



**Te Kete Aronui**  
Aspire Inquire Inspire



**The MacDiarmid Institute**  
*for Advanced Materials and Nanotechnology*

## Kōrero with Scientists

---

### Polymer Chemistry: Consumables List.

- PVA glue – available from stationery shops and hardware stores.
- Water.
- Plastic cups.
- Plastic spoons/popsicle sticks for stirring.
- Eye droppers/pipettes.
- Paper towels, rubbish bags and a bucket for clean-up.
- Borax (sodium borate) – available from Mitre 10 Mega (\$14 for 1 kg), Bunnings Warehouse (\$10 for 1 kg) and most pharmacists (often behind the counter, approximately \$15 for 50 g).
- Polyacrylamide – typically known as ‘Water crystals’, (or similar) in gardening centres. (\$5 at Palmers Garden Centre, \$9 at Oderings)
- Sodium Polyacrylate – a good source are absorbent travel urinal products e.g. ‘Travel John’, available in some pharmacies and online stores for \$10 – 15 ([www.equipoutdoors.co.nz](http://www.equipoutdoors.co.nz), [www.pharmacy-nz.com](http://www.pharmacy-nz.com), [www.healthexpress.co.nz](http://www.healthexpress.co.nz)). A small amount of sodium polyacrylate can also be extracted from nappies – cut open the nappy, tear the cotton pad into small pieces, place in an ice cream container and shake for several minutes; approximately one tablespoon of white sodium polyacrylate crystals should collect in the bottom of the container.
- Polyacrylamide toy figures that expand when wet - can be found in Paper Plus stores, approximately \$5 each and are re-usable