TEXT OF THE INTRODUCTORY ADDRESS delivered by **AN DR. IOGNÁID Ó MUIRCHEARTAIGH,** Pro-Vice-Chancellor, President, National University of Ireland, Galway on 25th April, 2002, on the occasion of the conferring of the Degree of Doctor of Science, *honoris causa,* on **RAYMOND P. KEARY**

A Sheansailéir, agus a mhuintir na hOllscoile,

Rugadh Raymond Keary, an mac is sine ag Brian agus Irene Keary, i nGráig na Muillte Iarainn; sráid bhaile bheag in oir-dheisceart Chontae na Gaillimhe. Ag éiri as an timpeallacht álainn inar tógadh é, bhí an-shuim i gcónaí ag Ray, go pearsanta agus go proifeisúnta, sa nádúir, sna cnoic, sna haibhnte agus sa chomhshaoil go ginearálta.

Ray Keary is an extraordinary scientist. His vision has not been that of the typical career scientist, once described as `getting to know more and more about less and less' but rather of educating a nation into the importance of its hidden territory. By `hidden territory', I refer to Ireland's extensive continental shelf, which covers an area approximately ten times greater than its landmass. Ray's appearance in the UCG landscape in the early 60s was a new departure for geology in the College. No Science student had taken geology in the previous 17 years; it was seen as a `service' subject for engineers and their ilk. This perception changed quite dramatically, with Ray quickly blazing a trail in the marine aspects of the discipline, when he began to study the shoreline of the west of Ireland. He discovered that many of our beaches were composed of fragments of shells and calcareous algae which, if fossilised, would become limestone. At that time, the consensus among the geological community was that limestones were generally formed in low, not high, latitudes. Ray's work on the occurrence of such `cold water limestones' showed how poorly we understood our own natural environment.

Ray's interests developed into trying to map the immediate offshore environment, frequently using equipment he had made and designed himself, as he foresaw that these regions were of critical importance to the nation. He partnered the then Professor of Zoology at UCG, Pádraig Ó Céidigh, in acquiring the 45ft ketch, the ONA III, which was for many years the College's research vessel. His most famous or perhaps infamous piece of equipment was a heavy sledge containing a microphone that was dragged along the sea-bed, the theory being that sand made a different sound from gravel or rock and these recordings from the deep would help us map our own Galway Bay. He participated in the joint UCG/Geological Survey of Ireland project mapping the islands off Connamara. He won the deep admiration of all concerned for his expert boat handling, which at times involved plucking wet-suit-clad scientists from small shoals surrounded by boiling Atlantic surf.

Ray didn't just restrict himself to surface vessels in his quest for knowledge. He once astounded French co-workers by surfacing from a SCUBA dive to the bottom of Killary Harbour and telling his scientist `buddy' in a robust mixture of English and French how he wished the dive to proceed. He was, in all aspects, a man of the sea!

Ray became increasingly convinced of the value of such studies for both science and the Irish nation. When the Geological Survey of Ireland advertised for a Senior Marine Scientist in 1975 to head their Marine Division, Ray was the best qualified - possibly the only qualified - Irish applicant. Marine geological research at that time was mainly conducted by visiting boats from other nations. Ray courageously resigned from his Statutory Lectureship in UCG and took the job with the GSI in Dublin. Thus began Ireland's single greatest scientific experiment. In 1999 the Geological Survey of Ireland proudly announced that it had obtained funding of £27 million for the National Seabed Survey. Ireland would be the first nation in the world to have mapped its entire continental shelf. At the conference,

launching this experiment to a stunned scientific community, everyone knew that it would never have been possible without the perseverance and foresight of Raymond P. Keary. This survey is of fundamental importance to the fisheries industry, the petroleum industry, the extractive industries and alternative energy groups such as the wind farming industry. It is also fundamental to our scientific understanding of our seabed. The Seabed Survey will greatly enhance our ability to conserve, manage and profit from our marine resources.

It is this magnificent achievement we honour today, recognising that both this University and indeed the nation owe a considerable debt to the foresight of one man, Raymond P. Keary.

In addition to his commitment to the so-called hard sciences, the sweep of Ray's interests and curiosity extends to the domains of history, the Irish language and music; he was the proud owner of and the maker of music on a set of uilleann pipes at a time when such activity was far removed from the well-trodden paths, with none of the *cachet* which it has today.

Ray Keary truly is an exceptional person. Is mór an onóir dúinn-ne in Ollscoil na hÉireann gradam a bhronnadh inniú ar chéimí den Ollscoil féin, ar scoláire den scoth, ar eolaí ar leith, agus ar dhuine de mhór-fhigiúirí eolaíochta na fichiú aoise sa tír seo. Ray Keary, duine dár gcuid féin, traoslaímid leat.

PRAEHONORABILIS CANCELLARIE, TOTAQUE UNIVERSITAS:

Praesento vobis hunc meum filium, quem scio tam moribus quam doctrina habilem et idoneum esse qui admittatur, honoris causa, ad gradum Doctoratus in Scientiae, idque tibi fide mea testor ac spondeo, totaeque Academiae.