempts at a more comprehensive summary of the subject contradicted prior work or were continuations of long-outdated controversial discussions.

As the anniversary of the 70th birthday of Polish informatics drew near, PIPS was tasked with the coordination of jubilee ventures prepared by various government institutions, universities, associations and companies. We had to organize our historical knowledge to fill existing gaps and develop a comprehensive description of the history of Polish computing. Not only because this story needs to be better known, but also to