SYNTHETIC CHEMIST

Globally engaged synthetic chemist with a proven history of leveraging research project management, and communication skills to drive scientific advancement. Respected ability to manage lab resources, solve scientific and technical problems, analyze data, and compile results. Multilingual (English, French, Serbian) communicator with experience in cross-functional collaboration with scientists, technicians, and senior leadership. Polished organizational skills to provide project updates and ensure understanding of scientific results through public speaking and written communication. PhD in Synthetic Chemistry with a MS in Applied Chemistry.

Leadership

- Training
- Relationship Management
- Scientific Thought Leadership

as initiation of at least three new projects.

Research Project Management

- Experimental Design
- Data Collection / Analysis
- Reporting / Public Speaking

Applied Chemistry

- Characterization / Synthesis
- Efficiency / Cost Reduction
- Chemical Process Development

PROFESSIONAL EXPERIENCE

REVEGEN CORPORATION, New Haven, United States

Senior Scientist

Conducted multistep organic synthesis of specialty chemicals used in pharmaceutical industry. Utilized principles of organic and organometallic chemistry to incorporate, protect, replace, and/or transform functional chemical moieties through advanced handling of air- and moisture-sensitive materials, as well as other hazardous substances. Analyzed scientific reports to modify, improve, and/or scale up chemical transformations (multigram scale) enabling the most cost- and time-effective delivery. Screened reaction outcome / pathway and ensured quality control of newly prepared intermediates and final products utilizing TLC, HPLC, Mass Spectrometry, and UV/VIS characterization techniques. Trained junior scientists and other technical staff on standard operating

procedures (SOPs). Multitasked on a daily basis to provide successful completion of ongoing experiments, as well

NANYANG TECHNOLOGICAL UNIVERSITY, Singapore

2014-2017

2017—Present

Teaching Assistant

Lead laboratory demonstrations on techniques of separation, organic and inorganic reactions, preparation and systematic identification of chemical compounds by their spectroscopic and chemical properties. Provide support and supervision to undergraduate students on an individual, class or small group bases. Instruct and monitor students in the use and care of laboratory equipment and materials to ensure compliance with laboratory safety regulations.

CHEMICAL ENVIRONMENTAL CENTER, Niš, Serbia

2009—2013

Researcher

Facilitated the characterization and testing of samples for public and private clients utilizing GC/MS and other tools. Tested the physical-chemical analysis of water (acidity, alkalinity, BOD, the level of Oxygen, turbidity, the level of heavy metals, presence of pesticides), air (ammonia, nitrogen-dioxide, sulphur-dioxide and heavy metals), soil (pH, electric conductivity, the level of chrome, zinc, lead), and locally-sourced food (pesticide).

EDUCATION

NANYANG TECHNOLOGICAL UNIVERSITY, Singapore

2017

PhD in Synthetic Inorganic and Organometallic Chemistry

Oversee and manage the lifecycle of scientific research projects; including experimental design, team collaboration and guidance, conducting experiments, analyzing samples and data, and evaluating and reporting progress and results.

- Develop, document, and train entire laboratory team on standard operating procedures concerning hazardous identification, handling and storage of chemicals, first aid measures.
- Establish strong partnerships with faculty, scientific thought leaders, peers, and technicians; included weekly and biannual progress report meetings, seminar discussions, and formal presentations.
- Train and supervise laboratory personnel in chemical inventory, waste disposal, and laboratory equipment maintenance (e.g. glovebox, cylinders, high vacuum pumps, and solvent purification system).
- Liaise with chemical suppliers to procure chemicals consistent with inventory needs and in compliance with international trade regulations.
- Conduct and document root-cause analysis in investigating unexpected laboratory results
- Synthesize various organic, inorganic, and organometallic compounds using air/moisture sensitive techniques.
- Leverage a wide variety of analytical instrumentation to characterize organic, inorganic, and organometallic compounds; included multinuclear NMR, HPLC, FTIR, LC-MS and GC-MS methods.

${\bf UNIVERSITY\ OF\ NIS\ -SCHOOL\ OF\ SCIENCES\ AND\ MATHEMATICS,\ Nis,\ Serbia}$

2008-2013

Master of Science in Applied Chemistry, 2013

Bachelor of Science in Chemistry, 2011

Gained strong foundational mastery of applied chemistry techniques for improving efficiency and cost in multiple industry settings including biotechnology and pharmaceuticals, petroleum/gas, biofuels, textiles, and industrial engineering.

- Leveraged multiple analytical techniques proficiently including sample preparation, UV/VIS spectroscopy, NMR, GC-MS, XRD, SEM, and TEM to perform characterization and quantitative analysis experiments.
- Increased adsorption capacity of materials through surface chemical modification (sulphurization and nitrification).
- Mastered the statistical interpretation and analysis of experimental data (graph, chart, diagrams).

DR MILENKO HADZIC MEDICAL SCHOOL, Niš, Serbia

Medical Technician, 2008

- Received vocational training in clinical medicine; included the preparation and administration of pre and postoperation medications as well as extensive experience interfacing with patients.
- Maintained comprehensive medical records.

PROFESSIONAL DEVELOPMENT / ASSOCIATION MEMBERSHIPS

PROFESSIONAL DEVELOPMENT Certificate of Research Integrity, 2013 6th Mass Spectrometry School, 2011 5th Mass Spectrometry School, 2010 ASSOCIATIONS

American Chemical Society

Serbian Chemical Society

Filip Filipovic School of Young Mathematicians

PUBLICATIONS

<u>Dordevic N.</u>, Ganguly R., Petkovic M., Vidovic D. E-H bond activation by tuning the structural and electronic properties of phosphenium cations. *submitted to Chemical Science*, 2017.

<u>Dordevic N.</u>, Ganguly R., Petkovic M., Vidovic D. Bis(carbodicarbene)phosphenium trication: the case against hypervalency. *Chemical Communications* 52: 9789-9792, 2016.

Gurnani C., <u>Dordevic N.</u>, Muthaiah S., Dimic D., Ganguly R., Petkovic M., Vidovic D. Extending the chemistry of carbones: P-N bond cleavage via an S_N2 '-like mechanism. *Chemical Communications* 51: 10762-10764, 2015.

<u>Dordevic N.</u>, Tay M.Q.Y., Muthaiah S., Ganguly R., Dimic D., Vidovic D. C-F bond activation by transient phosphenium dications. *Inorganic Chemistry* 54: 4180-4182, 2015.

ACADEMIC ACHIEVEMENTS

- Recipient of Chemistry and Biological Chemistry Laboratory Teaching Assistant (TA) Award in 2015/2016 academic year for excellent performance as a TA
- Winner of the Singapore International Graduate Award (SINGA) by the Agency for Science, Technology and Research (A*STAR), 2013
- Awarded with the "Srebrni znak" (eng. "Silver sign") as the best student who has finished bachelor studies at the University of Niš in 2010/2011 school year