

DOI: 10.1002/zaac.202200159

Laudatio Prof. Dr.-Ing. Caroline Röhr

Franziska Emmerling^[a] and Constantin Hoch^[b]

Prof. Dr.-Ing. Caroline Röhr, professor in Inorganic and Analytical Chemistry at the Albert-Ludwigs-University of Freiburg, celebrates her 60th birthday in June 2022. Friends, former students, and colleagues congratulate her and dedicate this issue of ZAAC to her in recognition of her scientific achievements. Caroline Röhr's areas of interest include the structural chemistry of intermetallic phases, ionic oxometalates, and double salt-like structures that combine both worlds. Intermetallic chemistry has always been a preeminent area of her work. New preparative strategies together with the elucidation of crystallographic structure, and calculations of electronic structures take equal importance. It is her unmistakable trademark to combine modern DFT calculation methods alongside crystallographic topological considerations, structure-property relations, and a chemist's view on bonding, resulting in a compelling explanatory power.

Caroline Röhr was born in 1962 in Kelkheim, Taunus, and studied chemistry at the Technical University in Darmstadt. This period was also the starting point of her scientific friendship with Brigitte Eisenmann and Herbert Schäfer. After her diploma in chemical technology (subject: zeolite catalysts) and her doctorate in inorganic chemistry with Rüdiger Kniep (subject: structural chemistry of intermetallic phases, she spent one year as a post-doctoral researcher with Hans-Beat Bürgi at the University of Bern and went back to Darmstadt for her habilitation, mentored by Rüdiger Kniep. Since October 1996, she has held a professorship in Inorganic and Analytical Chemistry at the University of Freiburg.

Caroline Röhr is an enthusiastic and outstanding academic teacher. Her success in this field was recognized in 2004 with a teaching award from the state of Baden-Württemberg (Landeslehrpreis Baden-Württemberg). Every lecture is not only well prepared but also complemented with concise and complete



handouts. She has a talent for combining different media types in a single lecture, alongside a clear and interesting way to present information. Extended scripts to accompany her lectures are also available on her much-requested homepage. We are just hoping for a textbook, which might be a project for the time after retirement. As an early indication of her interest in teaching, she helped set up the student learning center (Lernzentrum Chemie Darmstadt) - a student council initiative for which there was state funding. The center is a combination of textbook collections and tutoring by doctoral students which still exists today. Back when it was founded, she was the mid-level student representative in the management.

16 students finished their Ph.D. in her group. For her Ph.D. students, she has always been a level-headed, clear, and reliable support throughout every stage of the Ph.D. Her always open door is very telling of her advisory concept. She has always been approachable, but also capable of providing the necessary freedom to develop independent ideas. All talks and poster

[a] PD Dr. F. Emmerling
Bundesamt für Materialforschung und -prüfung
Richard-Willstätter-Straße 11
D-12489 Berlin
Germany

[b] PD Dr. C. Hoch
LMU München
Butenandtstraße 5-13(D)
D-81377 München
Germany

© 2022 The Authors. *Zeitschrift für anorganische und allgemeine Chemie* published by Wiley-VCH GmbH. This is an open access article under the terms of the Creative Commons Attribution Non-Commercial NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

presentations were prepared and checked, providing her students with the needed sovereignty. Most of her former Ph.D. students understood the advantages of this support once they were on their own. This support includes the incentive to present their work in conference talks and poster presentations at an early stage, and Hirschegg seminar talks have always played an important role here. Her own Hirschegg experiences can be traced back to 1992.

Caroline Röhr has the attitude to leave the spotlight to others and remains modest and unpretentious despite great successes. Looking at her attitude from a different angle, a central leitmotif becomes clear that defines Caroline's research, teaching, and attitude as a supervisor: science always takes first place with her. Consequently, she spends her energy on clear, comprehensible communication and presentation of science.

The "Röhr diagrams", which present complex relationships clearly and vividly without reduction, deserve a special mention. Throughout the years, these types of diagrams have appeared in her lectures, publications, and a multitude of presentations to her group. Sometimes, it can take a few moments to understand and admire her gift to capture all needed aspects in one compelling, minimalistic representation, adding higher dimensionality by elaborate coloring schemes, sizes, and shapes. This is an aspect that is highly valued by students and

colleagues, and at the same time makes one's gaps in this area painfully clear.

Another aspect showing her commitment to clear presentations is the development of the program DRAWxtl, allowing for real-time rotatable representations of polyhedra – a now common feature in many crystallographic programs but a substantially new thing when she gave her first talk in Freiburg.

Caroline Röhr has several passions besides chemistry. She loves to cycle and is still very active as a Volleyball player. She has always been interested in music and is a dedicated chorister. When visiting a foreign city, the local botanical garden is always one of the places to see.

Caroline Röhr has continuously served the chemical community in numerous commissions within and outside of the University of Freiburg. She has been a Member of the German crystallographic society where she has been active in the Max-von-Laue prize committee.

We thank Caroline Röhr for her many interesting contributions to the field of intermetallic and oxidic compounds, and we wish her happiness, healthiness, an impressive strawberry cake for her birthday, and all the best for the future.

The laudators
Franziska Emmerling and Constantin Hoch