

## **Heinz Heinemann, The Berkeley Years**

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Heinz Heinemann came to Berkeley and the Lawrence Berkeley National Laboratory in 1984, and he stayed in the Laboratory until his second retirement at the end of 1995. During this 12 year period he published more than 25 papers in a wide area of catalysis science with strong impact on catalytic technologies. These included the steam gasification of methane and graphite, the role of alkali hydroxide catalyst for the steam gasification reaction, and also the role of transition metals added to potassium hydroxide for that process. The fundamental surface chemistry of graphite with adsorbed carbon monoxide and carbon dioxide was also studied with the most up-to-date surface science techniques. Oxidative coupling of methane was another area of intense interest of Heinz Heinemann along with the oxydehydrogenation of ethane.

Heinz brought in the most modern surface science techniques to characterize the surface structure and the surface composition during catalytic reactions of methane, ethane and carbon solids, and opened up the science of these very important problems of the chemical technology.