

Dr. Beaty has undertaken research into numerous aspects of road surfacings and is currently extending his work to the low temperatures more typical of polar and sub-polar regions.

Author: See Session 1 for Michel Engler's resume.

Abstract: Since 1982, the general question of road and runway surfacings in the Canadian Arctic and the particular problem of the runway at Canadian Forces Station Alert have been studied at Royal Military College using a combination of laboratory and full-scale field tests. These studies are reviewed and the development of a low-temperature bituminous surfacing technology is described. A range of problems common to arctic roads and runways is given.

Extensive experience in bituminous pavement technology at the Laboratoire Central des Ponts et Chaussées complements the experience of the RMC team in the Canadian north. The French experience related to both the mountainous regions of metropolitan France and the French Antarctic territory is described. It is suggested that by combining Canadian and French expertise and experience a low-temperature technology appropriate to polar and sub-polar regions can be developed and subjected to comparative testing in the French Antarctic and in the Canadian Arctic. A wide range of problems to be investigated in the joint project are reviewed.

"Concrete Floating Platforms for the East Coast of Canada"

C. Valenchon

Chef de Projets Ingénieries, Bouygues Offshore

C. Putot, B. Molin

Chefs de Projets, Institut Français du Pétrole

Dat Duthinh

Group Leader, Ice Engineering, C-CORE

Author: Claude Valenchon is a graduate of Ecole Nationale des Ponts et Chaussées, Paris. He joined Bouygues Offshore in 1981 and is currently Project Manager for gravity base concrete structure designed for use in frozen seas and concrete semi-submersible production platforms for the east coast of Canada.

Author: C. Putot is currently a research engineer within the Marine Engineering Division of the Institut Français du Pétrole (IFP). He is Project Manager for IFP Project: Arctic Offshore Engineering and is also involved in studies concerning the flexible pipe Coflexip. He is a graduate from Ecole Nationale Supérieure des Mines de Paris (1971) and holds a doctorate in engineering from the Université Pierre et Marie Curie.

Author: B. Molin is currently Project Manager of Institut Français du Pétrole project: Hydrodynamics of Structures at Sea. He holds an MSc in naval