

## The first 40 years of physics at ISOLDE

*Monday, 17 December 2007 14:05 (35 minutes)*

In this talk I will give some selected comments to the present and future physics at ISOLDE, REX ISOLDE and HIE-ISOLDE. I will also give examples of some of the pioneering experiments at ISOLDE that have led to the success of this field of nuclear physics. As a basis for my talk I give below some dates and developments that have been important on the way towards the present Facility. 1951: The first experiment of ISOL type was carried out by Otto Kofoed-Hansen and Karl-Ove Nielsen in Copenhagen, Denmark. 1961: The Nuclear Chemistry Group built an electromagnetic isotope separator and showed that the capacity for production of radioactive nuclides in an internal beam of the SC was very high. 1964: December 17. CERN decides to build an ISOL(DE) experiment at the SC. 1967: September 23. The first experiment was performed at ISOLDE. The results were published in a paper with 29 authors [1]. 1973: Shutdown and reconstruction of ISOLDE. The external beam from the SC was increased to 4  $\mu$ A. 1974: First experiments at ISOLDE 2. 1987: Installation of a high-resolution separator in the SC proton hall. 1989: Start of the civil engineering work for the ISOLDE site close to the PS Booster. 1990: December 17, 12.00. The SC was shut down. 1992: June 26. The first experiment was performed at the ISOLDE PSB Facility. 2001: October 30. The first beams were delivered from REX ISOLDE. [1] Decay Characteristics of Short-Lived Radio-Nuclides Studied by On-Line Isotope Separator Techniques.

P.G.Hansen, P.Hornshøj, H.L.Nielsen, K.Wilsky, H.Kugler, G.Astner, E.Hagebo, J.Hudis, A.Kjelberg, F.Munnich, P.Patzelt, M.Alpsten, G.Andersson, A.Appelqvist, B.Bengtsson, R.A.Naumann, O.B.Nielsen, E.Beck, R.Foucher, J.P.Husson, J.Jastrzebski, A.Johnson, J.Alstad, T.Jahnsen, A.C.Pappas, T.Tunaal, R.Henck, P.Siffert, G.Rudstam, Phys.Lett. 28B, 415 (1969).

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