

# Nuclear powerhouse

The rolling scrublands of the northwest aren't the likeliest-looking hub for world domination, but it's here, tucked away on the slopes west of Pretoria, that an offshoot of South Africa's nuclear programme – NTP Radioisotopes – has evolved into a seriously important global player in the radioactive business.

Already the world's leading supplier of essential medical radioisotopes – and with strategic partners and associates ranking among the world's leading pharmaceutical producers and their suppliers – NTP is poised to take its expertise to an even wider audience. Case in point: its move to broaden the local and international distribution of radioactive materials used in gamma radiography applications in the non-destructive testing (NDT) industry via a 55 per cent stake in Gammatec NDT Supplies, a Vereeniging-based distributor with immense global potential. This move that underlines the business portfolio-orientated growth strategy is helping to place NTP at the forefront in its field.

It's been a story of consistent growth in revenue, profitability, product portfolio, personnel strength and markets for NTP since its inception as a commercial division of South Africa's nuclear programme, says Dr Rob Adam, CEO of the Nuclear Energy Corporation (Necsa) and chairman of the NTP Board. In addition to Gammatec, the NTP subsidiary family comprises AEC Amersham (Pty) Ltd (100 per cent owned), NTP Logistics (Pty) Ltd (51 per cent owned) and Cyclotope (Pty) Ltd (100 per cent owned).

Strategically, the partnership will enhance the NTP-Gammatec position in the Global NDT environment, allowing for expansion of operations into certain areas and to further develop the product exposure in existing territories.

NTP Radioisotopes, based at the Pelindaba nuclear facility, produces a range of radiochemicals, radiopharmaceuticals and industrial products that service needs in the domestic and international healthcare, life sciences and industrial markets. The company originated from within South Africa's nuclear establishment in the early 1990s.

Originally supplying only the domestic market with its range of

## Consolidating South Africa's growth into a nuclear industry powerhouse, NTP Radioisotopes looks to develop its global footprint even further



The Safari1 reactor core used for the irradiation of Iridium discs, which are used to produce Ir-192 sealed sources, critical in the field of non-destructive testing.



Left: A stainless steel Iridium source capsule assembly, known as a pigtail, contains high purity activated Iridium for industrial radiography.

Right: Industrial radioisotopes used in gamma- and X-ray equipment, accessories and consumables for radiography. NTP is the supplier of Iridium-192 to Gammatec.



radioisotope and related products and, continuing to meet the vast majority of domestic needs for isotope-related medical and industrial products, NTP now is a global player.

The growing organisation currently has a personnel complement of over 230, revenues of nearly R500 million per annum, some 90 per cent of which is derived from export sales, and is proud of its achievement of a safety and health record that is equal to or better than the world's best. Its facilities are all ISO9001:2008 compliant and approved by all the world's major medical regulatory bodies. NTP is a Level 3 BBEE contributor.

Exporting its products to nearly 60 countries on five continents, it's a world leader in the production and supply of radiochemicals. The most important isotope for devices used in the practice of diagnostic nuclear medicine is Molybdenum-99. During the world-wide shortage of Mo-99, NTP has ensured that South Africa is the only country in the world where patients have not been deprived of potentially life-saving nuclear medicine scans. NTP's output is used for millions of nuclear medical diagnostic scans every year, and is also applied in treatments for conditions such as thyroid disease and lymphoma. NTP has a strategically important relationship

with its parent organisation, Necsa, through the provision by the latter of amongst others, irradiation services using the SAFARI-1 reactor at Pelindaba.

Radioactive sources manufactured by NTP include Iridium-192, which is used extensively for the non-destructive testing (NDT) of welds, process vessel walls and piping. Other sources are Cobalt-60 and Caesium-137 for use in process control applications. NTP also manufactures a range of radioluminescent light sources and associated finished products used in signage.

Congratulating NTP Radioisotopes for strategically following its mandate, Necsa's Adam added that he hoped to see more of these kinds of mergers. But he threw out a challenge: Necsa was looking forward to developing the business into becoming the world's Number 1 Gamma radiography NDT equipment and sealed source supplier. Given NTP's track record, don't bet against it...

