

# MESSENGER

News and Information from **BERENTT**

## Changes and Staying The Same

### Dear Valued Customers

Following the passing of our dear colleague Professor Nabil Morcos on November 18th, 2020 there has been a restructure of the Charter Main business.

Owing to legal requirements the Charter Main trading name will expire soon and:

VENTI SYS OZ Pty. Ltd will commence as the new holding company of the service, maintenance and consumables business. This company will Trade under the name of:

### BERENTT

MEDICAL TECHNOLOGIES

NOTHING ELSE CHANGES!!!

Mr Richard Gotch and his team will still handle all service, preventative maintenance, repairs and training. Rick has worked with the Technegas generators globally for over 35 years and has "trained the trainers". Rick has trained technicians on the ground in N.S.W. and Victoria to efficiently respond to call-outs and perform routine maintenance and service on ALL Technegas generators, THAT IS ALL, Technegas generators AND TechnegasPlus generators.

PLEASE DO NOT ACCEPT THAT YOUR TECHNEGAS GENERATOR IS TOO OLD, CANNOT BE REPAIRED AND YOU HAVE TO BUY A NEW GENERATOR!!

In most instances Rick and his team can reinstate all generators to full optimal functionality. Landauer Australasia P/L, distributor for Venti Sys Oz P/L, remains your first port of call and David Rundell (02 8651 4008 and +61 413 481 585) will assist with enquiries for consumables and service.

In order to help you decide on resurrecting V/P S.P.E.C.T. scanning in your hospital, we at Berentt Medical Technologies / Landauer Australasia P/L want to provide you with financial incentive to get you going again and provide competition in the market place, so that finally you have a choice!!

*Until March 31st, 2022,* Berentt / Landauer is prepared to sell boxes of 50 Almedis consumables (ARTG 319260) for \$2,000.00 per box (exclusive of G.S.T. and freight)!

This represents a saving for your practice of several hundred dollars per box!!

The consumables perform the same function as the competitor's, generate Technegas in the same way, deliver Technegas into the patient's lungs in the same way BUT the crucibles are 0.3µl in volume and the contacts are solid carbon; NO BRASS!!

Get in touch with David to discuss your options.

### TO BRASS OR NOT TO BRASS: IS THAT THE QUESTION??

This paraphrase of the opening soliloquy uttered by Prince Hamlet in the nunnery scene of Shakespeare's Hamlet seems most apt!

The issue of the utility of brass and carbon contacts versus solid carbon contacts is once again rearing its ugly head displaying a perplexing lack of understanding of the individuals making these unsubstantiated, misleading and erroneous claims.

Don't take it from me. How about the inventor of Technegas, Doctor William Martin Burch; what does he feel is the relevance of brass in the contacts to the production of Technegas.

*"To Whom It May Concern:*

*I have been requested to provide an opinion as to the value of using brass in the contacts of the Technegas generator.*

*My name is Doctor William Martin Burch and I am the inventor of Technegas.*

*The brass plays NO PART in the production of Technegas. The brass, which followed gunmetal, was the second attempt to hold the carbon contacts in place between the pedestals during the simmer and the burn process.*

*The Technegas manufacturing process simply requires carbon to be raised rapidly to a high temperature, AND THAT IS THE TOTAL SUM!!*

*Various attempts were made to simplify the process and to make it simple to repair/replace the contacts, as required.*

*In my opinion the brass plays ABSOLUTELY no part in the process of Technegas production.*

*Signed:  
William Martin Burch*

*Date:  
12th day of August 2020”*

FURTHER:  
From the late  
Professor Nabil Morcos

*“I think Bill and you are absolutely correct.  
I also think that my previous comment about using CYC’s claim that two incidents of thyroid uptake are due to the Almedis kit are in essence a tribute to the product since there are only 2 reported incidents out of over 1/3 million German crucibles/contacts placed in the German market since its invention in 1992. This is in comparison to all the thyroid uptake reported in the literature when using Technegas.*

*Kind Regards,  
Nabil.”*

It is worth repeating that statement:  
Since 2002, (almost 20 years!!) Almedis Altmann GmbH has provided high volume crucibles and solid carbon contacts to hundreds of thousands of customers in Germany and the ONLY concern regarding Thyroid uptake comes from a single site in Germany, and ONLY 2 cases at that!!!  
I have included a photograph of what can happen using brass in the contacts if everything IS NOT



done correctly and the generator calibrated appropriately.

The example shown is just one of several where the brass contacts in Cyclomedica’s contacts has melted!!  
Have a good look at the photo!!!

SOLID CARBON CONTACTS CANNOT DO THIS.

This “melting” can happen if the contacts are loose or a high resistance joint exists on the clamping pedestals. Brass has a melting temperature of between 900 to 940 degrees Celsius (1,650 to 1,720 degrees Fahrenheit) and if the Technegas generator severely overheats, melting can occur as has been the case in several instances including the example pictured. To reiterate, for the edification of those who want to better understand the technology, let’s get down to brass tacks:

- 1) The inventor of Technegas tells us that BRASS IS NOT essential to the production of Technegas
- 2) Technegas is largely trapped in the surfactant of the alveolus
- 3) Technegas MOSTLY DOES NOT cross into the circulation: the whole premise behind a V/P scan
- 4) Technegas, per say, THERE-

FORE CANNOT result in Thyroid uptake

5) The only caveat is EXCESSIVE swallowing which could result in stomach uptake

6) Free pertechnetate DOES readily cross into the circulation and could result in the Thyroid being imaged

7) REFER TO CYCLOMEDICA’S OWN USER MANUAL for ways in which free pertechnetate could be generated

8) But the possible ways include:

i) Overfilling the small Cyclomedica 0.14µl crucible. Excess Tc-99m could be blown off the crucible, not be heated to 2,750C in the burn resulting in the production of free pertechnetate

ii) The burn could be carried out in an atmosphere containing as little as 3% oxygen in the Argon atmosphere

iii) Hoses and Regulators which are in any way damaged, i.e. running over hoses with the Technegas generator, old and/or faulty regulators. Any air/oxygen entering during Technegas production WILL result in pertechnetate production AND thyroid imaging

iv) Contaminated Argon bottles or incorrect Argon bottles

v) “Wetting” the carbon crucible. The “wetting” process occurs to prepare the crucible AND TO PREVENT bubble formation during the generation of Technegas which could result in the eruption of technetium out of the crucible, NOT TO sterilize the crucible!!

vi) The simmer temperature should be properly calibrated to result in COMPLETE drying of the crucible. If the simmer temperature is too low, the crucible will not be COMPLETELY dry after 6 minutes AND when the burn cycle commences FREE pertechnetate could be produced resulting in Thyroid imaging

9) Therefore, it is free pertechnetate which results in Thyroid imaging, NOT THE ABSENCE OF BRASS FROM THE CONTACTS, not

the Almedis Altmann GmbH solid carbon contacts, not the Almedis Altmann GmbH high purity, high volume solid carbon crucibles AND free pertechnetate can be generated for many and varied reasons as outlined above.



Charles Buttigieg

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## QUESTION FOR THE INQUISITIVE MIND???

Doctor William Burch has proposed a unique but very significant study which he is very keen to see someone in the nuclear medicine community follow up on.

Bill believes that there COULD be a strong bonding between COVID and Technegas because not only are the two very similar in size (~10 nm) but more importantly they BOTH have active carbon links.

Therefore Bill believes that Technegas will label the Covid virus with only minimal effort.

What is proposed is a single person investigation which could prove the Point:

A male volunteer, 20 -40 years old, preferably non-smoker, relatively fit, no pre-existing lung pathology, recently diagnosed Covid-positive. Ask the volunteer to take a single breath/inhalation of Technegas followed by sequential exhalations into a series of filters which would give a clear index if how well the bonding actually was.

Then the big test:

a single AP view will, Bill believes, show something not seen before!!!

If it actually works the ramifications go well beyond this to, for example future Radiotherapy!

Is there someone out there willing to give it a go??

This could form the basis of a significant paper for future follow-up and would probably suite a nuclear medicine technologist looking for a paper to present at an international conference!!

Call Charles for initial discussions on  
+ 61 (0) 449 289 007.



William (Bill) Burch

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## HELPFUL HINTS FROM RICK

The Technegas and TechnegasPlus User Manuals:

This much overlooked useful tool, available to ALL Technegas users should be kept handy for ready reference. It can be accessed on-line BUT it is usually provided to purchasers of Technegas generators in either hard-copy or on CD.

Error Messages: A comprehensive list of Error Messages is detailed in the User Manual. By referencing the Error Message in the User Manual, it is possible to identify and rectify many of the common problems preventing optimal functioning of the Technegas generators.

YOU SHOULD NOT START PUSHING buttons in the hope that a problem can be rectified. Pushing buttons may program the generator to perform a non-desired

function. As a matter of course, you should always wait, read the message on the screen and perform the function indicated. Don't pre-empt the machine; this can lead to problems with Technegas production.

Batteries: Batteries for the electronic version of the generators should be changed every three years and for manual version every two years. That is if the advised protocol is adhered to. So, it is worth repeating the recommended procedure:

I) Turn the generator ON at the start of the day

II) Leave on all day which charges the battery

III) Turn OFF at the end of the day

IV) This optimises the life of the battery

V) Refer to Item 6.6, page 17 of the TechnegasPlus User Manual (version dated 12/08/2021.)

Regular Servicing and Maintenance: While the Technegas generators are robust and require little attention if looked after, IT IS RECOMMENDED that the generator is serviced at least once per annum or after 500 burns. This attention ensures that the generator is appropriately calibrated and functioning optimally.

We have trained technicians on the ground in Victoria and N.S.W. to attend to emergency call-outs and offer phone assistance to resolve simple matters.

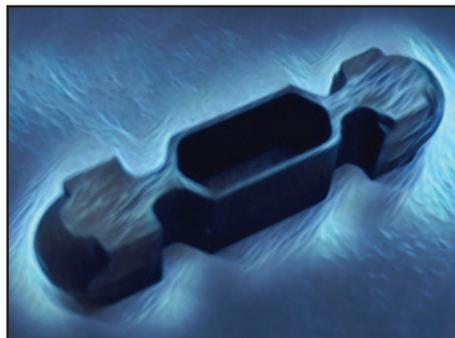
The annual Service Contract costs \$2,000.00 which is a cost-effective way to ensure that your generator operates always at full functional efficiency.



Rick Gotch

# Vent-Medis disposable kit for Ventilation Scintigraphy

**Large 0.3µl  
highest purity  
graphite crucible**



*Vent-Medis Kits include the improved high-purity, high-volume carbon crucible with a 0.3µl bowl capacity. This crucible saves time and minimises multiple simmers allowing the use of dilute Tc-99m generator elutions thus reducing operator radiation exposure.*

**Rugged design  
smooth-bore  
patient  
delivery set**



*The inhalation breathing unit contains a high efficiency HEPA, exhalation filter, T-piece with robust non-return valve, a robust one meter smooth-bore tubing with 15mm inner diameter and the special generator connection. A rigid mouthpiece and a nose clip complete the set.*

**High purity  
and long life  
graphite  
contacts**



*With every Vent-Medis Box you get one pair of high-purity carbon contacts for 50 scintigraphic examinations. The carbon contacts are very robust and fit the Generator specifications with great contact reliability.*

**Vent-Medis Kits -**

**Larger volume crucible  
equals more efficient use of  
dilute Tc-99m eluate**

**High-Efficiency HEPA filter**

**Time and cost saving**

**Less radiation through  
reduced simmers**

**Improved and more  
reliable crucible contact**

**More rugged design**

**Improved packaging**

**TGA Certified**

**Reliability of supply**

**CE marked**

**Major price advantage**

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