

Søknad/CV

279339- Researcher (global supply chain sustainability and biodiversity conservation) (Ref. 2025/20637)

ID: 32 - Silvan Goldenberg
Hofackerstr. 7
79110 Freiburg

16.05.2025

PERSONALIA

Fødselsdato 16.10.1986
Kjønn Ukjent
Statsborgerskap Tyskland
E-post silvan.goldenberg@gmail.com
Nåværende stilling not employed

SØKNAD

Dear Industrial Ecology team,

I am a German ecologist with a decade of international research experience focused on human stressors and nature-based solutions. Joining you at the Norwegian University of Science and Technology in Trondheim would allow me to apply this expertise to the conservation of global biodiversity.

Managing natural resources effectively requires both scientific knowledge and an appreciation of diverse stakeholders and cultures. Throughout my professional and personal journey, I have embraced international and interdisciplinary experiences. During university, I studied abroad for five years to explore a wide range of temperate and tropical ecosystems. My subsequent postdoctoral research in Germany involved extended expeditions to Norway, Peru and Spain as well as collaboration with partners from economic, political and legal disciplines. An additional three years of work and travel provided valuable insights into industries such as fisheries, agriculture and eco-tourism. These experiences have shown me our planet's vulnerability, but also its enormous – yet often overlooked – potential for sustainable growth.

Motivated by this perspective, I have dedicated my career to the complex relationship between humans and nature. Early on, I investigated how local stressors – including eutrophication, habitat degradation and species invasions – impact aquatic communities. My doctoral research then centered on the global stressors of ocean acidification and warming, with a focus on food web effects. More recently, in my postdoctoral work, I evaluated ocean-based strategies for enhancing ecosystem services. Specifically, I studied the effectiveness and environmental risks of carbon sequestration via alkalinity enhancement and food production via nutrient fertilization.

My work has equipped me with strong analytical and organizational skills, along with a holistic approach to problem-solving. My expertise includes:

- ☐ Experimentation and monitoring of stressor impacts in the field and laboratory
- ☐ Assessing species communities and biodiversity, from primary producers to invertebrates and vertebrates
- ☐ Quantifying ecological and biogeochemical processes, as well as emerging ecosystem services
- ☐ Analyzing, managing and interpreting complex spatiotemporal datasets
- ☐ Scientific writing and communication with both specialists and non-experts
- ☐ Project coordination, student supervision and collaboration within large international teams

Looking ahead, I would like to transition from traditional ecology to research with more direct implications for economy and policy. I am therefore enthusiastic about the opportunity to join the Industrial Ecology Programme at NTNU. Its mission to conserve biodiversity by advancing the sustainability of global supply chains aligns closely with my aspirations. While much of my work has focused on marine systems, I consider myself a generalist – excited about ecological concepts across marine, freshwater and terrestrial realms. A particular strength of mine is data analysis, visualization and storytelling, as well as simplifying complex scientific concepts for non-expert audiences. I believe these qualities – combined with my team spirit and dedication – make me a strong candidate for the position.

The BAMBOO and RAINFOREST projects are especially appealing for their focus on biomass production and trade. In my view, renewable organic resources must play an increasingly important role in achieving sustainability goals – not only in food systems but also in the areas of materials, energy and carbon removal. Contributing to research and development in this field is a goal I deeply value. To this end, I look forward to learning from experts in environmental engineering and life cycle assessment, such as Francesca Veronesi, and from the projects' partners at NTNU, in Europe and beyond. My frequent visits to Norway – both personal and professional – have deepened my appreciation for its natural beauty and culture. Relocating to Norway would be a natural next step for me.

Respectfully yours, Silvan Goldenberg Freiburg, Germany, 16.05.2025

UTDANNING

2014-07 - 2018-02 University of Adelaide, Australia - Doctor of Philosophy Biology Karakter: Awarded the "Dean's Commendation for Doctoral Thesis Excellence"

2010-10 - 2012-08 Ghent University, Belgium - Master of Science Marine Biodiversity and Conservation VT / Studiepoeng: 120 Karakter: Completed with 'Greatest Distinction' ranking in top 5% of cohort

2007-10 - 2010-09 University of Cologne, Germany - Bachelor of Science Biology VT / Studiepoeng: 180 Karakter: Completed with 'Greatest Distinction' ranking in top 5% of cohort

YRKESERFARING

2018-10 - 2024-01

GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany - Postdoctoral Researcher (100%)

Topic: Ocean-based solutions for climate change mitigation and food security,

via biomass production (artificial upwelling) and seawater chemistry (alkalinity enhancement)

☐ Field-based mesocosm experiments in coastal Norway, Peru, and Spain in teams of up to 70 people

☐ Study of abiotic (nutrients, light, and CO₂), ecological (primary production, grazing, and predation), and biogeochemical (element cycling and carbon sequestration) processes

☐ Data analysis using R – univariate and multivariate

☐ Project coordination (up to 15 people) and student supervision (11 PhD, Master, and Bachelor theses)

☐ Collaboration within interdisciplinary consortia: OceanNets, CDRmare, OceanArtUp, and CUSCO

2014-01 - 2014-05

University of Konstanz, Germany - Intern (100%)

☐ Freshwater evolutionary biology, using various genetic techniques

2013-05 - 2013-07

Cape Eleuthera Institute, Bahamas - Research Assistant (100%)

☐ Field experiment on invasive species in coral reefs

2012-12 - 2013-04

University of Perpignan, French Polynesia - Research Assistant (100%)

Field experiment on eutrophication and overfishing in coral reefs

KURS

2010-10

Master of Science in Marine Biodiversity and Conservation Varighet: 2 years

SPRÅK

Engelsk

Muntlig: Flytende Skriftlig: Flytende

Tysk

Muntlig: Morsmål Skriftlig: Morsmål

Fransk

Muntlig: Gode kunnskaper Skriftlig: Gode kunnskaper

Spansk

Muntlig: Grunnleggende kunnskaper Skriftlig: Grunnleggende kunnskaper

REFERANSER

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VEDLEGG

Letter of Motivation - Goldenberg

University certificates - Goldenberg

References - Goldenberg

CV and publications Goldenberg