



**Laudatio for the Award Ceremony
of the Prix Schläfli Chemistry 2021
of the Swiss Academy of Sciences (SCNAT)
for Dr Claudia Aloisi**

The jury of the Prix Schläfli 2021 in Chemistry of the Swiss Academy of Sciences (SCNAT) consisting of Professors Thomas Bürgi (U. Geneva), Christian Bochet (U. Fribourg), Catherine Housecroft (U. Basel), Klemens Koch (PH Bern), Laura Nyström (ETHZ) and Oliver Wenger (U. Basel) has evaluated twelve high quality applications and proposed to award the prize to Claudia Aloisi for her publication entitled 'Sequence-Specific Quantitation of Mutagenic DNA Damage via Polymerase Amplification with an Artificial Nucleotide.' (J. Am. Chem. Soc. 2020, 142, 6962–6969).

Claudia Aloisi received her Bachelor and Master degrees in Chemistry from the University of Pisa both with the highest mark. She conducted her Master thesis at the King's College London in the field of biotechnology. For her PhD she joined the lab of Prof. Shana Sturla at ETH Zurich, where she was bridging chemistry and biology to answer important questions in toxicology research. In 2020 she was awarded the prestigious EMBO postdoctoral fellowship.

The study proposed by Claudia Aloisi deals with the development of a strategy to detect low-abundance DNA adducts, a variant of DNA damage. She presents a strategy to identify, locate, and quantify a mutagenic DNA adduct, advancing tools for linking DNA alkylation to mutagenesis and for detecting DNA adducts in genes as potential diagnostic biomarkers for cancer prevention. The proposed approach is both elegant and interdisciplinary combining preparative chemistry, biology and analytical techniques.

The jury of the Prix Schläfli was particularly impressed by the breadth of the methods used, the mechanistic details obtained, and the potential for application of the approach.

The jury would like to congratulate again Claudia Aloisi on her excellent work, and wish her the best of luck for the future.

Prof. Thomas Bürgi, president of the jury of the Prix Schläfli Chemistry 2021

Award ceremony, 3 October 2022 in Zurich, ETHZ