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Professor Gisbert zu Putlitz (dark tie) showing the Author (left) a piece of equipment during their meeting at the **Heavy Ion Research Institute** in Darmstadt, discussing the Special Issue of ISR 9/4, published December 1984, dealing with Heavy Ions and trans-Uranium elements. From 1978 to 1983, Putlitz was the Director of the Darmstadt Research Institute and after being the Rector of the University of Heidelberg during its 600 Year Anniversary Celebrations, continues now as its Professor of Physics.

Courtesy Darmstadt Institute.

About 120 km north west from Berlin lies the small town of Putlitz, in the region of Priegnitz, East Germany. This town gave its name, about 1000 years ago to a family of landowners whose present head is the Professor of Physics at Heidelberg University. In 1983 he was elected its Rector, and from 1978-1983 the chairman of the scientific directorate of the Gesellschaft für Schwerionenforschung, GSI, (Heavy Ion Research) in Darmstadt.

I met Professor Dr Gisbert Gans, Edler Herr zu Putlitz (his formal family name), in 1981 and discussed with him a Special Issue of ISR on Heavy Ion Research which was published three years later in December 1984 as ISR 9/4. I liked and respected Putlitz from the beginning and our co-operation prospered in two further Special Issues of ISR in June 1986 "600 Years University of Heidelberg", ISR 11/2 [see Title 347] and in December 1996 "Man—Environment—Technology: Interdisciplinary Science Support by the Gottlieb Daimler and Karl Benz Foundation" ISR 21/4.

In his "Introduction to Heavy Ion Research" Putlitz gave basic explanations and definitions of the subject, briefly outlined the accelerators needed and stated that the GSI in Darmstadt was one of a number of similar research institutes in France, England, USSR, Canada and USA. In Darmstadt at the time, the accelerator was operating approximately 6000 hours a year, 2/3 of a year, and 450 scientists were employed. In addition about 500 other scientists from Germany and abroad were collaborating for various periods.

Six detailed articles described the "Heavy Ion Accelerators", "Nuclear Reactions induced by Heavy Ions", "Exotic Nuclei", "Atomic Physics", "Biological and Medical Research with Heavy Ions" and "Applied Heavy Ion Research", all contributed by staff members of the GSI.

I considered the article dealing with biological and medical applications the most interdisciplinary contribution, whereas the others were predominantly pure physics. Dr Gerhard Kraft, the author of the medical article, explained that the main advantages of the heavy ion beams were in radiotherapy, radiography, microsurgery and diagnostic applications, when compared with conventional methods. The benefits were the good depth dose distribution and the small angular scattering of the heavy charged particle beams. He listed nine heavy ion facilities for medical applications in the world, but in 1984 the heavy ions produced at the Darmstadt UNILAC accelerator only had a maximum range of half a millimeter in tissue.

In his brief outlook, Putlitz speculated on further energy increases of the heavy ion beams, producing in the extreme, a naked uranium nucleus. A number of trans-uranium elements have been synthesised at GSI since 1984.