

CURRICULUM VITAE



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PUBLICATIONS/COMUNICATIONS

1. (2020) Control of intermolecular photoinduced electron transfer in deoxyadenosine-based fluorescent probes. *Chem. Eur. J.* <https://doi.org/10.1002/chem.202003456>. (1st author)
2. (2019) Rational design, synthesis, and photophysics of dual-emissive deoxyadenosine analogs. *Dyes and Pigments*. <https://doi.org/10.1016/j.dyepig.2019.107553>. (1st author)
3. DNA-mediated dark resonance energy transfer (DRET): Fluorescence resurrection of push-pull dyes. (Submitted, coauthor)
4. Ratiometric detection of pH-induced i-motif folding based on a dual-emissive cytosine analog. (In preparation, coauthor)
5. (2019) Synthesis of new 1,2,3-triazole derivatives from vanillin and β -naphthol. *Vietnam Journal of Chemistry*. <https://doi.org/10.1002/vjch.201960019>. (coauthor)
6. (2019) Development of dual-emissive deoxyadenosine analogs for sensing proximal DNA hydration. (IUPAC – Poster)
7. (2019) Rational design and synthesis of dual-emissive deoxyadenosine analogs for sensing DNA conformational changes. (SCF – Oral)

EXPERIENCES

- Purification 5*** Purifying oligonucleotides, extraction, column chromatography (normal phase and reverse phase), preparative TLC, crystallization, distillation.
- Synthesis 5*** Nucleoside chemistry, phosphoramidite synthesis, Palladium catalyst, Click chemistry, microwave, water sensitive reactions.
- Analysis 5*** NMR, LC/MS, TLC, HPLC, GC/MS, IR, *absorption, fluorescence*, cyclic voltammetry.
- Photophysics 4*** ESIPT reaction, PET process, designing probe for specific application.
- Computer 4*** Origin, Chimera, Cary WinUV, Chemdraw, Topspin, Mestrenova, Scifinder, Xcalibur, *LaTeX*, Office, Papers, Endnote.
- Others 3*** *Teaching, project management, taking care of instruments*, purifying protein, nucleic acid structure and function, DNA-protein interaction.

FORMATION/WORKING EXPERIENCE

- 1/2021 - present** Postdoc at Chalmers University of Technology and AstraZeneca, Sweden. Working on the FoRmulaEx program at the Wilhelmsson research group.
- 10/2017-12/2020** Ph.D. student – IDEX fellowship. University Côte d’Azur, France. Thesis: “*Development of dual-emissive adenosine analogs for nucleic acid labeling and life sciences*”. Supervisors: Prof. Alain Burger and Dr. Benoit Michel.
- 10/2016-6/2017** M.Sc. in chemistry. University of Nice Sophia Antipolis, France. Internship (*ranked 1/6*): “*Synthesis and photophysical characterization of dual-emissive deoxyadenosine analogs as sensitive hydration-reporting probes*”. Supervisors: Prof. Alain Burger and Dr. Benoit Michel.
- 9/2014-11/2014** Kyoto Institute of Technology, Japan. Internship for 3 months: “*Using Bruker NMR 600 MHz to study structure of organic molecules*”. Supervisor: Dr. Kenji Kanaori.
- 11/2010-9/2016** Working as a lecturer in chemistry at Can Tho University, Vietnam.
- 9/2006-5/2010** B.S. in chemistry (*ranked 1/90*). Can Tho University, Vietnam. Internship: “*Isolation of natural products from n-butanol fraction of Hydrocotyle vulgaris*”. Supervisor: Dr. Ton Nu Lien Huong.

PRIZES/SCHOLARSHIPS/FUNDINGS

- 10/2017-11/2020** IDEX (Initiative d’Excellence) fellowship from University Côte d’Azur, France.
- May 2019** Scholarship IUPAC Congress 2019 from Société Chimique de France.
- Sep 2016** Scholarship from Vietnamese government (project 599) and French government (social security).
- Sep 2014** Scholarship KIT Global Human Resource Development program, Japan.
- 2013, 2015** (2x) Fundings (total amount >3000 USD) Can Tho University, Vietnam.
- Sep 2010** Prize for ranking 1/90 average of 4 years study, Can Tho University.
- 2009** Funding (460 USD) for student’s scientific research, Can Tho University.
- Aug 2007** Odon Vallet Scholarship, France.

OTHERS

- Philosophy** Don't wish it was easier, wish you were better.
- Mentors** Jim Rohn and Darren Hardy.
- Hobbies** Meditation, reading, and football

REFERENCES

1. Prof. Alain Burger, Institute of Chemistry, University Côte d’Azur, UMR 7272 CNRS, France. Email: Alain.Burger@unice.fr
2. Dr. Maria Duca, Institute of Chemistry, University Côte d’Azur, UMR 7272 CNRS, France. Email: maria.duca@unice.fr
3. Dr. Rachid Benhida, Institute of Chemistry, University Côte d’Azur, UMR 7272 CNRS, France. Email: rachid.benhida@unice.fr