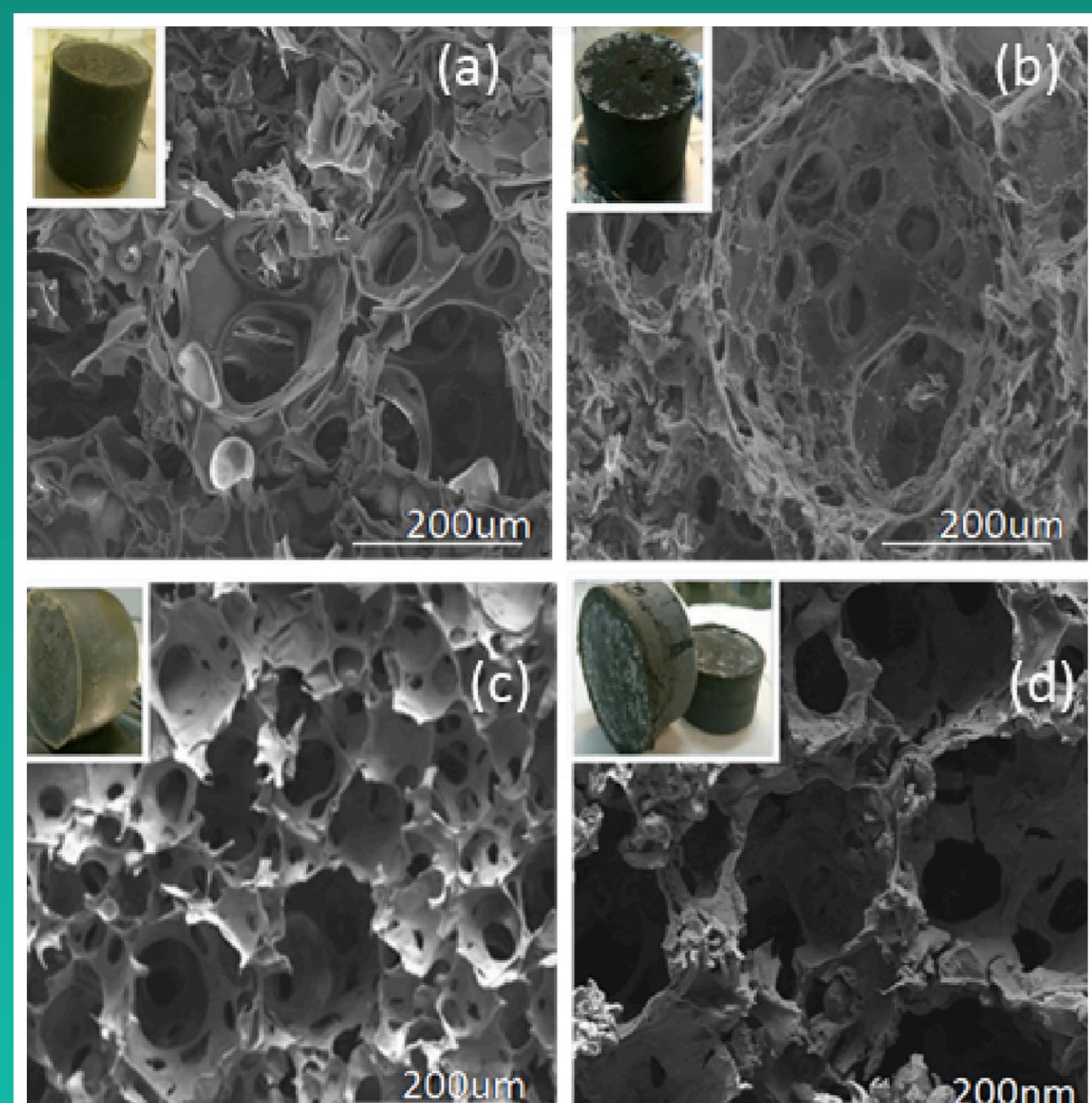


Coconuts will save our planet!

By Ross Newton-Taylor

Why does our planet need saving?

Well, unless you have been living under a rock in recent years, you'll have heard about Global Warming. Global Warming is the largest contributing factor to climate change and environmental impact, and shows no signs of stopping without human intervention. Huge factories cough up millions of tonnes of greenhouse gases every day, and cars, lorries, and planes certainly don't help it either! As science and technology advance, we are constantly thinking of ways to combat the rise of global warming, as it is absolutely vital to prevent these environmental damages while we still can. Last year, 36,000 people in the UK died to lung cancer, 6,000 of which were non smokers. Pollution was the main reason these 6,000 people suffered, so it is of major importance that we promote ways to eliminate pollution in a modern, changing society [1]. Over 100,000 people died in only a few days back in the 1910s due to a great fog of pollution, with both direct and indirect impacts on the populations' health and well-being. If we don't start to act now, global warming will have severe effects on the planet. It is time to take it seriously, and reduce our carbon footprint.



Microscopic images of carbon based foams [2]

Why coconuts?

After extensive research conducted by experts at the top of their professions, coconuts were found to have very unique properties regarding foams and gas absorption. When combined with surfactants, researchers found the carbon monoliths of coconut shells to be very effective in absorbing nanoparticles as foams themselves. This is due to the porous structure of the carbon based foams, which I have gathered absorb the nanoparticles of CO₂ emissions as they pass over the materials. As you can see in the image on the left, the microscopic view of the carbon structure shows them to be very detailed and intricate foams. These carbon based foams originate from the organic shells of coconuts, which means that, as plants, can be endlessly farmed at minimal cost in most tropical countries around the world. Areas like Indonesia, which produce millions of tonnes of coconuts every year, would be great sources of coconuts, and since they are a waste products in many of these tropical countries, companies could acquire them at very low costs to use in reducing their carbon emissions. The only downside to this entire project would be the installation. Companies and industries would have to totally change their production to implement these planet-saving technologies, and since the fines for carbon emissions are so low, many companies aren't so inclined to change their business to save the environment. [3]

Progress for the Future

For too long have governments and international superpowers ignored the prominent issue of climate change, and as we start to see the drastic and perilous effects of it, it's about to time to use science and technology to enforce change on our precious planet. That is why, in the next few years, it is absolutely vital that we see these air purifiers start to be introduced in both large scale and small scale industries. Huge factories and power plants need to start taking responsibility for their harmful emissions, as well as smaller scale sources like vehicles, which release millions of tonnes of CO₂ emissions every day. Exhausts and chimneys should all have organic air purifiers in the future, in order to bring us one step closer to solving global warming and set our planet on the right path to recovery. [4]



[1] Cancer research UK (2019) Lung cancer statistics

[2] [3] D. Zabiegala , M. Cacciab , M.E. Casco , F. Raveraa , J. Narciso (2018) Synthesis of carbon monoliths with a tailored hierarchical pore structure for selective CO₂ capture. Institute of Condensed Matter Chemistry and Technologies for Energy (ICMATE), via De Marini 6, 16149, Genoa, Italy

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[4] Hannah Ritchie, Max Roser (2020) CO₂ and Greenhouse Gas Emissions