**CONCLUSIONS**

Choline chloride: lactic acid with a molar ratio of 1:2 was the NaDES selected as the best extraction solvent to release antioxidant NEPs from mangosteen peel.

Box-Behnken experimental design showed that ultrasound amplitude and extraction time have a positive effect on the extraction of antioxidant NEPs from mangosteen peel while the percentage of water presented a negative effect.

SEC allowed to observe that UAE with NaDES provided NEPs with high molecular weight (from 2000 to 8000 Da).

UAE with NaDES is an efficient, nontoxic and sustainable alternative to recover NEPs from mangosteen peels.

**REFERENCES**