C0r0n@ 2 Inspect

Review and analysis of scientific articles related to experimental techniques and methods used in vaccines against c0r0n@v|rus, evidence, damage, hypotheses, opinions and challenges.

Thursday, November 11, 2021

New Evidence for Beaded Carbon Nanotubes Based on Liquid Graphene Beads and Polycrystalline Graphite

The presence of carbon nanotubes in the vaccine samples was demonstrated, together with the existence of carbon nano-octopuses, as well as their nexus and nucleation surfaces, necessary for their growth and development. On this occasion, two new images obtained by the doctor (Campra, P. 2021a; 2021b) in his report on " *possible microbiotics in COVID vaccines*" they have been identified as carbon nanotubes, with special peculiarities, which are worth noting. Figure 1 shows the microscopy images obtained in the Pfizer vaccine and its comparison with those found in the scientific literature, just below A first definition of what is observed, before proceeding to the detailed analysis, is that they are beads based on spheres or liquid carbon beads and graphite crystals with a polyhedral or meniscus shape.

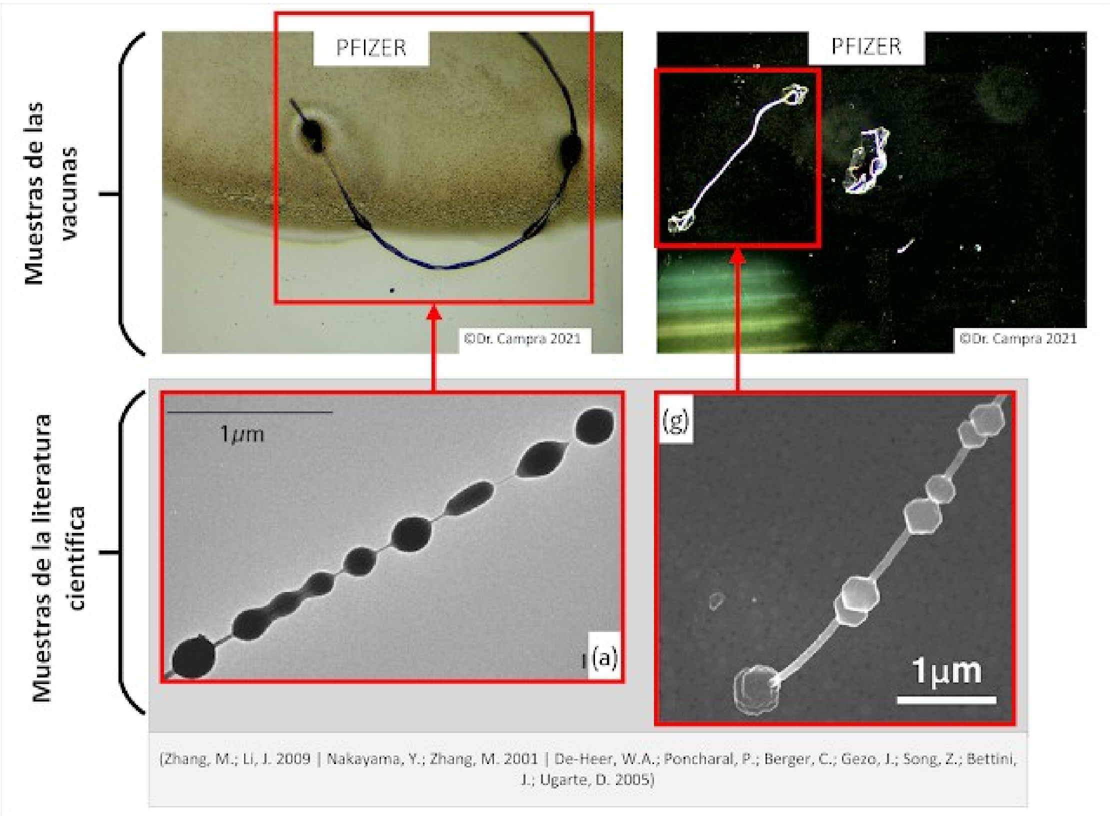

Fig. 1. Samples of the vaccines obtained by the doctor (Campra, P. 2021a; 2021b) and their pattern in the scientific literature, which denotes carbon nanotubes with liquid graphene beads, beads and hexagonal crystals of graphite or other materials. (De-Heer, WA; Poncharal, P .; Berger, C .; Gezo, J .; Song, Z .; Bettini, J .; Ugarte, D. 2005 | Nakayama, Y .; Zhang, M. 2001 | Zhang , M .; Li, J. 2009)

The upper left image of figure 1 (fig. 1 if sample of the vaccine) can be described as a filament or fiber of slightly variable thickness, opaque, with what appear to be black dots with a circular, ellipsoid or oval shape, perfectly inserted and connected. The curvature of the filament must be highlighted, which denotes flexibility and mechanical resistance, typical of graphene and carbon. It is actually a carbon fiber or carbon nanotube with liquid graphene beads, as referred to in the work of (De-Heer, WA; Poncharal, P .; Berger, C .; Gezo, J .; Song , Z .; Bettini, J .; Ugarte, D. 2005) and in the review of forms of carbon nanotubes of (Zhang, M .; Li, J. 2009). Additional evidence of this finding can be seen in Figure 2.

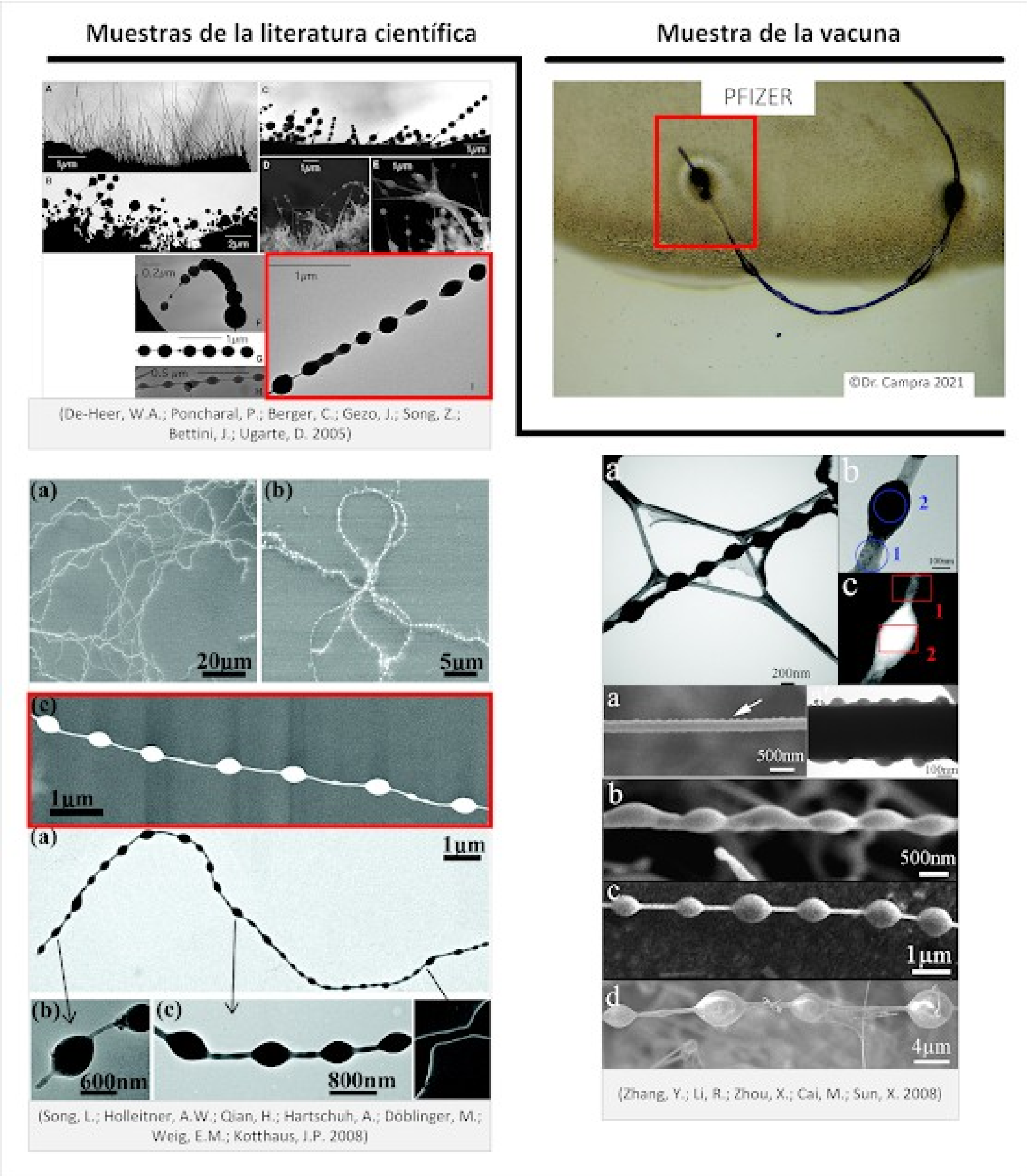

Fig. 2. The images obtained from the scientific literature confirm the presence of carbon nanotubes or filaments with carbon beads or liquid graphene (De-Heer, WA; Poncharal, P .; Berger, C .; Gezo, J .; Song, Z .; Bettini, J .; Ugarte, D. 2005), although other materials such as Magnesium (Mg), Aluminum (Al), Iron (Fe), among others, can also be incorporated, as shown (Song, L .; Holleitner, AW; Qian, H .; Hartschuh, A .; Döblinger, M .; Weig, EM; Kotthaus, JP 2008 | Zhang, Y .; Li, R .; Zhou, X .; Cai, M .; Sun, X. 2008)

The discovery of liquid carbon or graphene beads dates from the research of (De-Heer, WA; Poncharal, P .; Berger, C .; Gezo, J .; Song, Z .; Bettini, J .; Ugarte, D . 2005) in which they observed this type of formation with the manufacturing method of electric arc discharge in a helium atmosphere. In the words of the researchers, it is stated that " *Electron microscopy shows a viscous liquid-like layer of amorphous carbon covering the surfaces of millimeter-sized columnar structures containing nanotubes from which the cathode reservoir is composed. Regularly spaced submicron sized amorphous carbon spherical beads are often found in nanotubes on the surfaces of these columns. Apparently droplets of liquid carbon form on the anode, which acquire a carbon-glass surface due to rapid evaporative cooling. Nanotubes crystallize within supercooled, glass-coated liquid carbon droplets. The carbon-glass layer eventually coats and forms beads in the nanotubes near the surface*. The production of nanotubes with liquid carbon pearl beads was also corroborated by (Kohno, H .; Yoshida, H .; Kikkawa, J .; Tanaka, K .; Takeda, S. 2005). This means that the objects observed in the vaccine samples were manufactured using very specific techniques, with the aim of producing multi-walled carbon nanotubes (MWCNT multiwall carbon nanotubes), generating the aforementioned viscous carbon droplets as a subsequent result. According to (Song, L .; Holleitner, AW; Qian, H .; Hartschuh, A .; Döblinger, M .; Weig, EM; Kotthaus, JP 2008) the function of these viscous carbon spheroidal beads would be the reinforcement and improvement of the mechanical properties of carbon nanotubes, which would allow a greater grip and grip, as expressed in the introduction of his work " *nearby beads could provide a grip point to release slippage between host matrices and filaments. Recently, carbon nanotubes coated with carbon glass beads were observed in arc discharge products, and short carbon beads with protruding cones were produced by a catalyst method* . "However, the applications of these objects are very wide, including " *optoelectronics* ", due to the ability of these " *nanochains* " to act as " *nanowires*", with which to form integrated circuits at the nanoscale with a greater degree of freedom in their structuring (Zhang, Y .; Li, R .; Zhou, X .; Cai, M .; Sun, X. 2008).

Regarding the upper right image of figure 1 (fig. 1.sd), it can be described as a filament that shows significant fluorescence and flexibility, at the ends of which are located a kind of crystallized, slightly hexagonal formations, which could well be reminiscent of electrodes. . According to the work of (Nakayama, Y .; Zhang, M. 2001) and (Zhang, M .; Li, J. 2009) are actually carbon filaments or carbon nanotubes with amorphous or polycrystalline graphite in their terminations, resulting from their manufacturing process, which makes them a clean superconductor (Simonelli , L .; Fratini, M .; Palmisano, V .; Bianconi, A. 2006). Polycrystalline graphite terminations usually have dimensions of 100 to 200 nm and do not distort the properties of the carbon nanotube, for which they provide others, in particular, serving as electrodes. These crystallized structures are made up of multiple layers of graphene, approximately 15 or more, fused by the effect of the heat produced by the electrical discharges required to manufacture the nanotubes.In fact, when the manufacturing method of carbon nanotubes is an arc discharge at different currents and graphite is used in the electrodes, it is found that the carbon nanotube acquires at its ends the aforementioned crystallized graphite structures (since they act as anodes and cathodes), as stated in the work of (Karmakar, S. 2020). The interest of using the electric arc discharge technique to manufacture these materials is simple, according to the researcher, "The interest of using the electric arc discharge technique to manufacture these materials is simple, according to the researcher, The interest of using the electric arc discharge technique to manufacture these materials is simple, according to the researcher, " *Arc-generated CNTs (Carbon Nanotubes) and LGs (Graphene Sheets) are mostly defect-free and therefore very useful in a number of technological and biomedical applications* ", a statement corroborated by (Popov, VN 2004 | Ayodele, OO; Awotunde, MA; Shongwe, MB; Adegbenjo, AO; Babalola, BJ; Olanipekun, AT; Olubambi, PA 2019) Supplementary evidence can be seen in Figure 3.

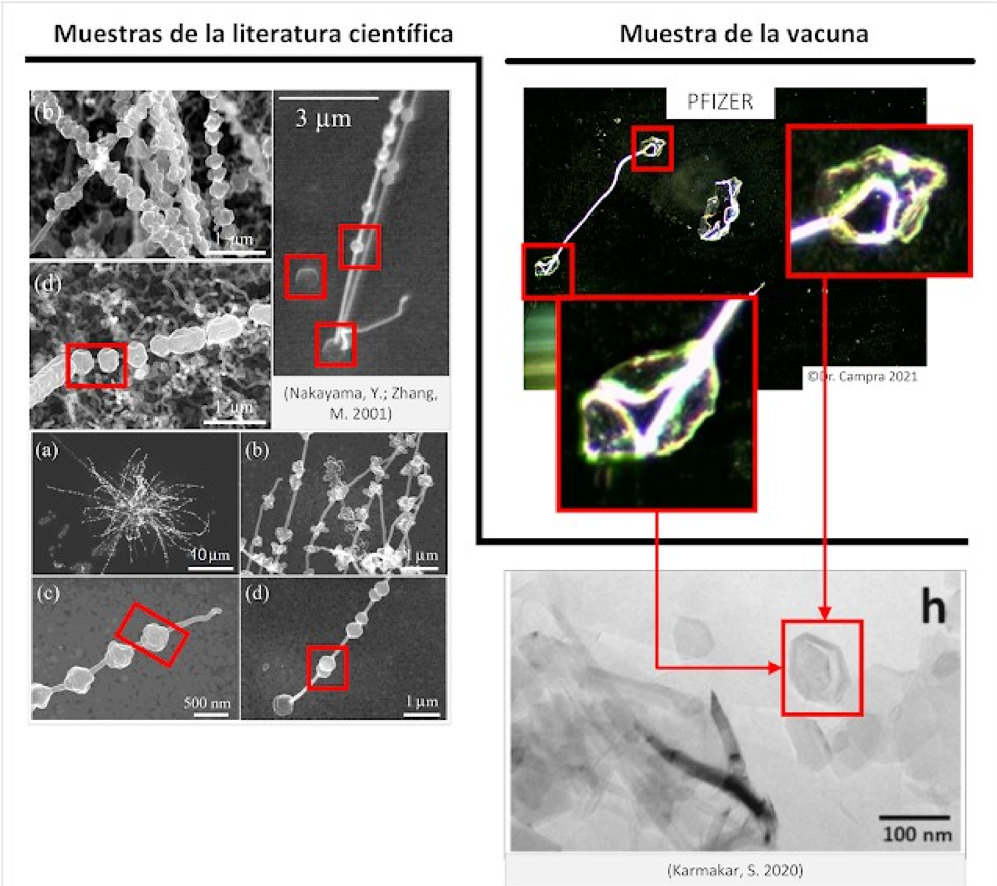

Fig. 3. Graphite crystalline structures, attached to carbon nanotubes.

Electronic circuits

Although it would be the subject of a monographic entry, it is worth noting that carbon nanotubes can be used to configure functional electronic circuits, without the presence of electromagnetic fields or electromagnetic waves (EM) being essential. This means that "teslaphoresis" is not necessarily required to configure the circuitry required for various types of sensors, since a solution of graphene sheets, carbon nanotubes and polymers or hydrogels, allows to configure random and apparently disordered routes, by which electrical conduction runs. This is what the researchers say (Yuan, C .; Tony, A .; Yin, R .; Wang, K .; Zhang, W. 2021) in his work on touch sensors and terms from carbon polymer nanocomposites, see figure 4.

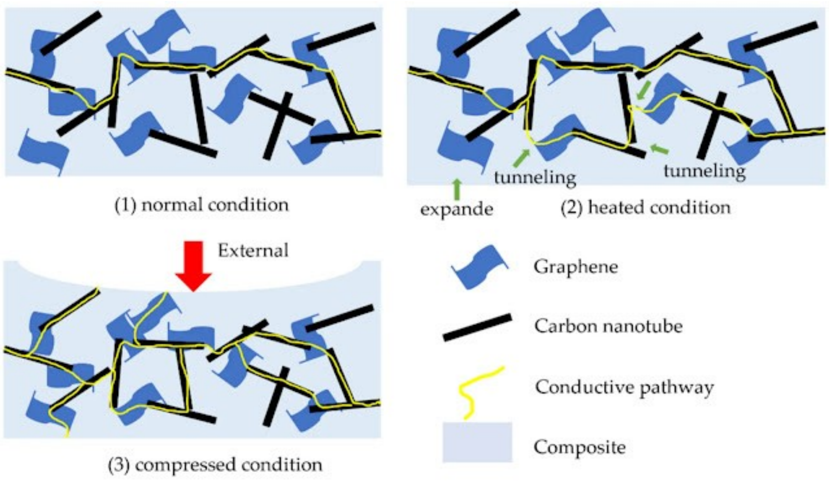

Fig. 4. The electrical conductivity is obtained between the carbon nanotubes that are in contact with the graphene nano-sheets, which generates an electronic circuit in itself. (Yuan, C .; Tony, A .; Yin, R .; Wang, K .; Zhang, W. 2021)

On the other hand, figure 4 also shows the mechanical properties of graphene and carbon nanotubes under conditions of expansion and compression, caused by heat, which makes it the ideal material for soft electronics applications in biomedicine. Considering all this, the conditions exposed by (Yuan, C .; Tony, A .; Yin, R .; Wang, K .; Zhang, W. 2021) in his research, are very similar to those found in the vials of the vaccines, which suggests that the materials and objects already identified in the samples could act in this way in the body of the inoculated people. These questions are in line with what has already been said about wireless nanocommunication networks for nanotechnology in the human body., which clearly alluded to hardware made up of graphene quantum dots, biosensors and other nano-devices whose objective is to monitor, collect data and interact with the body.

Another example of circuitry is that of (Gupta, S .; Meek, R. 2020) with his work on the collection of high-efficiency thermoelectrochemistry from hybrid aerogels of carbon nanotubes and graphene, see figure 5. In this case, they create circuits to collect energy that could serve as a battery for IoNT (Internet of NanoThings) nanodevices and more specifically, for intrabody device applications. This means that the basic ingredients to make up this energy accumulator are already found in the aqueous solutions of vaccines, which also fits with the need to power certain nano-devices (nano-router, nano-interface, nano-biosensors), in the wireless nanocommunication network, in order to propagate, transmit, and send the data packets,with the minimum possible energy consumption.

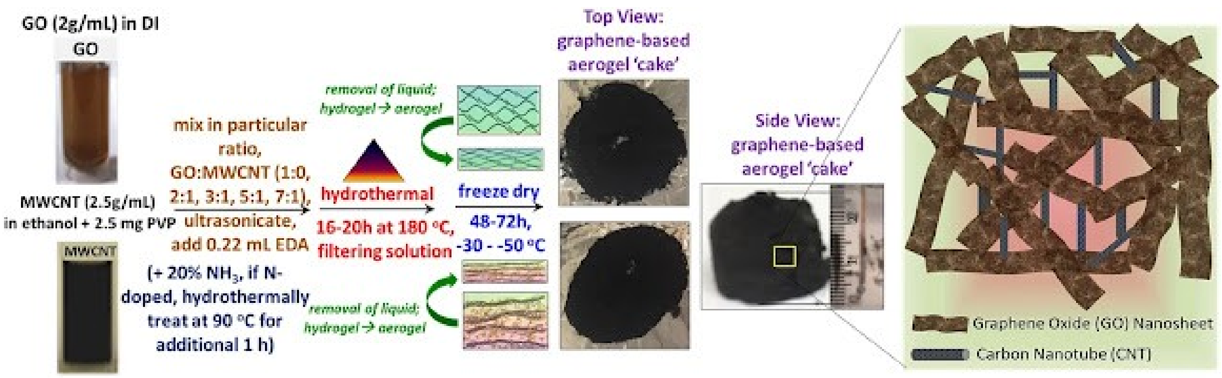

Fig. 5. Note the chaotic circuit on the right, made up of graphene oxide nanosheets and carbon nanotubes. These are obtained from an airgel cake. (Gupta, S .; Meek, R. 2020)

Neuromodulation

One of the articles citing the work of (De-Heer, WA; Poncharal, P .; Berger, C .; Gezo, J .; Song, Z .; Bettini, J .; Ugarte, D. 2005) presents great relevance for the applications of carbon nanotubes in the field of Neuroscience. This is the publication of (Zwawi, M .; Attar, A .; Al-Hossainy, AF; Abdel-Aziz, MH; Zoromba, MS 2021) in which the use of the conductive polymer Polypyrrole (PPy polypyrrole) doped is linked with multi-walled carbon nanotubes, in optoelectronic devices for biomedical applications. It should be noted that one of the forms of neuromodulation / neurostimulation known to science is optoelectronics and optogenetics, already explained in the **entry on brain stimulation by electromagnetic waves EM**. Reviewing the scientific literature on polypyrrole, graphene and carbon nanotubes, it is found that their combination is quite frequent, even if the search descriptor "neuronal" was added (more than 2000 scientific articles were obtained).

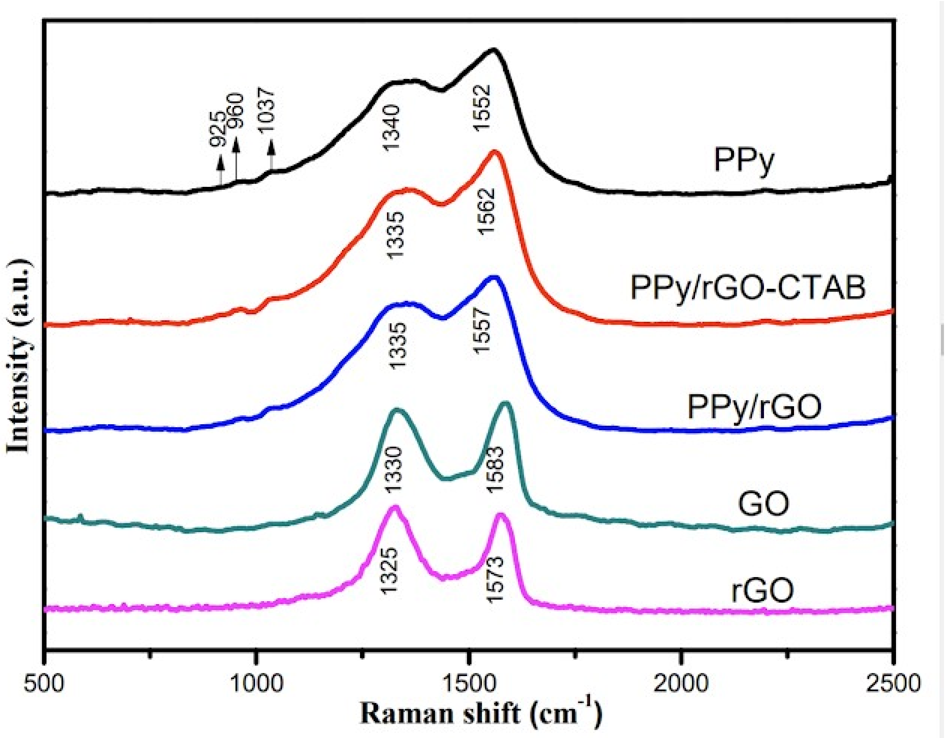

Fig. 6. Raman spectroscopy of polypyrrole and its combinations with graphene oxide. The Raman values are close to those observed in the tests obtained by Dr. Campra. (Fan, X .; Yang, Z .; He, N. 2015)

Without carrying out a more precise search, the reference to the research by (Fabbro, A .; Cellot, G .; Prato, M .; Ballerini, L. 2011) entitled " *Interconnection of neurons with carbon nanotubes: (re) neuronal signaling engineering "in which carbon nanotubes, graphene nanofilms and polypyrrole are the necessary and essential materials for neuronal optoelectronics. In fact, the article indicates that " CNT scaffolds (carbon nanotubes) promote the growth, differentiation and survival of neurons and modify their electrophysiological properties. These characteristics make CNT an attractive material for the design of nano-biohybrid systems capable of governing specific cell behaviors in cultured neural networks. The main objective of this brief review is to highlight how nanotube scaffolds can affect neuronal signaling ability. In particular, we will focus on the direct and specific interactions between this synthetic nanomaterial and biological cell membranes, and on the ability of CNTs to enhance the interfaces developed to record or stimulate neuronal activity ... Therefore,It is particularly relevant to improve our knowledge about the impact on neuronal performance of the interconnection of nerve cells with CNTs”*. The work also affirms the ability of carbon nanotubes to interact with neuronal membranes, producing an electrical coupling and its integration into the neuronal structure. This implies the possibility of neurostimulation with potentials of electromagnetic frequencies, interacting with the synapse , regulate its plasticity, and cause the retro-propagation of stimuli and signals. However, researchers do not pay attention to the problems of cytotoxicity and genotoxicity that were already known in the scientific literature. Continuing with his analysis, the properties of electrical conductivity alter and excite neuronal tissue, since carbon nanotubes act as neuroelectrodes, as stated in the next paragraph " *The possibility of administering electrical stimulation to neurons through layers of CNT was investigated and it was shown that CNTs offer a suitable and efficient interface for the direct stimulation of neuronal cells seeded in the nanotubes themselves*". This is corroborated in the works of (Liopo, AV; Stewart, MP; Hudson, J .; Tour, JM; Pappas, TC 2006 | Mazzatenta, A .; Giugliano, M .; Campidelli, S .; Gambazzi, L .; Businaro, L .; Markram, H .; Ballerini, L. 2007 | Wang, K .; Fishman, HA; Dai, H .; Harris, JS 2006) More recently, as noted (Fabbro, A .; Cellot, G .; Prato, M .; Ballerini, L. 2011) studies have been carried out in which collagens and polymers such as the aforementioned polypyrrole were combined with single and multiple walled carbon nanotubes, acting " *as nanostructured electrodes for the delivery of electrical stimuli at multiple sites or for the recording of neural electrical signals ... CNT-based electrodes were completely biocompatible and their enhanced electrochemical properties allowed high-fidelity extracellular recordings of the electrical activity of cells. cortical neurons, directly seeded on the electrodes* ", see (Gabay, T .; Jakobs, E .; Ben-Jacob, E .; Hanein, Y. 2005).

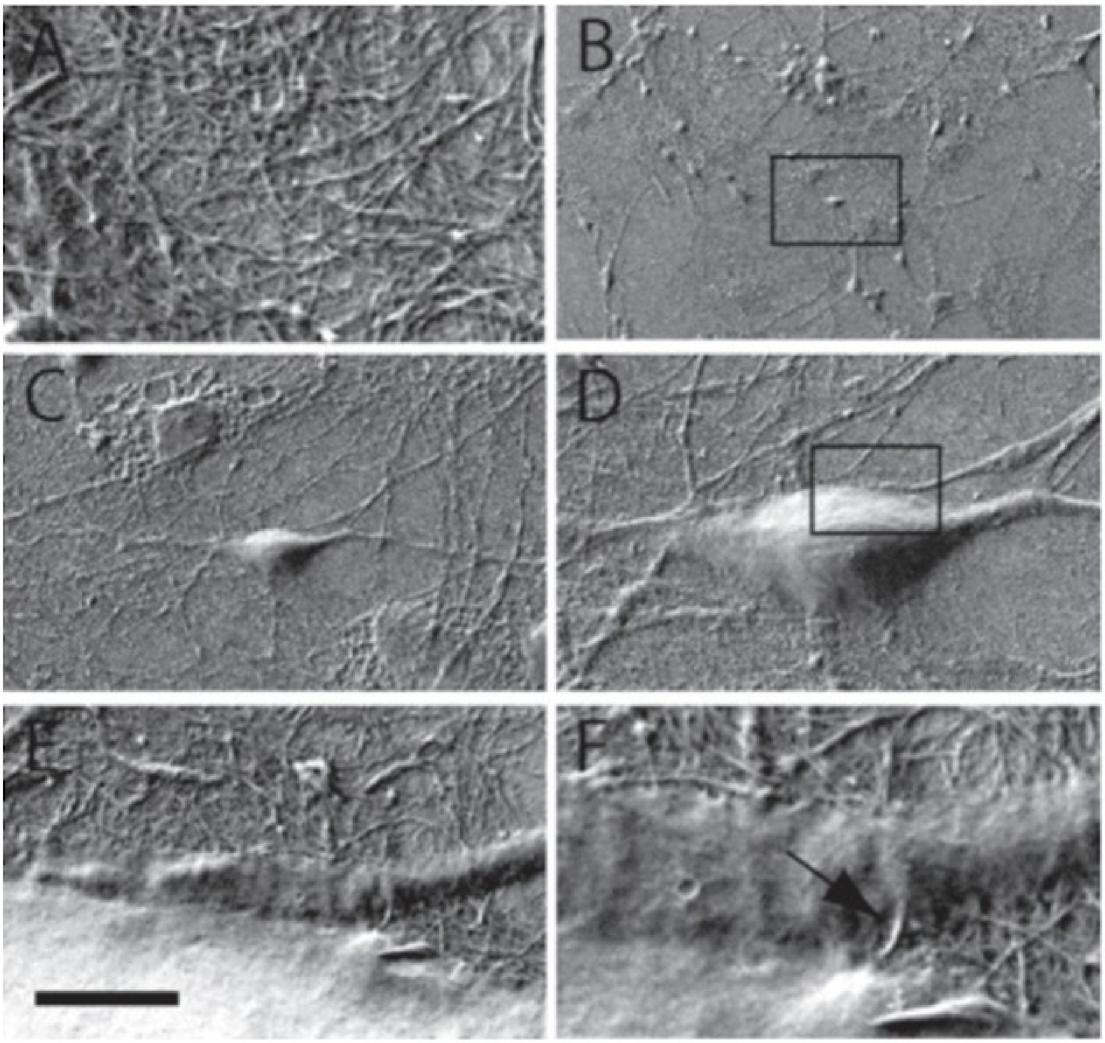

Fig. 7. Neuronal culture in the membranes of the hippocampus, where the interlaced tissue of carbon nanotubes and neurons is observed. Note the interconnected fibers, which improve the electrical conductivity of the tissue, producing shortcuts for neural communication. (Cellot, G .; Cilia, E .; Cipollone, S .; Rancic, V .; Sucapane, A .; Giordani, S .; Ballerini, L. 2009 | Fabbro, A .; Cellot, G .; Prato, M .; Ballerini, L. 2011)

Among the materials combined with carbon nanotubes, the review by (Fabbro, A .; Cellot, G .; Prato, M .; Ballerini, L. 2011) highlights PEG polyethylene glycol, PEI polyethyleneimine, TiN titanium nitride, PPy polypyrrole and Pt platinum, with which crystalline structures are also created to act as electrodes at the ends of carbon nanotubes. In conclusion, it can be stated that the presence of carbon nanotubes in their multiple forms, with high probability, are aimed at neuromodulation and brain stimulation, which is why their presence in vaccine vial samples is extremely serious.

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