

District of the Pacific Update



Friday 18th

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XAVIER COLLEGE CLASS of '61

From Br Doug & Mr. John Walsh

On the last weekend of October, 28th – 30th, Xavier College pupils from 1961 gathered for a reunion to mark 61 years since their school days. Fifty former pupils from the boys-only school run by the Marist Brothers came from all around the country and Australia for a weekend of festivities in Christchurch. Some of the attendees had not seen each other since leaving the school. Brother Douglas, now living in Lower Hutt, was the sole surviving Marist Brothers teacher from the 1961 era who was able to attend.

The highlight of the weekend was a Mass celebrated on the Cathedral College site on the Sunday morning – Xavier College having amalgamated with the former Sacred Heart College for girls in 1987 to form Catholic Cathedral College. The celebrant for the Mass was Fr. Kevin Burns with music provided by Antje Duda, Pastoral Chaplain at Cathedral College and Annette Pugh, also on the Cathedral College staff.

A challenge was laid down to the old boys to sing the school song “Salve Regina” (“Hail Holy Queen”), sung in Latin daily in 1961, as the recessional hymn. Judging by the volume of the singing, “Salve Regina” is etched in the memory of each of the old boys.

After the Mass, photographs were taken around the statue of St. Marcellin Champagnat (founder of the Marist Brothers) now in place on the Cathedral College site followed by a tour of the former Xavier College classrooms currently occupied by Marian College. The tour was hosted by Mary-Lou Davidson, Principal of Marian College.



Xavier College old boys from the 1961 era gather at the statue of St. Marcellin Champagnat in Cathedral College grounds.



Lithium-ion Battery Safety and Longevity

What is the best way to charge batteries to get the best life out of them? Also, there is potential fire risk with Lithium-ion batteries. The strategies that will increase battery life will also mostly minimise risk of fires, as both try to reduce the stress that the battery experiences during its life.

When charged, lithium-ion batteries contain a high level of energy. If a fault occurs internally (not visible) or externally, a lithium ion battery can catch fire. You likely won't know whether your battery is a higher than normal fire risk. Therefore it is very important to minimise both the risk of fire through proper battery care, as well as minimising any potential consequences, through best charging practices.

1. Battery Care

- Ω Protect the battery against physical stress. Keep it away from excessive exposure to direct sunlight (eg leaving battery or laptop in a window facing the sun), direct heat sources (such as home heaters or fires), or submersion in water.
- Ω Take care to protect the battery from physical damage. Do not allow it to be dropped, carelessly transported (eg in a backpack without proper protection), or sliding around in the boot of your car.
- Ω Keep your battery away from any small metal objects when the battery is not installed. Small tools, scrap cables, paper clips etc could short circuit the battery terminals.
- Ω Do not open the battery. This voids the warranty and may increase risk of fire.
- Ω Keep the battery away from children. Lack of awareness causes dangerous incidents.
- Ω The battery will not last forever. There will come a day when it needs replacing. Its appearance, how long a charge lasts compared to when it was new and its age are all factors. Continuing to use a failing battery can increase risks as it is getting older, less predictable and under more stress. When you do purchase a new battery, return your old one to your supplier for safe recycling. Keeping an old one as a 'spare' around your house is an unnecessary risk for very little gain.

2. Charging Best Practice

- Ω Unfortunately, the default practice of plugging the laptop in when you get home and letting it charge all the time is not the safest method. Lithium batteries are at their highest level of stress when at full charge. This includes when the battery has finished charging, even if disconnected from the charger. The tips below will not only minimise the fire risk, but they will also help to increase the longevity of your battery. The tips below are to help you assess the best charging practice for your usage patterns and home situation.

2.1 Charging Regime – Minimise how many hours per week your battery is at a full state of charge. Depending on your situation, this could be done by using the phone/laptop on battery until the charge level drops to about 20%, charge while using it up to about 80%, then disconnect from the charger. A reminder - while near 100% charge, the battery is highly stressed! If you are not using your battery for a period of time, leave it at about 75% charge, as this is the most stable state of charge, increasing longevity and reducing risks.

2.2 Charging Location – Do not charge your phone/laptop underneath curtains, in a cluttered area, near solvents and paints or directly between you and your exit from the house. The equipment should always be on a clean, dry, flat and fireproof surface, as the charger does create heat while charging.

The battery is likely to stay put if it catches fire. Would anyone be hurt? Would the house burn down? If you answer that the house would quickly catch alight while you sleep and you would struggle to get out, then you need a better charging strategy!

3. Fighting a Fire

- Ω As mentioned above, you cannot count on your ability to do anything other than just run away if there is a fire. If you can fight it, the first step would be to move the battery/device outside where you can just abandon it and leave at any moment. This is likely only to be possible if it's smouldering or you had been charging it in a metal box or something so you can move the battery without touching it.
- Ω Next comes trying to put it out. The transport industry knows a lot about the risks of lithium battery fires. The quick takeaway is that “Lithium ion batteries are a Class B flammable liquid and require dry chemical extinguishers to put out”. So if you have one, use it, as long as you’re able to stay safe.
- Ω It goes on to say that (contrary to popular belief), water can put out a lithium battery fire, if you don’t have a dry chemical extinguisher. The strategy here is to cool the battery cells down with the water. Your best chance at this is if the battery is inside a container that you can fill up with water, eg in a metal box you use for charging, or there's a bucket outside that you can drop the battery into, then fill with a hose. If the battery isn't contained in anything, then you won't cool it enough with a hose.
- Ω After the fire has been put out, the job is not done! At any moment the fire can start again. The fire fighters may not be aware of that, so you might ask them to dispose of the battery for you. Or if you’ve put it out yourself, put it somewhere safe, so that if it catches again, it won’t harm anyone or spread.

Adapted from <<http://tinyurl.com/NZLbatterysafety>>