ASE International

No 18 May 2023

Contents

2



About the journal

4



Editorial: Addressing pedagogical challenges in science education from practitioners' perspectives

6



Students love molecular models: Hypothesis–Experiment Classbook: 'If You Could See an Atom'

Hiroshi Yokotani, Mariko Kobayashi, Haruki Abe, Tomoko Hasegawa and Haruhiko Funahashi

15



Students love applying molecular models: Hypothesis–Experiment Classbook: 'The Three Phases of Matter'

Hiroshi Yokotani, Mariko Kobayashi, Haruki Abe, Tomoko Hasegawa and Haruhiko Funahashi

26



Everyday life, climate change and the Fuse Videos Keith Ross

33



Towards a comparative education: a wake-up call to developing quality STEM in Nigerian public schools

Ade Magaji

36



Biomimicry – science and design inspired by nature Richard Dawson

43



ASE News

44



Guidelines for authors

45



About ASE

Cover credit: see article on page 33