Let us make Ammonite accessories: a dissemination activity of the Fukada Geological Institute since five years

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Fukada Geological Institute has been holding an open house event every October since 1997. This event aims at the strengthening the community relation with neighbors and also at the dissemination of the geological and geo-engineering knowledge to the public. The event includes the exhibition of the research results, the consultation about geological problems, and self-studies by experiences such as earthquake vibration, liquefaction models, landslide shows and so on. We try to promote people's concern with the world of geology and geo-engineering.

Model-making of fossils by themselves is, among others, highly appreciated as is known by the name of ammonite accessory making. This makes the people, from the children to elderlies, popular with the replica making, thus introducing them to the life of the past. The new accessory making is, unlike the conventional plaster casting, very easy to do, by applying the new resin into the mother mold. Moreover, easy coloring and putting ribbons and hooks make the products unique accessories.

The self-made accessories, very quick to make by the up-to-date material, used as necklaces and/or name tags for bags for instance, attract people's attention to the fossils, even if for short time period. During the work, we have the time for conversation with the customers about the name, age and provenance of the target ammonite. This is useful for attracting the people's interest to the world of natural sciences.

In this paper, we will explain how to make the replica from the ammonites in much easier and quicker way. Anybody who is interested in can use it for earth science teaching.

Material: any fossil (please get it by yourself), Oyumarukun (high-temperature resin, Hinodewashi Co. Ltd., www.hinodewashi.co.jp), Jiyujushi (low-temperature resin, Daicel FineChem Co. Ltd., www.daicelfinechem.jp), an electric pan (or hot plate), water, ice, chopsticks and little things for decoration (clips, headbands, beads, seals for nail art etc., most of these can be found in 100 yen shops).

STEP 1. Preparation of the mother molds.

1. Dip an appropriate amount of Oyumarukun into hot water of above 80 degrees Celsius. Oyumarukun will be softened quickly.

2. Take the soft Oyumarukun out by chopsticks (beware of hot water), wad it up and wrap tightly the fossil with it.

3. Take out the fossil from the hardened resin after several seconds of cooling in normal temperature.

4. The resin mold thus obtained will be used as mother mold.

STEP 2. Molding the ammonite by colored resin on site.

5. Dip an appropriate amount of Jiyujushi into hot water of 60 degrees Celsius or hotter. The resin becomes soft quickly.

6. Take the Jiyujushi out from the hot water with chopsticks (beware of hot water), wad it up (mix the different color resins if you like it) to jam into the mother mold.

7. Put any thing like clips or hooks into the molded resin, quickly, before the resin becomes hardened. You should plan before at what point the pins or hooks are put.

8. Put the molded resin with the mother mold into the ice water. Just wait for minutes.

9. Take out the hardened resin from the mother mold.

10. Use your resin mold for your decorations, such as necklace, straps, seals or others. Here you have your self-made accessories! That's so easy.