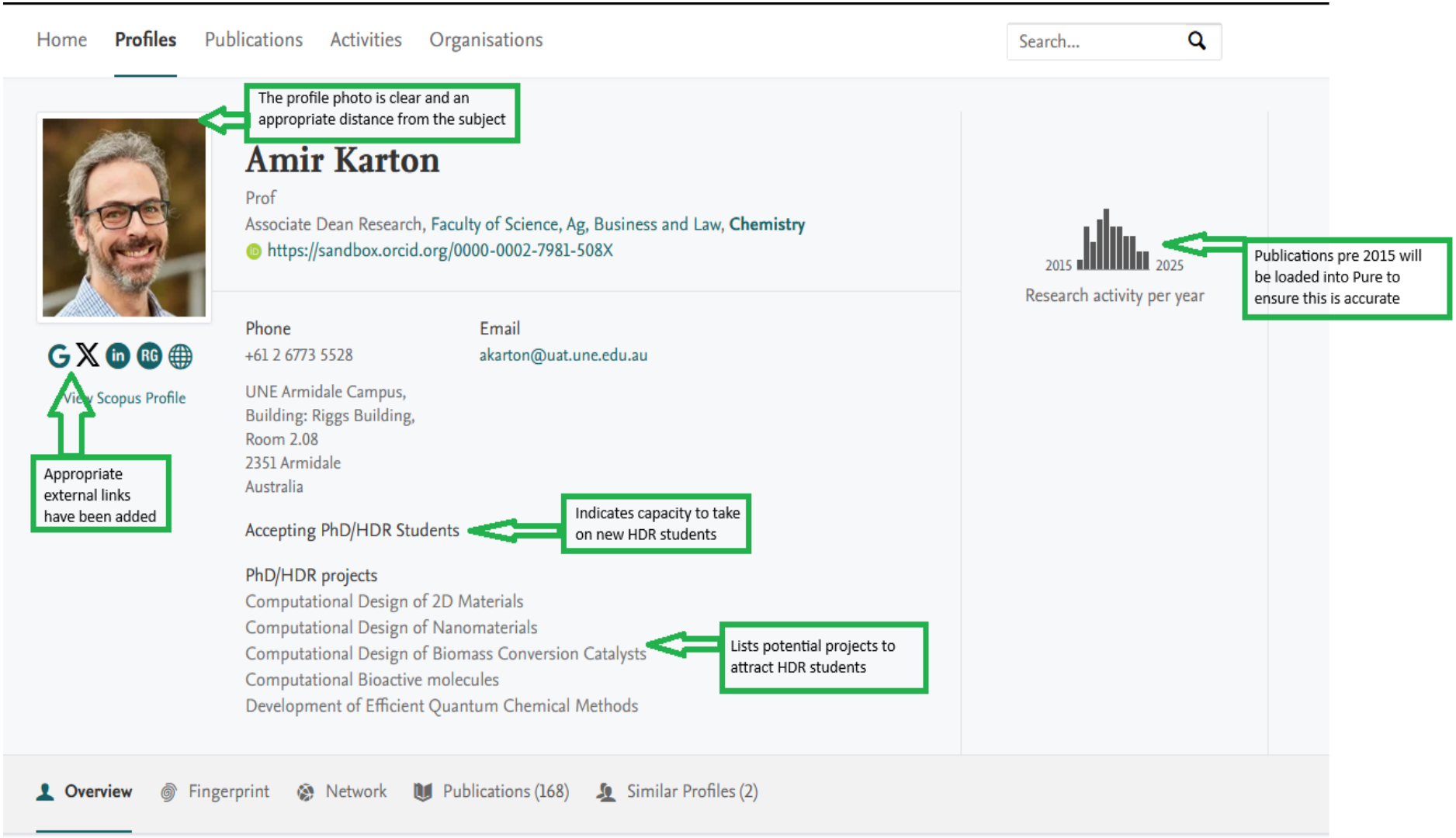
Sample: Quality Profile.



Personal profile

Bio and teaching information added

Biographical Details

Professor Amir Karton leads the quantum chemistry lab at the School of Science and Technology at the University of New England. Prof. Karton's lab designs functional molecules and materials for catalysis and sustainable energy technologies using high-level quantum chemical simulations. The significance of this research has been recognized by the Royal Australian Chemical Institute (RACI) Citation Award (2021), American Chemical Society (ACS) PHYS Division Lectureship Award (2020), RACI Physical Chemistry Lectureship (2019), and Le Fèvre Medal from the Australian Academy of Science (2018). Amir is an Editor of Chemical Physics Letters and Associate Editor of the Australian Journal of Chemistry.

Teaching

Computational chemistry, Applications of virtual reality (VR) technology in chemistry education, Physical chemistry.

Expertise related to UN Sustainable Development Goals

In 2015, UN member states agreed to 17 global Sustainable Development Goals (SDGs) to end poverty, protect the planet and ensure prosperity for all. This person's work contributes towards the following SDG(s):

SDGs added

Education/Academic qualification

Doctorate, Theoretical and Computational Chemistry (2010), Weizmann Institute of Science

Education/Qualifications have been listed

UNE Superviser

Approved PhD/HDR supervisor

Research Services/GRS will ensure this is listed if on the Supervisor Register

Research Interests

Computational Chemistry | Quantum Chemistry | Computational Materials | Nanomaterials | Sustainable Chemistry

Research Interests help potential HDR students and research collaborators to find you and your work when searching

Fingerprint

2
Similar Profiles

Dive into the research topics where Amir Karton is active. These topic labels come from the works of this person. Together they form a unique fingerprint.

CCSD
Chemistry

CCSD(T)
Keyphrases

Density Functional Theory
Chemistry

Møller-Plesset Perturbation Tl
Chemistry

CCSDT
Chemistry

CCSDT(Q)
Keyphrases

Calculation Method
Chemistry

Root Mean Square Deviation
Keyphrases

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Research output

Research output per year
2015 2025

164 Article
2 Letter
1 Chapter
1 Other

Basis Set Convergence and Empirical Approaches for Obtaining Accurate Diagonal Born–Oppenheimer Corrections from an Extensive Database of 200 Structurally Diverse Hydrocarbons

Karton, A., 12 Jun 2025, (E-pub ahead of print) In: The Journal of Physical Chemistry Part A. p. 1-8
Research output: Contribution to journal › Article

Hydrocarbons | Complete Basis Set Limit | Cc-PVDZ | Basis Set Convergence | Coupled Cluster

Publications held in Pure will automatically show on a researcher's profile. Using 'Highlighted Content' (Pure Backend) allows researchers to define a set of records which will appear at the top of the list on their profile page.

Refer to the Highlighted content user guide for details on how to ensure your highest quality publications appear at the top of your publications list.

Pure Projects (based on research awards) are not yet switched on to show on Profiles, but they are planned to roll out asap. Pure Activities will be available for population by researchers and these are switched on to show on Profiles, if researchers make them public.