2014 年「海のフロンティアを拓く岡村健二賞」受賞者

Blair Thornton

　Thornton 博士は２０１１年３月、福島第一原発事故発生直後から、海底放射能計測技術の開発の重要性を認識し、２０１１年７月に福島沖で開発した現場型ガンマ線センサの展開により「定点」での計測を実施、その後発展させた「線」状に海底泥の放射線セシウムを連続計測する曳航船ガンマ線計測装置により２０１２年８月より調査を開始、現在は原子力規制庁によるプロジェクトにおいて、曳航調査に本装置を使用し、これまで観測総距離1600㎞以上に亘って放射線セシウムの分布を調査し実用化した。その結果、広い海底が汚染されているのではなく、くぼ地、河口付近など特定の場所に放射性セシウムが溜まっている実態が初めて明らかになり、事故による海底泥の放射性汚染が地図として可視化できるようになり、分布状況の実態を把握することが可能になった。

　テクノオーシャン・ネットワークは海中ロボットと海底現場型センサの新技術開発研究に取り組み、沿岸域から深海底までの「海」を見る「新しい目」となる海中計測技術発展に大きく貢献する研究成果を挙げた Blair Thornton 博士に、この分野の将来を切り開く若手研究者への賞である「海のフロンティアを拓く岡村健二賞」を贈り、これまでの顕著な業績を讃える。

'Kenji Okamura Memorial Award for Pioneering the Ocean Frontier'
2014　Award Recipient

Blair Thornton

　Dr. Thornton recognized the importance of developing technologies to measure ocean-floor radioactivity immediately after the accident at Fukushima Daiichi Nuclear Power Station in March 2011. Having developed an onsite gamma ray sensor to position offshore from Fukushima in July 2011, he conducted 'fixed point' measurements. He then developed a towed gamma ray measuring system and, from August 2012, began to linearly measure the amounts of radioactive cesium in the ocean-floor mud. Today, this system is being used in towed investigation projects conducted by the Nuclear Regulation Authority. So far, a full implementation of the system has investigated the spread of radioactive cesium across a total distance of more than 1600km. The investigation results have, for the first time, clearly demonstrated that the ocean-floor has not been so widely polluted but that radioactive cesium has collected in particular spots such as pit holes and river mouths. The maps thereby created have enabled scientists to visualize the post-accident radioactive pollution within the sea-bed mud. This has made it possible to gain a real understanding of the extent of the pollution.

　The Techno-Ocean Network will present the 'Kenji Okamura Memorial Award for Pioneering the Ocean Frontier' to Dr. Blair Thornton. This is an award that recognizes promising young researchers who are shaping the future for the ocean technologies field. Dr. Thornton has worked with great dedication towards the development of new undersea robots and in research for better ocean-floor onsite sensors. His research has made an outstanding contribution to advancing our undersea measurement technologies, bringing 'new eyes' to the ocean from the coast to the depths of the sea-bed.