

**My Recollections: Working out an Undulator Radiation theory under Dr. H. Motz**

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**Abstract**

In commemoration of late Dr. Hans Motz, I would like to fully appreciate the latest developments of free electron lasers here in Japan and elsewhere in the world. At Dr. Motz's kind invitation, I visited Engineering Laboratory, Oxford University in October 1957 and stayed there until the end of 1958. At the time, there was an experimental model of the undulator, which, a few meters long, was accommodated in a small basement of an annex of the laboratory and cared for only by scant staff.

I devoted myself to working out an undulator radiation theory there. The work was materialized in a paper entitled "Radiation of an Electron in an Infinitely Long Waveguide," under the auspices of Dr. Motz. Life in the University town was simply marvellous. It is only a matter of regret that I had not enough opportunity to extend the treatment to the case of finitely long waveguides back in Japan.

**Prof. Hans Motzとの出逢いとアンジュレータ放射の理論**