

# ERNST HAAGE PRIZE FOR CHEMISTRY

MÜLHEIM CHEMISTRY  
CAMPUS



AWARD CEREMONY  
NOVEMBER 3, 2023

## KEYNOTE LECTURE

Prof. Dr. Paul T. Anastas (University of Yale) &  
Dr. Stafford Sheehan (Air Company, New York)

**Paul Anastas** is a trailblazer in the field of green chemistry, a visionary whose tireless commitment to sustainability and innovation has left an indelible mark on the scientific community. His pioneering work in the design and promotion of environmentally benign chemicals and processes, which is why he is often referred to as the „father of green chemistry,“ has reshaped the landscape of modern science.

As a Professor at Yale University, Paul Anastas has inspired countless students and researchers to prioritize sustainability and stewardship of our planet. He has also held influential positions in government and industry, where his insights have had a transformative impact on policy and practice.

**Stafford Sheehan** is a visionary entrepreneur and the Co-Founder of the Air Company, whose pioneering spirit and commitment to innovation have propelled the Air Company to the forefront of sustainable technology, making him a prominent figure in the world of environmental entrepreneurship.

Sheehan is a scientist and entrepreneur who has developed several commercial technologies based on his applied research in the fields of chemistry, physics, and computer science, and has built collaborations with several world-renowned universities and institutes through his research.

Paul Anastas and Stafford Sheehan will give a tandem talk on green chemistry sharing their expertise and dedication to creating a more sustainable future.



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# Ernst Haage Prize Winners 2023



## Ernst Haage National Prize

As a young scientist at Humboldt-Universität zu Berlin, **Oliver Dumele** developed his independent research profile in the field of supramolecular chemistry and functional  $\pi$ -systems extraordinarily quickly and became a promising shooting star in organic materials chemistry within a very short time. Dumele's potential is particularly evident in the broad range of his subject areas and the structural elements of his research derived from them. Thus, he succeeds in covering the entire chemical length scale from discrete molecular chemistry to supramolecular chemistry of strained macrocycles to nanostructured crystalline solids.

## Ernst Haage Prize for Post-Doctoral Fellows

**Maria Drosou** is a post-doctoral researcher at the MPI für Kohlenforschung in the Molecular Theory and Spectroscopy Department of Prof. Frank Neese. She has made several important contributions in the field of bioinorganic quantum chemistry and especially photosynthesis. In particular, Maria Drosou did outstanding work in the study of photosystem II.

**Joyce Grimm** is a post-doctoral researcher at the MPI für Kohlenforschung in the department of Homogeneous Catalysis led by Prof. Benjamin List. She excels in her knowledge of organocatalysis concepts and different catalyst classes, and has excellent skills in catalysis, synthesis, and molecular design.

## Ernst Haage Prize for Apprentices

**Sandra Denner**, chemical laboratory assistant at MPI for Chemical Energy Conversion

**Berfin Göker**, chemical laboratory assistant at MPI für Kohlenforschung

## Program

November 3, 2022  
starting 2pm

### Welcome and Introduction

**Prof. Dr. Serena DeBeer, Chair of Ernst Haage Foundation**

### Keynote Lecture

**Prof. Dr. Paul Anastas & Dr. Stafford Sheehan**

*Green Chemistry: From Science to Application for a Sustainable Future.*

### Presentation of the Ernst Haage Prize for Apprentices

Coffee Break

### Presentation of the Ernst Haage Prize for PhD Students & Post-Doctoral Fellows

**Dr. Maria Drosou**

*Uncovering Catalytic Principles of Photosynthetic Water Oxidation using Quantum Chemistry*

**Dr. Joyce Grimm**

*Catalytic Asymmetric Synthesis of Cannabinoids and Menthol from Neral*

### Presentation of the National Ernst Haage Prize

**Dr. Oliver Dumele**

*Curved Carbon Materials: Strained Macrocycles and Photochemical Spin Switching*

### Reception

Music: Rasmus Muhler